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REMOTE STORAGE

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Pullman Cars Between London and Brighton.

BAD as was the weather there was as repectable gathering of ladies and gentlemen, the former predominating, at the early hour of 10 A. M., at the Victoria Station on Monday to try the new train service of Pullman cars that day to be inaugurated between London and its fashionable suburb, London-super-Mare. A good deal of curiosity seemed to be created by the cars, but that was owing to the fact that our particular train was to consist of 4 Pullman cars, and nothing else. At the head is the "Victoria," which is a parlor and refreshment car of a non-alcoholic character, social arrangements being requisite for those thirsty souls who cannot stand the fatigue of a journey to Brighton without something in the shape of alcoholic liquor. But such unhappy people must be rare, as, so far from traveling in the Pullman car being a fatigue, it may be described as quite the reverse. You sit in a velvet arm-chair, and if you take your place in London, an hour and a quarter or twenty minutes after you rise from it to find yourself in Brighton; having all the while, as it were a moving panorama of town and country, villages of pleasant mansions, of green fields right before your very eyes. In summer it must be very pleasant to stand on the little landing-places between each car, and thus, when so disposed, to enjoy the benefit of traveling in the open air. This car, at the door of which we stand, the "Victoria," is the principal one. It has twenty-six seats, and a low counter for tea and coffee and light refreshment. There also are the daily papers on sale, besides there is a letter-box, barometer and thermometer. On each side there are little tables where you can write or refresh yourself according to your wish. If we resume our exploration we find ourselves in the "Beatrice," or drawing-room car, the handsome velvet chairs of which on the present occasion are handsomely furnished with ladies, so that there is not a seat to spare, and however disposed we may be to stop and chat, we are compelled to keep on moving, while the ladies study the latest novel, or, with agile fingers, do their daily round of crochet work. Further on we arrive at the "Louise," another drawing-room car. On our tour of inspection we note that every provision has been made for the wants of the traveling public. There are retiring rooms, rather Liliputian, it must be owned, but, nevertheless, big enough, in which you can wash your hands, or titivate your person. If you travel with servants or luggage there are compartments for them both, and if you require the service of an attendant you have only to touch a knob and he appears. The ordinary first-class fare to Brighton and back is seventeen shillings and sixpence. By the Pullman car the charge is one pound. To any one to whom money is no object—and that is the only class of visitor for whom Brighton kills the fatted calf and wreathes her face in smiles—the extra half-crown for the car is well laid out, and I doubt not but that the train will be a great success, as, indeed, it deserves to [illegible] our little train on Monday," observed one, who evidently knew, "was £20,000;" but as the train runs four times a day, and may be expected to fill well, that sum, it must be owned, was not badly laid out.

But the chief novelty of the train is the electric lighting. The carriages in the day-time are not lighted at all; but, suddenly, just before you enter a tunnel, there comes down on you a beautiful and soft light of the most exquisite character. For that numerous class of Her Majesty's faithful lieges, who when on a journey are always wanting "to stretch their legs a-bit," the Pullman Limited Express offers many advantages, as you can walk up and down, from Dan to Beersheba—that is, from the smoking car at one end to the drawing-room car at the other—as often as you like. However, the traveler requires sea l[illegible] that part of the business comfortably, if not he had better sit in his armchair at ease. The light, it may be as well to state, for the benefit of the scientific or curious reader, comes from thirty-four of Faure's accumulators in the guard's apartment. The magazines of electricity are supplied by an engine and dynamo machine in the Victoria Station. In time it is expected the train will store up electricity for itself by the working of a dynamo machine attached to the axle of the engine. But enough of science. As a matter of fact, the Brighton Company's Pullman car is as near perfection as can be imagined, and I look forward to the time when such cars shall run no longer for the benefit of the wealthy or luxurious, but for all decent people who have to take a railway journey. A little while ago I had to travel in a train which was bearing a real live London Mayor to a provincial town. I rode second-class, as befitted my humble circumstances, and the consequence was I had the pleasure of the company of a couple of his lordship's servants. It was a low, villanous carriage, and a disgrace to any company, and so it seemed to his lordship's servants. "Jem," said one of them to the other, as he bent his haughty head to enter a compartment, "these carriages weren't built for the likes of you and I." I can only add, as a last word of praise for the Pullman Limited Express, that in one of these carriages even a Lord Mayor's servant may enter without being compelled to submit to the indignity of a stoop.—Christopher Crayon, in *London Christian World.*

The [illegible]ylvania Railroad Company's Improvements in Jersey City.

THE straightening of the cut through Bergen Hill, at Point of Rocks, Jersey City, which was commenced in 1879, by the Pennsylvania Railroad Company, is now nearly compieted. When the road was first constructed the engineers, for the sake of economy, made three heavy curves. To straighten these curves the cut had to be widened in some places to 110 feet. Two of these curves have already been removed, and the third will be finished in a few weeks. The straightening of the cut, the engineers estimate, will afford a saving in time of about five minutes to each train, besides the great amount of wear and tear to the rolling stock. Four tracks will be laid through the hill in place of the two now used; two for freight, and two [illegible]senger trains. The roadbed is bal[illegible]as[illegible]th broken stone, and is accurately graded with concrete gutters on each side. Handsome terraces have been formed on each side of the road, upon which, in the summer, will be planted flowering plants and vines. The new tracks are also being laid from the cut to the Hackensack River. A bridge at this point will be widened in the spring so that the four tracks can be laid upon it. The new pier at the foot of Sussex street, Jersey City, which the Pennsylvania Railroad has been building for the Wilson Steamship Line, is nearly completed. The pier is 500 feet long and 150 feet wide. It is two stories high and covered with corrugated iron. A double track for freight cars extends to its extreme end, the tracks being sunk just far enough below the flooring of the pier to allow the sills of the cars to be on a level with it. The largest steamship can lie alongside the pier, and with the aid of derricks can be loaded directly from the cars. The floor of the pier lies on two layers of heavy

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timbers which cross each other diagonally and are fastened together with heavy bolts.

Philadelphia and Reading Companies.

The following is the comparative statement of the Philadelphia and Reading Railroad Company and the Philadelphia and Reading Coal and Iron Company for the month of November, 1881 and 1880 :

	1881.	
GROSS RECEIPTS.	*Profit for mo.*	*Year to date.*
Railroad traffic	$880,727.37	$8,411,996.09
Canal traffic	98,445.42	439,468.62
Steam colliers	37,789.87	287,770.32
Richmond coal barges	302.81	2,710.64
Total Railroad Co	$1,017,265.47	$9,141,945.67
Reading Coal & Iron Co	228,182.38	1,199,445.12
Total of all	$1,245,447.85	$10,341,390.79
TONNAGE & PASSENGERS.	*Month.*	*Year to date.*
Tons of coal on railroad	825,766.12	8,072,142.05
Tons of merchandise	754,699.04	6,815,234.17
Passengers carried	869,391	10,561,853
Coal transp by stm colliers	44,912.00	555,253.00
TONS OF COAL MINED.		
By Coal and Iron Company	421,391.09	3,937,607.12
By tenants	148,025.05	1,484,992.16
Total mined from lands owned and controlled by Co. and from leasehold estates	569,416.14	5,422,600.08

	1880.	
GROSS RECEIPTS.	*Profit for mo.*	*Year to date.*
Railroad traffic	$806,720.61	$7,945,392.78
Canal traffic	119,550.34	455,826.66
Steam colliers	36,633.89	223,589.32
Richmond coal barges	1,742.90	2,444.15
Total Railroad Co	$964,647.77	$8,627,252.91
Reading Coal & Iron Co	172,328.02	546,283.66
Total of all	$1,136,975.79	$9,173,536.57
TONNAGE & PASSENGERS.	*Month.*	*Year to date.*
Tons of coal on railroad	769,394.09	7,179,398.13
Tons of merchandise	475,681.08	5,885,080.00
Passengers carried	774,145	9,822.422
Coal transp by stm colliers	46,683.00	545,600.00
TONS OF COAL MINED.		
By Coal and Iron Company	393,861.14	3,460,464.03
By tenants	138,919.15	1,235,642.10
Total mined from lands owned and controlled by Co. and from leasehold estates	532.781.09	4,696,103.13

The gross receipts of the Railroad Company for the month of November were: from railroad traffic, $1,789,908.76 ; from canal traffic, $151,-829.89 ; from steam colliers, $64,242.77 ; from Richmond coal barges, $9,607.79—total, $2,-015,589.21, and the expenses $998,323.74, leaving net earnings, as stated above, $1,017,265.47, against $964,647.77 for the month of November, 1880, an increase of $52,617.70. The gross receipts of the Coal and Iron Company for the same month were $1,482,790.40, and the expenses, $1,254,608.02, leaving net earnings $228,-182.38, against $172,328.02 for the same month last year, showing an increase of $55,584.36. The profit of the Railroad Company, for the year ending November 30, 1881, was, as stated, $9,141,945.17 and of the Coal and Iron Company $1,199,445.12, a total for both companies of $10,341,390.79—being a gain, as compared with the year 1880, of $1,167,854.22. From the profit must be deducted the debit balance of renewal fund, $218,999.75 ; State tax on capital stock, $70,502.48 ; all rentals and full interest on all outstanding obligations, including floating debt, whether paid or not by the receivers, $8,709,-854.79; also, full interest on all outstanding obligations of the Coal and Iron Company, other than those held by the Railroad Company, whether paid or not by the receivers, amounting to $1,158,777.63, making a total of $10,158,-134.65—leaving the surplus of both companies for the year ending November 30, 1881, $183,-256.14, against a loss of $1,209,986.17 in the previous year, a gain of $1,393,242.31. Of this surplus $142,588.65 goes to the credit of the Railroad Company, and $40,667.49 to the credit Coal and Iron Company.

Finances of Pennsylvania.

According to the report of the State Treasurer, just issued, the receipts into the Treasury of the State of Pennsylvania, for the fiscal year ending November 30, 1881, (including $1,815,-046.90 balance from the previous year) were $8,816,829.33, and the disbursements (including $421,801.60 of loan redeemed) were $6,926,810.-20 ; leaving a balance on hand December 1, 1881, of $1,890,019.13. The total debt of the State at the close of the year was $21,140,888.-05 ; of which $164,388.05 is non-interest bearing. The Treasurer says :—

The increase of revenue over the estimates made at the commencement of the fiscal year just closed has entirely relieved the Treasury from the heavy floating indebtedness existing at that time, and at the same time has enabled the department to meet promptly every obligation falling due during the year. Such is the improved financial condition of the Commonwealth that it is an important question whether the time has not arrived when our important industries should be relieved from some of their heavy burdens of taxation. The most careful estimates warrant the belief that a less amount of revenue than the present laws produce will be sufficient to meet all the necessary requirements of the Government in the future.

The ordinary revenue of the State for the current fiscal year is estimated by the Treasurer at $6,015,000 ; and the expenses at $5,261,593.

New York, Lake Erie and Western R. R.

The following is an abstract of the report of the New York, Lake Erie and Western Railroad Company for the fiscal year ending September 30, 1880:

Common stock, 78,000,000; preferred stock, 8,536,900. Earnings—from passengers, $4,041,-267.03 ; from freight, $15,979,576.61 ; from express, $384,346.42 ; from mails, $167,459.56 ; from rents, $44,464.66 ; from miscellaneous sources, $85,792.05 ; from car service, $12,698 85 ; from ferries, $607,757.48 ; from interest on securities, $235,962.24; from sterling exchanges, $586.24—total, $21,559,911.14. The total charges against the earnings are $19,672,493.40, leaving a surplus for the year of $1,887,417.74. There was a net increase in the expenses over those of 1880, as shown by the balance she - 130,851.05.

DEBIT.

Construction main line, $2,340,657.55 ; third rail, general account, $218,898.20 ; equipment, $766,061.84 ; real estate, $387,388.37 ; amounts expended out of special fund for third rail, $1,-207,429.20 ; second track, $1,067,053.64 ; third track, $2,942.40; grading, $1,507.55; real estate, $6,127 ; right of way, $2,250 ; improvements at Buffalo, $141,504.60 ; engine-house at Bergen, $36,556.59 ; equipment, $396,376 ; elevator at Buffalo, $203,973.16 ; ship basin and docks at Jersey City, $98,938.55 ; Lehigh docks at Buffalo, $126,713.72; Weehawken docks, construction, $27,890.20; Blake's docks at Buffalo, $89,-865.98; New York and Fort Lee Railroad, $25,-346.45 ; improvements at Union Stock Yards, Fortieth street, New York City, $8,298.43; Buffalo and Southwestern Railroad improvement account, $52,205.20; amount paid on account of equipment, $1,667,851.88 ; stock in other companies, $734,490.49; bonds of other companies, $273,819.60 ; amounts due on current accounts, $2,565,415.50 ; supplies, $1,206,181.13; cash on hand, $77,150.32 ; cash in London to pay coupons, $23,713.42 ; bills receivable, $34,666.69 ; discount on common stock, $269,675; estate of Erie Railway Company, $151,210,930.63.

CREDIT.

Common stock issued to this date, $76,943,-100 ; preferred do., $7,632,200 ; funded debt, $67,165,665.95; loans payable, $58,500; interest on funded debt, due and accrued, $1,109,530.70; renewals, leased lines, $360,581.40 ; amounts due, pay rolls, $709,331.52 ; audited vouchers, $1,548,079.19; traffic balances, $644,080.39; sundries, $127,325.38 ; assessments on common stock of Erie Railway Company ($4 per share), $2,791,424; interest on assessments received on stock of Erie Railway Company and interest and profits on investments, etc., $376,197.35 ; profit and loss, $5,798,556.26.

Canadian Form of Government.

Canadian school text-books which undertake to describe our form of government will shortly need to be changed to read after this manner : "A limited responsible government consisting of a Governor-General responsible to the Crown with an Executive Council responsible to the people's representatives ; a Legislature composed of a Senate appointed by the Governer-General-in-Council and a House of Commons elected by and responsible to the people, and a Syndicate (to govern the carriage of goods and passengers through, in and out of the country), responsible to its own stockholders." The same definition, with slight changes of names of ruling bodies, will also apply to each of the several Provinces. In addition to the great Syndicate—the octopus of the West—we have the Quebec Government eagerly looking for a syndicate to take over its valuable railways. The railway system of Nova Scotia seems to be already within the clutches of a syndicate headed by Baring Bros., bankers, of London, and the Prince Edward Islanders are asking to have their lines thrown into the same hands. Amalgamation of the great Ontario lines into big monopolies fills the air with rumors. New Brunswick has one of its leading lines owned by members of the Pacific Syndicate, and has a network of railways under various management in course of preparation, doubtless, for the maw of either an existing syndicate or one that will arise.—*Montreal Daily Witness.*

As a party of gentlemen and ladies were climbing to the top of a high church tower one hot day, a gentleman remarked, "This is rather a spiral flight of steps." To which a lady rejoined, "Yes, perspiral," and she wiped her brow as she spoke.

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RIVAL SEAPORTS AND THEIR FOREIGN COMMERCE.

AMONG other interesting and original features of the report of the Chief of the National Bureau of Statistics recently issued, is a carefully prepared statement of the relative magnitude and growth of the foreign commerce of the cities of Boston, New York, Philadelphia, Baltimore and New Orleans. The interests of these fine cities, which are the most important of our seaports, are so closely connected with the internal commerce of the country and the development of resources in widely extended localities that the information given concerning their foreign commerce is of peculiar value at this time when attention is turned in such a marked degree to the study of this subject and the influences effecting the relative condition of certain shipping points. The great interest shown of late in the Southwestern and Gulf traffic gives a special value to figures showing the position occupied by New Orleans, the chef outlet for the great Mississippi water route, The facts as given in the report, it should be remembered, are not intended to furnish any indication of the relative magnitude of the total commerce of these several cities, but simply to show their relative status with respect to foreign commerce.

A table is given showing the tonnage of vessels entered in the foreign trade at the cities mentioned each year during the twenty years ended June 30, 1880, from which it appears that the total tonnage of the five ports in 1856 was 3,353,392; in 1860 3,696,376; in 1870 4,917,856, while in 1880 it had increased to 12,613,664. The percentage of the tonnage for each port in 1856 was for New York 50.15 per cent, Boston 20.34, New Orleans 19.77, Philadelphia 5.17, Baltimore 4.57. In 1880 the percentage stood, New York 60.34 per cent, Baltimore 11.92, Philadelphia 11.03, Boston 10.68 New Orleans 6.03. From this brief comparison it will be seen that New York has gained in relative pre-eminence over the other four cities, and that Philadelphia, Boston and Baltimore have been brought comparatively to a nearly equal footing, while New Orleans takes the position of the weakest among the rivals. Had the domestic or coast tonnage entered into this comparison New Orleans would doubtless have made a much different showing. A statement is given showing the relative growth of the tonnage entered at the port of New York, and at the other ports mentioned during the five years from 1856 to 1860 inclusive, as compared with the five years from 1876 to 1880, from which it appears that there has been an increase in the tonnage entered at New York in the latter period of five years of 212 per cent, and an increase of 124 per cent in the tonnage entered at the other four ports, the increase at New York amounting to 19,682,089 tons, and that of the other ports combined 10,385,346.

Notwithstanding the relatively small amount of tonnage shown by New Orleans a table giving the values of the exports from these five cities during the twenty-five years shows that in 1880 the value of the exports from New Orleans was greater than any of the above ports excepting New York. The value of the exports for 1880 were from New York $388,441,664, New Orleans $90,249,874, Baltimore $76,220,870, Boston $58,023,587, Philadelphia 49,612,195. From a comparison of the value of domestic exports during the two periods of five years ended June 30, 1860, and June 30, 1879, there appears to have been an increase during the latter period of 225 per cent in the value of the exports from New York, and an increase of 71 per cent in the value of the exports from the other four ports mentioned. The increase in the value of the domestic exports from New York amounted to $1,150,638,046, and the increase in the value of such exports at the other ports amounted to only $457,512,633.

During the two periods of five years ended June 30, 1860, and June 30, 1880, there appears to have been an increase during the latter period of 74.2 per cent in the value of imports at New York, and an increase of 14.4 per cent in the value of the imports at the other ports referred to. The increase in the imports at New York amounted to $772,224,535, and the increase in the value of the imports at the other ports amounted to $62,529,028.

The comparison made between a period of five years before the war with a period of five years since the war is especially desirable as it indicates traffic uninterrupted by blockades and other disturbing influences of war times. In all of these figures the strength with which New York maintains her supremacy in foreign commerce over rival ports is strikingly illustrated. There is little doubt, however, that changes will be made in the relative positions of some of these ports within the next few years. There has been in fact an apparent change during the past year not indicated of course in this report made up only to June 30, 1880. The increase in the Mississippi river traffic witnessed during the past year has had no inconsiderable effect upon New Orlean's importance as a shipping point. Boston meanwhile has experienced an unusual activity in her shipping interests, stimulated by her greatly improved railroad connections with the West via the Hoosac Tunnel route and other lines recently established and proposed. The improvements in terminal facilities which are being made on the South Atlantic coast as well as further North and on the Gulf, are indicative of changes anticipated concerning the current of ocean traffic.

Pneumatic Engine.

AN official trial of the Pneumatic Engine was made on Tuesday, December 27th, by order of Col. F. K. Hain, General Manager of the Elevated Railways. The trial was made on the Second Avenue, from 127th street to South Ferry. The train consisted of four cars. The engine at starting was charged with air under 600 pounds pressure. The machine has stood the test of 750 pounds pressure. The inventor, Mr. Hardy, who was engineer, said that he wanted to be on the safe side. Col. Hain, H. L. Grant and other officers and stockholders were on the train, but it was run as a regular passenger train. The train arrived at South Ferry about two minutes late. Col. Hain said that the second trial was much more successful

than the first. Better time was made; and, whereas on the first trip only 150 pounds pressure remained at the end of the trip, on the second there were 190 pounds pressure, enough to run the engine alone back to Sixty-seventh street. Col. Hain said that the trial was a successful one, but some mechanical difficulties would have to be overcome before the placing of pneumatic engines on the elevated railways could be considered.

The motor, which was built at the Baldwin Locomotive Works, does not differ from an ordinary steam motor to the eye of the unobserving traveler. Instead of the usual boiler, however, four large air reservoirs are used, three feet in diameter, made of steel half an inch thick and having a tensile strength of 75,000 pounds. These reservoirs contain 460 cubic feet of air compressed to 600 pounds to the square inch, and are all connected, the only advantage of four reservoirs over one large one being a better distribution of gravity. By running the triple riveted seams around the boilers spirally instead of longitudinally it is claimed that the strength of a solid steel tube is obtained. The air, heated by 240 degrees Fahrenheit by passing through hot water, and moistened that it may act as a lubricator, passes into the steam chest at a pressure of 120 pounds, which is regulated by reducing valves and safety gauges. In running down hill or coming to a stop the cylinders can be converted into air pumps, storing away energy that will act as a spring in starting the engine; while by the turning of a valve and reversing the lever the cylinders will work as air-brakes.

PERSONAL.

Jay Gould has been elected President of the Wabash, St. Louis and Pacific Railway, in the place of Solon Humphreys resigned.

Henry C. Wentworth, for 20 years General Passenger Agent of the Michigan Central Railraod, died, at Chicago, on the 28th ult.

Robert Anderson has been elected Superintendent of the Western and Atlantic Railroad, in place of Wm. McRae resigned. Joseph M. Brown has been made General freight agent.

F, D. Underwood has been appointed Superintendent of the Southern Minnesota division of the Chicago, Milwaukee and St. Paul Railway.

T. W. Fredericks, Superintendent of the car department of the Pardee car and machine works, at Watsontown, Penn., has resigned his position.

A. R. Wood, has been appointed assistant to General Manager C. W. Smith, of the Chesapeake and Ohio Railway with his office in Richmond.

Col. Henry S. McComb, of Wilmington, Del., died in Philadelphia, on the 20th ult., aged 53 years. He was well-known in connection with railroad matters in the West and South.

Henry Fink has been appointed manager of the confederated lines of the Cole system, viz: the Shenandoah Valley, the Norfolk and Western, and the East Tennessee, Virginia and Georgia with headquarters at Lynchburg.

The Canada and Atlantic Railroad Company has appointed Walter Shanly, Chief Engineer of the Company, The portion of the line between High Falls and Goteau, it is expected, will be opened for passenger and general traffic on the 10th inst.

The Governor of Vermont has appointed Hon. Samuel M. Gleason, of Thetford, Hon. Albert Dwinell, of Calais, and Col. Mason S. Colburn, of Manchester, as a State Board of Listers to appraise railroad property under an act of the Legislature passed at its last session.

Col. Wm. M. Wadley has been re-elected President and W. G. Raoul, Vice President of the Central Railroad Company of Georgia. In the election for directors four new members were chosen, viz: Messrs. Alexander, Phintzy, Falligant and Maclean. The election changes in a measure the policy of the company, and will insure the issuance of income bonds of the Ocean Steamship Company, and declares a dividend of 4½ per cent on certain common stock.

CONSTRUCTION.

Six miles of track had been laid on the Georgia Pacific Railroad up to the 3d inst.

The Northern Pacific Railroad was completed on the 25th ult., to the Rosebud river, the scene of the Custer Massacre.

The grading on the extension of the San Luis Ohispo and Santa Maria Valley Railroad between Arroyo Grande and Central City, Cal., is progressing rapidly and satisfactorily to all concerned, and will be completed in three or four weeks.

The Shenandoah Valley Railroad Company has established a bureau of construction, with headquarters in Philadelphia, and Mr. Julius C. Holmes, a prominent and enterprising West Virginia contractor, has been appointed chief of construction.

The Vicksburg and Ship Island and the Memphis and Vicksburg railroads have leased 600 penitentiary convicts from the Mississippi State Board of Public Works, which are to be divided between the two roads and put to work near Vicksburg.

A dispatch from Dover, N. H., says that owing to dissatisfaction at the existing freight rates on the Eastern and Boston and Maine Railroads, it is proposed to build a branch line of railroads, six miles in length, connecting with the Rochester and Nashua Railroad.

The San Diego *Union* says that about 37 miles of the California Southern Railroad have been completed. There are 57 bridges, the largest being 65 miles feet high and 250 feet long. The heaviest grade is 116 feet, and the deepest cut 40 feet.

The Missouri Pacific Railroad commenced to send out cars to Waco, Texas, on the 1st inst. The line will also be completed to Taylor, about 80 miles beyond, where connection will be made with the International and Gt. Northern Railway.

A charter has been obtained for a narrow-gauge railroad to run from the line of the Buffalo, New York and Philadelphia Railroad at Aurora, New York, Southeast to Williamsport, Pa. Work will be commenced on the road as soon as possible.

Work was commenced on the 2d inst., at Meridian, Miss., on the New Orleans and Northeastern Railroad, owned by the Erlanger syndicate. It is claimed that when this road is completed it will greatly shorten the route between New York and New Orleans.

The first locomotive ever seen in Newfoundland is busily engaged ballasting the new railway at the St. John's end, a mile of which was completed up to Dec. 14th. The road was finished for a mile and a half at the Harbor Grace end up to the 10th of Dec., and operations were being rapidly pushed.

Connection was made between the St. Louis and San Francisco Railway, and the main line of the Atchison, Topeka and Santa Fe Railroad at Halstead, Kansas, on the 2d inst. The extension from Wichita to Halstead, just completed, is about 25 miles in length, and passes through a rich country.

The new Fergus Falls and Black Hills Branch of the Northern Pacific Railroad, 64 miles from Wadena, on the main line, was opened for business on the 28th ult.. At the latter point the branch connects with the St. Paul, Minneapolis and Manitoba Railroad. The work toward the Black Hills from Fergus Falls is being pushed ahead vigorously.

The track of the St. Louis, Jerseyville and Springfield Railroad reached Jersey Landing on the 30th of December, and the Mississippi river on the following day, thus practically securing the subsidy of $100,000 and the right of way provided the road reached the river in 1881. Soon Grafton will be reached when $10,000 more of subsidy will be secured.

Connection has been made between the Danville, Olney and Ohio River Railroad and the Chicago and Eastern Illinois Railroad thus securing entrance to Chicago. The directors decided to extend the road this winter to a connection with the Louisville, New Albany and St. Louis Railroad, and during 1882 to complete the system to the Ohio river at Paduca, Ky.

The Mexican Government has accepted 191 kilometres of the Mexican Central Railroad, and the line to San Juan del Rio, 118½ miles from the City of Mexico, is now in operation. San Juan del Rio has a population 10of ,000. The line is graded and masonry work completed for about 225 miles from the City of Mexico. General Manager Fink says that the line will be completed to Leon, 262½ miles, Aug. 31, 1882.

The Louisville, New Albany and St. Louis Air Line Railroad has been completed from Mt. Vernon, to Louisville, Ky., with the exception of a small gap between Mt. Carmel, Ill., and New Albany, Ind., which will be finished by the 1st of May. The original road, known as the New Albany, Mt. Carmel and Alton railroad was projected 40 years ago by Gen. Wm. Pickering, and the road was graded ready for the track from Mt. Carmel to Albion, when the work was suspended. It was among the first railroads projected in the State of Illinois.

The new line to California via El Paso, Tex.,

composed of the St. Louis, Iron Mountain and Southern railway, the Texas and Pacific railway and the Southern Pacific railroad was opened on the 1st inst. New palace sleeping cars, built expressly for this line, leave St. Louis Union Depot daily at 9 A. M., and run through to Deming without change, where direct connection is made with the Southern Pacific's California express, which has palace sleepers running through to San Francisco without any change—only one change of cars from St. Louis to San Francisco.

THE route selected for the Canadian Pacific Railway from Callendar to Prince Arthur's Landing, North of Georgian Bay and Lake Superior, instead of running in a Northwesterly direction towards Moose River and Long Lake, as at first projected, will run from Callendar, North of Lake Nipissing, in a Southwesterly direction, to Spanish River, near Lake Huron; thence to Mississaga River; thence Northwest to Michipicoton River, skirting the shore of Lake Superior to Pic, and crossing the Red River at Red Rock; thence, following the shore of Lake Superior, to Fort William.

The Coal Trade.

THE leading coal carrying companies make the following reports of their tonnage for the week ending December 24, and for the year to same date, compared with their respective amounts carried to the same date last year:

	Week.	1881.	1880.
Reading Railroad	181,191	624,351	423,573
Schuylkill Canal	.....	27,655	.....
Lehigh Valley	132,464	470,183	314,008
Delaware, Lackawanna and Western	97,818	4,271,953	3,479,628
Shamokin	.....	1,041,935	894,109
Central R. R. of New Jersey	94,235	4,382,763	3,735,609
United R. R. of New Jersey	41,536	1,591,978	1,160,193
Pennsylvania Coal	27,620	1,406,058	1,110,432
Delaware and Hudson Canal	81,442	3,581,781	2,002,807
Huntingdon and Broad Top Mountain	.....	498,282	403,557
Penn. and New York	31,766	109,532	81,309
Clearfield, Pa	45,284	2,364,169	1,711,098

The total tonnage of anthracite coal from all the regions for the week ending Dec. 24, as reported by the several carrying companies, amounted to 629,240 tons, against 349,661 tons in the corresponding week last year, an increase of 279,579 tons. The total amount of anthracite mined for the year is 28,865,667 tons, against 23,931,541 tons for the same period last year, an increase of 4,934,126 tons. The quantity of bituminous coal sent to market for the week amounted to 90,982 tons, against 66,503 tons, in the corresponding week of last year, an increase of 24,479 tons. The total amount of bituminous mined for the year is 4,918,943 tons, against 4,303,403 tons for the corresponding period last year, an increase of 615,548 tons. The total tonnage of all kinds of coal for the week is 720,222 tons, against 416,164 tons in corresponding week last year, an increase of 304,058 tons, and the total tonnage for the coal year is 33,784,610 tons, against 28,234,944 tons to same date last year, an increase of 5,549,666 tons. The quantity of coal and coke carried over the Pennsylvania Railroad for the week ending December 24 was 200,723 tons, of which 145,610 tons were coal and 55,113 tons coke. The total tonnage for the year thus far has been 9,017,167 tons, of which 6,651,276 tons were coal and 2,365,891 tons coke. These figures embrace all the coal and coke carried over the road east and west. The shipments of bituminous coal from the mines of the Cumberland coal region during the week ended December 24 were 43,518 tons, and for the year to that date 2,197,715 tons, an increase of 135,000 tons last year, No exact comparison can be made, as the report for the last Saturday in December, is usually omitted, and a report made for the 7, 8, 9, 10 or 11 days ending December 31. The coal was carried to tidewater as follows: Baltimore and Ohio Railroad—week, 34,658 tons; year, 1,415,613 tons. Chesapeake and Ohio Canal—week, 1,586 tons; year, 505,339 tons. Pennsylvania Railroad—week, 7,067 tons; year, 273,163 tons. The coal was brought from the mines as follows: Cumberland and Pennsylvania Railroad—week, 33,984 tons; year, 1,903,428 tons. George's Creek and Cumberland Railroad—week, 6,116 tons; year, 207,824 tons. Baltimore and Ohio Railroad—week, 1,401 tons; year, 67,293 tons. West Virginia Central and Pittsburg Railway—week, 1,691 tons; year, 10,235 tons. The Reading Railroad shipment for last week, ending December 31, was 134,900 tons, of which 31,500 tons were sent to and 28,000 tons shipped from Port Richmond, and 17,500 tons sent to and 18,900 tons shipped from Elizabethport.—*Phil. Ledger, Jan. 2.*

Imports of Dry Goods at New York.

The Imports of Foreign Dry Goods at New York for the month of December, were:

ENTERED FOR CONSUMPTION.

	1879.	1880.	1881.
Manufs. of wool	$869,921	$588,513	$969,304
Manufs. of cotton	1,176,038	1,582,716	1,657,017
Manufs. of silk	1,297,807	1,283,844	1,871,421
Manufs. flax	797,847	630,436	764,564
Miscell. dry goods	483,887	512,262	538,240
Total ent. for consumption	$4,625,500	$4,597,771	$5,800,546

WITHDRAWN FROM WAREHOUSE.

	1879.	1880.	1881.
Manufs. of wool	$278,961	$384,889	$239,081
Manufs. of cotton	396,281	235,541	245,025
Manufs. of silk	185,004	307,313	257,992
Manufs. of flax	298,012	280,042	204,056
Miscell. dry goods	129,709	200,298	110,900
Total withdr'n from warehouse	$1,287,967	$1,408,083	$1,057,054
Add ent. for con	4,625,500	4,597,771	5,800,546
Total thrown on the market	$5,913,467	$6,005,854	$6,857,600

ENTERED FOR WAREHOUSING.

	1879.	1880.	1881.
Manufs. of wool	$273,712	$393,931	$341,660
Manufs. of cotton	365,180	530,733	321,061
Manufs. of silk	290,775	368,124	384,039
Manufs. of flax	316,398	291,059	191,046
Mis. dry goods	145,897	242,151	275,098
Total ent. for warehouse	$1,393,962	$1,737,968	$1,412,964
Add entered for consumption	4,625,500	4,597,771	5,800,546
Total entered at port	$6,019,562	$6,335,739	$7,213,450

The Imports of Foreign Dry Goods at New York for the years 1879, 1880 and 1881 were:

ENTERED FOR CONSUMPTION.

	1879.	1880.	1881.
Manufs. of wool	$20,773,785	$28,176,532	$24,536,605
Manufs. of cotton	18,813,862	26,211,471	25,087,821
Manufs. of silk	29,129,588	35,342,349	34,617,264
Manufs of flax	14,706,100	18,823,968	16,401,383
Mis. dry goods	8,126,265	11,289,800	10,893,947
Total entered for consumption	$91,549,600	$119,844,120	$111,537,029

A LADY was once asked why she always came so early to church. "Because," said she, "it is a part of my religion never to disturb the religion of others."

Cincinnati Iron Market.

OFFICE OF E. L. HARPER & Co.
Cincinnati, Jan. 3, 1881.

THE inquiries during the past week have been very numerous and a large number of orders have been booked. Business has been better at this season of the year than it has been for years past. A clean advance of $1.00 per ton has been realized on nearly all grades. Stocks are light and the tendency is towards still higher prices. The outlook for the New Year is very promising for a good business. We revise quotations as follows both for producers and consumers.

We quote as follows:

	No.			Mos.
FOUNDRY.				
Hanging Rock Charcoal	1	29 50	@30 75	4
Strong Neutral Coke	1	27 00	@28 00	4
American Scotch	1	26 50	@27 00	4
GREY FORGE.				
Neutral Coke		25 50	@26 50	4
Cold Short		24 00	@25 00	4
CAR WHEEL AND MALLEABLE.				
Hanging Rock Cold Blast		36 00	@38 00	4
" Warm Blast		30 00	@32 00	4
Lake Superior 1 and 2		32 00	@33 00	4
Lake Superior 3 to 6		34 00	@36 00	4
Southern Car Wheel		36 00	@40 00	4

New York Central and Hudson River Railroad.

THE following is the general balance-sheet of the New York Central and Hudson River Railroad Company, as reported to the State Engineer, and not contained in the statement recently published:

DEBIT.

Railroad Equipment — Cash expended by former companies and by this company to date, $110,000,216.90; certificates issued at time of consolidation in 1869 and afterwards converted into stock representing additional cost of road and equipment to the new company, $31,157,904; total, $141,248,120.90.

Ownership in Other Lines—Hudson River bridges, $1,739,372.16; Dunkirk, Alleghany Valley and Pittsburgh Railroad, $2,290,621.09; Geneva and Lyons Railroad, $331,889.93; total, $4,991,883.18; grand total, $146,240,004.08. Real estate in New York and Troy, outside of road, $1,173,500.36, advances on Harlem construction account, $277,513.49; company's own stock held, $184,200; stock in the Troy Union Railroad, $15,000; stock in Merchant's Despatch and Transportation Company, $730,575; stock in Union Pipe lines, $22,749.80; stock in the Pittsburg and Lake Erie Railroad, $100,000; stock in the New York Central and Niagara River Railroad, $28,100; stock and bonds of the Syracuse, Geneva and Corning Railroad, $376,010; fuel and supplies on hand, $1,624,358.28; cash on hand, $248,913.87; station balances, $864,776.52; connecting railroad balances, $316,075.24; United States bonds, $558,634.05; equipment on Harlem line, $404,394.22; sundry open accounts, $33,191.15; grand total, $153,218,680.83.

CREDIT.

Capital stock, $89,428,300; funded debt, $43,473,033.33; unfounded debt, $5,556,682.81; total, $138,458,016.14; balance, previous year, $13,216,847.98; surplus this year, $754,483.60; premiums on bonds sold, $778,151; profit from sale of invested securities, $33,000; total, $14,782,482.58. Debit—Internal revenue tax on undivided profits for year ending September 30, 1869, $29,817.89. Total, $14,752,664.67; grand total, $153,210,680.83.

New York Stock Exchange.

(Thursday's quotations follow money article.)

Closing Prices for the week ending Jan. 4.

	Th.29.	F.30.	Sat.31.	M. 2.	Tu.3.	W.4.
Adams Express	.....	.....	.....	.....	.....	146
Albany and Susq.	.....	.....	130	.....	.....	.....
1st mortgage	.....	.....	.....	.....	.....	.....
2d mortgage	.....	.....	.....	.....	.....	.....
American Express	90¾	.....	92½	.....	93	....
Atlantic & Pac. Tel.	.....	.....	.....	.....	.....	.....
Burl., C. R. & Nor.	.....	.....	81¾	.....	.....	.....
1st mortgage 5s	100	.....	.....	.....	100	.....
Canada Southern	52¾	54¼	52¾	.....	51	51½
1st mortgage guar	98¾	98¾	98¾	.....	.....	.....
Central of N. Jersey	91¾	92½	91½	.....	89¾	90¾
1st mort. 1890	.....	.....	118½	.....	.....	118¼
7s, consol. ass	.....	.....	.....	.....	....	....
7s, convertible ass.	.....	.....	.....	.....	.....	.....
7s, Income	.....	.....	.....	.....	.....	.....
Adjustment	107¾	107½	107	.....	.....	.....
Central Pacific	91½	92½	92	.....	90¾	91⅞
6s, gold	.....	.....	.....	.....	.....	113
1st M. (San Joaq)	.....	.....	.....	.....	.....	.....
1st M. (Cal. & Or.)	.....	.....	.....	.....	.....	.....
Land grant 6s	105	.....	.....	.....	.....	.....
Chesapeake & Ohio	25¾	26¾	26	....	25	25½
Chicago and Alton	130	131	.....	.....	128¾	129¾
Preferred	.....	.....	.....	.....	.....	.....
1st mortgage	.....	.....	122	.....	.....	.....
Sinking Fund	.....	.....	.....	.....	.....	.....
Chi,, Bur. & Quincy	136¼	136½	136¼	.....	133	134½
7s, Consol. 1903	.....	.....	.....	.....	.....	.....
Chi., Mil. & St. Paul	106¾	107¼	106½	.....	104⅞	106¾
Preferred	119¼	120¾	119¼	.....	119¼	119¾
1st mortgage, 8s	133¾	.....	.....	.....	.....	.....
2d mort., 7 3-10s	.....	.....	.....	.....	120	.....
7s, gold	.....	.....	.....	.....	.....	.....
1st M. (La. C. div)	.....	.....	.....	.....	.....	.....
1st M. I. & M. div.)	.....	.....	.....	.....	.....	.....
1st M. (I. & D. ext.)	.....	.....	.....	.....	.....	.....
1st M. (H.&D. div.)	117	.....	.....	.....	114x	.....
1st M.(C. & M.div.)	125	.....	110	...	.....	.....
Consolidated S. F.	123¾	123¾	.....	.....	.....	.....
Chi. & Northwestern	126	126½	125½	.....	124½	125¼
Preferred	139¾	140	138½	.....	137	138
1st mortgage	.....	110	110	.....	.....	.....
Sinking Fund 6s	.....	.....	109	.....	.....	.....
Consolidated 7s	.....	.....	131	.....	.....	.....
Consol. Gold bo'ds	124	.....	.....	.....	.....	123¾
Do. reg	124	.....	.....	....	123	.....
Chi., R. Isl. & Pac.	133	132½	132½	.....	131¼	131⅜
6s, 1917, c	.....	130	.....	.....	126x	.....
Clev.,Col.,Cin.&Ind.	84¼	84	83¼	....	81	82½
1st mortgage	.....	.....	.....	.....	.....	.....
Clev. & Pittsburg gr.	.....	.....	.....	.....	.....	.....
7s, Consolidated	.....	.....	.....	.....	.....	.....
4th mortgage	.....	.....	.....	.....	.....	.....
Col.,Chi.,& Ind. Cent.	21¾	21¾	21¼	.....	20	20¾
1st mortgage	.....	.....	.....	.....	.....	.....
2d mortgage	.....	.....	.....	.....	.....	.....
Del. & Hud Canal.	108	108½	107⅞	.....	107¾	107½
Reg. 7s, 1891	.....	.....	.....	.....	.....	.....
Reg. 7s, 1884	103¼	.....	.....	.....	.....	.....
7s, 1894	.....	.....	.....	.....	.....	.....
Del.,Lack.& Western	127½	127⅞	127½	.....	125½	126¾
2d mortgage 7s	.....	.....	.....	.....	.....	.....
7s, Consol. 1907	.....	.....	.....	.....	.....	.....
Erie Railway	.....	.....	.....	.....	.....	.....
1st mortgage	.....	.....	.....	.....	.....	.....
2d mort. 5s, ext.	.....	.....	.....	.....	.....	106x
3d mortgage	106	106	.....	.....	.....	.....
4th mort. 5s, ext.	.....	.....	.....	.....	.....	.....
5th mortgage	.....	.....	.....	.....	.....	.....
7s, Consol. gold	.....	129½	129¾	.....	129¾	.....
Great West. 1st mort	.....	.....	.....	.....	.....	.....
2d mortgage	.....	.....	.....	.....	.....	.....
Hannibal & St. Jo.	95¾	95¾	95	.....	95½	95
Preferred	113½	113	114¾	.....	109⅞	103
8s, Convertible	.....	.....	.....	.....	.....	.....
Houston & Tex. Cen	.....	.....	.....	.....	.....	85
1st mortgage	.....	.....	.....	.....	.....	.....
Illinois Central	131	131¼	130½	.....	129½	129½
LakeShore&MichSo	115¾	116¾	112¾x	....	110¼	112¾
Consol. 7s	.....	.....	124½	.....	.....	.....
Consol. 7s, reg	.....	.....	.....	.....	125	.....
2d Consolidated	.....	123½	.....	.....	.....	.....
Leh. & W. B. 7s, Con	.....	.....	.....	.....	.....	.....
Long Dock bonds	.....	.....	.....	.....	.....	.....
Louisville & Nash.	101¼	101¾	101¾	.....	98¼	99
7s, Consolidated	.....	.....	.....	.....	.....	.....
Manhattan	.....	54¾	54½	54	.....	53½	50
Met. Elevated	85½	86¾	86½	.....	84¾	87
1st mortgage	103	103	103	.....	100	99½
Michigan Central	87¾	87¾	86	....	83¾	86
7s, 1902	.....	124	.....	.. .	.....	124
M. S. & N. I. 1st, S. F	.....	.....	.....	.....	.....	.....
Morris & Essex	.....	121¾	121¾	.....	120½	121¾
1st mortgage	.....	.....	.....	.....	.....	.....
2d mortgage	.....	.....	.....	.....	.....	.....
7s of 1871	.....	.....	.....	.....	.....	122½
7s, Convertible	.....	.....	.....	.....	.....	.....
7s, Consolidated	123¼	.....	.....	.....	123¾	.....
N.Y. Cen. & Hud. R.	131¾	132	131	.....	129¾	130½
4s, S. F. 1883	.....	.....	.....	.....	.....	102½
6s, S. F., 1887	.....	.....	.....	.....	.....	.....
1st mortgage	138	.....	.....	.....	.....	.....
1st mortgage, reg	.....	.....	.....	.....	.....	.....
N. Y. Elevated	106½	105	.....	.....	.....	106
1st mortgage	.....	.....	118⅜	.....	115x	115
N. Y. & Harlem	205	.....	.....	.....	.....	.....
Preferred	.....	.....	.....	.....	.....	.....
1st mortgage	.....	.....	.....	.....	.....	.....
1st mortgage, reg	.....	.....	.....	.....	.....	.....
N. Y., Lake Erie & W	41¼	41¾	40¾	.....	39	40¼
Preferred	90¼	91	98	.....	84	82½
2d Consolidated	100	99¾	99½	.....	98¼	99¾
New 2d 5s fund	97½	....	.....	.....	.....	.....
N.Y.,N.Hav'n&Hart	.....	.....	172	.....	170½	.....
North Mo. 1st mort	123	.....	.....	.....	.....	.....
Northern Pacific	37¾	37¾	36½	.....	35¾	35¾
Preferred	76¾	77¼	75⅝	.....	73½	75⅛
Ohio & Mississippi	36	37½	36¾	.....	35½	34⅞
Preferred	.....	.....	.....	.....	.....	.....
2d mortgage	.....	.....	.....	.....	.....	.....
Consolidated 7s	.....	.....	.....	.....	.....	.....
Consol. S. Fund	.....	120	.....	.....	.....	.....
Pacific Mail S. S. Co	41⅛	42	41	.....	39¾	40¾
Pacific R. R. of Mo.	.....	.....	.....	.....	.....	.....
1st mortgage	.....	.....	.....	.....	107¾	.....
2d mortgage	113	.....	.....	.....	110x	.....
Panama	.....	.....	.....	.....	.....	.....
Phila. & Reading	69¼	69	67½	.....	65¼	66½
Pitts,Ft.W.&Chi.gtd	.....	134½	.....	.....	134½	.....
1st mortgage	.....	.....	.....	.....	.....	.....
2d mortgage	.....	.....	.....	.....	.....	.....
3d mortgage	.....	.....	.....	.....	.....	.....
Pullman Palace Car	123	135	135	.....	132	133
Quicksil'r Min'g Co	.....	12½	13	.....	.....	.....
Preferred	.....	59½	59	.....	57	.....
St. Louis & San Fran	39¾	41½	41	.....	.....	.....
Preferred	58	58¾	60½	.....	60½	58½
1st Preferred	.....	104	104½	.....	105	.....
St. L., Alt'n & T. H.	.....	47	.....	.....	.....	.....
Preferred	.....	.....	.....	.....	.....	.....
1st mortgage	.....	.....	.....	.....	.....	.....
2d mort. pref	.....	.....	.....	.....	.....	.....
Income bonds	.....	102½	.....	.....	.....	.....
St. L., Iron Mt. & S	.....	.....	.....	.....	.....	.....
1st mortgage	116½	.....	.....	.....	.....	117
2d mortgage	.....	.....	.....	.....	.....	108
Toledo and Wabash	.....	.....	.....	.....	.....	.....
1st mortgage	.....	.....	.....	.....	108	.....
2d mortgage	.....	109	.....	.....	.....	.....
7s, Consolidated	.....	.....	.....	.....	.....	.....
St. Louis Division	107½	.....	108	.....	.....	.....
Union Pacific	116⅞	117⅛	116⅜	.....	115	116⅜
1st mortgage	117½	117⅝	117⅝	.....	.....	114¾x
Land Grant 7s	113¼	.....	.....	.....	.....	.....
Sinking Fund 8s	.....	.....	.....	.....	.....	.....
United States Ex	77¼	77	.....	.....	77	76½
Wabash, St. L.& Pac	36¾	38	37	.....	34¾	36
Preferred	68¼	70⅞	68¾	.....	66½	68¾
New mort. 7s	.....	.....	.....	.....	.....	.....
Wells-Fargo Ex	.....	.....	.....	.....	.....	129¾
Western Pacific b'ds	.....	.....	.....	.....	.....	.....
Western Union Tel.	79¾	80⅝	79¾	.....	77¾	79⅝
7s, S.F. conv., 1900	.....	.....	.....	.....	.....	.....
FEDERAL STOCKS :—						
U. S. 4s, 1907, reg	117⅝	.....	.....	.....	117½	117½
U. S. 4s, 1907, coup	118⅜	118⅜	.....	.....	117⅝	117¼
U. S. 4½s, 1891, reg	.....	114¾	.....	.....	.....	.....
U.S. 4½s, 1891, coup	.....	114¾	.....	.....	.....	.....
U. S. 5s, 1881, reg	.....	.....	.....	.....	.....	.....
U. S. 5s, cont'd at3½	103	.....	103½	.....	102¼	102⅛
U. S. 6s cont'd at3½	.....	101½	101¼	.....	.....	.....
Dt. of Col. 3-65s, reg	.....	.....	.....	.....	.....	.....
Dt. of Col.3-65s,coup	.....	.....	109	.....	.....	.....

Boston Stock Exchange.

Prices for the Week Ending Jan. 4

	Th.29.	F. 30.	Sat.31.	M.2.	Tu.3.	W.3.
Atch.,Top.&San.Fe.	94¾	94½	94¾	.....	93½	93¾
1st mortgage	.....	.....	.....	.....	.....	120
2d mortgage	.....	.....	.....	.....	.....	.....
Land Grant 7s	.....	.....	117¾	.....	.....	117
Boston & Albany	.....	161½	164	....	162¼	.....
7s reg	.....	.....	.....	.....	.....	.....
Boston and Lowell	.....	106	.....	.....	.....	.....
Boston & Maine	.....	.....	149	.....	.....	.....
Boston& Providence	.....	.....	161	.....	.....	.....
Bos'n,Hart.& Erie7s	68¾	69¾	69	.....	64¾	63¾
Burl.& Mo.R.L.G.7s	.....	.....	.....	.....	.....	.....
Burl.& Mo.R.in Neb	.....	.....	.....	.....	.....	.....
6s, exempt	.....	.....	115	.....	.....	.....
4s	.....	.....	.....	.....	86	.....
Chi.,Burl. & Quincy	136½	137	135¾	.....	133⅝	133¾
7s	.....	.....	.....	.....	.....	.....
Cin.,Sand&Clev($50)	28¼	28½	28¼	.....	27⅝	27½
Concord ($50)	.....	.....	.....	.....	.....	100
Connecticut River	.....	.....	.....	.....	.....	.....
Eastern	36	37¼	37½	.....	.....	36¾
New 4½ Bonds	105¾	106	105¾	.....	.....	105½
Fitchburg	133	....	135	....	.....	134
Kan.C., Top. & West	.....	.....	.....	....	.....	.....
Michigan Central	.....	.....	.....	.....	.....	.....
N.Y. & New England	66¼	66	64	.....	61	62
7s	117¼	117¾	118	.....	118	.....
Northern N. H.	.....	.....	105	.....	104½	104½
Norwich&Worcester	.....	.....	.....	....	.....	.....
Ogden & Lake Cham	.....	.....	.....	.....	.....	.....
Preferred	.....	.....	.....	.....	.....	.....
Old Colony	.....	125½	125	.....	125½	124¾
Ph.,Wil.&Balt.($50).	63½	.....	.....	.....	62	.....
Portl'd,Saco & Ports	.....	.....	.....	.....	.....	.....
Pueblo & Ark Val.	.....	.....	.....	.....	.....	.....
7s	.....	.....	.....	.....	.. .	.....
Pullman Palace Car	125	131	132	.....	.....	126
Union Pacific	117	118	117¾	.....	115½	115⅝
6s	.....	114	.....	.....	.....	.....
Land Grant 7s	.....	.....	.....	.....	111	.....
Sinking Fund 8s	120¾	.....	121	.....	.....	.....
Vermont & Canada	.....	.....	.....	.....	.....	.....
Vermont & Mass.	.....	.....	.....	.....	.....	.....
Worcester & Nashua	.....	.....	.....	.....	.....	.....
Cambridge (Horse)	.....	.....	.....	.....	.....	.....
Metropolitan(Horse)	.....	...	.....	.....	.....	.....
Middlesex (Horse)	.....	.....	.....	.....	.....	.....
Cal.&Hecla Min'gCo	237½	238	.....	.....	.....	239
Quincy	49⅞	50	51½	.....	52	53

Philadelphia Stock Exchange.

Closing Prices for the Week Ending Jan. 3.

	W.28.	Th.29.	F.30.	Sat.31.	M.2.	Tu.3.
Allegh'y Val. 7 3-10s	.....	123½	.....	.....	.....	.....
7s, Income	52	52½	.....	.....	.....	.....
Camd'n & Am. 6s, '83	.....	.....	.....	.....	.....	.....
6s, 1889	.....	.....	.....	.....	.....	.....
Mort. 6s, 1889	.....	.....	114	.....	.....	.....
Camden & Atlantic	.....	.....	.....	.....	.....	.....
Preferred	.....	129	.....	.....	.....	.....
1st mortgage	.....	.....	.....	.....	.....	.....
2d mortgage	.....	.....	.....	.....	.....	.....
Catawissa	.....	.....	.....	.....	.....	.....
Preferred	.....	.....	.....	.....	.....	53
7s, new	.....	52	.....	.....	.....	.....
Del. & Bound Brook	125	.....	.....	.....	.....	.....
7s	.....	.....	.....	.....	.....	.....
Elmira&Williamsp't	.....	.....	.....	.....	.....	.....
Preferred	.....	.....	.....	.....	.....	.....
Hunt. & B. Top Mt.	.....	.....	.....	.....	.....	.....
Preferred	27½	.....	.....	28	.....	.....
2d mortgage	.....	.....	.....	.....	.....	.....
Lehigh Navigation	43⅝	44	43¾	43¾	.....	43
6s, 1884	.....	.....	.....	.....	.....	.....
Gold Loan	.....	.....	.....	111	.....	112¼
Railroad Loan	.....	.....	.....	.....	.....	.....
Conv. Gold Loan	.....	.....	.....	.....	.....	.....
Consol. Mort, 7s	117	.....	.....	.....	.....	117
Lehigh Valley	61½	61¾	.....	61½	.....	61¾
1st mort. 6s, coup	.....	121	120	.....	.....	.....
1st mort. 6s, reg	.....	.....	.....	.....	.....	.....
2d mort. 7s	.....	.....	.....	.....	.....	.....
Consol mort. 6s	117	.....	.....	.....	.....	.....
Consol.mtg.6s,reg	117½	.....	.....	.....	.....	.....
Little Schuylkill	.....	.....	57	.....	.....	57
Minehill&Sch.Hav'n	.....	.....	.....	.....	.....	60½x
North Pennsylvania	60	59½	60	60	.....	59¾
1st mortgage 6s	108	.....	.....	.....	.....	.....
2d mortgage 7s	.....	.....	.....	.....	.....	.....
Genl. mtg.7s,coup	.....	.....	.....	.....	.....	.....
Genl. mtg. 7s, reg	.....	.....	.....	.....	.....	.....
Northern Central	51½	51	.....	.....	.....	.....
5s	100¼	.....	.....	.....	.....	.....
Northern Pacific	37	38	37¾	36¾	.....	35⅝
Preferred	76¾	77	77¾	75⅝	.....	73¼
Pennsylvania R. R.	61¼	61¼	61¾	61⅝	.....	60¼
1st mortgage	.....	.....	.....	.....	.....	.....
Gen'l mort	.....	.....	.....	.....	.....	.....
Gen'l mort reg	.....	.....	.....	.....	.....	.....
Consol. mort. 6s	.....	.....	.....	.....	.....	.....
Consol. mort. reg	.....	.....	.....	.....	.....	.....
Pa.State 6s 2d series	.....	.....	.....	.....	.....	.....
do 3d series	.....	.....	.....	.....	.....	.....
do 5s, new	.....	.....	.....	.....	.....	.....
do 3s	.....	.....	.....	.....	.....	.....
Phila. & Reading	34⅝	34½	34⅝	33¾	.....	32⅞
1st mortgage 6s	.....	.....	.....	.....	.....	.....
7s of 1893	.....	.....	.....	.....	.....	.....
7s, new convert	.....	.....	.....	.....	.....	.....
Consol. mort. 7s	125	.....	125	125	.....	.....
Consol. mort. reg	.....	.....	.....	.....	.....	.....
Gen'l mort. 6s	98	97⅞	98⅛	98⅝	.....	98⅛
Philadelphia & Erie	.....	.....	19½	.....	.....	.....
1st mortgage 5s	105½	.....	.....	.....	.....	.....
2d mortgage 7s	.....	.....	.....	.....	.....	.....
Pittsb.,Cin.&St.L.7s	.....	.....	.....	.....	.....	.....
Pitts.,Titusv.&Buff.	21½	21¾	21¾	21½	.....	20¼
7s	.....	.....	.....	102½	.....	.....
Schuylkill Navi't'n	.....	.....	.....	.....	.....	.....
Preferred	.....	.....	.....	.....	.....	13
6s, 1872	.....	.....	.....	.....	.....	.....
6s, 1882	.....	.....	.....	.....	.....	89
United Co. of N. J.	185	185¾	185	.....	.....	185
Hestonville, (Horse)	.....	.....	.....	.....	.....	.....
Chestnut&Wal.(do)	.....	.....	.....	.....	.....	.....
Green & Coates (do)	.....	.....	.....	.....	.....	.....

Baltimore Stock Exchange.

Closing Prices for the Week Ending Jan. 3.

	W. 28.	Th. 29.	F. 30.	Sat. 31.	M. 2.	Tu. 3.
Baltimore & Ohio..	.....	.....	.....	.....	.....	.....
6s, 1880.....	.....	.....	.....	.....	.....	.....
6s, 1885.....	.....	.....	.....	.....	.....	107
Central Ohio ($50)..	.....	.....	.....	.....	.....	.....
1st mortgage.....	.....	.....	.....	.....	.....	109⅛
Marietta & Cincin'ti	126	.....	.....	.....	.....	.....
1st mortgage, 7s..	.....	.....	125	125½	.....	.....
2d mortgage, 7s..	106¼	106⅝	.....	.....	.....	105
3d mortgage, 8s..	62	62½	62	60⅝	.....	58½
Northern Cen. ($50)	.....	51½	.....	.....	.....	.....
2d mort., 6s 1885..	.....	.....	.....	.....	.....	.....
3d mort., 6s, 1900.	.....	.....	.....	.....	.....	.....
6s, 1900, gold.....	.....	.....	.....	.....	.....	113
6s, 1904, gold.....	114	115	.....	.....	.....	.....
Orange & Alex. 1st.	.....	.....	.....	.....	.....	.....
2d mortgage, 6s...	.....	.....	.....	.....	.....	.....
3d mortgage, 8s...	.....	.....	.....	.....	.....	.....
4th mortgage, 8s..	.....	.....	.....	.....	.....	.....
O.,Alex.&Manas's 7s	.....	.....	.....	.....	.....	.....
Pitts.& Connellsv.7s	125	.....	.....	.....	.....	.....
Virginia 6s, Consol.	71¼	72	73¼	72¼	.....	69⅞
Consol. coupons..	.....	76	76	73	.....	73
10-40 bonds.....	.....	41¾	42	42	.....	41
Def'd Certificates.	.....	17½	17½	17	.....	.....
Western Maryland..	.....	.....	.....	.....	.....	.....
1st M.,end.by Balt	.....	.....	.....	.....	.....	.....
2d M., do	.....	.....	.....	.....	.....	.....
3d M., do	.....	.....	.....	.....	.....	.....
1st M.,unendors'd	.....	.....	.....	.....	.....	.....
2d M.,end.WashCo	.....	.....	.....	.....	.....	.....
2d M., preferred..	.....	.....	.....	.....	.....	.....
City Passenger R R.	.....	.....	.....	.....	.....	41

London Stock Exchange.

	Closing Prices— Dec. 9.		Dec. 2.	
Baltimore & Ohio (sterling).....	114	116	114	116
Cairo & Viencennes com. stock	42	45	45	50
Do. preferred 5 per cent.....	91	93	90	92
Central of N. J. $100 share.....	93	98	93	98
Do. Cons. Mortgage.....	118	120	118	120
Do. Adjustment Bonds.....	104	109	104	109
Do. Income Bonds.....	104	107	104	107
Det.,G'd Haven & Mil. Equip bds	112	114	112	114
Do.Con.M.5p.c.,till'83aft'rop.c	110	112	110	112
Illinois Central $100 shares.....	137	138	137	138
Lehigh Valley Cons. mortgage..	115	119	115	119
Louisville & Nashville mort 6s.	105	107	106	108
Do. Sink. Fund bds (S.&N.Ala)	104	106	105	107
Do. capital stock $100 shares.	105	107	101	103
N. Y. Cent. & Hud. R. mt. bds..	138	142	137	140
Do. $100 shares.....	142½	143½	141½	142½
Do mort. bonds (stg.).....	123	125	123	125
N.Y.,Lake Erie & West.,$100 shs	47¼	47¾	46¾	47¼
Do. 6 p. c. pref. $100 shares ..	96	98	96	98
Do. 1st Con. Mort. bds (Erie) .	130	132	130	132
Do. do. Funded Coupon bds.	127	129	127	129
Do. 2d Consol Mort. bonds...	103½	104½	104	105
Do. do. Funded Coupon bds..	101	103	101	103
Do. Gold Income bonds.....	95	100	95	100
N.Y.,Pa.& Ohio 1st mort. bonds.	53	54	53½	54½
Do. Prior Lien bds (sterling)..	105	110	105	110
Pennsylvania, $50 shares.....	65¼	65¾	65¼	65¾
Do. Con. Sink Fund Mort....	120	122	120	122
Philadelphia & Reading $50 shs	35	36	33½	34½
General Consol Mortgage.....	116	118	115	117
Do. Improvement Mortgage..	104	106	103	105
Do.Gen.Mtg.'74,ex-def'd coup.	101	103	101	102
Do. Scrip for the 6 def. ½ coup.	95	100	91	98
Pittsb., Ft. W. & Chi. Eq. bds....	105	109	105	109
St. L. Bridge 1st mort. gold b'd.	126	128	126	128
Do. 1st pref. stock.....	102	104	102	104
Union Pa. Land Grant 1st. mtg.	115	119	115	119

AMERICAN RAILROAD JOURNAL.

Financial and Commercial Review.

THURSDAY EVENING, Jan. 5, 1882.

Money on call during the day, with stocks as collateral, was offered at six per cent, while on United States bonds 3@4 per cent was the quotation. Prime mercantile paper was 6@6½ per cent. In the last hour the rate for call loans fell to 3 per cent.

The actual rates for prime bankers' sterling were 4.79½@4.80 and 4.83½@4.84, with cable transfers 4.84½@4.85½, and prime commercial bills 4.78¼@½. The actual rates for continental bills are as follows: francs, 5.25@5.25⅝ and 5.20@5.20⅜; marks, 94@⅜ and 94⅞@95; and guilders, 39⅝@40⅛.

According to the report of the receivers of the Philadelphia and Reading Railroad and Coal and Iron Companies, which has just been made public, the gross earnings of the Railroad Company for the fiscal year ending November 30, 1881, (including the canals, the steam colliers and the Richmond coal barges) were $20,279,244.14, the working expenses $11,426,800 70, and the net earnings $8,852,443.44; from which deduct rentals of leased lines $3,363,539 79, and interest $5,346,315—leaving a profit of $142,588.65. Compared with the previous year there was an increase in gross earnings of $1,758,841.41, with an increase in working expenses of $1,279,652.64, making the increase in net earnings $479,188.77; to which add decrease in rentals of $2,619.23, together with decrease in interest of $169,158.34—making the increase in net income $650,966.34.

During the same period the gross earnings of the Coal and Iron Company were $15,007,219 17, the working expenses $13,807,774.05, and the net earnings $1,199,445.12; from which deduct interest $1,158,777.63—leaving a profit of $40,667.49. Compared with the previous year there was an increase in gross earnings of $1,350,618.49, in working expenses of $639,056.61, and in net earnings $711,561.88; to which add decrease in interest $30,714.09—making the increase in net income $742,275.97.

The total gross earnings of both companies for the year under review were $35,286,463.31, the total working expenses $25,234,574.75, and the total net earnings $10,051,888.56; less rentals of leased lines $3,363,539.79, and interest $6,505,092.63—leaving a profit of $183,256.14. Compared with the previous year there was an increase in gross earnings of both companies of $3,190,459.90, with an increase in working expenses of $1,918,709.25—making the increase in net earnings $1,190,750.65; to which add decrease in rentals of leased lines $2,619.23, together with decrease in interest of $199,872.42—making the increase in net income $1,393,242.31.

The Cattawissa Branch shows an increase in earnings of $71,943.28, and the Philadelphia, Germantown and Norristown Branch a decrease of $31,588.55. The North Pennsylvania Branch shows a profit over all rentals and expenses of $58,920.83, as against a loss for the previous year of $13,269.85, making a gain for the year of $72,190.68. The Delaware and Bound Brook Branch shows a profit for the year of $83,348.13, as against a profit for the previous year of $31,309.93, making an increase for the year of $52,038.20; or taking the two branches, the North Pennsylvania and Delaware and Bound Brook, together, the joint operations for the year show a united profit over and above all rentals and expenses of $142,268.96, as against a profit of the previous year of $18,040.08, making an increase for the year of $124,228.88. The express department shows a profit for the year of $125,988.39 as against $102,363.09 for 1880. The total amount of the floating debt of both companies, receivers' certificates and arrears of overdue interest for which either no provision has yet been made or for which provision being made at a lower rate by the receivers, is as yet unaccepted by creditors, outstanding at the close of the fiscal year ended November 30, 1881, were as follows: Floating debt. $9,682,293.43; receivers' certificates and obligations, $2,386,457.64; arrears of interest, including January, 1882, coupons of general mortgage and of scrip, $2,083,587.75. The above figures do not include arrears of canal rentals as yet unpaid, amounting to $270,180, nor the unsettled claims for losses upon old iron contracts, referred to in the report of the receivers made July 15, 1881.

By referring to the statement of the Secretary of the Treasury in another column it will be seen that the total debt of the United States on the 31st of December, 1881, amounted to $2,018,869,697.85, less cash in the Treasury $253,377,980,76, leaving net $1,765,491,717.09. Since the 1st Dec. the debt has been reduced $12,793,623.56, and since the 1st of July last the reduction has amounted to $75,107,094.89. Of the bonded debt $250,000,000 bears 4½ per cent interest, $739,347,800 bears 4 per cent, $551,186,800 bears 3½ per cent, and $14,000,000 bears 3 per cent. Interest has ceased upon $11,528,265.26, and $437,270,212.92 bears no interest, being in the shape of circulation, certificates of deposit and gold and silver certificates. Of the cash in the Treasury $156,369,534.53 is available for any extraordinary expenses. In addition to the above there are outstanding $64,623,512 in bonds issued to the Pacific Railroad Companies known as the currency 6's.

The total indebtedness of the District of Columbia on the 1st inst. amounted to $21,892,850. The amount of funded debt retired since July 1, 1876, $338,900; reduction in annual interest charge since July 1, 1878, $55,792.

The Auditor of Minnesota began on the 3d inst. to pay the new State Railroad bonds authorized by the adjustment act of last November, to the holders of the old bonds, the interest on which has defaulted since 1860. The State has sold $800,000 of trust securities for cash and has reinvested the funds in new bonds. This permits the payment of a considerable number of old bonds, in cash. All fractional parts of $1,000 will be paid in cash and a percentage of all, besides about $30,000 of claims against the old railroad companies. The new bonds issued bear 4½ per cent, and run thirty years, being redeemable after ten years at the pleasure of the State.

The closing quotations on Thursday were: American District Telegraph, 34@36; Adams Express, 146@150; American Express, 92@93; Chicago, Burlington and Quincy, 133½@134; Canada Southern, 51¾@52; Chicago and Northwestern, 124⅝@124⅞; do. pref., 137½@139; Chicago and Alton, 128½@129; Central of New Jersey, 90@90⅛; Central Pacific, 91¼@92½; Chicago, Milwaukee and St. Paul, 106⅛@106¼; do. pref., 120@121; Cleveland, Columbus, Cincinnati and Indianapolis, 78½@79; Columbus, Chicago and Indiana Central, 20¼@20¾; Delaware and Hudson Canal, 106½@106¾; Delaware, Lackawanna and Western, 123½@123⅝; Hannibal and St. Joseph, 95@95¼; do. pref., 108@109; Illinois Central, 128½@129¾; Lake Erie and Western, 32½@34½; Lake Shore and Michigan Southern, 110⅜@110½; Metropolitan Elevated, 85½@87; Manhattan Elevated, 50½@51; Michigan Central, 84½@84⅝; New York Elevated, 105½@106; New York, Lake Erie and Western,

39⅛@39¼ ; do. pref., —@— ; New York Central and Hudson River, 129⅛@129¼ ; Northern Pacific, 35¾@36; Ohio and Mississippi, 35½@@35⅝ ; Panama, —@— ; Pacific Mail, 40@40⅛; Texas and Pacific, 45½@45¾; Union Pacific, 115¾@115¼ ; United States Express, 76@77 ; Western Union Telegraph, 77⅛@78 ; Wabash, St. Louis and Pacific, 34⅞@35⅛ ; do. pref., 66⅞@67; Wells-Fargo Express, 126@130.

The following quotations of sales of Railway and other securities, for the week, are in addition to those given elsewhere in our columns:

New York.—American Dock and Imp., 5s, 100; Boston and New York Air Line pref., 62; Cedar Falls and Minnesota, 19 ; Chicago, St. Louis and New Orleans, 80 ; Chesapeake and Ohio 1st pref., 34⅞ ; do. 2d pref., 24 ; do. cur. int., 52 ; do. 1st, Series B, 80¾ ; Chicago, St. Paul, Minneapolis and Omaha, 35⅛ ; do. pref., 98½; do. consol., 98⅜, Central Iowa, 37¼ ; Cleveland, Columbus, Cincinnati and Indiana consol., 122½ ; Chicago, Milwaukee and St. Paul 1st, La C. and Dav. div., 94½ ; do. S. M. div. 1st, 103⅝ ; Columbus, Chicago andIndiana Central 1st Trust Co. certif. ass. sup., 118½; do. Income, 74¼ ; Denver and Rio Grande, 67 ; do. 1st, 113; do. 1st consol., 102½; Denver, South Park and Pacific 1st, 101½ ; East Tennessee, Virginia and Georgia, 13¾ ; do. pref., 24; do. inc., 54¾ ; Green Bay, Winona and St. Peter, 11¾ ; Gulf, Colorado and Santa Fe 1st, 106½ ; Indianapolis, Decatur and Springfield 2d income, 70 ; Indiana, Bloomington and Western, 45½ ; International and Gt. Northern 1st, 107 ; Lehigh and Wilkesbarre consol. ass., 107½ ; Kansas Pacific 1st consol., 102¼; Lake Erie and Western, 34 ; Louisville, New Albany and Chicago, 74; do. 1st, 101 ; Louisville and Nashville gen'l mort. 6s, 100½ ; Manhattan Beach, 25¼ ; Marietta and Cincinnati 1st pref., 15 ; do. 2d pref., 9; Mobile and Ohio, 35 ; do. 1st deben., 95; do. 1st, 110; Missouri, Kansas and Texas, 36¼ ; do. gen'l mort. 6s, 88; do. consol. 7s, 106; do. 2d, 71½; Missouri Pacific, 100; do. 1st consol.; 103½; Memphis and Charleston, 71 ; Milwaukee, Lake Shore and Western, 46; Michigan Central 5s, 97½ ; do. 8s, 103½; Nashville, Chattanooga and St. Louis, 85 New York, Ontario and Western, 27; Northern Pacific 1st, 99⅜; New Orleans Pacific 1st, 91½ ; Ohio Central, 23½ ; do. 1st, 97 ; Ohio Southern, 21½; do. inc., 42⅞; do. 1st, 96½ ; Oregon Railway and Nav., 131 ; Peoria, Decatur and Evansville, 36 ; Richmond and Allegany, 39¾ ; do. 1st, 101; Richmond and Danville, 180 ; do. 1st, 102 ; Rome, Watertown and Ogdensburg, 20 ; do. 1st consol., 90¼ ; St. Paul and Sioux City 1st, 109; St. Paul Minneapolis and Manitoba, 111; do. 1st, 109; St. Louis and Iron Mountain 1st pref. inc., 96; do. 5s, 85; Southern Pacific of California 1st, 103⅞ ; Toledo Delphos and Burlington, 16¾; Texas and Pacific, 47⅛ ; do. inc. L. G., 72 ; do. Rio Grande div. 1st, 88¼ ; Wabash, St. Louis and Pacific 6s, 89; Alabama, Class A, 81 ; Arkansas 7s, L. R. & Ft. S., 30 ; Louisiana 7s, consol. 68 ; Missouri 6s, 1888, 111½ ; South Carolina 6s, non-fund., 11¾; Tennessee 6s, old, 74½; do. new, 74⅜; American District Telegraph, 35 ; Sutro Tunnel, ⅞; Colorado Coal and Iron, 42¾ ; do. 6s, 89 ; New Central Coal, 19¾; Excelsior, ¾; Little Pittsburg, 1½ ; Robinson, 2½ ; Standard, 17¾.

Philadelphia.—Catawissa new pref., 52 ; Central Transportation, 37½; Huntingdon and Broad Top 1st, 119 ; do. consol. 5s, 89 ; Philadelphia, Wilmington and Baltimore, 62½ ; do. 4s, 94 ; Philadelphia and Reading R. R. scrip, 80; Steubenville and Indiana 6s, J. & J., 106½: St. Paul and Duluth pref., 71; Texas and Pacific consol. mort. 6s, 100; do. 1st mort., 106 ; West Jersey and Atlantic 6s, 112. The latest quotations are: City 6s, 118@121; do. free of tax, 126@129; do. 4s, new, 102@109; Pennsylvania State 6s, 3d series, 100@101; do. 5s, new loan, 110@115; do.4s, new, 107@111; Philadelphia and Reading R. R., 32⅝@32¾ ; do. consol. mort. 7s, reg., 124½@125¼ ; do. mort. 6s, 116@— ; do. gen'l mort. 6s, coupon, 98⅛@98½ ; do. 7s, 1893, 118@125 ; do. new, conv., 73@77 ; United New Jersey R. R. and Canal, 184⅞@185⅛ ; Buffalo, Pittsburg and Western, 20@20¼ ; Pittsburg, Titusville and Buffalo 7s, 102⅜@102⅝ ; Camden and Amboy mort. 6s, 1889, 113½@114¼ ; Pennsylvania R. R., 60¼@60⅜; do. general mort. coupon, —@— ; do. reg., 123@— ; do. consol. mort. 6s, reg., 119@124; Little Schuylkill R. R. 56¾@57¼ ; Morris Canal, 65@75 ; do. pref., 165@169½ ; Schuylkill Navigation, 6@7 ; do. pref., 13@13¼ ; do. 6s, 1882, 88½@89½; do. 1872, 107@108; Elmira and Williamsport pref., 58@60; do. 6s, 110@—; do. 5s, 95@—; Lehigh Coal and Navigation, 43@43⅛ ; do. 6s, 1884, 105½@107 ; do. R. R. loan, 116@118 ; do. Gold Loan, 111⅜@111⅞ ; do. consol. 7s, 114¼@117¼ ; Northern Pacific, 35¾@35¾ ; do. pref., 73¼@73⅜; North Pennsylvania, 59½@60 ; do. 6s, 107¼@108¼; do. 7s, 123½@— ; do. General mort. 7s, reg., 119@124 ; Philadelphia and Erie, —@— ; do. 7s, 117@120 ; do. 5s, 105@106 ; Minehill, 60@60½; Catawissa, 14@16; do. pref., 52¾@53¼; do. new pref., 51¾@52¼; do. 7s, 1900, 120@— ; Lehigh Valley 61⅜@— ; do. 6s, coupon, 120¾@121¼ ; do. reg., 121½@122½ ; do. 2d mort. 7s, 133@— ; do. consol. mort. 117½@117¾ ; Fifth and Sixth streets (horse), 149@150; Second and Third, 114¾@114⅝; Thirteenth and Fifteenth, 75@80; Spruce and Pine, 47¾@48¼; Green and Coates, 90@100; Chestnut and Walnut, 94@95 ; Germantown, —@70; Union, 110@125 ; Lombard and South, —@— ; West Philadelphia, 108@110; People's 15@15½; Continental, 100@105.

Baltimore.—Baltimore City 6s, 1884 104 ; do. 6s, 1890, 114 ; do. 5s, 1916, 121 ; Consolidation Coal, 39 ; Columbia and Greenville 1st, 103; Canton 6s, gold, 107½; George's Creek Coal, 100 ; Maryland Defense 6s, 103 ; Norfolk and Western pref., 57; Richmond and Danville, 163; do. gen'l mort. 6s, 1915, gold, 104½ ; Virginia Midland, 70 ; do. 1st pref., 101 ; do. 2d mort., 110 ; do. 5th mort., 98½; Virginia Black scrip, 17; Virginia Peelers, 39 ; do. Peeler coupons, 27½ ; Wilmington, Columbia and Augusta, 110. The latest quotations are : Atlanta and Charlotte 1st, 108¾@111 ; Baltimore and Ohio, 195@210 ; do. 6s, 1885, 105½@107; Baltimore City 6s, 1890, 114@114½; do. 5s, 1894, —@116½; do. 5s, 1900, 118@— ; do. 5s, 1916, 121@121¼; do. 4s, 1920, —@112; Canton Co. 6s, gold, 107⅜@107½ ; Columbia and Greenville 1st, —@104; Marietta and Cincinnati 2d, 105@105¼ ; do. 3d, 58½@58½ ; Northern Central, —@50¾ ; do. 6s, 1900, gold, 113@114; do. 6s, 1904, gold, 111@—; do. 5s, 1926, 97@97½; Ohio and Mississippi, Springfield div. 1st, —@119¾ ; Richmond and Danville, 180@—; Richmond and Allegany, 38@41 ; Virginia Midland 5th mort., 97½@99; Virginia consols., 69½@69⅞; do. consol. coupons, 72½@73; do. 10-40s, 40@41.

Boston.—Atlantic and Pacific 6s, 96 ; do. 6s, Income, 33 ; Atchison, Topeka and Santa Fe 5s, 95 ; Boston Water Power, 6½; Chicago and West Michigan 5s, 79 Connotton Valley 7s, 85; Chicago, Burlington and Quincy 4s, Denver ext., 87½ ; do. 4s, old, 88⅜; Detroit, Lansing and Northern pref., 116; Flint and Pere Marquette, 22; do. pref., 92½ ; Kansas City, St. Joseph and Council Bluffs 7s, 116½; Kansas City, Lawrence and Southern 5s, 104 ; Kansas City, Fort Scott and Gulf 7s, 107½; Little Rock and Fort Smith, 61½; do. 7s, 112½; Mexican Central 7s,87 ; Marquette, Houghton and Ontonagon, 60¼; do. 6s, 102 ; Maine Central, 40 ; New York and New England 6s, 107; Northern Pacific 6s, 99½; New Mexico and Southern Pacific 7s, 115½ ; Rutland pref., 26½ : do. 6s, 101; Summit Branch, 12½; Sonora 1st, 89 ; Toledo, Delphos and Burlington, 8½ ; Wisconsin Central, 20½ ; Allouez Mining Co., 3½ ; Atlantic, 17½ ; Blue Hill, ¾; Catalpa, ⅝; Central, 31; Copper Falls, 4½; Franklin, 14½; Huron, 3½; Harshaw, 4½; Osceola, 31¾; Pewabic, 16½; Phœnix, 3; Silver Islet, 21; Star 1.

Hannibal and St. Joseph Railroad.

Referring to the alleged statement of the Governor of Missouri, that if the Hannibal and St. Joseph Railroad Company fails to pay the January interest on the State Aid bonds of that State he will advertise the road for sale, John R. Duff, Vice President of the company, says ;

"The Hannibal and St. Joseph Railroad Company is under no obligations to pay the interest referred to. The bonds are the bonds of the State of Missouri, and not of the railroad company. They amount to $3,000,000 and no more. On the 20th of June, 1881, the railroad company paid $3,090,000 to Phil E. Chappell, the Treasurer of the State, and took a specific receipt from the Treasurer. The $3,090,000 paid was the full amount of the principal and accrued interest of the bonds. The State of Missouri still has this money. The State paid the July interest on these bonds through the Bank of Commerce, its regular fiscal agency in New York. It is an absurd proposition that, after paying our debt in full, principal and interest, we should continue to pay interest. The Hannibal and St. Joseph Railroad Company is the only railroad company receiving aid from the State of Missouri which has never defaulted upon the interest. Over $23,000,000 of bonds were issued by the State for her railroads. This particular $3,000,000 of bonds is the only issue upon which the State has never lost a dollar."

Growth of Colorado.

The growth of the State of Colorado during the past year is unprecedented in its history. In Denver alone more than $4,000,000 were expended in the construction of new buildings, and the total assessed valuation of the city is $25,650,000, an increase in the past year of $9,460,000. The Auditor's records show the assessed valuation ot the entire State to be $96,059,000, an increase of $23,000,000 over that of 1880. The lowest figures on the bullion output of the State for the past year place it at $20,200,000. Of this, Lake County is credited with $11,500,000. The total indebtedness of the State is $330,000. It is safe to say that there

will not be over $100,000 of outstanding warrants a year hence, as the receipts from the counties will amount to $300,000 at least during the next nine months. More than $9,000,000 has been spent in the State on railway construction during the past year. Denver and New Orleans expect to have connection by the Texas Railroads with New Orleans by next Christmas; the Chicago, Burlington and Quincy Railroad company will have its line completed to Denver, and the Rio Grande Railway has laid a third rail to Pueblo. The Atchison, Topeka and Santa Fe Railroad will run trains through to Denver.

Railroad Lease and Traffic Contract.

THE Louisville and Nashville Railroad Company has leased to the Chesapeake and Ohio and Southwestern Railroad Company the 46 miles of its railroad known as the Cecilian Branch, running from Louisville south to Cecilian Junction, where it connects with the Paducah and Elizabethtown Division of the Chesapeake and Ohio and Southwestern Company, completing the latter's line between Memphis and Louisville. The Chesapeake and Ohio and Southwestern Railroad Company and the Louisville and Nashville Railroad Company have also entered into a traffic agreement for the use by the former of the latter's railroad between Lexington and Louisville, thus putting at rest all questions about building a second line of road between those two points. By this arrangement the Chesapeake and Ohio and Southwestern Railroad practically have a continuous line of railroad from Newport News to Memphis, and the Louisville and Nashville Railroad, by accommodating the Chesapeake and Ohio and Southwestern Railroad and enabling it to perfect its through line, is benefited by securing the large volume of business which the Chesapeake and Ohio and Southwestern Railroad will send over the Lexington Road to Louisville, and benefits also by the rental derived from the leased property, which the Louisville and Nashville Company has never made use of.

The Pacific Railway Snow Sheds.

THESE wonderful wooden tunnels cover forty miles of the Central Pacific railroad. They were first suggested by its practical vice president, Charles Crocker, but his companions hesitated through fear of their impracticability and expense. They are of two kinds, one with very steep roofs and the other with flat roofs. They cost per mile from $8,000 to $12,000, and in some places, where heavy masonry was needed, the cost reached $30,000 a mile. They are firmly constructed to support the great weight of snow and resist the rush of avalanches. Fire precautions are very thorough. Corrugated plates of iron separate the buildings into sections, and in the great ten mile shed there are automatic electric fire alarms. At the summit is an engine and tank always ready to flood the ignited spot in an instant. These sheds shut in the view of the great Sierras, but without them travel would be impossible. Sometimes five feet of snow falls upon them in a day and often thirty feet lie on the ground at one time, and in many places snow accumulates to the depth of fifty feet above these great wooden arches.

Statement of the Public Debt of the United States, January 1, 1882.

DEBT BEARING INTEREST.

	Amount Outstanding.	Accrued Interest.
6 per cent loan, 1861-'81, continued at 3½ per ct.	$101,827,200 00	$1,781,974 29
6 per cent loan 1863-'81 continued at 3½ per ct	47,855,700 00	837,473 82
5 per cent funded loan of 1881	401,503,900 00	2,342,106 08
4½ per cent funded loan of 1891	250,000,000 00	937,500 00
4 per cent funded loan of 1907	738,772,550 00	7,387,725 50
4 per cent refunding certificates	575,250 00	5,752 50
3 per cent navy pension fund	14,000,000 00	240,000 00
Aggregate of debt bearing interest	$1,554,534,600 00	$13,502,532 19
Interest due and unpaid		1,331,845 66

DEBT ON WHICH INTEREST HAS CEASED SINCE MATURITY.

	Amount Outstanding.	Interest due & unpaid.
4 to 6 per cent. old debt, 1837.	$57,665 00	$64,174 81
5 per cent. Mexican indemnity stock, 1846	1,104 91	85 74
6 per cent. bonds, 1847	1,250 00	22 00
6 per cent. bounty land scrip, 1847	3,275 00	213 06
5 per cent. Texas indemnity bonds, 1850	20,000 00	2,945 00
5 per cent. bonds, of 1858	8,000 00	....
5 per cent. bonds, of 1860	10,000 00	600 00
6 per cent. 5-20 bonds, 1862, called	370,700 00	8,439 32
6 per cent. 5-20 bonds, June, 1864, called	58,650 00	170 95
6 per cent. 5-20 bonds, 1865, called	77,050 00	18,897 52
5 per cent. 10-40 bonds, 1864, called	490,350 00	110,386 10
6 per cent. Consol. bonds, 1865, called	411,300 00	15,815 21
6 per cent. Consol. bonds, 1867, called	1,103,850 00	204,455 36
per cent. Consol. bonds, 1868, called	315,750 00	24,203 90
6 per cent. loan, Feb. 8, 1861, matured Dec. 31, 1880	142,000 00	6,660 00
per cent. funded loan 1881, called	3,558,750 00	90,739 38
Oregon War Debt, March 2, 1881, matured July 1, 1881.	134,500 00	6,373 50
6 per cent loan of July 17 and Aug. 5, 1861, matured June 30, 1881	1,107,400 00	44,068 50
6 per cent loan of July 17 and Aug. 5, 1861, matured Dec. 24, 1881, called	2,763,300 05	46,636 40
6 per cent. loan of March 3, 1863, matured June 30, 1881.	326,350 00	10,023 00
1-10 to 6 per cent. Treasury notes, prior to 1846	82,525 35	2,668 06
1-10 to 6 per cent. Treasury notes, 1846	6,000 00	206 00
6 per ct. Treasury notes, 1847.	950 00	57 00
3 to 6 per cent. Treasury notes, 1857	1,700 00	99 00
6 per ct. Treasury notes, 1861.	3,000 00	364 50
7 3-10 per cent. 3 years' Treasury notes, 1861	16,300 00	1,104 43
5 per cent. 1 year notes, 1863	43,225 00	2,173 35
5 per cent. 2 year notes, 1863.	35,200 00	1,779 80
6 per ct. compound interest notes, 1863-64	225,260 00	45,968 07
7 3-10 per cent. 3 years' Treasury notes, 1864-65	140,900 00	4,763 87
6 per cent. certificates of indebtedness, 1862-63	4,000 00	253 48
4 to 6 per cent. temporary loan, 1864	2,960 00	244 19
3 per cent. certificates, called.	5,000 00	394 31
Aggregated of debt on which Interest has ceased since maturity	$11,528,265 26	$714,985 31

DEBT BEARING NO INTEREST.

Demand notes, 1861-62	$59,920 00	
Legal tender notes, 1862-63	346,681,016 00	
Certificates of Deposit	9,590,000 00	
Coin certificates, 1863	5,188,120 00	
Silver certificates, 1878	68,675,230 00	
Unclaimed interest		7,256 51
Fractional currency, 1862, 1863 and 1864 $15,451,860 92		
Less amount estimated as lost or destroyed, act of June, 21, 1879 8,375,934 00		
	7 075,926 92	
Aggregate of debt bearing no interest	$437,270,212 92	$7,256 51

RECAPITULATION.

	Amount Outstanding.	Interest.
Debt bearing interest in coin, viz:		
Bonds at 6 per cent., continued at 3½ per cent.	$149,682,900 00	
Bonds at 5 per cent, continued at 3½ per cent.	401,503,900 00	
Bonds at 4½ per cent....	250,000,000 00	
Bonds at 4 per cent.	738,772,550 00	
Refunding certificates,...	575,250 00	
Navy pension fund, 3 p.c	14,000,000 00	
	$1,554,534,600 00	$14,814,377 85
Debt on which interest has ceased since maturity.	11,528,265 26	714,985 31
Debt bearing no int., viz:		
Old demand and legal-tender notes	$346,740,936 00	
Certificates of deposit....	9,590,000 00	
Coin & silver certificates.	73,863,350 00	
Fractional currency	7,076,926 92	
	$437,270,212 92	
Unclaimed interest.....		7,256 51
	$2,003,333,078 18	$15,536,619 67
Total debt, principal and interest to date, including interest due and unpaid		$2,018,869,697 35

AMOUNT IN TREASURY.

Interest due and unpaid	$1,311,845 66
Debt on which interest has ceased	11,528,265 16
Interest thereon	714,985 31
Gold and silver certificates	73,863,350 00
U. S. notes held for redemption of certificates of deposit	9,590,000 00
Cash balance available January 1, 1882	156,369,534 53
	$253,377,980 76
Debt, less am't in Treas'y Jan. 1, 1882	$1,765,491,717 09
Debt, less am't in Treasury Dec. 1, 1881	1,778,285,340 65
Decrease of debt during the month	$12 793,623 56
Decrease of debt since June 30, 1881	$75,107,094 89

BONDS ISSUED TO THE PACIFIC RAILROAD COMPANIES, INTEREST PAYABLE IN LAWFUL MONEY.

	Amount Outstanding.	Accrued Interest not paid.
Central Pacific bonds, 1862-64	$25,885,120 00	$776,553 60
Kansas Pacific bonds, 1862-64	6,303,000 00	189,090 00
Union Pacific bonds, 1862-64	27,236,512 00	817,095 36
Cent. Branch Union Pacific bonds, 1862-64	1,600,000 00	48,000 00
West'n Pacific Bonds, 1862-64	1,970,560 00	59,116 80
Sioux City & Pacific bonds, 1862-64	1,628,320 00	48,849 60
Totals	$64,623,512 00	$1,938,705 36

Interest paid by the United States, $51,467,272 02; interest repaid by transportation of mails, &c., $14,707,886 34; interest repaid by cash payments: 5 per cent. net earnings, $655,198 87; balance of interest paid by United States, $36,104,186 81.

The foregoing is a correct statement of the public debt, as appears from the books and Treasurer's returns in the Department at the close of business, December 31, 1881.

CHARLES J. FOLGER,
Secretary of the Treasury.

MEN with few faults are the least anxious to discover those of others.

DEATH and the sun have this in common—few can gaze at them steadily.

TALENT is an eyesore to tyranny. In weakness, tyranny fears it as a power; in power, it hates it as a liberty.

THE LAKE SHORE AND MICHIGAN SOUTHERN RAILWAY COMPANY,

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The Board of Directors of this company have this day declared a QUARTERLY DIVIDEND of TWO per cent upon its capital stock, payable on WEDNESDAY, the first day of February next at this office.

The transfer books will be closed at 3 o'clock P. M. on Saturday, the 31st instant, and will be reopened on the morning of Saturday, the fourth day of February next.

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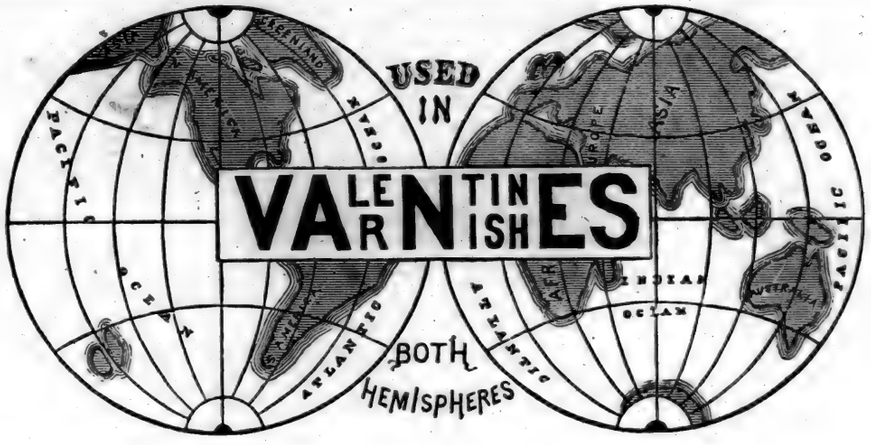
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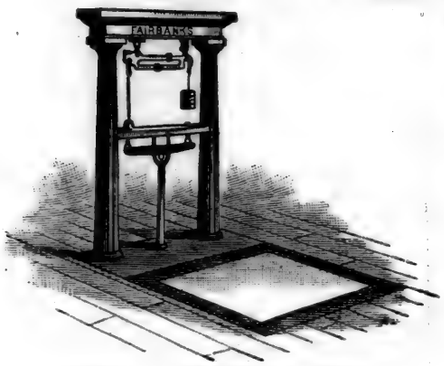
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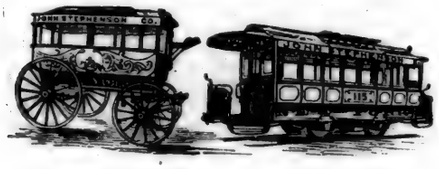
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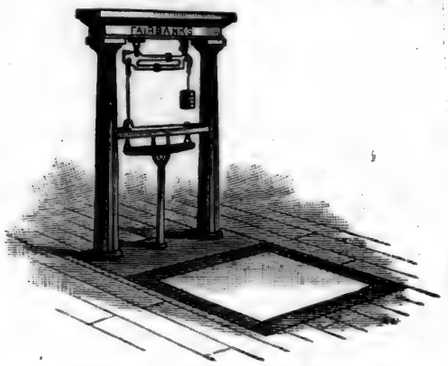
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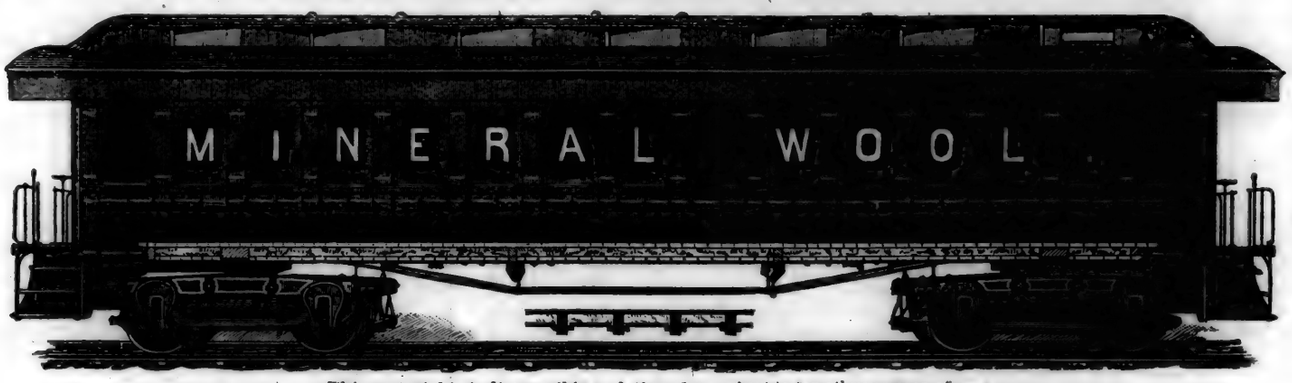
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SECOND QUARTO SERIES.—VOL. XXXVIII., No. 2.] NEW YORK, JANUARY 14, 1882. [WHOLE No. 2,386.—VOL. LV.

Perpetuation of Testimony in Patent Suits.

A CASE in equity of considerable interest to patent lawyers, as well as to legal antiquarians, has been decided by Judge Benedict in the United States Circuit Court for the Eastern District. The complainant, it appears, has been infringing a certain patent owned by the defendant, and now files his bill in equity under section 866 of the United States Revised Statutes to have recorded in the court the testimony of a witness upon which the complainant alleges that he relies to show that the patent is void for want of novelty, in case a suit shall be brought against him by the defendant for the infringement. The witness is a very old man, and the complainant further alleges in his bill that the defendant is waiting for the witness to die before bringing his suit, so that the complainant may be deprived of the protection afforded by his testimony. On this ground he prays that the testimony may be recorded in perpetuam rei memoriam. The defendant demurred to the bill, and Judge Benedict, by the decisoin referred to, has overruled the demurrer. The interest of the case to patent lawyers arises from the fact that, so far as appears from the books, no such suit has ever before been brought in any case involving patent rights, nor, in fact, has any bil for the recording of testimony strictly in perpetuam rei memoriam ever been pleaded under the section of the Revised Statutes referred to. One of the points made upon the argument was that the bill ought to be dismissed because the complainant was able to obtain a full judicial settlement of his rights by inducing the Attorney-General to bring a suit in the name of the United States to annul or repeal the patent. But waiving the question whether such a suit could be brought in the name of the United States, Judge Benedict decides that the complainant has no power to bring such a suit, nor is it such a remedy as to deprive the complainant of his right to institute the present proceeding. Legal antiquarians will also find interest in the decision on account of the antiquated character of the procedure. In England at the present time, and generally in the United States, the subject of the perpetuation of testimony is regulated by special statutes giving a summary course of procedure for that purpose. The ancient practice of obtaining the same end by bill in equity survives only within the production of a few of the older States and of the Federal courts, which still follow in these matters the English practice of the time of Lord Eldon. A curious feature of the practice is the taking of the testimony in perpetuam rei memoriam immediately after the cause is at issue, without waiting for the complainant to establish his right to do so by proof, an anomally which Prof. Langdell in his summary of equity pleading thinks arose from confounding the testimony to be perpetuated with the testimony to establish the right to perpetuate it. If this explanation is correct, it furnishes a striking instance of the way in which the force of reason is sometimes overridden in law by the power of long-established usage. Richards & Heald, and Henry P. Starbuck, appeared for the complainant, and Goodrich, Deady & Platt, for the defendant.

The Barings.

THE Barings have been among the most famous of English bankers. They are of German stock. There is a kind of ecclesiastical flavor about them. Their English founder was a Bremen Pastor, who settled in this country. His grandson married the niece of an English Archbishop. One of his descendants became Bishop of Durham. The money was originally made in the rich, profitable clothing business in the West of England. Going into the old-fashioned church of the pleasant Devonshire town of Ashburton one day, we were greatly interested by the Baring monuments. Ashburton gave a title in the peerage to the chief of the house of Baring. It has been a rule in the house that when any one of them has got a title he goes out of the business. Sir Francis Baring, the first great banker, who, dying in 1810, left a fortune of two millions, had three sons—Thomas, Alexander, and Henry. Thomas succeeding to the baronetcy, gave up the business. Henry had rather a romantic reputation as a lucky gambler, who was frequently able to break the bank of a gambling-table. He was the amazement of beholders, when he would sit down at a gambling-table at the Palais Royal—before such tables were happily abolished—with piles of gold and notes before him. The reputation of a successful gambler was hardly suited to the intense respectability of the firm, and Mr. Henry was induced to retire from the business. Alexander Baring, often known as "Alexander the Great," sustained and extended the fortunes of the house. He went to America, there the richest banker in England, married the daughter of the richest citizen of the United States. One of his gigantic transactions possesses a historical importance. After the conclusion of the great European war he paid down a sum of £1,100,000, by which France was freed from the occupation of Russian, Austrian and German armies. "There are six great powers in Europe," said the Duc de Richelieu—"England, France, Russia, Austria, Prussia, and Baring Brothers." In 1835 he was made Lord Ashburton. Two of his sons held the title, and each successively retired from the business. The head of the firm, Thomas Baring, became Chancellor of the Exchequer in Lord Melbourne's Ministry, and another member, Lord Northbrook, has been Governor-General of India.—*London Society.*

The Cable Railway.

No improvement has ever been made in the city of Chicago which has been regarded with as much interest as the cable railway which has been in course of construction on the South-side by the South-side Street Railway company during the last six months. Its near completion only adds to this interest, and it is asserted that the value of property along the line of the road and at the southern terminus has increased in proportion to the progress of the work. The construction of this new mode of transportation is the work entirely of the South-side company, the president, Mr. Holmes, having visited and studied the system thoroughly in San Francisco, upon which he made his report to the directory, that ordered him to adopt and perfect it at once. It has caused some bad feelings during the temporary abandonment of State street by the company, but now that the work is almost done and the people begin to understand the great expense involved and the blessings to come therefrom, they are beginning to take pride in it and long for its active operation. There are nine miles of road constructed in the most approved plan, steel rails having been used. This is an improvement over all other cable roads. The expense attached to building the road has been about $2,000,000. The department of machinery and all of the mechanical appliances are acknowledged to be the best in the world, and in very many respects are decided improvements on other systems. One of the special features that has been especially commended is the large winders and sheaves; these are considered very important factors and are for the purpose of preventing crystallization of the

rope. The very best material has been used in the construction of the cables. An interesting study is the gripping device, which is claimed to be another improvement over any other cable system adopted heretofore. Special plans have been taken to prevent its wearing on the rope. The importance of this will be better understood by the public when the road will be in active operation. The grip-cars which have been constructed by the company are very artistic in their appearance. Forty-two of these have been built by the company. To these the ordinary street cars are attached. Some inquiry has been made as to the mode by which these cars will be stopped. Mr. Holmes says that by means of a very ingenious device which controls and manipulates the tension wheels no difficulty will be experienced in the stoppages, or trouble anticipated from the severity of the weather. In case snow or ice should obstruct the cable chain, such obstruction will be easily removed by means of a steam pipe heated for that purpose. The working of the machinery, it is claimed, creates no unpleasant noise to the ear. The starting or stopping will be milder than in the present system, all of the sudden checks or jerkings being avoided. The motion will be easy and uniform. In respect to rapid transit it will be a revolution in city travel, and a ride in one of the coaches over the bed road will become a luxury instead of a dread, as on the old system. The South-side company claims to be the first city railway in the world to adopt steel rails and the 21-foot car. The company announce that the cars are to be run with a special view to the comfort of the public. They propose that not only shall Chicago enjoy the system, but that it shall be run upon a principal which will reflect upon the city from abroad. The system has already created great interest abroad, the result being that capitalists from Eastern cities have already come to Chicago to see its workings. Mr. Holmes is very much opposed to the proposed change in the name of State street, inasmuch as he has that name ground in the class of all his cars. In regard to the date upon which the system will go into operation Mr. Holmes is not certain, but says it will be in the very near future.—*Chicago Times.*

Strength of Wooden Columns.

An extended account of his experiments at the Watertown Arsenal to test the strength of wooden columns was recently given before a meeting of the Society of Arts at Boston, Mass., by Prof. Lanza. The main results deduced were that wooden bolsters or caps at the top of the columns are a source of weakness, as was proved in an experiment where the bolster was crushed with a pressure of 20,000 pounds, while the column did not yield until 375,000 pounds were brought upon it; that the estimates of strength based upon formulas contained in the books are untrustworthy, as was proved when a column which by the formula should have withstood 8,000 pounds gave way at 4,000 pounds; that allowance must be made on account of eccentric pressure, that is, weight brought by the timbers of a heavily loaded floor upon one side of a column, not counteracted by corresponding weight upon the contiguous timbers of an unladen floor; that pintles are a source of weakness if not set square and true, whereby a rocking pressure may be brought upon the column; that the deflection or springing of a column is unimportant compared with weakness arising from a knot or crooked grain, and that the text books on mechanics need to be amended by having a new set of tables compiled from data obtained from experiments on full-sized timber, such as is used in building.

Mineral Wool.

One of themost striking illustrations of the possibilities of invention in turning waste substances into important articles of utility is seen in the conversion of the slag of iron smelting furnaces into mineral wool. Up to within a few years this slag was considered as a worthless incumbrance that was constantly increasing about the iron works premises, excepting as it was carted off to be used for roads, where it was only after a long amount of travel that it could be so ground up by the passage of horses and vehicles as to be considered desirable as a road bed A few years ago however a process was discovered by which this waste was destined to be turned into an article of great practical value in numerous and widely varying directions. It was discovered that the slag while in a molten condition if penetrated forcibly by a jet of steam or compressed air, went through a most curious transformation, a result of which was the production of a fibrous article resembling wool in appearance. After considerable experimenting a process of manufacture was devised and patented, by which in a very simple manner the slag was changed into a product called mineral wool and in such perfection as to be ready for use immediately.

The experiments and improvements of the past few years have resulted in the process of manufacture as carried on now at Stanhope, N. J., which in brief is as follows: While the slag is still in a fluid state, it is allowed to fall in a small stream, from a suitable vessel, upon a jet of steam or compressed air, the effect of which is to disintegrate the molten slag, which cools as it is carried forward in the form of wool, resembling sheep's wool and cotton. The instantaneous separation causes a thread or fibre to be pulled out, which varies in length, thickness and color, according to the fluidity and composition of the slag. When gathered up, the fibres appear to lie in all possible directions with relation to each other, in consequence of which there is no parallelism or common direction to the threads, so that the air spaces are angular in shape and microscopic in size. The wool is collected in a large chamber, where it settles in a bulky state, having a fleecy appearance. About eighty per cent of the product has to be riddled, forming the ordinary grade, while the balance is separated py currents of air, and forms the extra grade.

The uses to which mineral wool has been successfully applied as a non-conductor of heat and a non-transmitter of sound are almost innumerable while new uses for it are constantly being discovered by mechanics, builders and scientists. The underlying principle of the application and utility of mineral wool is the one long established in physics, that air-confining or porous bodies are the poorest conductors, and that the passage of heat is retarded in proportion to the volume of air the insulating material holds from circulation. It is used on houses by applying a thickness of about two inches to the roof, to prevent the passage of the sun's heat in summer and the escape of warm air from the house in winter; it is used in ice houses, about steam-pipes, in hotels, in car building and kindred purposes to a great extent and in the construction of fire proof rooms, it being absolutely fire proof and durable in contact with heated surfaces on account of its having no organic matter in its composition. The Health Commissioners of this city, at their conference with the master plumbers last November strongly recommended as a sanitary precaution that boilers, ranges hot and cold water supply pipes in exposed places be packed with mineral wool and properly cased in. An idea of the cheapness of the wool is seen in the fact that the cost of a filling two inches thick for 100 square feet of surface (416 lbs) is only $4.16 for the ordinary grade at the works. About 3,000,000 pounds of this useful and economical article are now in use, and the United States Mineral Wool Co. at their office 16 Courtland St., have many valuable references as to the satisfactory results attending its extended adoption.

English Locomotives in America.

English engineers will be somewhat surprised to learn that the order has been obtained in the country for a considerable number of American locomotives for railways in America. They are now being built from the designs and instructions of Mr. James Cleminson, M.I.C.E., Westminster, by a leading North of England firm, and are on the true American type, as represented in Baldwin's America, Mogul, and consolidation classes, though some slight modifications are made in the arrangement of the compensating beams. The system of compensation is carried out completely, so that the wheels must bear with full weight on any road, just as the speculum of a large telescope is supported on Lord Rosse's or Grubb's system of connected levers. It is expected that the engines will show what can really be done by locomotives on the American type built on the best English methods and workmanship, and we shall probably learn how much truth there is in the off repeated statement that American locomotives will haul a greater load, weight for weight, and cylinder for cylinder, than those of the English type.—*London Engineer*, Dec. 10.

A Wild Texas Charter.

Charters for private corporations or profit can be had by simply preparing and filing them after paying the fee fixed by law in the State Department. It is reported that a charter for a narrow-gauge railway to every point in Texas has been recently filed. It calls to mind a story told by Swift of a country parson in England who was given to the use of very strong language for one of his cloth. His clerk, who was allowed to use his own discretion in the selection of the hymn with which the services were opened, had already on several successive Sundays commenced with the one beginning: "All people that on earth do dwell." When he read it out again on another Sunday the parson was heard in a suppressed voice to exclaim: "—— all people that on earth do dwell!" which, says Swift, was the most comprehensive anathema of which he had ever heard.—*Austin (Texas) Siftings.*

The Syndicate have undertaken the construction of the Vancouver Island Railway.

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RAILROAD COMMISSIONERS AND RAILROADS IN CONNECTICUT.

IN few States has the utility of a well constituted Board of Railroad Commissioners been better illustrated, or the duties of these officers more satisfactorily performed, both in the estimation of the railroad managers, the people and those outside of that State, who have been interested in suggestions arising there, and in measures adopted after their examination and recommendation, than in Connecticut. Being one of the first States to establish such a commission, Connecticut has been looked to as one of the prominent localities from which should emeriate many ideas, tending to improve the relations between the railroads and their employees, and the people, and to be of practical value to railroad managers themselves, in varied details connected with the workings of their roads. The Commissioners of that State, have done a vast amount of work within the past few years, in giving careful hearings and practical tests to theories, complaints and suggestions placed before them, the results of which are conspicuous among the improvements adopted, and conclusions generally accepted in railroad circles. And this work, while persistently prosecuted, has been accomplished in such a manner as not to create the disturbance and unpleasant relations, which unfortunately have been witnessed in other localities between commissioners and those with whom their duties have brought them in contact.

An important reason which has conduced to this desirable result, is that the people of Connecticut have not deemed it best to confer excessive power upon their Commissioners, in regard to such questions of transportation, as form so large a part of the duties of similar officers in other States; those aiming to enforce measures judicious, or otherwise, for the suppression of alleged opportunities for unjust discrimination and exaction. Connecticut, to be sure, is not a field where complaints about discrimination would be expected in any such extent, as in States where there were special motives for favoring certain localities and parties, where a hot rivalry existed as to the development of certain seaports or markets. Situated between New York and Boston, and having no rival seaport of her own, Connecticut can turn to either of these great markets with about equal facility and avail herself of such advantages as either may choose to offer, prospering with the prosperity of both, and enjoying the effect of their rivalry without serious, local disturbance, or inconvenience to herself.

The ownership of Connecticut railroads is peculiarly local, as is the management, the roads being owned and managed largely by people living in the sections through which they pass. On this account it is possible to lay complaints which arise promptly before the railroad managers themselves, instead of before their representatives, in which way, by personal communication, the cause for complaint can be clearly understood and rectified, and frequently their unreasonableness readily and satisfactorily demonstrated, without the tedious and annoying delays of red tape required when the officers of the road are far removed and not interested in the local affairs along their lines. The manufacturing, commercial and agricultural interests of Connecticut, are peculiarly fortunate in that the roads of their State are so largely under home management and ownership, and the Commissioners thereby are relieved from duties which would interfere with their important work pertaining to other practical matters.

But the success which has attended the work of the Connecticut Railroad Commissioners and the desirable position maintained by them in the estimation of similar Boards and the general public, while greatly assisted by the conditions mentioned, are largely due to the great pains taken to apply to the practical questions brought before them the most careful consideration and such tests as would be considered reasonable and just by experienced railroad men. They have been better enabled to do this on account of the wisdom which placed upon the Board as one of its active members, a man who has been all his business life a practical railroad man. An illustration of this manner of working, is seen in the course pursued in the matter recently agitated in that State concerning the enactment of a law, requiring railroads to aodpt a safety car-coupler. A bill to this effect was last year referred by the Connecticut Legislature to the Commissioners with instructions to report upon the subject this year. Accordingly a public investigation was held at the Commissioners office in November last for two days, after liberal announcements -concerning the same, at which a variety of patents were submitted and examined. This investigation was supplemented by further examinations and by personal inquiry of railroad men, in various positions and in different parts of the State. We have briefly referred to some of the causes which resulted so admirably in regard to the relations established by this particular Board of Commissioners between themselves, the people, the railroads and their employees, believing that some of these causes hinted at, might be utilized to advantage in the organization of similar Boards in other localities. As an illustration of an unprejudiced opinion, we conclude by quoting from their recommendation concerning the car-coupling question, which, with the addition of the recommendation of some simple and cheap method of improving the couplers of old cars was as follows:—

"We would therefore recommend the enactment of a law requiring that all freight cars hereafter bought or built by the corporations operating railroads in this State, shall be equipped with automatic couplers, the draw-bars of which shall be at the uniform height which has been recommended by the master car-builders, and with dead-blocks sufficiently thick to give not less than one foot clear space between the cars, when the blocks come together, and that similar draw-bars and couplers should be made

use of in all renewals. If it is objected that this is a half way measure, we answer, that is just what it is intended to be. To require our companies to substitute, at once, automatic couplers for those now in use on their more than eight thousand freight cars would, in our judgment, be imposing an unreasonable burden of expense."

GOSHEN SUPERHEATING SAFETY BOILER.

THE Goshen Foundry and Gas Machinery Co., are receiving most satisfactory results from the practical tests which have been given of late, to their Goshen Superheating Safety Boiler, patented last spring. Some of these boilers in actual use, have affected a saving of 20 per cent, and upwards, in fuel over boilers replaced by them. Seven hundred and fifty pounds of coal is considered to be the consumption required for running a 40 horse power engine, averaging from 60 to 70 pounds of steam, for 12 hours with this boiler, which evaporates 15 pounds or more of water, to one pound of coal. Some of the peculiarities and advantages of the boiler are, that each section of 5 horse power is separate and can be removed for repairs without interfering with the other parts of the boiler; that it generates dry steam, is non-explosive and has a remarkably large heating surface, and also a very small grate surface. At the company's office, 37 Dey street, under the charge of Mr. Benj. Hornor, General Agent, can be obtained further information concerning what the valuable improvements possessed by the Goshen boiler have accomplished and illustrated, in the way of economy and durability.

Mica Masks.

A WELL-KNOWN German manufacturer of mica wares, Herr Raphael, of Breslau, now makes mica masks for the face which are quite transparent, very light and affected neither by heat, nor by acids. They afford good protection to all workmen who are liable to be injured by heat, dust or noxious vapors; all workers with fire, metal and glass melters, stonemasons, etc. In all kinds of grinding and polishing work the flying fragments rebound from the arched mica plates of the mask without injuring them. These plates are fixed in a metallic frame, which is well isolated by means of asbestos, so as not to be attacked by heat or acid. These masks allow the turning of the eyes in any direction, and, as against mica spectacles, they afford the advantage of protection to the whole face. In certain cases, the neck and shoulders may also be guarded by a sheet of cloth impregnated with fire-proof material, or by asbestos sheet, attached to the mask. The interval between the mica and the eyes allows of workmen who have poor eyesight wearing spectacles, and of workers with fire or in melting operations wearing colored glass spectacles under the mask, without fear of breakage of the glass, mica being such a bad conductor of heat. Where the mask has to be worn long it is found desirable to add a caoutchouc tube with mouthpiece for admission of fresh air; the tube passes out to the shoulders, where its funnel-shaped end (sometimes holding a moistened sponge) is supported. The mask has a sort of cap attached to it for fixture on the head.

PERSONAL.

EX-POSTMASTER GENERAL JAMES has assumed the duties of his new position as president of the Lincoln National Bank.

JUSTICE GRAY was sworn in on the 9th inst., and took his seat on the bench of the United States Supreme Court, at Washington.

GEORGE SKINNER has been appointed Superintendent, and Joseph Robinson Treasurer and Assistant Superintendent of the Scioto Valley Railroad.

JAMES D. SMITH, of Stamford, Conn., has been appointed by the Governor, State Treasurer, in the place of David P. Nichols, deceased.

WM. C. EGLESTON, of this city, has been elected a director of the Cleveland and Pittsburg Railroad Company, in the place of F. T. Walker, deceasd.

BENJAMIN F. NEWCOMER has been elected a director of the Philadelphia, Wilmington and Baltimore Railroad Company, in the place of Samuel Harlan.

FRANK M. BARKER has been appointed to engineer the survey of 70 miles of road which is to be built from Corry, Pa., to Buffalo. His headquarters will be at Erie.

ISAAC HINCKLEY has been re-elected president; A. J. Cassatt, vice president, and Robert Craven, treasurer of the Philadelphia Wilmington and Baltimore Railroad Company.

DR. JOHN W. DRAPER, author of "Intellectual Development of Europe," history of "American Civil War," and "Conflict between Science and Religion," died on the 4th inst., aged 71, at his home, Hastings-on-Hudson, N. Y.

JOHN C. GAULT has been appointed second vice president and general traffic manager of the Wabash system, with Robert Andrews, general superintendent; and W. F. Merrill, as his assistant. The ticket and freight departments have been placed under the charge of H. C. Townsend and H. C. Bird respectively.

CHARLES W. CASE has been appointed superintendent of the Hastings and Dakota Division of the Chicago, Milwaukee and St. Paul Railway, with headquarters at Minneapolis, Minn.; Fred D. Underwood, superintendent of the Southern Minnesota Division, with headquarters at La Crosse, Wis.; Henry R. Wilson, superintendent of the Iowa and Minnesota Division, with headquarters at Minneapolis, Minn.; John Jackson, superintendent of the Sioux City and Dakota Division, with headquarters at Sioux City, Iowa. George W. Sanborn continues as superintendent of the Iowa and Dakota Division and branches, with headquarters at Mason City, Iowa. N. Monsarrat has resigned the position of general superintendent of the Chesapeake, Ohio and Southern Railroad, to become general superintendent of the Cleveland, Akron and Columbus Railroad.

JOHN G. MOTLEY has been appointed superintendent of the Southern Division of the Mobile and Ohio Railroad.

ENGINEER John M. Unglaub who had charge of the engine of the train on the Baltimore and Potomac Railroad, conveying ex-PRESIDENT and Mrs. Hayes, and family from Washington, on the 5th of March, 1881, which was run into by an extra train going South, and who stood so manfully at hit post, reversing the engine as soon as he saw the extra, has recovered from the injury sustained by him at that time, and resumed his place on the road. On the 2d of January, he was waited upon by a personal friend of the late President, who handed him a fine gold watch and chain, valued at $700, accompanied by a letter from Mr. and Mrs. Hayes, asking him to accept it as a token of their gratitude and memento of his coolness exhibited on that occasion. The watch was made to order in Philadelphia, and on the outer case there is a monogram, "J. M. U.," and on the inside of the case is a suitable inscription, but Mr. Unglaub, having been charged not to allow it to get into the papers, the exact inscription cannot be procured.

ORGANIZATION.

THE Wilmington, Wrightsville and Jacksonville Railroad Company was organized in Wilmington, N. C., on the 29th ult. with Joseph T. Foy president. Books of subscription are to be opened along the line of the proposed road.

THE John P. King Manufacturing Company was organized at Augusta, Ga., on the 28th ult. with a capital of $1,000,000. Charles Estes is president and C. C. Baldwin, of New York, and O. H. Sampson, of Boston, are among the directors.

THE directors of the Milford and Bay Shore Railroad Company, elected on the 5th inst., are A. J. Cassatt, John P. Green, William A. Patton, John W. Hall, Isaac Jump, George V. Massey, Bradford Murphy, and Josiah Bacon. The officers are: President, Manlove Hayes; secretary and treasurer, Wm. T. Smithers.

THE Brooklyn and Long Island Railway Company, who propose to build a railroad from the Blackwell's Island Bridge through Long Island City and Brooklyn, have elected the following directors: Richard G. Phelps, Ludwig Semler, James R. Allaben, J. Corbin, E. H. Cole, F. T. Parson, David H. Fowler, Nathaniel Biggs, W. F. Bruff, E. O. Phelps, Alexander Dugan, E. S. Keller and M. C. Earl.

THE directors of the Erie and Huron Railway Company, elected on the 29th ult. are: Hon. Arch. McKellar, J. B. Bain, Alex. Trerice, Dresden; L. H. Stevens, Chatham; F. A. Manning, A. MacNabb, Vernon Smith, Toronto. A meeting of directors was held immediately

afterwards, when Hon. Arch. McKellar was elected president of the Board, Mr. Trerice, vice president; and Mr. MacNabb, secretary.

THE directors of the Baltimore and Delta Narrow Gauge Railway Company, elected on the 5th inst., are : Wm. H. Waters, James P. Streett, C. J. Moore, Stevenson Archer, Eli Tucker, E. S. Rogers, Caleb T. Taylor, S. G. Boyd, Thomas Armstrong, C. W. Hatter, G. O. Wilson, Henry R. McNally and Foulk Jones. The officers are : Wm. H. Waters president ; S. G. Boyd, secretary ; Thomas Armstrong, treasurer, and C W. Hatter, auditor.

AT the annual meeting of the stockholders of the Cleveland and Pittsburg Railroad Company, held at Cleveland, O., on the 4th inst., the following directors were elected: J. N. McCullough, B. F. Jones, George B. Roberts, William Bucknell, Frederick Sturges, S. J. Tilden, Charles Lanier, William C. Egleston, E. A. Ferguson, J. V. Painter, James F. Clark and R. P. Ranney. The election of officers rests with the lessees of the road, the Pennsylvania Company.

THE directors of the Dayton and Union (a branch of the Cincinnati, Hamilton and Dayton) Railroad Co., elected on the 4th inst. are : James McDaniel, P. Smith, R. D. Marshall, of Dayton; J. H. Devereux, E. R. Thomas, W. H. Poppleton, Stevenson Burke, of Cleveland ; F. H. Short, John Carlisle, of Cincinnati. The officers are F. H. Short, president ; Stevenson Burke, vice president; G. H. Russell, secretary and treasurer, E. B. Thomas, general manager; P. A. Hewitt, auditor.

THE directors of the Topeka and Western Railroad Company are : William B. Strong of Boston, O. C. Wheeler of Topeka, G. G. Dexter, J. T. Burr, Alden Speare, C. L. Thorndyke, W. Powell Mason, Elisha Atkins, F. L. Ames, all of Boston ; Sidney Dillon of New York, Gov. Veale of Topeka, E. B. Purcell of Manhattan. The capital stock is fixed at $6,000,000, divided into 60,000 shares. This new road is to starf from Topeka, Kansas, thence to the town ot Eskridge, in Waubaunsee county, and on through Morris, Dickenson, Saline, Ottawa, Lincoln and Osborne counties. Its length will be 250 miles.

THE directors of the New Haven and Northampton Railroad Company, at their meeting in New Haven on the 4th inst., elected the following Board of Directors : C. N. Yeamans, George J. Brush, Daniel Trowbridge, Horatio G. Knight, William D. Bishop, George H. Watrous, Charles H. Pond, Ezekiel H. Trowbridge and E. M. Reed. The directors subsequently re-elected C. N. Yeamans president and Edward A. Ray secretary. This is the first annual meeting since the New Haven and Hartford Railroad Company purchased a controlling interest in the road. It now has a majority of the directors.

AT a meeting of stockholders of the Terre Haute and Indianapolis and Terre Haute and Loganspoint Railroad Companies held in Terre Haute, Ind., on the 4th inst., the former elected as directors W. R. McKeen, Geo. E. Farrington, Alexander McGregor, D. W. Minshall, Henry Ross, Josephus Collet and F. C. Crawford. The directors elected W. R. McKeen president, Geo. E. Farrington Secretary, and J. W. Cruft, treasurer. The latter elected W. R. McKeen, Geo. E. Farrington, J. B. Hager, John B. Williams and D. W. Minshall, directors, who elected W. R. McKeen president, and Geo. E. Farrington secretary and treasurer.

THE following is the organization of the New York and New England Railroad Company for the year 1882 : directors, Jesse Metcalf, Providence; Legrand B. Cannon, Sidney Dillon, Cyrus W. Field, Jay Gould, R. Suydam Grant, Hugh J. Jewett, Russell Sage, New York ; Eustis C. Fitz, John H. French, William T. Hart, Henry L. Higginson, James H. Wilson, Boston; Frederick J. Kingsbury, Waterbury, Conn., and George B. Roberts, Philadelphia. Executive Committee, William T. Hart, Legrand B. Cannon, Jonas H. French, Jay Gould and James H. Wilson (ex officio). Finance Committee, R. Suydam Grant, Cyrus W. Field, Henry L. Higginson, James H. Wilson (ex officio). President, James H. Wilson; general manager, Samuel M. Felton; treasurer, George B. Phippen ; clerk, W. Perkins.

CONSOLIDATION.

THE Canadian Pacific Railway Syndicate took possession on the 1st inst. of the St. Lawrence and Ottawa Railway. It is understood that no change is to be made in the *personnel* of the management.

THE Cleveland, Columbus, Cincinnati and Indianapolis, the Wabash, St. Louis and Pacific, the Indiana, Bloomington and Western, the Cincinnati, Indianapolis, St. Louis and Chicago, and the Pennsylvania Company, now operate, by ownership, lease or otherwise, all of the twelve separate lines centering in Indianapolis, which were originally managed by as many different companies.

THE St. Louis, Arkansas and Texas Railway company of Missouri, the St. Louis, Arkansas and Texas Railway company of Arkansas, and the Missouri, Arkansas and Southern Railway company have been consolidated under the name of the St. Louis, Arkansas and Texas Railway company. This road enters Arkansas in Benton county, and is being constructed southward via Fayetteville to the Little Rock and Fort Smith railway.

THE stockholders of the Pittsburg and Western and Red Bank and Youngstown Railroad companies met at Pittsburg, on the 30th ult. and consolidated, under the name of the Pittsburg and Western Railroad company. The Red Bank and Youngstown is to run from Red Bank, Pa., to State line in Lawrence county, and there connect with the Youngstown branch of the Pittsburg and Western road. This route it is claimed will be sixty-five miles shorter than yet projected for transmission of freight from East to West.

ARTICLES of consolidation were filed in the office of the Secretary of State of Illinois on the 6th inst. of the Joliet and Indiana Railway Company and the Laporte and Indiana Railway Company. The new organization is to be known as the Joliet, Indiana and Eastern Railway Company, is to have a capital stock of $1,000,000, and the directors are to be those of the Laporte and Indiana Railway Company, namely : A. W. Paige, William H. Campbell, C. E. Sargeant, John F. Wilson, C. T. Baxter, A. C. Badger and F. D. Raymond. The present president and secretary of the Laporte and Indiana are to remain officers of the consolidated company.

CONSTRUCTION.

THE grading of the Harrisburg and Potomac Railroad is rapidly approaching Shippensburg. The tracks will be laid by March next.

THE South Mountain Railroad Company has commenced the survey of an extension from Hunter's Run to Gettysburg and other points.

WORK is progressing with rapidity on the second track in the Hoosac Tunnel. Eleven thousand feet have been laid, and the central shaft is nearly reached.

THE Harbor Grace (Newfoundland) *Standard* says the Railway Company are purchasing in England enough railway material to build, equip and operate 160 miles of railway, including rails, carriages, locomotives, implements, etc.

THE Schuylerville branch of the Boston, Hoosac Tunnel and Western Railroad was opened on the 9th inst., to Saratoga. The tonnage of the Hoosac Tunnel line increased in December 50 per cent and the earnings 25 per cent.

THE Mexican government has granted a concession, with a subsidy of $8,000 per kilometre, to Count Telefener, the agent of De Castro, for a railroad from Matamoras to Tampeco, on condition that De Castro shall acquire the branch road from Matamoras to Victoria, belonging to the Gould-Degrees concession.

THOS. L. RODGERS, vice-president of the California Southern Railroad Company, has received a concession from the Mexican government for the construction of a railroad and telegraph line from a convenient point of junction with the Sonora Railroad to San Diego. The length of the proposed road will be nearly 400 miles.

THE Bethlehem *Times* says that track laying has been completed from Belvidere to Danville on the Lehigh and Hudson River Railroad for a distance of thirteen miles, and coal is now being shipped to the latter place. The road is to be pushed forward as rapidly as possible, and in a few weeks will be running to Andover. It is also to be run to Portland and Bangor, in Northampton county.

CONNECTION has been made between the Danville, Olney and Ohio River Railroad and the Chicago and Eastern Illinois Railroad thus securing entrance to Chicago. The directors decided to extend the road this winter to a connection with the Louisville, New Albany and St. Louis Railroad, and during 1882 to complete the system to the Ohio river at Paducah.

CONTRACTS have been let by the Chicago and Northwestern Railway Company, to Carmichael and O'Rourke for grading, on the Callope branch to the Vermillion River, to be finished Aug. 1 ; on the Algoma branch, to be finished to Swan Lake by Aug. 1 ; to Spirit Lake, by Oct. 1 ; Tracy, by Nov. 1, and, on the Maple

River branch, to be finished to Sioux City by Sept. 1.

Statement of the Public Debt of the United States, January 1, 1882.

DEBT BEARING INTEREST.

	Amount Outstanding.	Accrued Interest.
6 per cent loan, 1861-'81, continued at 3½ per ct.	$101,827,200 00	$1,781,974 29
6 per cent loan 1863-'81 continued at 3½ per ct	47,855,700 00	837,473 82
5 per cent funded loan of 1881	401,503,900 00	2,342,106 08
4½ per cent funded loan of 1891	250,000,000 00	937,500 00
4 per cent funded loan of 1907	738,772,550 00	7,387,725 50
4 per cent refunding certificates	575,250 00	5,752 50
3 per cent navy pension fund	14,000,000 00	210,000 00
Aggregate of debt bearing interest	$1,554,534,600 00	$13,502,532 19
Interest due and unpaid		1,331,845 66

DEBT ON WHICH INTEREST HAS CEASED SINCE MATURITY.

	Amount Outstanding.	Interest due & unpaid.
4 to 6 per cent. old debt, 1837.	$57,665 00	$64,174 81
5 per cent. Mexican indemnity stock, 1846	1,104 91	85 74
6 per cent. bonds, 1847	1,250 00	22 00
6 per cent. bounty land scrip, 1847	3,275 00	213 06
5 per cent. Texas indemnity bonds, 1850	20,000 00	2,945 00
5 per cent. bonds, of 1858	8,000 00	....
5 per cent. bonds, of 1860	10,000 00	600 00
6 per cent. 5-20 bonds, 1862, called	370,700 00	8,439 32
6 per cent. 5-20 bonds, June, 1864, called	58,650 00	170 95
6 per cent. 5-20 bonds, 1865, called	77,050 00	18,897 52
5 per cent. 10-40 bonds, 1864, called	490,350 00	110,386 10
6 per cent. Consol. bonds, 1865, called	411,300 00	15,815 21
6 per cent. Consol. bonds, 1867, called	1,103,850 00	204,455 36
per cent. Consol. bonds, 1868, called	315,750 00	24,203 90
6 per cent. loan, Feb. 8, 1861, matured Dec. 31, 1880	142,000 00	6,660 00
per cent. funded loan 1881, called	3,558,750 00	90,739 38
Oregon War Debt, March 2, 1881, matured July 1, 1881.	134,500 00	6,373 50
6 per cent loan of July 17 and Aug. 5, 1861, matured June 30, 1881	1,107,400 00	44,068 50
6 per cent loan of July 17 and Aug. 5, 1861, matured Dec. 24, 1881, called	2,763,300 05	46,636 40
6 per cent. loan of March 3, 1863, matured June 30, 1881.	326,350 00	10,023 00
1-10 to 6 per cent. Treasury notes, prior to 1846	82,525 35	2,668 06
1-10 to 6 per cent. Treasury notes, 1846	6,000 00	206 00
6 per ct. Treasury notes, 1847.	950 00	57 00
3 to 6 per cent. Treasury notes, 1857	1,700 00	99 00
6 per ct. Treasury notes, 1861.	3,000 00	364 50
7 3-10 per cent. 3 years' Treasury notes, 1861	16,300 00	1,104 43
5 per cent. 1 year notes, 1863.	43,225 00	2,173 35
5 per cent. 2 year notes, 1863.	35,200 00	1,779 80
6 per ct. compound interest notes, 1863-64	225,260 00	45,968 07
7 3-10 per cent. 3 years' Treasury notes, 1864-65	140,900 00	4,763 87
6 per cent. certificates of indebtedness, 1862-63	4,000 00	253 48
4 to 6 per cent. temporary loan, 1864	2,960 00	244 19
3 per cent. certificates, called.	5,000 00	394 31
Aggregated of debt on which Interest has ceased since maturity	$11,528,265 26	$714,985 31

DEBT BEARING NO INTEREST.

Demand notes, 1861-62	$59,920 00	
Legal tender notes, 1862-63	346,681,016 00	
Certificates of Deposit	9,590,000 00	
Coin certificates, 1863	5,188,120 00	
Silver certificates, 1878	68,675,230 00	
Unclaimed interest		7,256 51
Fractional currency, 1862, 1863 and 1864 $15,451,860 92		
Less amount estimated as lost or destroyed, act of June, 21, 1879 8,375,934 00		
	7 075,926 92	
Aggregate of debt bearing no interest	$437,270,212 92	$7,256 51

RECAPITULATION.

	Amount Outstanding.	Interest.
Debt bearing interest in coin, viz:		
Bonds at 6 per cent., continued at 3½ per cent.	$149,682,900 00	
Bonds at 5 per cent, continued at 3½ per cent.	401,503,900 00	
Bonds at 4½ per cent.	250,000,000 00	
Bonds at 4 per cent.	738,772,550 00	
Refunding certificates	575,250 00	
Navy pension fund, 3 p.c	14,000,000 00	
	$1,554,534,600 00	$14,814,377 85
Debt on which interest has ceased since maturity.	11,528,265 26	714,985 31
Debt bearing no int., viz:		
Old demand and legal-tender notes	$346,740,936 00	
Certificates of deposit	9,590,000 00	
Coin & silver certificates.	73,863,350 00	
Fractional currency	7,076,926 92	
	$437,270,212 92	
Unclaimed interest		7,256 51
	$2,003,333,078 18	$15,536,619 67
Total debt, principal and interest to date, including interest due and unpaid	$2,018,869,697 35	

AMOUNT IN TREASURY.

Interest due and unpaid	$1,311,845 66
Debt on which interest has ceased	11,528,265 16
Interest thereon	714,985 31
Gold and silver certificates	73,863,350 00
U. S. notes held for redemption of certificates of deposit	9,590,000 00
Cash balance available January 1, 1882.	156,369,534 53
	$253,377,980 76
Debt, less am't in Treas'y Jan. 1, 1882	$1,765,491,717 09
Debt, less am't in Treasury Dec. 1, 1881	1,778,285,340 65
Decrease of debt during the month	$12 793,623 56
Decrease of debt since June 30, 1881	$75,107,094 89

BONDS ISSUED TO THE PACIFIC RAILROAD COMPANIES, INTEREST PAYABLE IN LAWFUL MONEY.

	Amount Outstanding.	Accrued Interest not paid.
Central Pacific bonds, 1862-64	$25,885,120 00	$776,553 60
Kansas Pacific bonds, 1862-64	6,303,000 00	189,090 00
Union Pacific bonds, 1862-64	27,236,512 00	817,095 36
Cent. Branch Union Pacific bonds, 1862-64	1,600,000 00	48,000 00
West'n Pacific Bonds, 1862.64	1,970,560 00	59,116 80
Sioux City & Pacific bonds, 1862-64	1,628,320 00	48,849 60
Totals	$64,623,512 00	$1,938,705 34

Interest paid by the United States, $51,467,272 02; interest repaid by transportation of mails, &c., $14,707,886 34; interest repaid by cash payments: 5 per cent. net earnings, $655,198 87; balance of interest paid by United States, $36,104,186 81.

The foregoing is a correct statement of the public debt, as appears from the books and Treasurer's returns in the Department at the close of business, December 31, 1881.

CHARLES J. FOLGER,
Secretary of the Treasury.

The Coal Trade.

THE leading coal carrying companies make the following reports of their tonnage for the week ending December 31, and for the year to same date, compared with their respective amounts carried to the same time last year:

	Week.	1881.	1880.
Reading Railroad	135.993	760,344	518,231
Schuylkill Canal	.....	27,655	.....
Lehigh Valley	100.602	570,772	380,373
Delaware, Lackawanna and Western.	79,037	4,359,990	3,539,086
Shamokin	22,241	1,088,917	930,363
Central R. R. of New Jersey	95,680	4,478,443	3,785,760
United R. R. of New Jersey	33,904	1,625,882	1,182,281
Pennsylvania Coal	21,699	1,427,747	1,123,674
Delaware and Hudson Canal	74,574	3,656,385	2,047,594
Huntingdon and Broad Top Mountain	9,402	518,420	417,330
Penn. and New York	25,365	134,898	98,806
Clearfield, Pa	37,818	2,401,987	1,739,872

The total tonnage of anthracite coal from all the regions for the week ending Dec. 31, as reported by the several carrying companies, amounted to 495,354 tons, against 343,183 tons in the corresponding week last year, an increase of 152,171 tons. The total amount of anthracite mined for the year is 29,361,021 tons, against 24,274,724 tons for the same period last year, an increase of 5,086,297 tons. The quantity of bituminous coal sent to market for the week amounted to 75,118 tons, against 67,916 tons, in the corresponding week of last year, an increase of 7,201 tons. The total amount of bituminous mined for the year is 4,994,061 tons, against 4,371,320 tons for the corresponding period last year, an increase of 622,741 tons. The total tonnage of all kinds of coal for the week is 570,472 tons, against 411,100 tons in corresponding week last year, an increase ot 159,372 tons, and the total tonnage for the coal year is 34,355,082 tons, against 26,646,054 tons to same date last year, an increase of 7,709,038 tons. The quantity of coal and coke carried over the Pennsylvania Railroad for the week ending December 24 was 200,723 tons, of which 145,610 tons were coal and 55,113 tons coke. The total tonnage for the year thus far has been 9,017,167 tons, of which 6,651,276 tons were coal and 2,365,891 tons coke. These figures embrace all the coal and coke carried over the road east and west. The shipments of bituminous coal from the mines of the Cumberland coal region during the week ended December 31 were 33,378 tons, and for the year 1881, 2,231,453 tons, an increase of 148,750 tons over 1880. The coal was brought from the mines as follows: Cumberland and Pennsylvania Railroad—week, 27,220 tons; year, 1,930,648 tons; decrease as compared with 1880, 85,886 tons. George's Creek and Cumberland Railroad—week, 4,131 tons; year, 211,955 tons; increase over 1880, 211,955 tons. Baltimore and Ohio Railroad—week, 1,365 tons; year, 77,516 tons; increase over 1880, 11,424 tons. West Virginia Central and Pittsburg Railway—week, 1,020 tons; year, 11,257 tons; increase over 1880, 11,257 tons. It was carried to tidewater as follows: Baltimore and Ohio Railroad—week, 28,141 tons; year, 1,443,755 tons. Chesapeake and Ohio Canal—week, 25 tons; year, 505,365 tons; decrease compared with 1880, 96,169 tons. Pennsylvania Railroad—week, 5,435 tons; year, 278,598, tons; increase compared with 1880, 63,866 tons. Nearly one-third of the whole shipments of the region were mined by the Consolidation Company—739,414 tons. Only seven shippers sent out over 100,000 tons. the New Central shipping 301,000 tons, and the George's Creek and Iron 255,000 tons, the others sending out less than 200,000 tons.—*Phil. Ledger, Jan.* 9.

INCORPORATION.

A CHARTER was granted on the 5th inst., in Pennsylvania to the American Combined Iron and Steel Company, of Philadelphia, with a capital of $2,000,000. The company had been formerly chartered under the laws of New York.

THE papers of organization of the Central Pacific Railroad Company, of Wyoming, has been filed with the Secretary of Wyoming Territory by Charles Crocker, Charles F. Crocker and W. V. Huntington, incorporators and trustees. Capital stock, $13,500,000, in 135,000 shares.

THE Mattoon and Northern Railway Com-

Secretary of State of Illinois. It is proposed pany, has filed articles of incorporation with the to construct a road from Mattoon to some point on the Illinois Midland Railroad. The principal office is to be at Mattoon. The capital stock is $30,000, and the incorporators and first Board of Directors are Ira James, C. M. Doyle, J. G. Wright, Thomas M. Lytle and A. M. Ritter, all of Mattoon.

THE St. Augustine Construction Company has been incorporated under the general laws of New Jersey, with a cash capital of $50,000, and has an office at Red Bank, Monmouth county. The incorporators are W. J. Lawton, of Jacksonville, Fla.; A. M. Lyon, of New York, and G. V. Sneden, of Red Bank. The object of the company is to engage in building and equipping railroads and steamboats and buying and improving lands in Florida.

THE Secretary of State of Illinois, on the 7th inst., licensed John E. Cowles, of New York City; John S. Wompoon, W. R. Jouette and Nelson C. Gridley, of Chicago; and Benjamin F. Wompoon, of Aledo, Ill., to organize the Rock Island and Southwestern Railway Company, with the principal office in Chicago. The capital of the company is $1,000,000. The company proposes to build about 35 miles of railway and telegraph lines from Rock Island, Ill., to New Boston, Mercer County, Ill.

ARTICLES of incoporation were filed on the 6th inst., with the Secretary of State of Illinois, by the Freeport and Northwestern Railroad Company, which is to have a capital stock of $36,000. This company proposes to construct a line from Chicago to Fox River and across through Kane County to Freeport, a distance of 145 miles. The principal office is to be at Freeport, and the incorporators and first Board of Directors are John F. Smith, Henry J. Porter, Alonzo V. Richards, M. H. Wilcoxon and Warren C. Clark, all of Freeport.

THE charter of the Topeka and Western Railway Company was filed with the Secretary of State of Kansas, on the 4th inst. The new road is to start from Topeka, thence to the town of Esdridge, in Wabaunsee County, and on through Morris, Dickinson, Saline, Ottawa, Lincoln and Osborne counties. Its length will be 250 miles. The directors are William H. Strong, of Boston; C. C. Wheeler, Topeka; Alden Speare, J. T. Burr, F. G. Dexter, S. L. Thorndike, W. Powell, Sidney Dillon, J. T. Dillon of New York; G. W. Veale, of Topeka, and E. B. Purcell, of Manhattan. The capital stock is fixed at $6,000,000, divided in 60,000 shares.

A CHARTER was issued by the Secretary of State of West Virginia, on the 3d inst., to the Kanawha and Chesapeake Railroad Company. The capital stock is $3,000,000. The incorporators are H. C. Parsons, H. D. Whitcomb and S. McG. Fisher, of Richmond, Va.; S. A. Miller, of Charleston, W. Va.; and Joseph S. Miller, of Wheeling. The route of the road is as follows: Commencing at or near Cannelton, in the county of Kanawha, and running by the most practicable route, to a point at or near the mouth of the South Branch of the Potomac river, in the county of Hampshire, with the right to build a branch line to a point on the Potomac river, in the county of Mineral. Principal office, Charleston, W. Va.

ARTICLES of incorporation of the Cincinnati and St. Louis Air-Line Railroad Company were filed on the 26th ult., in the office of the Secretary of State of Illinois. The route of the proposed railroad is from East St. Louis to the Wabash river, at Palestine, or near that point, and running through the counties of St. Clair, Madison, Clinton, Rond, Marion, Fayette, Clay, Effingham, Jasper and Crawford; also a branch from the city of Effingham, Northwesterly, through Effingham and Clay counties to a junction with the Toledo, Burlington and St. Louis Railroad, at or near Holliday, in Shelby county. The principal office of the company is to be at Robinson, Crawford county. The capital stock is $2,800,000, and the incorporators and Board of Directors are John S. Cooper, Eric Winters, George Bass, William E. Loan and William W. Garley.

Illinois Central Railroad.

DURING the month of December, 1881, the traffic on the lines operated by this company was (estimated):

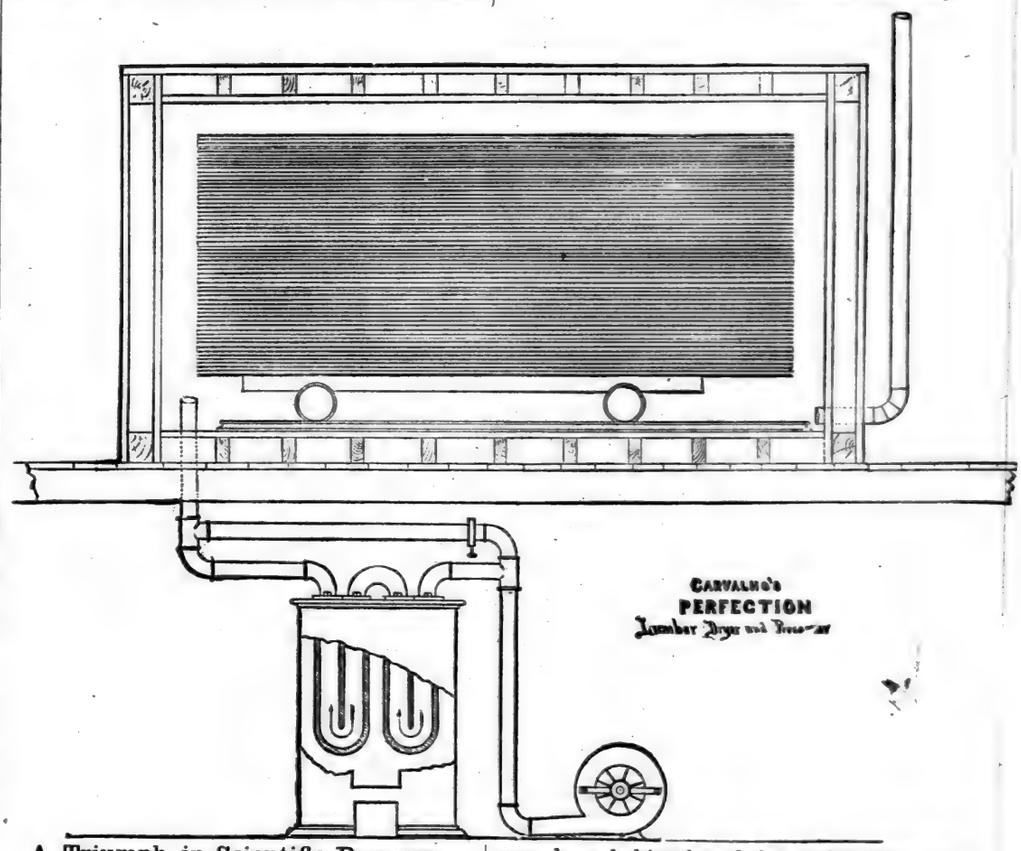
In Illinois	$595,190 00
In Iowa (leased lines)	169,964 00
Total	$709,154 00

The traffic for the same month in 1880, on the same mileage, was (actual):

In Illinois	$522,565 31
In Iowa (leased lines)	150,616 33
Total	$673,181 64

During December, 1881, the land sales were 1,384.22 acres for $8,185.32, and the cash collected on land contracts was $9,244.98.

L. A. CATLIN, *Secretary.*



A Triumph in Scientific Progress.

WHEN we take a retrospective glance at the primitive efforts of our forefathers to subvert the forces of Nature to the necessities of man and contrast their now almost absolute methods with the more modern and scientific substitutions, viz: steam, gas, electricity, &c., we cannot but exclaim that man has "progressed continually" and now occupies a prominent place on the plane of civilization and enlightenment.

We are led to these remarks, by having recently witnessed the practical operations upon a very large scale of an improved apparatus invented by Professor S. N. Carvalho for heating air and superheating steam. His process not only heats atmospheric air to any temperature from 100 degrees to 800 degrees but regulates the temperature and quantity as desired. 500 to 10,000 cubic feet per minute may be transferred to great distances and utilized for drying lumber, grain, bricks, boiling sugar, soap, beer, baking bread, &c., and heating warehouses and large buildings economically, practically and without danger. The introduction of this novel way to utilize hot air, superceding in many instances the expensive use of steam, is a public benefaction, and we respectfully call the attention of our readers, especially those interested in car building, drying grain and lumber, to a careful examination of its merits.

The apparatus is simple in the extreme and consists of setts of double cylinders placed vertically in a furnace, as per "Patent office drawing" annexed. They rest on an iron plate which also sets on a buck or iron furnace. The apparatus, as seen in operation at the establishment of Wilson & Adams, on 1st Avenue, this city, dried perfectly without checking 3500 thousand feet of lumber just from the mile in 35 hours at the nominal expense of about twenty cents per thousand feet for fuel.

Professor Carvalho's office is at No. 120 Liberty Street, New York.

New York Stock Exchange.

(Thursday's quotations follow money article.)

Closing Prices for the week ending Jan. 11.

	Th.5.	F.6.	Sat.7.	M. 9.	Tu.10.	W.11.
Adams Express	.....	145	117½	.....	149	149
Albany and Susq.	.....	130	130	.....	.....	.....
1st mortgage	.....	.....	.....	.....	.....	.....
2d mortgage	.....	.....	.....	.....	.....	.....
American Express	93	92¼	93¼	.....	93	93⅜
Atlantic & Pac. Tel.	.....	.....	.....	.....	.....	.....
Burl., C. R. & Nor.	.....	.....	.....	.....	.....	.....
1st mortgage 5s	99¾	99¾	99¾	99¾	100	.....
Canada Southern	52⅛	53⅛	53¾	54¾	55	54
1st mortgage guar	96¼	95¾	.....	95½	95¾	95⅞
Central of N. Jersey	90	90⅞	91½	92½	91½	91¾
1st mort. 1890	118¼	.....	.....	.....	118⅝	119
7s, consol. ass	.....	.....	.....	.....	114	114
7s, convertibleass.	.....	.....	123¾	.....	.....	.....
7s, Income	103	.....	.....	.....	101½	102
Adjustment	....	105	.....	.....	107	107½
Central Pacific	91¼	91¾	92¼	92⅝	93	93
6s, gold	113⅝	.....	.....	113½	113¼	113¼
1st M. (San Joaq)	109	.....	.....	.....	.....	.....
1st M. (Cal. & Or.)	.....	103½	.....	.....	.....	104
Land grant 6s	.....	.....	.....	107	105⅝	106
Chesapeake & Ohio.	25	24¾	26	25½	25	24½
Chicago and Alton.	129	129¾	130¼	.....	130¾	131
Preferred	.....	.....	.....	.....	.....	.....
1st mortgage	.....	.....	.....	.....	119¾	.....
Sinking Fund	.....	.....	.....	.....	.....	.....
Chi,, Bur. & Quincy	134	135	135	135⅛	136	136⅜
7s, Consol. 1903	.....	127¼	.....	.....	.....	125⅝
Chi., Mil. & St. Paul	106¼	107	108	109½	109⅜	108⅝
Preferred	121	120	121	121¾	122	121½
1st mortgage, 8s	.....	.....	.....	.....	.....	.....
2d mort., 7 3-10s	.....	120	.....	.....	121	.....
7s, gold	.....	.....	.....	.....	.....	.....
1st M. (La. C. div)	115¼	.....	.....	.....	.....	.....
1st M. I. & M. div.)	.....	.....	.....	.....	.....	.....
1st.M. (I. & D. ext.)	.....	.....	114	.....	.....	.....
1st M. (H.&D. div.)	114	114	114	113⅞	114	114
1st M.(C. & M.div.)	.....	.....	.....	.....	.....	.....
Consolidated S. F.	.....	.....	.....	118¾	....	119
Chi. & Northwestern	124¾	124¾	125	126¼	126	126⅛
Preferred	137½	136½	138¼	138	139⅜	.....
1st mortgage	.....	.....	.....	.....	.....	.....
Sinking Fund 6s	.....	109	.....	.....	109¾	110
Consolidated 7s	.....	.....	.....	.....	.....	.....
Consol. Gold bo'ds	123	123	.....	.....	123⅜	124
Do. reg	123	123	.....	.....	.....	.....
Chi., R. Isl. & Pac.	131⅜	131⅝	.....	132½	132⅜	133
6s, 1917, c	125	.....	.....	126	....	125½
Clev.,Col.,Cin.&Ind.	78¾	79½	80½	79	80	82¼
1st mortgage	.....	.....	.....	.....	.....	.....
Clev. & Pittsburg gr.	.....	.....	133	134	.....	135
7s, Consolidated	135½	.....	.....	.....	.....	.....
4th mortgage	.....	.....	112	112	.....	.....
Col.,Chi.,& Ind. Cent.	20¼	21	21¾	21¼	21¾	21¼
1st mortgage	.....	.....	.....	.....	.....	.....
2d mortgage	.....	.....	.....	.....	.....	.....
Del. & Hud Canal.	107¼	107	107	106⅛	106⅜	106⅜
Reg. 7s, 1891	.....	112	.....	112	112	.....
Reg. 7s, 1884	105	....	.....	.....	.....	.....
7s, 1894	.....	.....	.....	.....	.....	.....
Del.,Lack.& Western	123⅝	124⅛	124¾	124	124	123⅞
2d mortgage 7s	.....	.....	.....	.....	.....	.....
7s, Consol. 1907	.....	.....	.....	.....	.....	.....
Erie Railway	.....	.....	.....	.....	.....	.....
1st mortgage	.....	.....	.....	126	.....	.....
2d mort. 5s, ext	.....	.....	.....	.....	.....	.....
3d mortgage	.....	.....	.....	105¾	.....	.....
4th mort. 5s, ext	.....	.....	.....	.....	112	.....
5th mortgage	.....	113	.....	.....	.....	112
7s, Consol. gold	129½	.....	.....	129½	129⅜	.....
Great West. 1st mort	.....	.....	.....	.....	.....	108¾
2d mortgage	.....	104½	.....	104	103¾	109
Hannibal & St. Jo.	95	95¼	95½	95	95¼	95¼
Preferred	108	107⅞	108¾	111¼	109½	109¾
8s, Convertible	.....	.....	108	.....	111¾	111¾
Houston & Tex. Cen	.....	85	.....	.....	.....	.....
1st mortgage	.....	111	110	.....	111¾	.....
Illinois Central	128½	129¼	129½	129¼	130	131
LakeShore&MichSo	110½	111	111⅝	112⅛	113¾	113¾
Consol. 7s	.....	.....	.....	.....	130	.....
Consol. 7s, reg	.....	.....	.....	.....	.....	.....
2d Consolidated	.....	124½	.....	.....	.....	.....
Leh. & W. B. 7s, Con	.....	.....	.....	.....	.....	.....
Long Dock bonds	.....	.....	.....	.....	.....	.....
Louisville & Nash.	95⅛	97	98	97⅞	97⅝	97¼
7s, Consolidated	121	100½	.....	.....	.....	121⅝
Manhattan	51	49½	51	51	.....	51
Met. Elevated	85¼	87½	88¾	89	.....	.....
1st mortgage	100	99⅞	100	100	100	100½
Michigan Central	84¼	85⅛	85⅞	86⅜	87⅝	86¾
7s, 1902	123¾	.....	.....	124	.....	.....
M. S. & N. I. 1st, S. F	107½	.....	.....	.....	.....	.....
Morris & Essex	122	.....	121½	121½	.....	121
1st mortgage	.....	.....	.....	.....	.....	.....
2d mortgage	.....	.....	.....	.....	116	.....
7s of 1871	122½	123⅞	123½	.....	123⅜	.....
7s, Convertible	.....	.....	.....	.....	.....	.....
7s, Consolidated	.....	.....	.....	.....	124	.....
N.Y. Cen. & Hud. R.	129¼	129¾	129¾	130⅞	131½	130½
6s, S. F. 1883	.....	102¼	.....	.....	.....	102¾
6s, S. F., 1887	.....	.....	.....	110	.....	 110
1st mortgage	.....	.....	.....	.....	.....	134½ ....
1st mortgage, reg.	133	.....	.....	132¾	133	.....
N. Y. Elevated	106½	105¼	106	105½	107	.....
1st mortgage	115¾	116½	116½	117	.....	.....
N. Y. & Harlem	.....	.....	.....	.....	.....	.....
Preferred	.....	.....	.....	.....	.....	.....
1st mortgage	.....	.....	.....	.....	.....	.....
1st mortgage, reg	.....	.....	.....	.....	.....	.....
N. Y., Lake Erie & W	39¼	39⅜	39¾	39⅞	40¾	40¾
Preferred	79	80	81½	81¼	81⅜	82
2d Consolidated	97⅞	97⅝	98¼	98½	98¾	99½
New 2d 5s fund	95	....	95½	94¾	.....	96¼
N.Y.,N.Hav'n&Hart	....	170½	172	170½	.....	170
North Mo. 1st mort	.....	.....	.....	.....	.....	.....
Northern Pacific	35¾	35¾	36½	36¼	39	35¾
Preferred	73¾	74½	75¼	75⅞	75¼	74⅞
Ohio & Mississippi.	35½	35	36¼	36	36¼	36¼
Preferred	.....	.....	.....	.....	.....	.....
2d mortgage	.....	.....	.....	.....	120½	.....
Consolidated 7s	.....	.....	.....	.....	.....	116
Consol. S. Fund	.....	....	.....	116½	.....	117
Pacific Mail S. S. Co	40	41¼	41¼	41⅜	41½	41½
Pacific R. R. of Mo.	.....	.....	.....	.....	.....	.....
1st mortgage	.....	.....	.....	.....	.....	.....
2d mortgage	.....	.....	.....	.....	.....	.....
Panama	.....	.....	195	.....	195	.....
Phila. & Reading	64⅞	66	66⅞	66¼	66½	65⅝
Pitts,Ft.W.&Chi.gtd	.....	....	134	134½	.....	134
1st mortgage	.....	.....	.....	.....	.....	.....
2d mortgage	.....	.....	.....	.....	.....	.....
3d mortgage	.....	.....	.....	.....	.....	.....
Pullman Palace Car	125	134¾	133¾	135	134	.....
Quicksil'r Min'g Co	.....	.....	12	.....	.....	12⅝
Preferred	57	.....	58⅛	57⅓	58	59⅛
St. Louis & San Fran	40	40	.....	40	.....	.....
Preferred	58¼	57	.....	.....	58⅓	58¼
1st Preferred	104¼	104	.....	104⅜	104½	105½
St. L., Alt'n & T. H.	.....	.....	.....	.....	42	.....
Preferred	.....	.....	88½	90¼	.....	.....
1st mortgage	.....	.....	.....	.....	.....	.....
2d mort. pref	.....	.....	....	107	.....	.....
Income bonds	.....	.....	.....	.....	.....	.....
St. L., Iron Mt. & S	.....	.....	.....	.....	.....	.....
1st mortgage	.....	.....	.....	.....	117	.....
2d mortgage	109½	.....	.....	.....	.....	108¾
Toledo and Wabash	.....	.....	.....	.....	.....	.....
1st mortgage	.....	.....	.....	110	.....	.....
2d mortgage	.....	.....	.....	.....	.....	.....
7s, Consolidated	104¼	.....	104¼	104¼	.....	.....
St. Louis Division	107⅞	.....	.....	.....	.....	.....
Union Pacific	115½	116	116¼	117	117¼	117¾
1st mortgage	.....	114½	.....	.....	.....	.....
Land Grant 7s	.....	113	...	113½	113¼	.....
Sinking Fund 8s	.....	.....	.....	.....	123¼	.....
United States Ex	76¾	.....	.....	.....	76½	76½
Wabash, St. L.& Pac	35½	36½	36¼	36¼	36½	36
Preferred	66⅞	67½	68⅝	68⅝	68⅝	68¼
New mort. 7s	.....	.....	114½	.....	.....	.....
Wells-Fargo Ex	130½	128	.....	.....	.....	.....
Western Pacific b'ds	.....	....	.....	.....	110	.....
Western Union Tel.	78	78⅝	78½	78½	77⅞	77⅜
7s, S.F. conv., 1900	.....	.....	.....	.....	.....	.....
FEDERAL STOCKS :—						
U. S. 4s, 1907, reg	.....	.....	.....	117½	117⅝	.....
U. S. 4s, 1907, coup	.....	.....	.....	117⅝	117⅞	117¾
U. S. 4½s, 1891, reg	114½	.....	.....	.....	.....	.....
U. S. 4½s, 1891, coup	.....	.....	.....	.....	.....	.....
U. S. 5s, 1881, reg	.....	.....	.....	.....	.....	.....
U. S. 5s, cont'd at3½	102½	102½	.....	102¼	102¼	.....
U. S. 6s cont'd at3½	103¾	100¾	100¾	100¾	100	.....
Dt. of Col. 3-65s, reg	.....	.....	.....	.....	107	.....
Dt. of Col.3-65s,coup	.....	.....	.....	.....	107	107

Boston Stock Exchange.

Prices for the Week Ending Jan. 11.

	Th.5.	F. 6.	Sat.7.	M.9.	Tu.10.	W.11.
Atch.,Top.&San.Fe.	93⅝	93½	94½	95¼	95¼	92½
1st mortgage	.....	120	119¾	.....	.....	119
2d mortgage	.....	.....	.....	.....	.....	.....
Land Grant 7s	.....	.....	.....	.....	.....	116⅜
Boston & Albany	164	.....	163¾	163¾	163	164
7s reg	.....	.....	.....	.....	.....	.....
Boston and Lowell.	.....	.....	.....	.....	.....	.....
Boston & Maine	144	145	145	145¼	145	144½
Boston& Providence	.....	.....	.....	162	.....	.....
Bos'n,Hart.& Erie7s	66⅞	66¼	67¼	67¾	67¾	.....
Burl.& Mo.R.L.G.7s	.....	.....	.....	115½	.....	.....
Burl.& Mo.R.in Neb	.....	.....	.....	.....	.....	.....
6s, exempt	.....	115	.....	.....	.....	.....
4s	.....	.....	.....	86	.....	.....
Chi.,Burl. & Quincy	135¼	134½	135	135¼	136	136¼
7s	.....	.....	.....	119	126	.....
Cin.,Sand&Clev($50)	28	28½	.....	28	.....	27⅝
Concord ($50)	.....	.....	.....	.....	.....	.....
Connecticut River	.....	.....	.....	.....	.....	.....
Eastern	.....	37¼	.....	37	38	.....
New 4½ Bonds	105¾	106	105¾	106½	.....	106¼
Fitchburg	.....	.....	.....	.....	.....	.....
Kan.C., Top. & West	.....	.....	.....	.....	.....	.....
Central Michigan	.....	.....	.....	.....	.....	.....
N.Y. & New England	64	63	62⅝	63	63	62¼
7s	118	117⅞	117⅞	.....	117¾	.....
Northern N. H.	104½	.....	.....	105	.....	.....
Norwich&Worcester	.....	.....	.....	.....	.....	.....
Ogden & Lake Cham	.....	.....	.....	.....	.....	.....
Preferred	.....	.....	.....	.....	.....	.....
Old Colony	124½	124	124¾	.....	.....	126
Ph.,Wil.&Balt.($50).	.....	.....	.....	.....	.....	.....
Portl'd,Saco & Ports	.....	.....	.....	.....	.....	.....
Pueblo & Ark Val	.....	.....	.....	.....	.....	.....
7s	.....	.....	117	.....	.. .	.....
Pullman Palace Car	130½	.....	134½	134	134	.....
Union Pacific	116	116¼	117	117¼	117¾	117⅜
6s	.....	.....	114¾	.....	.....	.....
Land Grant 7s	.....	.....	.....	110¾	111	.....
Sinking Fund 8s	... .	.....	119⅞	.....	.....	120
Vermont & Canada	.....	.....	.....	.....	.....	.....
Vermont & Mass	.....	.....	.....	.....	.....	.....
Worcester & Nashua	.....	57	.....	57½	.....	58
Cambridge (Horse)	.....	120	.....	.....	.....	.....
Metropolitan(Horse)	.....	...	.....	.....	.....	.....
Middlesex (Horse)	.....	.....	.....	.....	.....	.....
Cal.&Hecla Min'gCo	239	.....	240	250	252½	250
Quincy	55	55	55	58	54¾	55

Philadelphia Stock Exchange.

Closing Prices for the Week Ending Jan. 10.

	W.4.	Th.5.	F.6.	Sat.7.	M.9.	Tu.10.
Allegh'y Val. 7 3-10s	.....	.....	.....	.....	.....	.....
7s, Income	55	.....	.....	53½	.....	.....
Camd'n & Am. 6s, '83	.....	.....	.....	.....	103½	.....
6s, 1889	.....	.....	.....	.....	106	.....
Mort. 6s, 1889	114	.....	114	114	113¼	113¼
Camden & Atlantic	.....	.....	.....	.....	.....	.....
Preferred	.....	.....	.....	.....	.....	29½
1st mortgage	.....	.....	.....	.....	.....	.....
2d mortgage	.....	.....	.....	.....	.....	.....
Catawissa	.....	.....	.....	.....	.....	.....
Preferred	53½	.....	.....	.....	.....	.....
7s, new	.....	.....	.....	.....	.....	.....
Del. & Bound Brook	....	.....	.....	.....	.....	.....
7s	.....	.....	.....	.....	.....	.....
Elmira&Williamsp't	.....	.....	.....	.....	.....	.....
Preferred	.....	.....	.....	.....	.....	.....
Hunt. & B. Top Mt.	.....	14½	....	14½	14	14
Preferred	26	26	25¾	26	25	.....
2d mortgage	.....	.....	.....	.....	.....	.....
Lehigh Navigation	43½	43¼	43¾	43¾	43¼	43
6s, 1884	105¼	.....	105½	106	105¾	105¾
Gold Loan	.....	112	.....	.....	.....	.....
Railroad Loan	.....	.....	117	.....	.....	.....
Conv. Gold Loan	.....	.....	.....	.....	112¾	.....
Consol. Mort, 7s	117	.....	.....	117	.....	.....
Lehigh Valley	61¼	61½	61¾	62	62¼	62
1st mort. 6s, coup	.....	121	120	121	121	.....
1st mort. 6s, reg	121½	.....	.....	.....	.....	.....
2d mort. 7s	.....	133	.....	.....	.....	.....
Consol mort. 6s	.....	117	.....	.....	.....	.....
Consol.mtg.6s,reg	... .	118	.....	.....	.....	.....
Little Schuylkill	.....	55¼	.....	.....	.....	.....
Minehill&Sch.Hav'n	.....	.....	.....	.....	.....	60
North Pennsylvania	60	60	.....	60	60	60
1st mortgage 6s	.....	.....	105	.....	.....	104½
2d mortgage 7s	.....	.....	.....	.....	.....	.....
Genl. mtg.7s,coup	.....	.....	.....	.....	.....	120
Genl. mtg. 7s, reg	.....	.....	.....	.....	.....	.....
Northern Central	49½	.....	.....	48¾	48½	49
5s	.....	97½	97½	.....	.....	.....
Northern Pacific	36	35¾	36	36¾	36½	35¼
Preferred	75⅝	73¾	74½	75½	75¾	75¾
Pennsylvania R. R.	60⅞	60¼	60¾	61½	60¾	61
1st mortgage	.....	.....	.....	.....	.....	.....
Gen'l mort	.....	.....	.....	.....	.....	117
Gen'l mort reg	.....	.....	.....	.....	.....	.....
Consol. mort. 6s	.....	.....	.....	.....	.....	117
Consol. mort. reg	.....	.....	.....	.....	.....	.....
Pa.State 6s 2d series	.....	.....	.....	.....	.....	.....
do 3d series	.....	.....	.....	.....	.....	.....
do 5s, new	.....	115½	.....	.....	.....	.....
do 3s,	.....	.....	.....	.....	.....	.....
Phila. & Reading	33¼	32½	32⅞	33½	32¾	33½
1st mortgage 6s	.....	.....	.....	.....	.....	.....
7s of 1893	.....	.....	.....	.....	.....	.....
7s, new convert	.....	.....	.....	.....	70	.....
Consol. mort. 7s	.....	.....	.....	.....	125	... .
Consol. mort. reg	.....	.....	.....	.....	.....	.....
Gen'l mort. 6s	98¼	97½	97⅝	98	98	.....
Philadelphia & Erie	.....	.....	....	20	20	.....
1st mortgage 5s	105½	.....	.....	.....	105	105
2d mortgage 7s	.....	.....	.....	.....	.....	.....
Pittsb.,Cin.&St.L.7s	.....	121	.....	.....	122	.....
Pitts.,Titusv.&Buff.	21	20¾	20¾	20¾	20⅝	20⅝
7s	.....	102	.....	102	.....	102½
Schuylkill Navi't'n	.....	.....	6	.....	.....	.....
Preferred	13	13	.....	.....	.....	.....
6s, 1872	.....	.....	.....	.....	.....	.....
6s, 1882	89	.....	89	.....	.....	.....
United Co. of N. J.	185	.....	.....	.....	185	.....
Hestonville, (Horse)	18½	.....	.....	.....	.....	.....
Chestnut&Wal.(do)	.....	.....	.....	.....	.....	.....
Green & Coates (do)	.....	.....	.....	.....	.....	.....

Baltimore Stock Exchange.

Closing Prices for the Week Ending Jan. 10.

	W. 4.	Th. 5.	F. 6.	Sat. 7.	M. 9.	Tu. 10.
Baltimore & Ohio..	.....	195	.....	.....	.....	.....
6s, 1880.....	.....	.....	.....	.....	.....	.....
6s, 1885.....	.....	.....	.....	107¼	.....	106⅝
Central Ohio ($50)..	.....	.....	.....	.....	.....	.....
1st mortgage.....	108½	109	.....	.....	109⅛	.....
Marietta & Cincin'ti	.....	.....	.....	.....	.....	.....
1st mortgage, 7s..	.....	.....	.....	125½	.....	125¾
2d mortgage, 7s..	104⅞	.....	105⅞	.....	105⅞	.....
3d mortgage, 8s..	59¼	60¾	61	61¾	61⅜	61
Northern Cen. ($50)	50	.....	.....	49	.....	.....
2d mort., 6s 1885..	105	105	.....	.....	.....	.....
3d mort., 6s, 1900.	.....	.....	.....	.....	.....	.....
6s, 1900, gold.....	113	113¼	.....	113½	.....	.....
6s, 1904, gold.....	111½	.....	.....	111½	.....	.....
Orange & Alex. 1st.	.....	.....	.....	.....	.....	.....
2d mortgage, 6s...	.....	.....	.....	.....	.....	.....
3d mortgage, 8s...	.....	.....	.....	.....	.....	.....
4th mortgage, 8s..	.....	.....	.....	.....	.....	.....
O.,Alex.&Manas's 7s	.....	.....	.....	.....	.....	.....
Pitts.& Connellsv.7s	121⅝	.....	.....	.....	.....	121⅝
Virginia 6s, Consol.	69¾	67	65	65	64	63¼
Consol. coupons..	73	72¼	74	73½	73¾	68
10-40 bonds.....	.....	41	40½	40	38¼	33¾
Def'd Certificates.	16½	.....	17¼	17½	17¼	.....
Western Maryland..	15	.....	.....	15	15	15
1st M.,end.by Balt	.....	.....	.....	.....	.....	.....
2d M., do .	.....	.....	.....	.....	.....	.....
3d M., do .	.....	.....	.....	.....	.....	.....
1st M.,unendors'd	.....	.....	.....	.....	.....	.....
2d M.,end.WashCo	.....	.....	.....	.....	.....	.....
2d M., preferred..	.....	.....	.....	.....	105	.....
City Passenger R R.	.....	.....	.....	.....	.....	.....

London Stock Exchange.

	Closing Prices Dec. 10.	Dec. 23.
Baltimore & Ohio (sterling).....114	116	114	116
Cairo & Viencennes com. stock 42	45	36	40
Do. preferred 5 per cent..... 91	93	90	92
Central of N. J. $100 share:.... 93	98	93	98
Do. Cons. Mortgage.....116	118	115	117
Do. Adjustment Bonds.....104	109	104	109
Do. Income Bonds..... 104	107	104	107
Det.,G'd Haven & Mil. Equip bds112	114	112	114
Do.Con.M.5p.c.,till'83aft'r6p.c110	112	110	112
Illinois Central $100 shares.....137	138	132½	133½
Lehigh Valley Cons. mortgage..115	119	115	119
Louisville & Nashville mort 6s.105	107	105	107
Do. Sink. Fund bds (S.&N.Ala)104	106	103	105
Do. capital stock $100 shares.108	110	102	104
N. Y. Cent. & Hud. R. mt. bds..136	139	134	137
Do. $100 shares.....140	141	136½	137½
Do mort. bonds (stg.).....123	125	123	125
N.Y.,Lake Erie & West.,$100 shs 46	46½	42¼	43¾
Do. 6 p. c. pref. $100 shares.. 94	96	91	93
Do. 1st Con. Mort. bds (Erie) .130	132	130	132
Do. do. Funded Coupon bds.127	129	127	129
Do. 2d Consol Mort. bonds...103	104	101	103
Do. do. Funded Coupon bds..100	102	97	100
Do. Gold Income bonds..... 95	100	95	100
N.Y.,Pa.& Ohio 1st mort. bonds. 50½	51½	45½	46½
Do. Prior Lien bds (sterling)..105	110	105	110
Pennsylvania, $50 shares..... 64¾	65¼	62¾	63¼
Do. Con. Sink Fund Mort....120	122	118	122
Philadelphia & Reading $50 shs 35	36	33½	34½
General Consol Mortgage.....116	118	116	118
Do. Improvement Mortgage..104	106	103	105
Do.Gen.Mtg.'74,ex-def'd coup.100	102	99	10[illegible]
Do. Scrip for the 6 def. ½ coup. 95	100	95	100
Pittsb., Ft. W. & Chi. Eq. bds....105	109	105	109
St. L. Bridge 1st mort. gold b'd.126	128	126	128
Do. 1st pref. stock..... 102	104	102	104
Union Pa. Land Grant 1st. mtg.115	119	115	119

AMERICAN RAILROAD JOURNAL.

Financial and Commercial Review.

THURSDAY EVENING, Jan. 12, 1882.

THE quotation for call loans during the day was 4@5 per cent, and at the close it was 4 per cent.

The actual rates for prime bankers' sterling were 4.81¾@4.82 and 4.85½@4.85¾, with cable transfers 4.86½@¾, and prime commercial bills 4.80@¼. The actual rates for continental bills are as follows : francs, 5.19⅜@5.20 and 5.24⅜@5.25 ; marks, 94⅛@3-16 and 95@95⅛ ; and guilders, 39¾@40¼.

The receipts of the United States Government for the six months ending December 31, 1881, were : from customs, $108,358,919 ; from Internal Revenue, $76,230,128 ; from miscellaneous, $20,566,976—total, $205,156.023. The expenditures during the same time were : Ordinary, $96,615,570; interest on debt, $38,305,374—total, $134,920,944. For the six months ending December 31, 1880, the receipts were : from customs, $98,636,184 ; from Internal Revenue, $67,192,225 ; miscelleaneous, $13,755,175—total, $179,583,584. The expenditures during the same time were: Ordinary, $97,798,665; interest on debt, $41,820,175—total, $139,618,840. It will be seen that the receipts of 1881 show an increase over those of 1880, of $25,572,439, and the expenditures a decrease of $4,697,896; and that the surplus for the six months ending December 31, 1881, was $70,235,079, against $39,964,744 for the corresponding six months of 1880, an increase in favor of the period first named $30,270,385. The reduction on the interest account will be much larger during the coming six months, for the reason that there has been a large reduction in the principal of the public debt, and for the additional reason that on all the continued five and six per cent bonds the rate of interest to be paid will be 3½ per cent. During the past six months on a portion of these bonds the higher rate of interest was paid. The large amount of surplus revenue shown by the figures given above will have considerable influence with Congress when the question of reducing taxation comes to be considered.

The Pennsylvania Sinking Fund Commissioners have accepted bids for $9,000,000 of the new State loan, at 3, 3½ and 4 per cent, of which Drexel & Co. of Philadelphia get about $6,000,000. By this transaction, when completed, the interest-bearing State debt will be reduced $1,482,000.

At a meeting of the trustees of the East River Bridge, held on the 9th inst., the financial statement was presented showing that up to December 31, 1881, the total receipts were $13,537,731.34, and total expenditures $13,377,155 67. The cash on hand was $160,675.67, and the cash liabilities were $100,774.12. In December the recespts were $201,796.54, and the expenditures $53,926.82.

New stock to the amount of $70,000 has been issued by the Boston, Revere Beach and Lynn Railroad Company, and taken by the stockholders and a dividend paid upon it, and the road has authority to issue $80,000 more stock if necessary.

According to the Message of the Mayor the debt of the city of Brooklyn at the close of the year 1881 was $42,197,000, with a sinking-fund of $4,022,000. Of the total indebtedness, $9,236,000 is for Prospect Park, $10,430,000 for the East River Bridge, $9,830,000 for the Water Works, $7,239,000 for temporary debt, $4,270,000 is in tax certificates. The city is paying $1,500 a day interest on its bridge debt.

At the annual meeting of the North Pennsylvania Railroad Company on the 9th inst., it was stated that the receipts for the yea rwere $778,375.15—being dividends and interest on bonds paid by the Philadelphia and Reading Railroad Company.

The following gentlemen have been elected directors of the Mechanics' Banking Association: Trenor W. Park, Thomas W. Evans, Charles J. Osborn, William L. Scott, Frank Work, Cornelius F. Timpson. Joseph G. Mills, John G. McCullough and W. J. Hutchinson. It is intended to increase the stock to $1,000,000 and to occupy spacious rooms in the new Mills Building. It is also designed to make the bank the nucleus of a stock-clearing house.

The closing quotations on Thursday were : Albany and Susquehanna, 128@131 ; Adams Express, 147@149; American Express, 92@93½; Chicago, Burlington and Quincy, 136⅛@136¼; Canada Southern, 53¾@55; Chicago and Northwestern, 126@126¼ ; do. pref., 138¾@139; Chicago and Alton, 132½@133½; Central of New Jersey, 91¾@92 ; Central Pacific, 93⅜@93¾ ; Chicago, Milwaukee and St. Paul, 108⅜@109¼ ; do. pref., 121¼@121; Cleveland, Columbus, Cincinnati and Indianapolis, 81½@82½; Columbus, Chicago and Indiana Central, 21¼@21½; Delaware and Hudson Canal, —@—; Delaware, Lackawanna and Western, 124@124⅛ ; Hannibal and St. Joseph, 96@96¼; do. pref., 109¼@109½; Illinois Central, 132@132¼ ; Lake Erie and Western, 35@35½ ; Lake Shore and Michigan Southern, 114½@114⅞ ; Metropolitan Elevated, 87½@89 ; Manhattan Elevated, 48⅞@49 ; Michigan Central, 88@88 ; New York Elevated, 105@106½; New York, Lake Erie and Western, 41¼@41⅜ ; New York Central and Hudson River, 133⅝@133⅞; Northern Pacific, 35⅜@36; do. pref., 74⅜@74⅝; Ohio and Mississippi, 37¼@@37½ ; Panama, 195@198 ; Pacific Mail, 41⅜@41⅞; Texas and Pacific, 47⅝@47¾; Union Pacific, 117½@117¾ ; United States Express, 76½@77½; Western Union Telegraph, 78¼@78⅜ ; Wabash, St. Louis and Pacific, 36⅛@36⅜ ; do. pref., 68⅝@68⅞; Wells-Fargo Express, 128@130.

The following quotations of sales of Railway and other securities, for the week, are in addition to those given elsewhere in our columns:

New York.—Atlantic and Pacific 1st, 96½ ; Atchison, Colorado and Pacific 1st, 98 ; Boston and New York Air Line pref., 63; Chicago and Milwaukee 1st, 118 ; Cedar Falls and Minnesota, 20 ; Chicago, St. Louis and New Orleans, 80 ; do. 1st consol., 115; Chesapeake and Ohio 1st pref., 36; do. 2d pref., 26 ; do. 1st mort., Series A, 101; do. B, 82 ; do. cur. int., 51½ ; Chicago, St. Paul, Minneapolis and Omaha, 35¾ ; do. pref., 99⅞ ; do. consol., 98⅝ ; Central Iowa, 34 ; do. 1st, 115½ ; Chicago, Burlington and Quincy 8s, 103; Chicago, Milwaukee and St. Paul, Chicago and Pacific Western div., 94½ ; do. S. M. div. 1st, 103½ ; do. S. W. div. 1st, 103½; Columbus, Chicago and Indiana Central 1st, Trust Co. certif. ass. sup., 118; do. Income, 75 ; Chicago and Northwestern S. F. 5s, 101½ ; Chicago, St. Paul and Minneapolis 1st, 108¾; Denver and Rio Grande, 68¾ ; do. 1st consol., 103 ; Des Moines and Ft. Dodge inc.,75⅜ ; Denver, South Park and Pacific 1st, 103⅛ ; East Tennessee, Virginia and Georgia, 14¾ ; do. pref., 24¾; do. inc., 55⅛ ; do. 5s, 99; do. 1st, 113¼ ; Galveston, Harrisburg and San Antonio 1st, 103 ; Green Bay, Winona and St. Peter, 13½ ; Gulf, Colorado and Santa Fe 1st, 106 ; Hudson River 2d S. F., 108½ ; Houston and Texas Central 1st, Western div. 107½; International and Gt. Northern 1st, 107½ ; do. coup. 6s, 90; Indianapolis, Decatur and Springfield 1st, 105; Indiana, Bloomington and Western, 47; do. 2d, 80; Jackson, Lansing and Saginaw 6s, 110⅛; Kansas Pacific 1st consol., 103½ ; do. 6s, Denver div. ass., 108⅜; Keokuk and Des

Moines 1st, 106; Lehigh and Wilkesbarre consol. ass., 107¾ ; Louisville, New Albany and Chicago, 74; do. 1st, 100⅞ ; Long Island, 51¾ ; Lake Erie and Western, 34½ ; do. 1st, 107½ ; do. Inc., 54 ; Louisville and Nashville consol. 6s, 1898, 121⅝; do. gen'l mort. 6s, 101½ ; Lafayette, Bloomington and Muncie 1st, 103; Lake Shore dividend bonds, 122 ; Manhattan Beach, 27¾ ; Minneapolis and St. Louis, 21; do. pref., 61; Mobile and Ohio, 34 ; do. 1st deben., 96½ ; do. 2d deben., 68 ; do. new mort., 110 ; Missouri, Kansas and Texas, 37 ; do. consol. 7s, 106½; do. gen'l mort. 6s, 81½; do. 2d, 70¼; Missouri Pacific, 100¼ ; do. 3d, 110¼ ; do. 1st consol.; 103 ; Memphis and Charleston, 74 ; Milwaukee, Lake Shore and Western, 48; do. 1st, 100; Michigan Central 5s, 98 ; Metropolitan Elevated 2d, 90; New York, Ontario and Western, 27½; Norfolk and Western, 20; do. pref., 58¾ ; do. Gen'l mort., 103 ; Nashville, Chattanooga and St. Louis, 85; do. 1st, 115¼ ; New Jersey R. R. Transp. Co., 183 ; New Orleans Pacific 1st, 91½ ; Northern Pacific 1st, 99¼; Ohio Central, 23½ ; do. inc., 45 ; do. 1st, 96½ ; do. 1st Terminal Trust, 95½; Oregon Railway and Nav., 133 ; do. 1st, 106; Ohio Southern inc., 44 ; do. 1st, 91½; Ohio and Mississippi Springfield div. 1st, 121½; Peoria, Decatur and Evansville, 35½ ; do. 1st, 103½; Quincy and Toledo 1st, 102 ; Rochester and Pittsburg, 25½ ; do. 1st, 100¾ ; Richmond and Allegany, 36½ ; do. 1st, 101 ; Richmond and Danville, 181 ; do. 6s, 102¾ ; Rome, Watertown and Ogdensburg, 20 ; Rensselaer and Saratoga 1st, 136 ; South Pacific of Missouri 1st, 104 ; St. Louis, Alton and Terre Haute div. bonds, 50; St. Louis and Iron Mountain, Arkansas Branch 1st, 110; do. 5s, 85 ; St. Paul Minneapolis and Manitoba, 113½ ; do. 1st, 109; do, 2d, 105½ ; St. Paul and Duluth pref., 70 ; St. Louis, Kansas City and Northern, Omaha div. 1st, 113½ ; do. R. E. 7s, 105; Scioto Valley 1st, 98; St. Paul and Sioux City 1st, 110; Southern Pacific of California 1st, 103⅜ ; St. Louis, Jacksonville and Chicago 1st, 116½; Texas Central 1st, 107 ; Toledo Delphos and Burlington, 16½; do. 1st M. L., 84; do. Terminal Trust, 95 ; Texas and Pacific, 47⅜ ; do. inc. L. G., 74; do. Rio Grande div. 6s, 90 ; Toledo, Peoria and Western 1st, 111 ; Utah Gen'l mort. 7s, 106; Union Pacific Collateral Trust 6s, 107 ; Wabash, St. Louis and Pacific, Iowa div. 1st, 90¼ ; do. Gen'l mort. 6s, 88½ ; do. Chicago div., 85 ; do. Havana div. 1st, 95; Winona and St. Peter 1st, 107.

Philadelphia.—American Steamship Co. 6s, 107 ; Catawissa new pref., 53 ; Central Transportation, 35 ; Chesapeake and Delaware Canal 6s, 89; Erie and Western Transp. Co., 55; Morris Canal pref., 169 ; New Orleans Pacific 6s, 92 ; Nesquehoning Valley, 57½ ; Philadelphia, Germantown and Norristown, 105 ; Philadelphia, Wilmington and Baltimore 4s, 94½; Pennsylvania Company 4½s, 95½ ; Philadelphia and Reading scrip, 81 ; do. Inc. 7s, 98¼; Pennsylvania Canal 6s, 99¾ ; Pittsburg 7s, Water Loan, 127 ; Schuylkill Nav. Boat Loan 7s, 60 ; Texas and Pacific consol. mort. 6s, 100; do. Rio Grande div. 6s, 90; Union and Titusville 7s, 103. The latest quotations are : City 6s, —@118; do. free of tax, 126@132; do. 4s, new, 102@109 ; Pennsylvania State 6s, 3d series, 100@101; do. 5s, new loan, 115@—; do. 4s, new, 107@111; Philadelphia and Reading R. R., 33@33⅛ ; do. consol. mort. 7s, reg., 124½@125½ ; do. mort. 6s, 117@— ; do. gen'l mort. 6s, coupon, 97¾@98¼; do. 7s, 1893, 118@125 ; do. new, conv., 73@77; United New Jersey R. R. and Canal, 184¾@185; Buffalo, Pittsburg and Western, 20⅝@20¾; Pittsburg, Titusville and Buffalo 7s, 102⅜@102⅝; Camden and Amboy mort. 6s, 1889, 113¾@114; Pennsylvania R. R., 60⅞@61; do. general mort. reg., 123@— ; do. consol. mort. 6s, reg., 119@124 ; Little Schuylkill R. R. 55¼@55½ ; Morris Canal, 65@75; do. pref., 165@169½; Schuylkill Navigation, 5¾@6¼ ; do. pref., 12½@13½ ; do. 6s, 1882, 88½@89½; do. 1872, 107@108; Elmira and Williamsport pref., 58@60 ; do. 6s, 110@—;95@ do. 5s,— ; Lehigh Coal and Navgation, 43⅛@43½ ; do. 6s, 1884, 105¾@106¼ ; do. R. R. loan, 116¾@117¼ ; do. Gold Loan, 111¾@112¼ ; do. consol. 7s, 114¼@117¼; Northern Pacific, 35⅜@36½; do. pref., 75½@75⅝; North Pennsylvania, 59⅞@60⅛ ; do. 6s, 104¾@105¼ ; do. 7s, 123½@— ; do. General mort. 7s, reg., 119@124 ; Philadelphia and Erie, 19⅞@20⅛ ; do. 7s, 117@120 ; do. 5s, 105@105½ ; Minehill, 60@60½; Catawissa, 14@16 ; do. pref., 52¾@53¼ ; do. new pref., 52¾@53¼; do. 7s, 1900, 120@— ; Lehigh Valley 62@62¼ ; do. 6s, coupon, 120¾@121¼ ; do. reg., 121½@122½ ; do. 2d mort. 7s, 133@— ; do. consol. mort. 117¾@118¼ ; Fifth and Sixth streets (horse), 149@150 ; Second and Third, 114¾@115 ¼; Thirteenth and Fifteenth, 79¾@80¼ ; Spruce and Pine, 47¾@48¼ ; Green and Coates, 90@100; Chestnut and Walnut, 94@95 ; Germantown, —@70; Union, 110@125 ; West Philadelphia, 111@112 ; People's 15@15½ ; Continental, 100@105.

Baltimore.—Atlantic Coal, 1.10 ; Atlanta and Charlotte 1st, 109¾ ; Baltimore and Ohio 2d pref., 120 ; Baltimore City 6s, 1890, 114⅜ ; do. 6s, 1886, 106½ ; do. 6s, 1900, 128; do. 5s, 1916, 121¼ ; do. 5s, 1885, 101½ ; do. 5s, 1894, 116; do. 4s, 1920, 112 ; Columbia and Greenville 1st, 102½; Canton 6s, gold, 107½; North Carolina 4s, 83; Ohio and Mississippi, Springfield div. 1st, 121¼; Richmond and Allegany, 37½; Richmond and Danville 6s, gold, 102½ ; do. 6s, 1890, 106½; do. 6s, 1885, 103 ; Virginia Midland 1st pref., 115 ; do. 2d pref., 115 ; do. 1st mort., 116½; do. 2d mort., 109¼; do. 4th mort., 55; do. 5th mort., 98; Virginia Peelers, 38¾ ; do. Peeler coupons, 32 ; Virginia Black scrip, 25; Wilmington, Columbia and Augusta, 109. The latest quotations are : Atlanta and Charlotte, 101@— ; do. 1st, 109½@109¾ ; Baltimore and Ohio, 195@200 ; do. 6s, 1885, 106½@107; Baltimore City 6s, 1890, 114@114¼; do. 5s, 1885, 101@105 ; do. 5s, 1894, —@116½ ; do. 5s, 1916, 121@— ; do. 4s, 1920, —@112; Columbia and Greenville 1st, 102½@103½; Central Ohio 1st, 110@111; Marietta and Cincinnati 1st, 125½@125¾ ; do. 2d, 105@106 ; do. 3d, 61@61⅜ ; Northern Central, 48½@— ; do. 6s, 1885, 106½@— ; do. 6s, gold, 1900, 113@—; do. 5s, 1926, —@97¾ ; Norfolk and Western pref., 57@—; Ohio and Mississippi, Springfield div. 1st, 121¼@121½ ; Pittsburg and Connellsville 7s, 121@121¾ ; Richmond and Danville, 180@195 ; Virginia Midland 5th, 97@99; Virginia consols., 63¼@63⅜; do. 10-40s, 38½@39.

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The transfer books will be closed at 3 o'clock P. M. on Saturday, the 31st instant, and will be reopened on the morning of Saturday, the fourth day of February next.

E. D. WORCESTER, Treasurer.

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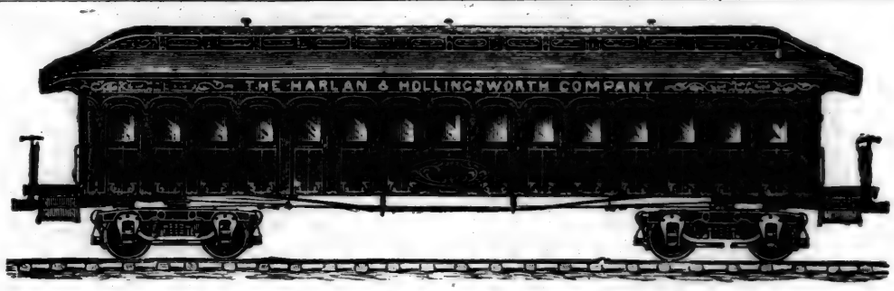
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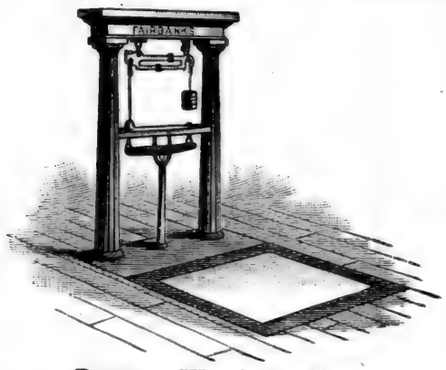
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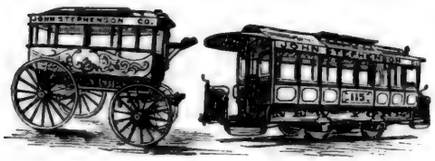
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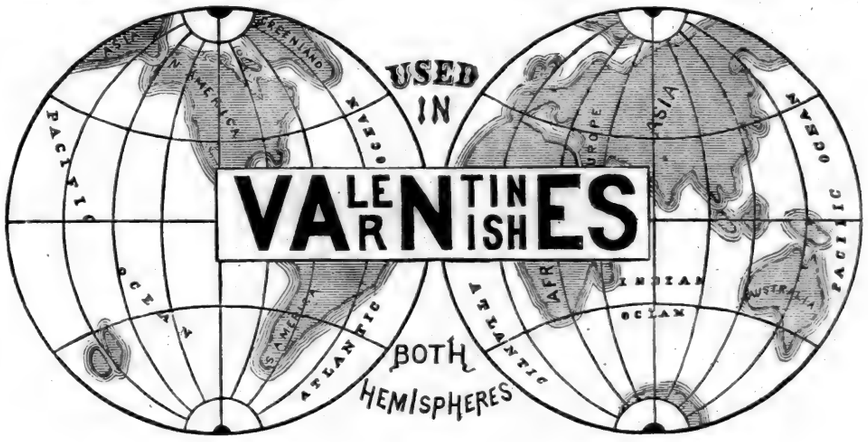
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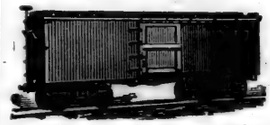
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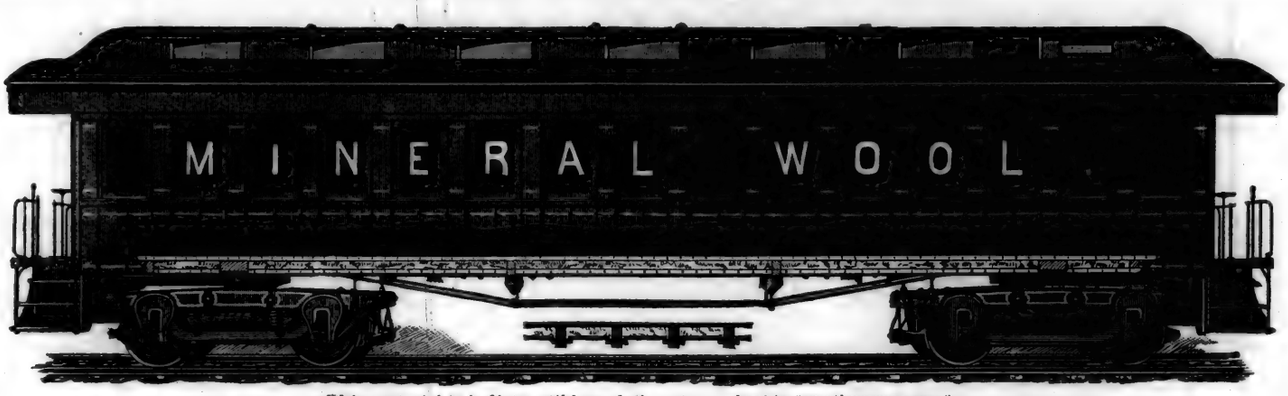
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SECOND QUARTO SERIES.—VOL. XXXVIII., No. 3.] NEW YORK, JANUARY 21, 1882. [WHOLE No. 2,387.—VOL. LV.

The First Wagner Sleeping-Car.

THE following is Senator Webster Wagner's account, as nearly as the writer can remember, of the way in which he induced Commodore Vanderbilt to adopt his Sleeping-Car :

"I had never thought of the sleeping-car until I saw one, of a very clumsy pattern, that had been built by some man living up beyond Palatine Bridge. The man had no capacity, no capital, and not much inventive genius. I thought right away that the idea was a good one, but that it was be developed. I hadn't much capital either, but I saw that I could do better than the man who had made this first attempt, and I immediately applied to Mr. William H. Vanderbilt to be allowed to use an old car to illustrate my notion of what a sleeping-car should be. I saw that the Hudson River Railroad was sharing a large business with the night boats, which it ought to have itself. Men who needed all the time they could get begrudged the five or six hours lost in traveling between Albany and New York by boat. It seemed to me that much time could be saved by providing accommodations for merchants and others who would be glad to sleep while they traveled rapidly. My request for an old car was granted, and I went to work to fit it up with berths. It took me months to finish the car in such a way as to satisfy me that it would do to show. When it was completed, there was another difficulty. Until it had been seen and approved by Commodore Vanderbilt, it could not be used on the Hudson River Railroad. So I went to Mr. W. H. Vanderbilt and urged him to induce the old man to name a day when he would look at it. At first the Commodore would pay no attention to the request, but at last he said that on a certain Sunday morning—it was early in the year 1858—he would come to the Thirtieth street depot to look at the new-fangled car. It was a critical moment for me that Sunday morning when I waited in my car to show the Commodore through it and hear his verdict. I walked through the car a dozen, perhaps a hundred times to see that everything was right. At last the Commodore arrived with his son. He came in, said 'Good morning,' and then I led him from one end of the car to the other, explaining its arrangements with my heart in my mouth, not daring to ask his opinion. He walked back and forth, looked at the berths, the curtains and seats, and at last sat down in one of the compartments—the car was divided into several saloons—and spread out his hands upon one of the adjustable tables. I watched him. He was ready to say something, and I was afraid he would condemn the work.

"How many have you got of these things?" was his first question.

"I told him I had only one.

"'Go ahead, said he, 'and build more. It's a devilish good thing and you can't have too many of them.'

"My heart dropped back in its place and I knew that my fortune was made. With my brother's help four cars were built, and we had them running in the Fall of the same year."

Mr. Wagner then went on to explain the difference between the first cars and those of a more recent make. The earlier ones were not provided with folding arrangements, in which the mattresses, pillows, linen, and blankets could be stowed away snugly. The first car had a single tier of berths, and the bedding had to be packed away in a closet at the end of the car, occupying a great deal of valuable space. One tier of berths was not profit enough, and a second tier was put in. The upper berths were too close, as the roof was flat, and to overcome that objection the pitched roof, much higher than that of the old cars, was devised and applied, securing ventilation and eventually admitting the swinging upper berth now used. This pitched roof was patented, and has been used everywhere, since it was adopted by Mr. Wagner, with great profit to its inventor. After the cars began to be used, Mr. Wagner said he had no difficulty in getting all the capital he wanted, although Commodore Vanderbilt insisted that the cars should be built by a company, and that he must have an interest in the concern. An arrangement was made that has been carried out to the satisfaction of both the Vanderbilts and Mr. Wagner.

Senator Wagner said, on this occasion, that after the sleeping and drawing room cars came into use he had repeatedly gone abroad to study the methods of construction of railway cars on foreign railways, and he explained with some minuteness the English, French, and Swiss carriages, some of the cars on the Swiss railways having impressed him as superier to most of the others he had seen. He complained that nearly all of them were destitute of conveniences which are regarded as absolutely necessary by American travelers, and he was convinced that the time was not far distant when travelers from Europe, who had been in this country, would succeed in convincing foreign railway managers of the importance of adopting the baggage check system, the bell-rope signal to the engineer, and other American ideas. He had narrowly escaped injury in several accidents to trains on which he was traveling, and described one smash-up in which he had left the baggage car only a few moments before collision, by which the car he had been in was wrecked and a man with whom he had been talking was killed. He spoke of his immunity from injury as something almost miraculous for a man who had traveled so constantly for more than 20 years.

Railroads of Arizona.

THE completion of the Southern Pacific Railroad across Arizona marks a new era in the history of the Territory. No longer is it an unknown land, isolated from the busy centers of civilization, trade, and active industry ; the dangers and discomforts of long and dreary stage rides, have been superseded by the luxury of the palace car, and a trip to the "marvelous country," at the present time, will be found both pleasant and profitable. The Southern Pacific enters Arizona at Yuma and crosses the Territory between the 32 and 33 degrees of latitude. Its length within the boundaries of Arizona is over 400 miles. Since the building of the road, many towns and mining camps have sprung up in the country adjacent ; an army of prospectors, traders, and speculators has filled the Southern counties, and the steadily increasing volume of bullion which is finding its way out of the country, is an earnest of what other portions of the Territory will do when they are likewise in possession of rail communication. At Deming, near New Mexico, about 90 miles East of the Arizona line, another great transcontinental route, the Atchison, Topeka, and Santa Fe railroad, forms a junction with the Southern Pacific. This line (Atchison, Topeka, and Santa Fe) begins at Kansas City, Missouri, traverses the plains of Kansas and Colorado, enters NewMexico, and passes down the Rio Grande valley, from whence the main line turns West towards Arizona, while another branch follows the Rio Grande to El Paso. From Deming, the Atchison Topeka and Santa Fe Company have their road surveyed to Tombstone and Tucson, where it is expected it will connect with the branch which is now building from Guaymas, through the State of Sonora. The opening of this great thoroughfare will give Southern Arizona direct rail connection with the Gulf of

California, as its junction at Deming with the Southern Pacific has already linked it with the Mississippi valley and the Atlantic seaboard. Among the branch roads projected from the line of the Southern Pacific, is that from Benson station to the City of Tombstone, a distance of 28 miles. Ground has been broken for this branch, and it will be finished at an early day. A branch has also been surveyed from Wilcox to the town of Globe. The length of this proposed line will be something over 100 miles. It will pass through one of the best grazing portions of the Territory, by the lately discovered coal fields near the Gila, and will open up to capital and immigration that rich mineral region which has Globe for its center.

Another branch line is in contemplation from Casa Grande station to Pinal, by way of Florence. It will pass through the rich valley of the Gila and penetrate the extensive mineral region embraced in the Pioneer, Pinal, Mineral Creek, and other rich districts of Pinal county.

The Southern Pacific company have surveyed a line from Yuma to Point Isabel, on the Gulf of California. A good harbor is said to exist at that place. The building of this branch will give the Territory another outlet to tidewater on the gulf. A line has also been surveyed from Yuma to the rich mining camps of Castle Dome and Silver district, on the Colorado river.

In the Northern part of the Territory, the construction of the Atlantic and Pacific railroad is making rapid progress. This road leaves the Atchison, Topeka and Santa Fe at Albuquerque, and takes a westward course across the Territory, following nearly the 35th parallel of north latitude. The road will pass about 50 miles North of Prescott, the capital of Arizona, and will cross the Rio Colorado at the Needles. This road will have termini at San Francisco and San Diego. The Atlantic and Pacific line will open to the capitalist, the miner, and the stock raiser, some of the finest grazing and richest mineral regions to be found on the continent; it will also pass through the best timbered portion of the Territory. A franchise has been granted by the last Legislature to build a branch from Prescott to the Atlantic and Pacific. The extensive mining, farming, and grazing interests, of which Prescott is the natural center, require the construction of such a road, and it will no doubt be completed within a short time.

Besides the roads now building and those projected, which have been mentioned, the Utah Southern is being pushed down to the Colorado river, with the intention, as is generally supposed, of seeking an outlet on the Gulf of California. This would give Arizona a connection with the Union Pacific and another route to the East and West.

From this brief review of the railroad situation, it will be seen that all the principal points in the Territory will soon be in possession of rail communication. It is safe to say that within the next two years all the leading towns and mining camps will be linked to the outside world with iron hands. The benefits which cheap freights and rapid transit will confer on the Territory are almost incalculable. Besides that the building of the road on the 35th parallel will give the people of Arizona a competing line to the marts of the East and the West, it will help to maintain a healthy competition, and prevent discriminating and oppressive charges on freight and travel which the corporation controlling the Southern Pacific have always shown a disposition to indulge in when there was no opposition.

Commerce of New York.

THE foreign imports at New York for the month of December were :—

	1879.	1880.	1881.
Ent. for cons.....	$15,191,709	$14,726,093	$19,303,335
Do. for warehousing	7,875,733	5,817,234	6,166,934
Free goods.....	15,865,136	10,540,073	13,894,803
Specie and bullion..	6,751,319	16,202,447	1,757,101
Total ent. at port....	$45,683,897	$67,285,847	$41,121,455
Withdrawn from warehouse.....	4,493,935	6,835,847	6,499,736

This brings the total for the year 1881 up to $495,424,906, against $539,386,776, for the year 1880, and $424,189,123 for the year 1879.

The following is a classification of imports at New York for the years :—

	1879.	1880.	1881.
Dry Goods.....	$91,549,600	$119,844,120	$111,537,020
General mdse.....	248,443,414	344,332,560	327,864,653
Specie.....	84,196,109	75,210,096	56,923,233
Total.....	$424,189,123	$539,386,776	$495,424,906

The duties received at New York for the twelve months ending with December were:

	1879.	1880.	1881.
Jan.....	$7,665,552 67	$11,960,677 78	$10,571,559 15
Feb.....	8,229,362 06	11,255,602 24	11,217,766 87
Mar.....	9,330,695 68	14,469,557 65	13,122,964 03
April.....	1,184,797 88	11,901,071 43	11,678,760 93
May.....	7,577,733 93	9,752,773 54	11,055,935 39
June.....	7,198,779 44	10,699,840 52	10,993,452 70
July.....	9,329,895 17	13,360,394 37	12,079,573 95
Aug.....	10,562,138 82	14,492,361 87	15,204,469 51
Sep.....	11,790,902 26	12,856,636 10	14,104,647 58
Oct.....	10,952,554 48	10,574,333 53	13,011,426 27
Nov.....	8,460,050 08	9,079,082 36	9,711,039 46
Dec.....	8,175,540 13	9,230,734 57	10,972,231 38
Total...	$107,448,002 60	$140,632,065 96	$143,724,917 22

The exports from New York to foreign ports in the month of December were :—

	1879.	1880.	1881.
Dom. produce.....	$33,126,695	$33,620,453	$29,430,216
For. free goods.....	272,895	978,709	1,156,495
Do. dutiable.....	449,973	415,127	643,635
Specie and bullion...	643,804	1,667,962	1,104,760
Total exports.....	$34,493,367	$36,682,251	$32,335,106
Do. exclusive of specie.....	33,848,563	35,104,289	31,230,346

The exports from New York to foreign ports exclusive of specie for the years named were :

	1879.	1880.	1881.
1st quar.....	$78,474,748	$82,934,173	$94,961,907
2d "	79,982,231	112,049,304	91,307,603
3d "	96,423,052	113,106,665	100,488,172
4th "	101,337,534	107,732,685	86,648,687
Total.....	$356,218,565	$415,822,827	$373,136,370

Asbestos Paint.

SOME interesting tests have recently been made in England of the value of asbestos paint applied to wood, canvas, and other combustible materials. Amongst other experiments a piece of light pine wood, about six inches long by four inches square, painted with five coats, was placed for upwards of half an hour in an ordinary grate fire, but, although the wood within was reduced to charcoal, there was no blaze whatever emitted during the charring. A small model theatre, built of wood, with net scenes and accessories, was sprinkled with turpentine and set on fire. Every portion ignited and the whole was consumed. A similar model, with the net scenes and the wood framing all painted with asbestos, was drenched with turpentine and set fire to, but the thin scenes were only partially charred at the lower ends with the turpentine flames, whilst the timbering was not even ignited. Similar illustrations were made with two models of larger size about four feet cube, built on a bed-plate of one inch deal board, and set fire to by a bundle of shavings. The one was burned and the bed-plate set on fire. In the other case, where the framing scenes and bed-plate had been painted with asbestos, no ignition was effected, and, although the lower portions of the light scenes were destroyed by the fierce flames of the shavings, the rest remained intact.

Water-Power in the Southern States.

VIRGINIA has a water-power of great extent and value. Almost all the streams in the state have ample fall for mill-seats. The line of the James river from Buchanan to Richmond is a favored locality for manufacturing. Jackson's river, a branch of the James, has a large fall from its head to its junction with the James. Lynchburg has an excellent water-power. There are many rivers originating in Middle Virginia which have sufficient fall for manufacturing; those in the Piedmont have a still greater fall; and those in the valley and Blue Ridge and Apalatchia have a fall varying from 500 to 1,000 feet, which may be used for manufacturing. The whole country from the Potomac to the Dan abounds in manufacturing sites. On the 100,000 available horse-power on the James, 44,800 of this power exists from Richmond to Bosher's dam—ten miles—with a fall of 130 feet.

North Carolina is estimated to have more than three million horse-power in her streams from the table lands to the sea. This exceeds that of all the steam engines in the United States and Great Britain.

Prof. Kerr estimates the water-power of that part of Roanoke river within the State at 70,000 horse-power; that of the Yadkin at 225,000; that of the Catawba at 184,000 or enough in the last to turn 7,360,000 spindles, and that of the Cape Fear, Haw and Deep rivers combined at 130,000 horse-power, a force sufficient to turn 5,200,000 spindles. Thus far these immense powers waste themselves in almost unheeded call.

South Carolina has over two millions of water-powers from water falling in the State. The commissioner of agricultural of that State says :—

"Considering the magnitude of the North Carolina water-shed that finds its drainage through this State estimated at 3,370,000 horse-power, we may safely add from this source one million to our estimate, giving a total of three million horse-powers for the State."

Georgia does not fall behind her sister States in her water-power. The differences of elevation between the sources among the mountains and the mouths of the rivers emptying into the ocean or gulf, ranging from one to three thousand feet, demonstrates the abundance and value of the water-power of the State. The Chattahoochee, Etowah, Savannah, Broad, Ocmulgee, Flint, Ogeechee, Altamaha and other rivers and streams afford power enough to satisfy all the demands that can be made by manufactories.—*Southern Railway Gazette.*

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PRECAUTIONS AGAINST RAILROAD ACCIDENTS.

THE terrible disaster on the New York Central and Hudson River Railroad last week, in the intensity and cruel bitterness of its horrors and the causes which made its occurrence possible, must of necessity stand, in the estimation of the general public, as a most unfortunate reflection upon the railroad and train management, upon whom the responsibility is placed. Theories in abundance are afloat as to the causes, and investigations will doubtless fix somewhere a personal responsibility. But the causes are plain enough, and while the advancement of theories may result in good, still not much theorizing is needed to demonstrate why such a disaster was possible or quite probable. One long train of magnificent cars, supposed to be a model train in equipment and management, and crowded with passengers, is closely followed by a local passenger train, neither train running on its regular time. The first train is brought to a stand-still at an unusual point and its pursuer is not stopped, but plunges into the rear drawing-room car at full speed. The results were terrible and heart-rending enough, but it is a wonder that they were not still more so under the circumstances, and it seems almost miraculous that the destruction of life was not even greater. The local train which followed the express was not stopped in this case, and under the system it is not necessarily surprising though it is shameful beyond expression, that it was not.

The rules of the railroad company were sufficiently explicit in this matter, but there was no guarrantee of their being carried out save the faithfulness and ability of two men—the brakeman at the rear of the express train and the engineer of the local. The disability or carelessness of either one of these men must result in destructive consequences. This is the risk in all such cases where the sole dependence is up on one man, and this risk is very conspicuous in the case of a man stationed at the rear of a long train, where his movements cannot be watched by a superior officer or his disability noticed and promptly met by a companion. One of the chief merits of the system known as the block system is that the absence from his post of the signalman, or his disability, leaves the signal in such a manner as to notify the engineer to stop, which the rules require him to do in all cases until the signals indicate that the "block" ahead is clear. In cases where this system is not used there evidently is an imperative need that there should be some one on the train whose first duty it should be in the case of an accident or an unusual stop to see that every train man is at his post, and especially that no disability or carelessness has prevented the brakeman on the rear car from performing his important duties.

A train like the one in question, to which may be entrusted daily the lives of perhaps 500 passengers or more, should in all respects be as complete in its equipment and in the number and character of its trainmen as human skill and judgment of men can possibly make it, as should be the case, for that matter, with every train, great or small, carrying passengers. Railroad men constantly have impractical ideas and suggestions placed before them, but certainly there is nothing unreasonable in the demand that all possible appliances for preventing and extinguishing fire and for extricating passengers from wrecked cars should be an acknowledged and never neglected part of a passenger train's equipment, and that the trainmen should be trained in the performance of the duties devolving upon them in cases of emergency as are the men on board an ably commanded ship. The terrible experience of last week has fully illustrated the necessity of these precautions, and the demand for them must be met. This is a point upon which there can be but one opinion as to the propriety of legal action in cases where the indifference or shortsighted selfishness of railroad managers prevent their adoption. The demands that are made in this direction must be listened to, and will be by all men worthy of public esteem and the responsible positions of railroad managers.

Nickel—Origin of its Name.

"NICKEL," says an old magazine of 1824, "signifies in German, from which it is derived, false, dirty or foul, and in this sense is applied to the very worst description of females. Now, nickel is found in different parts of Germany, and was supposed by the miners to be copper. As they could not, however, extract any copper from it, they gave it the name of Kopfernickel, or false copper. When a scientific chemist by the name of Cronstedt came to examine it, about 1750, and found that it was metal different from all others, he retained the latter part of the name, given it in reproach, and called it *nickel*, which has since been universally adopted; and thus an element of nature is stigmatized by a term than which no more oppobrious name can be given to a woman. For any other people but Germans this is certainly of no consequence, but it is rather a curious specimen of the manner in which names, that in a scientific point of view ought to express the qualities of substances, are applied. Nickel is rather a scarce mineral, and is always found combined with some other metals, which, for a long time, occasioned its separate existence to be denied. The brittle metal that is usually sold under this name always contains iron, arsenic, copper, cobalt and bismuth. When pure, it is a fine white color, resembling silver, and it is rather softer than iron. It is malleable both when cold and hot, it is attracted by the magnet, and, like steel, may be converted into a magnet, pointing, when suspended, to the north like a common magnetic needle. It is put to no use, and is, perhaps, most remarkable on account of its forming a part of almost all the stones that have fallen from the sky (meteoric stones) in every part of the world."

CONSTRUCTION.

A RAILROAD is being surveyed from the vicinity of Maricopa, Arizona, to Phœnix, thence to the Vulture Mine and Prescott.

A CONFERENCE of railway managers has fixed the time for opening the entire St. Gothard Railway line on the 1st of July.

THE track of the Mexican National Railway is now completed across the State of Tamaulipas and is being laid at the rate of a mile a day in the State of Nuevo Leon.

THE Baltimore and Delta Narrow-Gauge Railway Company commenced this week to lay tracks on the Sheppard Asylum property, about 1 mile from Towsontown.

THE grading for the 24½ miles of double track of the Baltimore and Potomac Railroad was commenced this week at Odentown. The work is to be completed by July next.

THE Upper Lehigh Coal Co. are building a narrow gauge railroad from their Green Mountain slope to their Upper Lehigh breaker, a distance of two and a half miles.

THE Youngstown *News* says that the contractors are working along the line of the Pittsburgh, Youngstown and Chicago Railway a new road beiug projected from Akron to Pittsburgh.

THE directors of the Atlantic and French Broad River Railroad met at Abbeville, S. C., on the 15th inst., and signed a contract with Childs & Oliver, of New York, for the building of the road.

THE work of surveying and locating the Steubenville and Cleveland Railroad was commenced on the 9th inst., at a point on the Cleveland and Pittsburgh Railroad 7 miles above Steubenville.

THE Denver, Utah and Pacific Railroad between Denver and Longmont was opened for business on the 17th inst. Freights are now being run through without breaking bulk between Denver and Kansas City.

THE directors of the Southern Pacific Railroad Company of Arizona have appropriated $300,000 for the construction of the Yuma and Port Ysabel Railroad. The latter, according to President Crocker, will be completed in 60 days.

THE name of the Bellaire, Beaver Valley and Shawnee Railway Company has been changed to the Wheeling, Cincinnati and Mineral Railway Company; its termini has been changed to correspond, and its nominal capital increased to $5,000,000.

THE first train over the Toledo, Delphos and Burlington Railway from Cincinnati, arrived at Dayton on the 12th inst. This makes the connection complete between Cincinnati and Toledo over the Toledo, Delphos and Burlington narrow-gauge route. The road has yet to be ballasted before it is opened for regular business.

THE directors of the Philadelphia, Wilmington and Baltimore Railroad Co., at their recent annual meeting in Wilmington confirmed the the purchase of the Delaware and Chesapeake Railroad, which runs from Clayton, on the Delaware Railroad, to Oxford, Md., 54 miles. The road will pass into the hands of the new owners about February 1st.

THE Harrisburg and Potomac Railroad has been completed to Leesburg, Pa., and trains are now running to that point. There is still a link of 4 miles between Leesburg and Shippensburg to complete. Workmen are busily engaged in pushing the work of grading along rapidly, and it is thought trains will be running into Shippensburg about the last of March.

THE directors of the Canadian Pacific Railway resolved not to build the contemplated branch to Sault Ste. Marie, but to connect with the Chicago and Northwestern Railway instead. While their line along the North shore of Lake Superior is in progress of construction the company will use fast steamers to carry freight from Algoma Bay to Chicago and Thunder Bay.

GROUND was broken on the 10th inst., at St. Louis on the extension of the Atlantic and Pacific Railroad, from Vinita, Indian Territory, to the Arkansas River. A large force will be put at work, and the whole section of 65 miles, the contract for which was let some days ago, will be ready for the rails by May 1. Several engineering parties are locating a line from the Arkansas river to Albuquerque, New Mexico.

IT is expected that the new short line of the Chicago, Milwaukee and St. Paul Railway, between Chicago and Omaha will be opened about the middle of May. By this line it is only 468 miles from Chicago to Omaha. The line intersects the Chicago and Northwestern Railway at Marion, and then runs parallel with and between both the Chicago and Northwestern, and the Chicago, Rock Island and Pacific railways, the entire breadth of Iowa, intersecting the latter road a few miles Northeast of Council Bluffs.

IT is stated on good authority that the money has all been raised for the building of the North Shore Railroad of Long Island, and that the contracts will shortly be awarded. The Long Island Railroad Company will in the course of a few weeks begin work on the extension of the Locust Valley branch, to run through the villages of Oyster Bay, Cold Spring and Huntington to Greenlawn, and the extension of the Port Jefferson branch to Riverhead and Greenpoint. From Greenpoint connection will be made by ferry with Fort Pond Bay.

THE new Stony Clove and Catskill Mountain Railway, connecting Hunters, Tannersville, and the old Greene County region of the Catskills with the Ulster and Delaware Railroad at Phœnicia by way of the famous Stony Clove Notch, began running to the latter point on the 16th inst. It has been in operation as far as Edgewood, 8½ miles from Phœnicia, since last August. It is now completed to within four miles of Hunter's Village, its proposed terminus, and two miles from Tannersville Junction. All is to be in readiness for the regular summer mountain travel by June next.

A MOVEMENT is on foot to build a railroad from Kingwood, Preston county, West Virginia, to some point on the Baltimore and Ohio line. Several prominent persons, including Senator Dawson, Hon. Frank Heermans, Hon. J. C. McGrew, Hon. Jas. H. Brown, Hon. Charles M. Bishop, Gustavus Cressup, Dr. Maknown, J. Barton Payne, Smith Crane, Wm. G. Brown, Jr., and others are enlisted in the enterprise. Articles of incorporation have been taken out by a company. The routes from which to select are to Tunnelton, on the Baltimore and Ohio, ten miles, along the valley of Cheat River; or to Newburg, 15 miles, through a rich field of coal; or to Rowlesburg, 12 miles.

ORGANIZATION.

THE directors of the Granite Railway Company, elected on the 16th inst., are: William B. Sewall, John F. Osgood, John W. Leighton, George F. Williams, George Lewis. The officers are: President, J. C. Pratt; vice president, John D. Parker.

THE directors of the Lehigh Valley Railroad Company, elected on the 17th inst., are: Charles Hartshorne, president, David Thomas, Ashbel Welch, William L. Conyngham, Ario Pardee, William A. Ingham, George B. Markle, Robert H. Sayre, Harry E. Packer, James I. Blakslee, Robert A. Packer, Elisha P. Wilbur and Joseph Patterson.

THE directors of the Buffalo, Pittsburg and Western Railroad Co., elected on the 9th inst., are: J. W. Jones, president, Clarence H. Clark, George F. Tyler, Edward A. Rollins, Archer N. Martin, B. J. Jamison, Foster W. Mitchell, Isaac N. Seligman, Harold M. Sill, Calvin H. Allen, Giles E. Taintor, Edward L. Owen.

THE directors of the North Pennsylvania Railroad Co., elected on the 9th inst., are: Franklin A. Comly, president, John Jordan, jr., Wm. C. Ludwig, Edward C. Knight, Alfred C. Knight, Alfred Hunt, Thomas Smith, Ario Pardee, Jas. H. Stevenson, R. J. Dobbins, C. A. Sparks, E. H. Fitler, Thos. P. Stotesbury and Thomas Cochran.

THE directors of the Portland and Ogdensburg Railroad Company, elected on the 17th inst., are: Samuel J. Anderson, president, with the following directors: Horatio N. Jose, Western F. Miliken, Joseph S. Richor, Joel Eastman, James P. Botler, Rosell M. Richardson, Willard W. Thomas, Jr., Samuel Waterhouse and Francis Fessenden.

AT the annual meeting of the Norwich and Worcester Railroad Company on the 11th inst., the following directors were elected: F. H. Dewey, Geo. W. Gill, Charles W. Smith and Edw. L. Davis, of Worcester; John. F. Slater, of Norwich; Wm. Bayard Cutting, of New York, and Wm. J. Weld, of Boston. F. H. Dewey was re-elected president.

THE following gentlemen were elected directors of the New York Elevated Railroad Company, on the 10th inst., Cyrus W. Field, George S. Scott, Davis Dows, J. H. Lane, Jay Gould, Jesse Hoyt, Russell Sage, Daniel A. Lindley, John H. Hall, Edward M. Field, Alfred S. Barnes, James D. Smith and James A. Cowing.

AT the recent annual meeting of the Western Railroad Association in Chicago, the following board of directors was chosen: B. F. Ayer, B. C. Cook, A. S. Osborn, T. F. Withrow, T. J. Potter, T. B. Blackstone, Chas. Paine, C. W.

Rogers, S. S. Merrill, T. Defuniak, S. R. Callaway and John C. Brown. The officers are: President, B. F. Ayer; secretary and treasurer, J. H. Raymond; counsel, Geo. Payson.

At the annual meeting of the New York and New Haven Railroad Co., on the 11th inst., the old board of directors was re-elected by a full vote as follows: George H. Watrous, Edward M. Reed, William D. Bishop, Wilson G. Hunt, George N. Miller, Chester W. Chapin, A. R. Van Nest, Henry C. Robinson, E. H. Trowbridge, Nathaniel Wheeler, C. M. Pond, Augustus Schell and William H. Vanderbilt.

At the recent meeting of the stockholders of the Philadelphia and Reading Railroad Company an election was held for president, secretary, treasurer and six managers of said company, which resulted in the choice of the following gentlemen: for president, Franklin B. Gowen; for secretary, Albert Foster; for treasurer, Samuel Bradford; for managers—J. B. Lippincott, I. V. Williamson, Henry Lewis, Eckley B. Coxe, Edward C. Knight; Joseph B. Altemus.

At the annual meeting of the New York, Pittsburg and Chicago Railroad Company, held in Pittsburg on the 10th inst., the following directors were elected: James S. Negley, Delos E. Culver, Henry Day, Wm. A. Cole, Wm. B. Scott, James R. McPherson, Charles Seidler, James S. Robinson, L. Scott, D. M. Carroll, H. E. Collins, W. N. Riddle and W. E. Schmertz. The officers ar : President, James S. Negley; vice president and chief engineer, Delos E. Culer; treasurer, W. N. Riddle; secretary, James S. Negley.

The directors of the Philadelphia, Wilmington and Baltimore Railroad Company, elected on the 9th inst., are: Isaac Hinckley, S. M. Felton, S. M. Shoemaker, Jacob Tome, Charles Warner, William Sellers, Christian Febiger, George B. Roberts, A. J. Cassatt, John P. Green, J. N. DuBarry, Wistar Morris, Edmund Smith, Henry M. Phillips, Ben. F. Newcomer. The officers are: President, Isaac Hinckley; vice president, A. J. Cassatt; secretary and treasurer, Robert Craven; superintendent, H. F. Kenney.

At the annual meeting of the stockholders of the U. S. Concave Spring Co. held at the office of the Company, Coal and Iron Exchange, 21 Cortlandt Street, on the 11th of January, 1882, the following board of directors was elected: Hon. W. T. Minor, William Davison, Geo. R. Blanchard, John F. Scott, John F. Moulton, Curran Dinsmore, E. M. Reed, Thomas P. Simpson, J. W. Krepps. At a subsequent meeting of the bo rd of directors, the following gentlemen were unanimously elected as officers of the company: Hon. W. T. Minor, president, John F. Moulton vice president, William Davison secretary, Charles W. Minor treasurer.

CONSOLIDATION.

The articles of consolidation of the Louisville, New Albany and St. Louis Railroad with the Evansville, Rockfort and Eastern were filed at Indianapolis, Ind., on the 14th inst. The capital stock is fixed at $6,000,000, and, as has already been announced, the new company takes the name of the Louisville, Evansville and St. Louis Railroad Company.

Articles of consolidation have been filed in Wisconsin and Minnesota of the Chicago, Freeport and St. Paul and the St. Paul, Minneapolis and Chicago railways. The line extends from a point on the South boundary line of the State, in the town of Cadiz, Green County, to Minneapolis, and the new corporation is named the Chicago, Freeport and St. Paul Railway Company, capital stock $40,000,000, and the general offices for Wisconsin and Minnesota are respectively at Dodgeville, Iowa County, and Minneapolis. The stockholders of the consolidated company are M. J. Briggs, Thomas Kennedy, Aldro Jencks, Adam Eulberg, Wm. O. Wright, Peter J. Morris and Chas. J. Thomas.

INCORPORATION.

An amendment to the charter of the St. Louis, Indianapolis and Eastern Railroad Co., has been filed with the Secretary of State of Indiana. The mortgage indebtedness of this company is increased to $20,000 per mile. Last fall the mortgage was increased from $12,000 to $16,000 per mile, but the additional increase to $20,000 is due to high prices for material and labor.

The Oriental Construction Company, filed articles of incorporation in Denver, Col., on the 13th inst., with a capital stock of $10,000,000. The officers of the new company are G. M. Dodge, president; Amos. L. Hopkins, vice president; Frank W. Baldwin, secretary. The company is said to be organized in the interest of Jay Gould. Its object is to build railroads in the United States and Mexico. The principal offices will be in Denver.

Articles of incorporation of the Terra Heaut and Cincinnati Short Line have been filed with the Secretary of State of Indiana. The capital stock is $1,500,000, and the directors are Chas. C. P. Holden, Chicago; George S. Bowen, Elgin, Ill.; Joseph M. Davis, Chicago; Milton Holden, Chicago; William V. Key, Waukegan, Ill.; Joseph S. Reynolds, Chicago; James C. Hyde, Chicago; Edgar Terhune, Chicago. The road will run from Lawrenceburg, Dearborn County, through the counties of Dearborn, Franklin, Decatur, Jennings, Bartholomew, Brown, Monroe, Greene, Owen, Clay, Vigo and Sullivan, the proposed length being 150 miles.

Articles of association have been filed in the office of the Secretary of State of Arkansas of the Kansas City, Arkansas and Gulf Air-Line Railway. The amount of the capital stock is placed at $6,000,000. The directors are Richmond Hibbard, John McClure, J. G. Botsford, P. K. Roats and William H. Monaghan. Books of subscription to the capital stock have been opened. The length of the main line of the road will be 220 miles. It will begin at a point in Little River County, and run across the Western portion of the State.

Articles of association of the Salem and Little Rock Railroad Company have been filed with the Secretary of State of Missouri. Capital, $1,600,000. The road is to extend from a point on the St. Louis, Salem and Little Rock Railroad at or near the town of Salem, in Dent county, thence in a Southwesterly direction to a point in either Ozark or Howell county (as may be found most practicable) on the boundary line between the States of Missouri and Arkansas. The length of the road will be about 80 miles and will run through the counties of Dent and Texas, and also through Douglas and Ozark or through the counties of Shannon and Howell as may hereafter be determined to be most practicable and advantageous. The incorporators are A. L. Crawford, New Castle, Pa.; W. L. Scott and Joseph McCarter, of Erie, Pa.; Emerson H. Foote and H. A. Crawford, of St. Louis.

The Coal Trade.

The leading coal carrying companies make the following reports of their tonnage for the week ending January 7, and for the year to same date, compared with their respective amounts carried to the same time last year:

	Week.	1882.	1881.
Reading Railroad	100,666	861,008	614,613
Schuylkill Canal	.....	27,655	.....
Lehigh Valley	88,009	658,782	450,541
Delaware, Lackawanna and Western	70,500	70,500	51,255
Shamokin	10,178	10,178	13,165
Central R. R. of New Jersey	40,121	40,121	46,045
United R. R. of New Jersey	27,532	27,532	22,086
Pennsylvania Coal	19,836	19,836	14,844
Delaware and Hudson Canal	49,330	49,330	39,934
Huntingdon and Broad Top Mountain	10,856	10,856	11,159
Penn. and New York	23,044	157,942	117,599
Clearfield, Pa	39,085	39,085	32,398

The total tonnage of anthracite coal from all the regions for the week ending Jan. 7, amounted to 375,097 tons, against 318,577 tons in the corresponding week last year, an increase of 56,500 tons. This is the opening week of the new year. The quantity of bituminous coal sent to market for the week amounted to 68,818 tons, against 71,523 tons, in the corresponding week of last year, a decrease of 2,705 tons. The total tonnage of all kinds of coal for the week is 443,895 tons, against 390,100 tons in corresponding week last year, an increase of 53,795 tons. The quantity of coal and coke carried over the Pennsylvania Railroad for the week ending January 7th was 184,818 tons, of which 129,103 tons were coal and 55,717 tons coke. The total tonnage for the year thus far has been 184,818 tons, of which 129,103 tons were coal and 55,717 tons coke. These figures embrace all the coal and coke carried over the road east and west. The shipments of bituminous coal from the mines of the Cumberland coal region during the week ended January 7 were 27,361 tons, and for the year to that date 27,361 tons, a decrease of 5,358 tons. The shipments to Baltimore and Ohio Railroad were, for the week, 20,360 tons; for the year, 20,360 tons; a decrease of 8,179 tons compared with 1881. The shipments to the Pennsylvania Railroad were, for the week, 7,001 tons; for the year, 7,001 tons; an increase of 3,828 tons as compared with 1881. The Reading Railroad shipment for last week, ending January 14th, was 157,800 tons, of which 36,500 tons were sent to and 21,000 tons shipped from Port Richmond, and 17,600 tons sent to and 21,400 tons shipped from Elizabethport.—*Phil. Ledger, Jan.* 16.

The interest on the general mortgage bonds of the Philadelphia and Reading R. R. Co. due in July, 1881, will be paid on February 10th.

New York Stock Exchange.

(Thursday's quotations follow money article.)

Closing Prices for the week ending Jan. 18.

	Th.12.	F.13.	Sat. 14.	M. 16.	Tu.17.	W.18.
Adams Express	146½	149	.....	149	148¼	148¼
Albany and Susq.	130	.....	.....	.....	.....	.....
1st mortgage	.....	124¾	.....	.....	.....	.....
2d mortgage	108	.....	.....	.....	.....	.....
American Express	93⅜	92½	93½	93⅞	94½	93¾
Atlantic & Pac. Tel.	.....	.....	.....	.....	.....	.....
Burl., C. R. & Nor.	81⅜	.....	.....	.....	.....	.....
1st mortgage 5s	100¼	100¼	100½	.....	100½	.....
Canada Southern	55⅞	55⅜	55⅝	55⅜	55½	55½
1st mortgage guar	96¼	96¼	96½	96⅜	96½	96⅜
Central of N. Jersey	92	93⅞	95½	94⅞	94⅞	94⅜
1st mort. 1890	.....	.....	.....	.....	.....	.....
7s, consol. ass	.....	.....	115	114¾	115	115
7s, convertible ass.	.....	.....	.....	115	.....	.....
7s, Income	102	103	103¼	103¼	103	.....
Adjustment	108	108	108⅞	.....	108	108½
Central Pacific	93⅝	94¼	91⅝	91	91¼	91
6s, gold	113¾	113¾	114	115	115	.....
1st M. (San Joaq)	.....	.....	.....	.....	.....	.....
1st M. (Cal. & Or.)	103¾	.....	104	.....	.....	.....
Land grant 6s	.....	.....	.....	.....	.....	.....
Chesapeake & Ohio.	25¼	25	25½	25½	.....	.....
1s, series B	81⅜	81⅝	.....	.....	.....	.....
Chicago and Alton.	132¾	133¾	133	134¼	134¼	135
Preferred	.....	.....	.....	.....	.....	.....
1st mortgage	.....	.....	.....	.....	.....	.....
Sinking Fund	112	.....	.....	.....	.....	.....
Chi,, Bur. & Quincy	136	137	137	137	136¾	136¾
7s, Consol. 1903	126¾	127	126⅞	126⅝	.....	.....
Chi., Mil. & St. Paul	108⅞	109½	109⅞	109¼	109⅞	108⅞
Preferred	121	121¾	121¼	122½	122½	.....
1st mortgage, 8s	.....	.....	.....	.....	.....	.....
2d mort., 7 3-10s	.....	.....	.....	.....	.....	.....
7s, gold	.....	.....	.....	.....	.....	.....
1st M. (La. C. div)	.....	.....	.....	.....	121	118¾
1st M. I. & M. div.)	.....	.....	.....	.....	.....	.....
1st M. (I. & D. ext.)	.....	.....	118¾	.....	119	.....
1st M. (H.&D. div.)	114	.....	.....	.....	.....	.....
1st M. (C. & M. div.)	.....	.....	.....	.....	.....	.....
Consolidated S. F.	119	.....	119¾	120	121½	121¾
Chi. & Northwestern	126¼	127	127½	127⅝	127½	127
Preferred	139	140¼	140	140	141	141
1st mortgage	.....	.....	.....	.....	.....	.....
Sinking Fund 6s	110¾	.....	.....	.....	.....	110¾
Consolidated 7s	.....	.....	132	132½	132½	.....
Consol. Gold bo'ds	.....	123½	124	124	.....	.....
Do. reg	.....	.....	.....	.....	.....	.....
Chi., R. Isl. & Pac.	133¾	134¾	134½	134¾	.....	134
6s, 1917, c	.....	.....	.....	124	125	125
Clev., Col., Cin. & Ind.	82	83	84	83	82¾	83
1st mortgage	.....	.....	.....	.....	.....	.....
Clev. & Pittsburg gr.	.....	137	.....	.....	.....	.....
7s, Consolidated	.....	.....	.....	.....	.....	.....
4th mortgage	.....	.....	.....	.....	.....	.....
Col., Chi., & Ind. Cent.	21¼	21⅜	21½	21¼	21¾	21¼
1st mortgage	.....	.....	.....	125	.....	.....
2d mortgage	.....	.....	.....	.....	.....	.....
Del. & Hud Canal.	106½	107½	107½	107¼	107½	107¾
Reg. 7s, 1891	.....	.....	.....	.....	.....	.....
Reg. 7s, 1884	104	103¾	.....	104	103⅜	.....
7s, 1894	.....	.....	.....	.....	116½	.....
Del., Lack. & Western	124¾	125½	125½	124¾	125½	125
2d mortgage 7s	.....	.....	.....	.....	.....	.....
7s, Consol. 1907	.....	.....	.....	.....	.....	.....
Erie Railway	.....	.....	.....	.....	.....	.....
1st mortgage	.....	.....	.....	.....	.....	.....
2d mort. 5s, ext	.....	.....	.....	.....	.....	.....
3d mortgage	.....	106¼	.....	.....	.....	.....
4th mort. 5s, ext.	.....	.....	.....	.....	.....	.....
5th mortgage	.....	.....	.....	.....	.....	.....
7s, Consol. gold	129½	129½	.....	.....	130	130
Great West. 1st mort	109	.....	.....	109¼	.....	105½
2d mortgage	.....	104½	.....	.....	.....	.....
Hannibal & St. Jo.	96	96½	95⅞	96½	96½	96⅝
Preferred	109½	109⅝	109¾	110	109¾	109¾
8s, Convertible	.....	108	.....	.....	109	109
Houston & Tex. Cen	.....	.....	86	.....	.....	.....
1st mortgage	.....	110½	.....	.....	111½	.....
2d mortgage	142¼	.....	.....	.....	.....	.....
Illinois Central	132⅜	133	133¼	134½	134¾	136½
LakeShore&MichSo	114½	115	115⅜	114¾	115	114⅝
Consol. 7s	130	.....	.....	.....	.....	.....
Consol. 7s, reg	.....	.....	128	.....	.....	.....
2d Consolidated	.....	.....	.....	125	.....	.....
Leh. & W. B. 7s, Con	.....	.....	.....	.....	.....	.....
Long Dock bonds	120	.....	.....	.....	.....	.....
Louisville & Nash.	98	99	99¾x	97⅜	97½	97
7s, Consolidated	.....	.....	.....	122¾	.....	.....
Manhattan	49	50¼	.....	51	50	50⅞
Met. Elevated	.....	.....	88	.....	.....	.....
1st mortgage	100½	100¾	101	101	101½	101½
Michigan Central	88⅛	88⅝	89½	88½	89	89
7s, 1902	124	.....	.....	.....	.....	123
M. S. & N. I. 1st, S. F	.....	.....	.....	.....	.....	.....
Morris & Essex	121	122	123½	.....	122¾	.....
1st mortgage	.....	.....	.....	138	.....	.....
2d mortgage	.....	.....	.....	.....	.....	.....
7s of 1871	.....	125	.....	125	.....	.....
7s, Convertible	.....	.....	.....	.....	.....	.....
7s, Consolidated	.....	.....	.....	.....	124¾	.....
N. Y. Cen. & Hud. R.	133¾	134¾	135	134¾	134¾	134¼
6s, S. F. 1883	102½	.....	.....	102¾	.....	102¾
6s, S. F., 1887	.....	.....	.....	.....	.....	.....
1st mortgage	.....	.....	.....	133	.....	.....
1st mortgage, reg	133	.....	.....	.....	.....	.....
N. Y. Elevated	.....	.....	.....	.....	.....	106
1st mortgage	116	.....	.....	116½	.....	.....
N. Y. & Harlem	.....	.....	.....	.....	.....	.....
Preferred	.....	.....	.....	.....	.....	.....
1st mortgage	.....	.....	.....	.....	.....	.....
1st mortgage, reg	.....	.....	.....	.....	.....	.....
N. Y., Lake Erie & W	41¼	42⅜	42⅝	42¼	42⅛	41⅞
Preferred	82¾	84¼	84	83½	.....	83
2d Consolidated	99⅜	99⅝	100	99⅞	99¾	99¾
New 2d 5s fund	.....	96¼	.....	.....	.....	.....
N. Y., N. Hav'n & Hart	.....	170	171	.....	.....	.....
North Mo. 1st mort	120¼	.....	120½	.....	.....	121
Northern Pacific	35¾	37	36⅞	36⅜	36	36⅛
Preferred	74⅞	76¼	76⅜	75⅜	75¾	75¼
Ohio & Mississippi.	37½	37⅝	37¾	37	36⅝	37
Preferred	.....	.....	.....	.....	.....	.....
2d mortgage	.....	.....	.....	.....	.....	.....
Consolidated 7s	.....	.....	.....	.....	.....	.....
Consol. S. Fund	.....	.....	117	.....	.....	.....
Pacific Mail S. S. Co	41¾	42½	42⅜	41¾	41⅞	41¼
Pacific R. R. of Mo.	.....	.....	.....	.....	.....	.....
1st mortgage	.....	.....	108⅞	108¾	109	109
2d mortgage	.....	.....	.....	112⅝	.....	111
Panama	.....	.....	.....	.....	.....	.....
Phila. & Reading	64¾	64⅝	63⅜	61¾	60¾	59⅞
Pitts, Ft. W. & Chi. gtd	.....	134	.....	.....	135	.....
1st mortgage	.....	.....	.....	.....	.....	.....
2d mortgage	.....	.....	.....	132½	.....	.....
3d mortgage	.....	.....	.....	.....	.....	.....
Pullman Palace Car	133½	133	134½	135	137½	143½
Quicksil'r Min'g Co	.....	14	14¼	.....	.....	.....
Preferred	.....	61¼	61½	62	61¼	61⅞	61½
St. Louis & San Fran	40¼	41	42	41½	.....	.....
Preferred	58¾	58⅞	59½	.....	59¾	.....
1st Preferred	105	105¼	106	106	106½	.....
St. L., Alt'n & T. H.	.....	.....	43	43¾	42	42½
Preferred	.....	.....	91	91¼	.....	.....
1st mortgage	.....	.....	.....	.....	.....	.....
2d mort. pref	.....	.....	.....	.....	.....	.....
Income bonds	.....	.....	.....	.....	.....	.....
St. L., Iron Mt. & S	.....	.....	.....	.....	.....	.....
1st mortgage	118	.....	117¼	.....	117¾	.....
2d mortgage	.....	.....	.....	.....	109	.....
Toledo and Wabash	.....	.....	.....	.....	.....	.....
1st mortgage	.....	.....	.....	.....	.....	.....
2d mortgage	103	.....	.....	105½	104½	.....
7s, Consolidated	106	.....	105	.....	.....	.....
St. Louis Division	.....	.....	118	.....	.....	.....
Union Pacific	117¾	119	119	119¼	119	119¼
1st mortgage	.....	114¾	115¼	115¾	115½	115½
Land Grant 7s	.....	.....	.....	.....	.....	.....
Sinking Fund 8s	.....	123¾	124	.....	124	.....
United States Ex	.....	.....	77	77	.....	.....
Wabash, St. L. & Pac	36¼	37⅝	37⅞	37¼	37¼	37
Preferred	68⅞	70⅛	70⅝	70	70	69⅞
New mort. 7s	.....	.....	.....	.....	.....	.....
Wells-Fargo Ex	.....	130	.....	130	.....	130½
Western Pacific b'ds	.....	.....	.....	109¾	.....	.....
Western Union Tel.	78¼	79¾	81¼	81¾	81⅞	81½
7s, S.F. conv., 1900	.....	.....	.....	.....	.....	.....

FEDERAL STOCKS:—

U. S. 4s, 1907, reg	118	.....	.....	.....	118¼	.....
U. S. 4s, 1907, coup	118	118¼	.....	.....	.....	.....
U. S. 4½s, 1891, reg	114¾	.....	.....	.....	.....	.....
U. S. 4½s, 1891, coup	114½	.....	.....	.....	.....	.....
U. S. 5s, 1881, reg	.....	.....	.....	.....	.....	.....
U. S. 5s, cont'd at 3½	102¼	102½	.....	.....	.....	.....
U. S. 6s cont'd at 3½	100¾	.....	.....	.....	.....	.....
Dt. of Col. 3-65s, reg	.....	.....	.....	.....	.....	.....
Dt. of Col. 3-65s, coup	.....	.....	.....	.....	.....	.....

Boston Stock Exchange.

Prices for the Week Ending Jan. 18.

	Th.12.	F. 13.	Sat. 14.	M. 16.	Tu. 17.	W. 18
Atch., Top. & San. Fe.	95⅛	95¼	96	95¾	95⅜	96¾
1st mortgage	.....	.....	119	119½	120	.....
2d mortgage	.....	.....	.....	.....	.....	.....
Land Grant 7s	.....	.....	.....	116¼	.....	.....
Boston & Albany	163¾	164	165	165¾	165½	166
7s reg	.....	.....	.....	.....	126¾	.....
Boston and Lowell.	.....	103	105	.....	104	105
Boston & Maine	145	144½	145	144¾	.....	147
Boston & Providence	.....	.....	.....	162	.....	.....
Bos'n, Hart. & Erie 7s	67¼	.....	68¾	68	67⅝	67¼
Burl. & Mo. R. L. G. 7s	.....	.....	.....	.....	.....	.....
Burl. & Mo. R. in Neb	.....	.....	.....	.....	.....	.....
6s, exempt	115	.....	.....	.....	.....	.....
4s	.....	.....	.....	.....	.....	.....
Chi., Burl. & Quincy	135¾	136¼	137⅞	137⅜	136⅝	136¾
7s	.....	.....	.....	.....	.....	.....
Cin., Sand. & Clev ($50)	27⅞	28	28½	28¼	.....	28
Concord ($50)	.....	.....	.....	.....	.....	.....
Connecticut River	.....	.....	.....	.....	.....	.....
Eastern	.....	.....	37	37	.....	36¼
New 4½ Bonds	107	105⅞	106	106½	106¼	107½
Fitchburg	.....	.....	.....	.....	.....	.....
N. Y. & New England	62½	65	.....	63	62½	62
7s	.....	117¾	.....	117⅝	.....	117½
Northern N. H.	104	.....	106	.....	.....	.....
Norwich & Worcester	.....	.....	.....	.....	.....	155
Ogden & Lake Cham	.....	.....	.....	.....	.....	.....
Preferred	.....	.....	.....	.....	.....	.....
Old Colony	.....	125⅛	125	.....	126	126
Ph., Wil. & Balt. ($50)	.....	.....	.....	62	.....	62
Portl'd, Saco & Ports	.....	.....	.....	.....	.....	.....
Pueblo & Ark Val.	.....	.....	.....	.....	.....	.....
7s	116¾	116½	.....	116¾	116⅞	117
Pullman Palace Car	133½	133	134⅝	134	136½	140
Union Pacific	.....	.....	118½	119¾	119⅝	119	118⅞
6s	114¼	114½	114½	.....	.....	.....
Land Grant 7s	.....	.....	.....	.....	.....	.....
Sinking Fund 8s	.....	120¼	.....	120⅜	.....	120⅛
Vermont & Canada	.....	.....	.....	.....	.....	.....
Vermont & Mass	.....	.....	.....	143½	.....	.....
Worcester & Nashua	.....	58½	.....	58	58½	.....
Cambridge (Horse)	.....	.....	.....	.....	.....	.....
Metropolitan (Horse)	.....	.....	.....	.....	.....	.....
Middlesex (Horse)	.....	.....	.....	.....	.....	.....
Cal. & Hecla Min'g Co	250	.....	250	250	.....	245
Quincy	55¼	56	56	55½	55½	55

Philadelphia Stock Exchange.

Closing Prices for the Week Ending Jan. 17.

	W.11.	Th.12.	F.13.	Sat.14.	M.16.	Tu.17
Allegh'y Val. 7 3-10s	.....	120	.....	120	.....	.....
7s, Income	56	.....	56½	57	58	.....
Camd'n & Am. 6s, '83	.....	.....	.....	.....	.....	.....
6s, 1889	.....	.....	.....	.....	.....	.....
Mort. 6s, 1889	113¼	113½	.....	113½	.....	113½
Camden & Atlantic	.....	.....	.....	.....	.....	.....
Preferred	.....	.....	.....	.....	.....	33
1st mortgage	.....	.....	.....	.....	.....	.....
2d mortgage	.....	.....	.....	.....	.....	.....
Catawissa	.....	.....	.....	18	.....	.....
Preferred	.....	.....	.....	.....	.....	.....
7s, new	.....	.....	.....	.....	.....	.....
Del. & Bound Brook	.....	.....	.....	.....	.....	.....
7s	.....	.....	.....	.....	.....	.....
Elmira & Williamsp't	.....	.....	.....	.....	.....	.....
Preferred	.....	.....	.....	.....	.....	.....
Hunt. & B. Top Mt.	14	.....	15	14¾	.....	.....
Preferred	.....	28	29½	.....	.....	28¾
2d mortgage	.....	.....	.....	.....	.....	.....
Lehigh Navigation.	43½	.....	43¾	43½	43¾	43¾
6s, 1884	.....	.....	.....	.....	.....	105¼
Gold Loan	.....	111	.....	111	.....	.....
Railroad Loan	.....	.....	.....	.....	.....	.....
Conv. Gold Loan	.....	113	.....	.....	111	.....
Consol. Mort, 7s	116½	117	.....	116½	116½	.....
Lehigh Valley	61⅛	62½	62¼	62½	62¾	62⅝
1st mort. 6s, coup	.....	.....	.....	.....	.....	121
1st mort. 6s, reg	.....	.....	.....	.....	.....	.....
2d mort. 7s	.....	.....	.....	.....	.....	134¾
Consol mort. 6s	.....	.....	.....	117½	117	117½
Consol. mtg. 6s, reg	.....	117	117	.....	.....	.....
Little Schuylkill	.....	.....	.....	55¼	.....	.....
Minehill & Sch. Hav'n	.....	.....	.....	60	60	.....
North Pennsylvania	60	60	60	.....	60	60
1st mortgage 6s	.....	.....	.....	105¼	.....	.....
2d mortgage 7s	.....	.....	.....	.....	.....	.....
Genl. mtg. 7s, coup	.....	.....	.....	.....	.....	.....
Genl. mtg. 7s, reg	.....	.....	.....	.....	.....	.....
Northern Central	.....	50¼	50	50¾	.....	.....
5s	.....	97	97	97	.....	.....
Northern Pacific	35¾	35¼	36¼	36⅜	36⅛	36¼
Preferred	74⅜	74⅜	74⅜	76⅛	75½	75⅜
Pennsylvania R. R.	.....	61⅝	62¼	62⅝	62	61⅛
1st mortgage	.....	.....	.....	.....	.....	.....
Gen'l mort	123	.....	.....	121	.....	.....
Gen'l mort reg	.....	.....	.....	.....	.....	.....
Consol. mort. 6s	117	.....	.....	.....	.....	.....
Consol. mort. reg	.....	.....	.....	.....	.....	.....
Pa. State 6s 2d series	.....	.....	.....	.....	.....	.....
do 3d series	.....	100	.....	.....	.....	.....
do 5s, new	116	.....	.....	.....	.....	.....
do 3s,	.....	.....	.....	.....	.....	.....
Phila. & Reading	33	32¼	32⅛	31½	30	30⅜
1st mortgage 6s	.....	.....	.....	.....	.....	118
7s of 1893	.....	.....	.....	.....	.....	.....
7s, new convert	73	.....	.....	73	72⅜	73
Consol. mort. 7s	.....	.....	.....	125	125	.....
Consol. mort. reg	.....	.....	.....	.....	.....	.....
Gen'l mort. 6s	98	.....	98¼	98¼	98	97⅞
Philadelphia & Erie	20	.....	.....	.....	20	.....
1st mortgage 5s	104¾	104½	.....	.....	.....	.....
2d mortgage 7s	.....	.....	.....	114	.....	.....
Pittsb., Cin. & St. L. 7s	.....	.....	.....	.....	.....	122
Pitts., Titusv. & Buff.	20⅞	20¾	21	21	20¾	20⅝
7s	101½	102½	.....	.....	.....	.....
Schuylkill Navi't'n	.....	.....	.....	.....	.....	.....
Preferred	.....	.....	.....	.....	.....	.....
6s, 1872	.....	.....	.....	.....	.....	.....
6s, 1882	.....	89	.....	89	89	.....
United Co. of N. J.	183	183	183	.....	184¾	184
Hestonville, (Horse)	.....	.....	.....	.....	.....	.....
Chestnut & Wal. (do)	.....	.....	.....	.....	.....	.....
Green & Coates (do)	.....	.....	.....	.....	.....	.....

Baltimore Stock Exchange.

Closing Prices for the Week Ending Jan. 10.

	W. 11.	Th. 12.	F. 13.	Sat. 14.	M. 16.	Tu. 17
Baltimore & Ohio..	195	.....	.....	.....	.....	.....
6s, 1880.....	.....	.....	.....	.....	.....	.....
6s, 1885.....	.....	105⅞	.....	.....	.....	.....
Central Ohio ($50)..	.....	.....	.....	.....	.....	.....
1st mortgage.....	.....	.....	.....	.....	.....	.....
Marietta & Cincin'ti	.....	.....	.....	.....	.....	.....
1st mortgage, 7s..	.....	.....	.....	.....	.....	.....
2d mortgage, 7s..	105	105⅛	.....	105¾	.....	105⅛
3d mortgage, 8s..	59	59¾	59½	60	.....	59⅛
Northern Cen. ($50)	.....	50¼	.....	50½	.....	.....
2d mort., 6s 1885..	106	.....	.....	.....	.....	.....
3d mort., 6s, 1900.	.....	.....	.....	.....	.....	.....
6s, 1900, gold.....	113⅛	.....	.....	113¼	.....	.....
6s, 1904, gold.....	.....	113¼	111⅛	.....	.....	.....
Orange & Alex. 1st.	.....	.....	.....	.....	.....	.....
2d mortgage, 6s...	.....	.....	.....	.....	.....	.....
3d mortgage, 8s...	.....	.....	.....	.....	.....	.....
4th mortgage, 8s..	.....	.....	.....	.....	.....	.....
O.,Alex.&Manas's 7s	.....	.....	.....	.....	.....	.....
Pitts.& Connellsv.7s	.....	.....	.....	.....	.....	121
Virginia 6s, Consol.	63¾	65	64½	64½	.....	63¾
Consol. coupons..	68	70	...	70	.....	70½
10-40 bonds.....	39	.....	.....	.....	.....	39¾
Def'd Certificates.	17	.....	.....	.....	.....	.....
Western Maryland..	.....	.....	14	.....	.....	.....
1st M.,end. by Balt	.....	.....	.....	.....	.....	.....
2d M., do .	.....	.....	.....	.....	.....	.....
3d M., do .	.....	.....	.....	.....	.....	.....
1st M.,unendors'd	.....	.....	.....	.....	.....	.....
2d M.,end. WashCo	.....	.....	.....	.....	.....	.....
2d M., preferred..	.....	105	.....	.....	.....	.....
City Passenger R R.	.....	41	.....	.....	.....	.....

London Stock Exchange.

	Closing Prices— Dec. 30.		Dec. 23.	
Baltimore & Ohio (sterling).....114	116	114	116	
Cairo & Viencennes com. stock 36	38	36	40	
Do. preferred 5 per cent..... 90	92	90	92	
Central of N. J. $100 share..... 93	98	93	98	
Do. Cons. Mortgage.....115	117	115	117	
Do. Adjustment Bonds.....104	109	104	109	
Do. Income Bonds..... 104	107	104	107	
Det.,G'd Haven & Mil. Equip bds112	114	112	114	
Do.Con.M.5p.c.,till'83aft'r6p.c110	112	110	112	
Illinois Central $100 shares.....134½	135½	132½	133½	
Lehigh Valley Cons. mortgage..115	119	115	119	
Louisville & Nashville mort 6s.105	107	105	107	
Do. Sink. Fund bds (S.&N.Ala)103	105	103	105	
Do. capital stock $100 shares.105	107	102	104	
N. Y. Cent. & Hud. R. mt. bds..134	137	134	137	
Do. $100 shares.....135	136	136½	137½	
Do mort. bonds (stg.).....123	125	123	125	
N.Y.,Lake Erie & West.,$100 shs 42¼	43	42¼	43¾	
Do. 6 p. c. pref. $100 shares .. 87	89	91	93	
Do. 1st Con. Mort. bds (Erie) .131	13[illegible]	130	132	
Do. do. Funded Coupon bds.127	129	127	129	
Do. 2d Consol Mort. bonds...102	104	101	103	
Do. do. Funded Coupon bds.. 97	100	97	100	
Do. Gold Income bonds..... 95	100	95	100	
N.Y.,Pa.& Ohio 1st mort. bonds. 50	51	45½	46½	
Do. Prior Lien bds (sterling)..104	108	105	110	
Pennsylvania, $50 shares..... 63	64	62¾	63¼	
Do. Con. Sink Fund Mort....119	121	118	122	
Philadelphia & Reading $50 shs 35	36	33½	34½	
General Consol Mortgage.....116	118	116	118	
Do. Improvement Mortgage..103	105	103	105	
Do.Gen.Mtg.'74,ex-def'd coup. 99¼	100⅛	99	10[illegible]	
Do. Scrip for the 6 def. ¼ coup. 95	100	95	100	
Pittsb., Ft. W. & Chi. Eq. bds...105	109	105	109	
St. L. Bridge 1st mort. gold b'd.126	128	126	128	
Do. 1st pref. stock..... 102	104	102	104	
Union Pa. Land Grant 1st. mtg.115	119	115	119	

AMERICAN RAILROAD JOURNAL.

Financial and Commercial Review.

THURSDAY EVENING, Jan. 19, 1882.

THE quotation for call loans during the day on stocks was 4@5 per cent, and on Governments 2@3 per cent. In the last hour the rate to the stockbrokers for call loans fell to 3 per cent.

The posted rates for prime banksrs' sterling were 4.83½ and 4.87½. The actual rates were 4.82½@¾ and 4.86½@¾, with cable transfers 4.87½@4.87¾, and prime commercial bills 4.81 @4.82. The actual rates for continental bills are as follows: francs, 5.18⅛@¾ and 5.23⅛@ ¾; marks, 94¼@⅜ and 95¼@⅝ and guilders, 39⅞ and 40⅛.

THE Illinois Central Railroad Company has declared its regular semi-annual dividend of 3½ per cent, payable March 1. The company's annual report is not yet completed, but we are informed that it will show that the net earnings for 1881 not only provided for interest on the debt and 7 per cent on the capital stock, but also for about $950,000 betterments, including a large elevator of Cairo, additional equipments and real estate and docks at Chicago.

THE Legislature of Arizona last year authorized the publication of a book that should give authentic information concerning the resources, the history and the future prospects of that Territory. Mr. Patrick Hamilton was appointed as a Commissioner for that work, and under his authorship a valuable pamphlet full of information desired by investors and settlers has been produced. We give elsewhere an extract from theis publication on the Railroads of Arizona.

The report of the President of the Buffalo, Pittsburg and Western Railroad Co., which was presented at the annual meeting of the stockholders held in Philadelphia on the 9th inst., after explaining the impossibility of preparing an accurate financial statement in the first week of the new year, says the gross receipts upon the same mileage as in 1880 were about $23,000 greater than in 1881; that for the previous year the net earnings for the first three months of the year were less than for the same period in 1880, owing to the increased expenses consequent upon the unusually severe Winter, but the net earnings for the last nine months were in excess of those for the last half of 1880, and were more than sufficient to meet the interest on the bonded debt for that time. The passenger traffic was larger than for the previous year, and would have been still greater were it not for a lack of equipment. The line to Buffalo and Salamanca will be finished early in the Spring. In April the Newcastle and Franklin was bought in for $850,000, and reorganized as the Newcastle and Oil City Railroad, with a capital of $150,000 common and $450,000 preferred stock, and $600,000 first mortgage bonds, all of which the company holds in its treasury. The expenditures for improvements thus far have been $50,000. The mines already opened on the branch near Jackson Centre are producing bituminous coal of a superior quality at the rate of 200,000 tons a year, with a capacity of three times as much. The Buffalo and Baltimore is a new company formed in the interest of this road to build a line from Newcastle to Chicago Junction, under joint traffic guarantees from this road and the Baltimore and Ohio. The Newcastle and Oil City Railroad is be extended to Oil City, and it is proposed to offer to the stockholders of this company the right to subscribe upon favorable terms for the securities necessary for its construction; the reorganized road will ultimately be merged into the parent company. Contracts have been signed with the New York, West Shore and Buffalo, and the Buffalo, New York and Philadelphia Railroad Companies for extensive terminal facilities at Buffalo, and for a line from Chicago Junction by way of Oil City to Buffalo.

The issue of District of Columbia 3.65s is limited by law to $15,000,000. The amount issued to date is $14,468,350. The stocks and bonds now outstanding on which interest has ceased, and for the payment of the principal and interest of which there are funds deposited in the United States Treasury amount to $5,500.68.

The Governor of Connecticut, in his second annual Message, delivered on the 4th inst., says that the State receipts last year were $1,722,160 01 the expenses $1,509,855.28, and the balance, $212,304.74. Of the State debt $877,000 comes due at the end of the current year and he advises paying it from funds in the Treasury.

The report of the Railroad Commissioners of Iowa for the year ending June 30, 1881, states that the capital stock representing the railroads of that State is $103,905,021, or $19,149 per mile. The debt of all these lines is $110,766,483, or $20,413 per mile. Both stock and debt is $214,671,504, or $39,563 per mile. The reported cost of these roads is $173,998,790, or $40,672,814 less than the reported stock and debt. The entire earnings for the year were: from passengers, mail and express, $6,757,877.43; from freight and miscellaneous, $21,694,304.48—total, $28,452,181.91, against $24,837,545.35 for the previous year, an increase of $3,614,636.56. The operating expenses during the year ending June 30, 1881, were $16,788,404.39, against $13,982,653.77 during the previous year, an increase of $2,805 750.62. The net earnings for the year ending June 30, 1881, were $11,663,777.52, against $10,854,891.58, for the previous year, an increase of $808,885.04. The gross earnings per mile of road were $5,396.46, the expenses $3,246.85 and the net earnings $2,149.61. Eleven roads show an excess after deducting operating expenses, rentals, interest and taxes, of $6,879,209.40, while seven roads show a deficit of $205,046.47—leaving the net income $6,674,162.93, which would give an average of net earnings for stockholders per mile for all roads in the State, $1,230.93. There are 2,190 miles of steel rail and 3,275 miles of iron in Iowa. On the 30th of June last there were 5,426 miles of road in operation in that State and over 900 miles partially constructed, which will certainly be completed in another season, when the total will foot up over 6,300 miles. Total freight moved for the year over 9,000,000 tons.

From the report of the St. Louis, Vandalia and Terre Haute Railroad Company, which was presented at the annual meeting of the directors held on the 10th inst., we learn that the gross earnings for the year ending October 31, 1881, were $1,565,515.04, of which the company received 30 per cent as rental from the lessee, amounting to $469,654.50; to which add bundry amounts of interest received, $169.90—making the total income $469,824.50; from which was paid $34,111.43 for taxes and general expenses, and $314,930 for interest on first and second mortgage bonds, leaving a surplus for the year of $120,782.97. This surplus was applied to the payment of $10,003,28 on account of suspended taxes, and $110,779.69 toward the liquidation in part of the previous balance to the debit of profit and loss. The loss to the lessee in operating the road was $281,081.15, of which $103,223.09 was on account of additions and permanent improvements to the road.

According to the annual report of the Com-

missioners of Railroads, the total number of miles of track in the State of Massachusetts is 3,148 an increase of 103 miles over last year. The aggregate capital stock is $122,155,614, an increase of $3,416,742 ; net debt of all companies, $64,850,890, an increase of $5,678,370 ; gross income, $37,764,395, an increase of $2,624,021; net income, $10,701,751, a decrease of $490,000 ; freight earnings, five per cent more than last year; passenger earnings, eight per cent increase.

The approximate earnings of the Flint and Pere Marquette Railway for the year 1881 were $1,858,256.65, against $1,596,950 for the year 1880, an increase of $261,306.65. There were hauled during 1881 on this road 105,296,530 feet of pine logs against 87,475,516 feet for 1880. The construction expenses of the road from Oct. 1, 1880, to Nov. 30, 1881, were $1,239,480 ; 11 locomotives, 5 sleepers, 13 passenger cars, 3 drawing-room cars and 600 freight cars have been added to the equipment. Over 60 miles of steel rails have been laid, and over 30 miles of new line constructed, including the Otter Lake Extension, 6 miles, and the Manistee Branch, 26 miles. Considerably over $100,000 was expended during the year for improvements at East Saginaw, including a new machine shop and passenger depot. Two new propellers, to cost $60,000 are to be delivered to the company the present year, to run between Ludington and Milwaukee.

The earnings of the Delaware Railroad for the year ending October 31, 1881, were $428,747.24, of which $260,588.79 was from freights —decrease of $9,059.19, and $157,560.62 from passengers—an increase of $11,201.85; $300,123; 07 operating expenses, or 70 per cent of earnings, as by agreement with the lessee company (the Philadelphia, Wilmington and Baltimore); interest and dividends paid by lessee, $729,480 06. The decrease in earnings from freight was due entirely to the failure of the peach crop.

We give elsewhere the 107th call of the Secretary of the Treasury for the redemption of bonds. It is for twenty millions of extended sixes, and the principal and accrued interest will be paid on the 13th of March, the interest ceasing on that day.

The closing quotations on Thursday were : Adams Express, 147@149; American Express, 93½@94 ; Chicago, Burlington and Quincy, 137@137¼; Canada Southern, 55@55½; Chicago and Northwestern, 127⅛@127¾; do. pref., 139½@140; Chicago and Alton, 134¼@134½ ; Central of New Jersey, 96@96½; Central Pacific, 90⅜@90½; Chicago, Milwaukee and St. Paul, 108¾@109 ; do. pref., 122@122¾; Cleveland, Columbus, Cincinnati and Indianapolis, 81½@83; Columbus, Chicago and Indiana Central, 20⅝@20¾; Delaware and Hudson Canal, 107⅜@107¾; Delaware, Lackawanna and Western, 125@125½ ; Hannibal and St. Joseph, 95¾@96½; do. pref., 108⅞@109; Illinois Central, 135⅝@135¾ ; Lake Erie and Western, 35@36½ ; Lake Shore and Michigan Southern, 114⅞@115 ; Metropolitan Elevated, 87½@89 ; Manhattan Elevated, 50@51 ; Michigan Central, 88⅝@88¾ ; New York Elevated, 106@107 ; New York, Lake Erie and Western, 41¼@42 ; New York Central and Hudson River, 134⅜@134⅞; Northern Pacific, 36@36½; do. pref., 74⅝@75; Ohio and Mississippi, 36¼@36½ ; Panama, 195@198 ; Pacific Mail, 41½@41⅝ Texas and Pacific, 50½@50½; Union Pacific, 119½@119¾ ; United States Express, 77@78 ; Western Union Telegraph, 82@82⅛ ; Wabash, St. Louis and Pacific, 36⅝@36⅞ ; do. pref., 69½@69⅝ ; Wells-Fargo Express, 129@130.

The following quotations of sales of Railway and other securities, for the week, are in addition to those given elsewhere in our columns:

New York.—Atchison, Colorado and Pacific 1st, 98 ; Atlantic and Pacific 1st, 98 ; Boston and New York Air Line pref., 62; Buffalo and Erie 7s, new, 122 ; Cairo and Fulton 1st, 111 ; Chicago, Milwaukee and St. Paul, S. M. div. 1st, 104½ ; do. La C. and Dav. div. 1st, 95 ; Chicago, St. Paul, Minneapolis and Omaha, 36 ; do. pref., 101¼ ; do. consol., 100 ; Central Iowa, 35 ; do. 1st, 115½ ;Cedar Falls and Minnesota, 20 ; do. 1st, 112; Chicago, St. Louis and New Orleans, 81 ; Chesapeake and Ohio 1st pref., 37¾; do. 2d pref., 26¾ ; do. 1st Series B, 82½ ; do. cur. int., 53 ; Chicago, St. Paul and Minneapolis 1st, 112 : Chicago and Milwaukee 1st, 122 ; Chicago, Burlington and Quincy 8s, 108 ; Columbus, Chicago and Indiana Central Income, 74; do. 1st, Trust Co. certif. ass. sup., 120; Chicago and Alton Inc., 103; Denver and Rio Grande, 73 ; do. 1st, 114 ; do. 1st consol., 105¼ ; Denver, South Park and Pacific 1st, 103¾; Detroit, Monroe and Toledo 1st, 125⅞ ; East Tennessee, Virginia and Georgia, 15⅞ ; do. pref., 26; do. 1st, 114; do. inc., 58 ; do. 5s, 79⅜; Evansville and Terre Haute 1st, 98, Green Bay, Winona and St. Peter, 15¾ ; Georgia R. R. and Bank, 165; Galveston, Harrisburg and San Antonio 1st, 106 ; Gulf, Colorado and Santa Fe 1st, 107; Hudson River 2d S. F., 110 ; Indiana, Bloomington and Western, 47¼ ; do. 1st, 91 ; Indianapolis, Decatur and Springfield, 42 ; do. 1st, 105; Joliet and Chicago, 140; International and Gt. Northern 1st, 107½ ; do. 2d inc. ass., 90; Kansas Pacific 1st consol., 103⅞; do. Denver div. 6s, ass., 108¾ ; Lake Erie and Western, 36⅛ ; Long Island, 51½; Lafayette, Bloomington and Muncie 1st, 103 ; Louisville, New Albany and Chicago, 74; do. 1st, 101 ; Louisville and Nashville gen'l mort. 6s, 102; Lake Shore dividend bonds, 124; Lehigh and Wilkesbarre consol. ass., 108¼ ; Louisiana and Missouri River 1st, 119 ; Minneapolis and St. Louis, 20 ; do. pref., 60¼; do. 1st, 115; do. 1st, Iowa Ext., 110¼ ; Missouri, Kansas and Texas, 38 ; do. consol. 7s, 107½; do. gen'l mort. 6s, 83¼; Missouri Pacific, 102¾ ; do. 1st consol.; 104 ; Memphis and Charleston, 81 ; Milwaukee, Lake Shore and Western, 51; Mobile and Ohio, 34 ; do. 1st deben., 96; Marietta and Cincinnati 1st pref., 15 ; do. 2d pref., 9; Manhattan Beach, 27¾ ; Metropolitan Elevated 2d, 89¾ ; New York, Ontario and Western, 27½; Norfolk and Western, 20; do. pref., 57½ ; do. Gen'l mort., 103 ; Nashville, Chattanooga and St. Louis, 86; do. 1st, 115¼ ; New Orleans Pacific 1st, 90 ; Northern Pacific 1st, 99; Ohio Central, 25 ; do. inc., 48; do. 1st, 97½ ; Oregon Railway and Nav., 137½ ; do. 1st, 106; Ohio Southern, 23½; do, inc., 45½; do. 1st, 92 ; Peoria, Decatur and Evansville, 36¾; Rensselaer and Saratoga, 140; do. 1st, 133; Rochester and Pittsburg, 28½ ; do. inc., 40 ; Rome, Watertown and Ogdensburg, 21½ ; do. 1st consol., 91 ; Richmond and Allegany, 36 ; do. 1st, 98½ ; Richmond and Danville, 197½; do. 1st, 102¾; Syracuse, Binghamton and New York 1st, 123; St. Paul and Sioux City 1st, 110; St. Louis, Jacksonville and Chicago 1st, 119 ; St. Paul Minneapolis and Manitoba, 115 ; do. 1st, 109½; do. 2d, 106; St. Paul and Duluth, 30; do. pref., 70; St. Louis, Kansas City and Northern, Omaha div. 1st, 113½ ; St. Louis and Iron Mountain 5s, 84½ ; do. Arkansas Branch 1st, 110; St. Louis and San Francisco 2d, Class B, 92; do. C, 90½ ; South Pacific of Missouri 1st, 103⅞ ; Southern Pacific of California 1st, 104½; Scioto Valley 1st, 97⅛ ; Toledo Delphos and Burlington, 16; Texas and Pacific, 50¼ ; do. inc. L. G., 74½; do. 1st, 107 ; do. Rio Grande div. 1st, 90 ;Texas Central 1st, 106½ ; Toledo, Peoria and Western 1st, 110 ; Wabash, St. Louis and Pacific, Gen'l mort. 6s, 88½ ; do. Chicago div. 1st, 84½ ; do. Havana div., 96 ; Alabama, Class C, 81¾ ; Georgia 7s, gold, 118½ ; Louisiana 7s, consol. 67¼ ; Missouri 6s, 1888, 108½ ; do. 6s, 1887, 107½; do. 6s, 1886, 106½ ; North Carolina 6s, S. T., 3d class, 7¾; do. consol. 4s, 84; South Carolina 6s, non-fund., 10¼; Tennessee 6s, old, 76; do. new, 75½; Sutro Tunnel, 1; Consol. Coal, 34½ ; Colorado Coal and Iron, 44 ; do. 6s, 90 ; New Central Coal, 20; Pennsylvania Coal, 240; Caribou, 2½ ; Homestake, 15⅝; Little Pittsburg, 1⅞; La Platta, 9¼; Ontario, 34½ ; Robinson, 2¾ ; Standard, 16.

Philadelphia.—American Steamship Co. 6s, 106½ ; Central Transportation, 35 ; Erie and Western Transp. Co.,55; Huntingdon and Broad Top Mt. consol. 5s, 89 ; Nesquehoning Valley, 57½ ; New Orleans Pacific 6s, 91¼; Oil Creek 1st, 100½; Philadelphia and Reading deben. 6s, 65 ; do. scrip, 81¾ ; Philadelphia, Wilmington and Baltimore 4s, 96 ; Pennsylvania Company 4½s, 95½ ; Schuylkill 6s, 1895, 55; St. Paul and Duluth pref., 71; Texas and Pacific consol. mort. 6s, 99¾; do. 1st mort. 107; do. 1st mort. 6s, Rio Grande div. 90; Union and Titusville 7s, 103; Western Pennsylvania 6s, 104. The latest quotations are : City 6s, —@118 ; do. free of tax, 126@132; do. 4s, new, 102@109 ; Pennsylvania State 6s, 3d series, 100@101 ; do. 5s, new loan. 115@116¼ ; do. 4s, new, 107@111 ; Philadelphia and Reading R. R., 30⅜@30½; do. consol. mort. 7s, reg., 124½@125 ; do. mort. 6s, 117@121 ; do. gen'l mort. 6s, coupon, 98¾@99; do. 7s, 1893, 118@125 ; do. new, conv., 73@77; United New Jersey R. R. and Canal, 184@185; Buffalo, Pittsburg and Western, 20⅝@20¾; Pittsburg, Titusville and Buffalo 7s, 102⅜@103 ; Camden and Amboy mort. 6s, 1889, 113¼@114 ; Pennsylvania R. R., 62⅜@62½; do. general mort. reg., 123½@— ; do. consol. mort. 6s, reg., 119½@124 ; Little Schuylkill R. R. 55⅜@55½ ; Morris Canal, 65@75; do. pref., 165@169½; Schuylkill Navigation, 5¾@6 ; do. pref., 12¾@13¼ ; do. 6s, 1882, 88½@89½; do. 1872, 107@108; Elmira and Williamsport pref., 58@60 ; do. 6s, 113@—; 95@ do. 5s, 95—; Lehigh Coal and Navigation, 43⅜@— ; do. 6s, 1884, --@105¾ ; do. R. R. loan, 116¾@117¼ ; do. Gold Loan, 112@112¼ ; do. consol. 7s, 116½@117 ; Northern Pacific, 36⅛@36½ ; do. pref., 75¾@75 ; North Pennsylvania, 59⅝@60⅛ ; do. 6s, 105@105¾ ; do. 7s, 123½@— ; do. General mort. 7s, reg., 119½@124 ; Philadelphia and Erie, 7s, 113¾@114¼ ; do. 5s, 104⅝@105½ ; Minehill, 60@60¼ ; Catawissa, 18@19 ; do. pref., 53@53¼ ; do. new pref., 50½@53¼ ; do. 7s, 1900, 120@— ; Lehigh Valley 62¼@62¾ ; do. 6s, coupon, 120@121 ;

do. reg., 121½@122½ ; do. 2d mort. 7s, 134½@134¾ ; do. consol. mort. 116½@118 ; Fifth and Sixth streets (horse), 149@150 ; Second and Third, 114¾@115¼; Thirteenth and Fifteenth, 79½@80½ ; Spruce and Pine, 47@49 ; Green and Coates, 99@100 ; Chestnut and Walnut, 94@95; Germantown, 60@70; Union. 110@125 ; West Philadelphia, 110@112 ; People's 13¾@15½ ; Continental, 100@104.

Baltimore.—Atlanta and Charlotte, 82½ ; do. 1st, 110 ; Baltimore City 6s, 1890, 114⅞ ; do. 6s, 1886, 106 ; do. 6s, 1900, 128 ; do. 5s, 1916, 120½ ; do. 5s, 1900, 118; do. 5s, 1904, 115½; do. 4s, 1920, 112 ; Canton 6s, gold, 108½; Columbia and Greenville 1st, 103½ ; Consolidation Coal, 36½; Chesapeake and Ohio Canal, 38 ; Ohio and Mississippi, Springfield div. 1st, 122½; Richmond and Danville, 191 ; do. gold bonds, 103 ; Richmond and Alleghany, 38½ ; South Side (Va.) 2d 6s, 101½ ; Virginia Midland, 75 ; do. 1st pref., 120 do. 2d mort., 110; do. 3d mort., 95; do. 5th mort., 98½ ; Virginia Black scrip, 32 ; Virginia Peelers, 39½ ; do. Peeler coupons, 38½. The latest quotations are : Atlanta and Charlotte, 82@82½ ; do. 1st. 109⅞@110 ; Baltimore City 6s, 1884, 104@104½ ; do. 6s, 1890, 114⅜@115 ; do. 5s, 1900, —@118½; do. 5s, 1916, 120½@120⅝; Baltimore and Ohio, 195@200 ; Central Ohio 1st, 110½@112 ; Canton 6s, gold, 108¼@108½; Columbia and Greenville 1st, 103⅜@103½; Marietta and Cincinnati 1st mort., 124¾@125½; do. 2d, 105⅛@105½ ; do. 3d, 59@59½ ; Northern Central, 49¼@50½ ; do. 6s, 1900, gold, 113@—; do. 6s, 1904, gold. 111¼@— ; do. 5s, 1926, 96½@— ; Norfolk and Western pref., 57@—; Pittsburg and Connellsville 7s, 120½@121; Richmond and Danville, 195½@—; do. 1st, gold, 102½@103; Virginia Midland 5th mort., 96@98½ ; Virginia consols., 63¾@64; do. 10-40s, 39¼@ —.

Boston.—Atlantic and Pacific 6s, 97½ ; do. 6s, Income 31¾ ; Atchison, Topeka and Santa Fe plain 4½s, 93 ; Boston Land, 8¾ ; Boston Water Power, 6¾ ; Burlington and Missouri River in Nebraska 6s, non-exempt, 103⅞ ; Chicago, Burlington and Quincy 5s, 105 ; do. plain 5s, 1901, 102½; do. 4s, old, 88 ; do. 4s, Denver ext., 37½ ; Connotton Valley, 19; do. 7s, 90; do. 7s, Straitsville div., 75¾ ; Chicago and West Michigan, 80 ; do. 5s, 95; Cincinnati, Sandusky and Cleveland 7s, 102½ ; Central of Iowa, 34⅝ ; do. 2d pref., 50 ; Chicago, Milwaukee and St. Paul, Dubuque div. 6s, 104; Flint and Pere Marquette, 24⅜; do. pref., 95½ ; Iowa Falls and Sioux City, 84½ ; Kansas City, Topeka and Western 7s, 118; Kansas City, Fort Scott and Gulf, 80 ; do. 7s, 112; Kansas City, St. Joseph and Council Bluffs 1st, 119; Little Rock and Fort Smith, 61; do. 7s, 112 ; Massachusetts Central 6s, 94½; Marquette, Houghton and Ontonagon, 63 ; do. pref., 119 ; Mexican Central blocks, new, 94; do. old, 110; do. 7s, 86 ; New York and New England 6s, 107½; New Mexico and Southern Pacific 7s, 115½; Northern Pacific 6s, 98¾ ; Nebraska R. R. 7s, 115; Ogdensburg and Lake Champlain Inc., 47; Rutland, 4½; do. pref., 27; do. 6s, 101¼; Republican Valley 6s, 103 ; Sonora, 27 ; do. 7s, 89½ ; do. block, No. 3, 150; Toledo, Delphos and Burlington, 7½ ; Wisconsin Central, 20¾ ; Wisconsin Valley 7s, 114 ; Allouez Mining Co., 3⅜ ; Atlantic, 19 ; Blue Hill, ¾ ; Brunswick Antimony, 12 ; Copper Harbor, 4⅞ ; Copper Falls, 4 ; Douglas, 1⅛; Franklin, 14½; Harshaw, 4 ; Huron, 3¾; Napa consol. Quicksilver, 7 ; National, 3⅜ ; Osceola, 34⅜; Pewabic, 17; Phœnix, 2¾ ; Silver Islet, 20; Sullivan, 2½.

Forfeiture of Railroad Lands.

A JOINT resolution was introduced in the House of Representatives at Washington on the 11th inst. to declare certain lands heretofore granted to railroad companies forfeited to the United States and to restore the same to the public domain, and open the same to settlers A schedule which is appended to the resolution enumerates the following railroads, together with the estimated quantity of land granted to each :

Name of Railroad :	*Acres.*
Gulf and Ship Island	652,800.00
Alabama and Florida	419.520.00
Coosa and Tennessee	132,480.00
Mobile and Girard	840,880.00
Coosa and Chattanooga	150,000.00
Alabama and Chattanooga, formerly Northeast and Southwest Alabama and Wills Valley railroads	897,920.00
Pensacola and Georgia	1,568,729.87
Florida, Atlantic and Gulf Central	183,153.99
North Louisiana and Texas, formerly Vicksburg, Shreveport and Texas Railroad	610,880.00
New Orleans, Baton Rouge and Vicksburg	3,800,000.00
St. Louis and Iron Mountain	640,000.00
Little Rock and Fort Smith	1,009,296.34
Detroit and Milwaukee	355,420.00
Houghton and Ontonagon, formerly Marquette and Ontonagon	552,515.24
North Wisconsin, formerly St. Croix and Lake Superior and branch to Bayfield	1,408,455.69
Wisconsin Central, formerly Portage, Winnebargo and Superior	1,800,000.00
St. Paul and Pacific, St. Vincent extension, formerly branch to Red River of the North	2,000,000.00
St. Paul and Pacific, Brainerd branch, formerly braneh to Lake Superior	1,475,000.00
Hastings and Dakota	550,000.00
Oregon Central	1,200,000.00
Atlantic and Pacific	42,000,000.00
Texas Pacific	18,000,000.00
Northern Pacific	47,000,000.00

Redemption of Bonds.

THE following is the text of the one hundred and seventh call for the redemption of bonds of the loans of July 17 and Aug. 5, 1861, continued at 3½ per cent from July 1, 1881, issued on the 12th inst. :

TREASURY DEPAREMENT,
WASHINGTON, D. C., Jan. 12, 1882.

By virtue of the authority conferred by law upon the Secretary of the Treasury, notice is hereby given that the principal and accrued interest of the bonds hereinbelow designated, will be paid at the Treasury of the United States in the city of Washington, D. C., on the 13th day of March, 1882, and that the interest on said bonds will cease on that day, viz : Registered bonds of the acts of July 17 and Aug. 5, 1861, continued during the pleasure of the Government under the terms of the circular No. 42, dated April 11, 1881, to bear interest at the rate of 3½ per cent per annum from July 1, 1881, as follows : $50, No. 1,851 to No. 1,950, both inclusive ; $100, No. 13,001 to No. 13,700, both inclusive ; $500, No. 9,601 to No. 10,000, both inclusive ; $1,000, No. 47,001 to No. 48,900, both inclusive ; $5,000, No. 16,001 to No. 16,150, both inclusive ; $10,000, No. 30,101 to No. 32,550, both inclusive ; total, $20,000,000. Many of the bonds originally included in the above numbers have been transferred and canceled, leaving outstanding the amount above stated.

Bonds forwarded for redemption should be addressed to the "Secretary of the Treasury, Loan Division, Washington, D. C.," and all the bonds called by this circular should be assigned to the "Secretary of the Treasury—For redemption." Where checks in payment are desired in favor of any one but the payee the bonds should be assigned to the "Secretary of the Treasury—For redemption for account of ——," (here insert the name of the person or persons to whose order the check should be made payable.)

CHAS. J. FOLGER, Secretary.

Electricity in Railroad Carriages.

AN interesting and successful experiment in lighting railway carriages by electricity has just been made in England. The train was the Pullman Limited mail, consisting of four cars, running between London and Brighton. The lamps were Edison's incandescent lamps, of which altogether 29 were used. As the train entered Box hill and other tunnels on the Dorking, Horsham and Steyning route, by which the trip to Brighton was made, the cars were simultaneously, and by the mere turn of a handle, brilliantly lighted, and as quickly, when the train emerged, the light was turned off. On the return journey the cars were lighted all the way from Brighton to Victoria, the lamps burning with a steadiness undisturbed by the motion of the train. The electricity was supplied by Faure accumulators, of which 80 were carried. Mr. W. Lachlan, the engineer representing the Societe La Force et La Lumiere, who was in charge of the batteries, reported that but 30 were brought into use on the down journey, and only a portion of the electricity stored in these was expended. On the up journey these and four fresh boxes were brought into operation. For the present the accumulators are charged each evening with a dynamo machine worked by a small stationary engine. It is expected, however, that before long the electricity required will be generated on the train itself, the chief practical difficulty in the way of this saving of force arising from the unavoidable alterations in the speed of the train—a mechanical difficulty which the ingenuity of the electrical engineers will no doubt overcome.

Revolutions in Locomotives.

INVENTORS have shown a disposition of late to depart altogether from the old and seemingly well established general form of locomotive engines. A great many changes have been made in the details of locomotive construction since its early days, but the machine itself still remains the same in general appearance. The Wooten dust burning engines present a somewhat different form, and the Fontaine, with its main driving wheels and most of the machinery above the boiler, is still more novel in the arrangement of parts, though most of the outline remains the same. Another new locomotive—Dr. Raub's—does not at all resemble the ordinary locomotive, except that it has wheels and a cow catcher. The boiler or boilers extend from end to end. The smoke stack, steam dome, cylinders and driving gear are all in the centre, grouped together under the cab. The purpose of this construction is to get the centre of gravity in the centre of the base formed by the driving wheels, and to put the motive power also in the centre. If one of Dr. Raub's locomotives should be cut in four quarters, each quarter would be exactly like the other quarters in form and weight. Whether these new forms are practically better than the old remains to be proved by actual work, but it is a good thing for inventors to get rid of the notion that they are bound to follow closely an adopted form or system while seeking to make improvements. Habit, custom, prejudice are

so many dead weights on inventive genius. They should not enslave the mechanic, however, though he, more than anyone else, needs to know what has been accomplished, and why certain forms have been adopted.

A Texas Mother-In-Law.

SEARCHING FOR A SPINDLE-SHANKED, GOGGLE-EYED PRODIGAL SON.

A TALL woman, wearing a sun-bonnet, came into the office of the chief of police, and, sitting down hard on a bench, wiped her nose, snapped her eyes at the chief, and asked, in a voice that reminded one of the sharpening of a saw:

"Be you the galoot what locks folks up?"

"I regret to say that I am occasionally obliged to resort to such extreme measures with refractory persons."

"I know all that; but be you the galoot?"

"Yes madam."

"Why didn't you say so when I asked you?"

"I did."

"You didn't, sir; and if you don't treat me like a lady, I'll fold you up and sit down on you," and she snapped her eyes some more like a terrier.

"What do you want?" asked the official, looking as if he needed reinforcements right away, and plenty of them.

"I want that dirty little whelp what married my darter. I want to talk to him on business, but he evades me. If I could only get a chance to caress him once more!" and she breathed hard and gritted her teeth, until the official felt in his pocket for a police whistle.

"What did he do?"

"He told my darter that he would give 320 acres of land, with a gold mine on it, to anybody who would ampertate my jaw with a boot jack. He said my mouth was like the gate at the Fair Grounds."

"He meant, I suppose, it was never shut. I don't see how he ever came to make such a ridiculous comparison as that. Did you ever remonstrate with him?"

"You bet I did. I drawed him across the kitchen table by the hair with the one hand, while I basted him with a long-handled skillet, and you should have heerd him calling me 'mother darling' and 'pet,' but Providence was agin me. His har gave way, and he lit out before I could reason with him any more. Just as like as not we will never meet again," and she sighed heavily.

"Be calm, madam: do not excite yourself too much."

"I am calm. I like to talk about these family seerets. It calls up sacred recollections. It makes me think of my darter's fust husband. It was real fun to remonstrate with him. His har didn't give. He was game. He sassed back, but, Lord! what a time they had holding the inquest. That was at Arkansas, before I moved to Galveston. There was some of his remains in one corner of the yard, and a few more remains hanging on the fence, and there was right peart of him wrapped around the axe-handle. The jury knew me, so they brought in a verdict of justifiable suicide, or homicide, or something like that. And now to think of this pesky little, worthless, spindle-shanked, goggle-eyed whelp getting clear off, excepting a few pounds of har. I want you to find him for me. You can know him by the brands I made on him with the hot skillet. Wanted to amputate my jaw, the little brassy whelp! Said my mouth was like a gate, did he?"

The official said he would hunt for him, and let her know. As she went out, she snapped her eyes significantly at the official, and remarked:

"You had better find that prodigal son, or thar'll be music at these headquarters.—*Galveston News.*

Good Promise in California.

THE dispatches sent to the *San Francisco Alta* from various parts of the State all indicate a fairly prosperous condition of trade and industry, and give promise of a successful year. Agriculture in all its branches is making steady progress. The wheat, vine, and orchard areas are wider than ever before. Local trade is flourishing, building improvements are numerous, there are fewer mortgages than has been the rule, small factories are increasing in number, and a general feeling of hopefulness is noticeable. It is true that in the southern section the rain fall has not yet been so abundant as is desirable, but there is still time for the clouds to give down all the moisture that is needed. The mining industry is temporarily impeded by unwise litigious opposition, but time will right this. California is in so prosperous and hopeful a condition that a large immigration should follow the publication of the facts. There is still a considerable amount of land open to settlement, upon which industrious farmers and fruit-growers should be able to establish permanent and comfortable homes. The era of depression may be considered to have passed away, and henceforward our State will make rapid progress.

Engraving by Sand Blast.

THIS is one of the most curious and strange of the inventions which have come into use in these latter days. To make an inscription upon a marble slab, cover the face of the stone with a sheet of wax no thicker than a wafer; then cut out in the wax the name, date, &c., leaving the marble exposed. Now pass it under the blast, and the sand shall cut it away. Remove the wax and you have the cut letters. To cut or mark plate glass, cover it with fine lace and pass it under the blast, and not a thread of the lace will be injured, but the sand will cut deep into the glass wherever it is not covered with the lace. Now remove the lace, and you have a delicate and beautiful figure raised on the glass. In this way beautiful figures of all kinds are cut in glass and at a small expense. The workmen can hold their hands under the blast without harm, even when it is rapidly cutting away the hardest cutting glass, iron or stone; but they must look out for finger nails, for they will be whittled off right hastily. If they put on steel thimbles to protect their nails it will do but little good, for the sand will whittle them away; but if they wrap a piece of soft cotton around them they are safe. You will at once see the philosophy of it. The sand whittles away and destroys any hard substance—even glass—but does not effect substances that are soft and yielding, like wax, cotton, fine lace, or even the human hand.

Cincinnati Iron Market.

OFFICE OF E. L. HARPER & CO.
Cincinnati, Jan. 17, 1882.

THE market is about the same as reported last week. Stocks are light, demand good and prices strong.

We quote as follows:

	No.			Mos.
FOUNDRY.				
Hanging Rock Charcoal	1 29 50	@30 75		4
Strong Neutral Coke	1 27 00	@28 00		4
American Scotch	1 26 50	@27 50		4
GREY FORGE.				
Neutral Coke	25 50	@26 50		4
Cold Short	24 00	@25 00		4
CAR WHEEL AND MALLEABLE.				
Hanging Rock Cold Blast	36 00	@38 00		4
" Warm Blast	30 00	@32 00		4
Lake Superior 1 and 2	32 00	@33 00		4
Lake Superior 3 to 6	34 00	@36 00		4
Southern Car Wheel	36 00	@40 00		4

Poetic Ferry Boat.

THE new ferry boat "Wenonah," constructed by the Harlan & Hollingsworth Co., of Wilmington, Del., for the Camden and Philadelphia Ferry Co., arrived at Camden, N. J., on the 11th inst. Its entry into the waters of the Delaware is thus poetically described by Walt Whitman:

"Such a show as the river presented an hour before sundown yesterday evening all along between Philadelphia and Camden is worth weaving into an impromptu item. It was full tide, a fair breeze from the southwest, the water of a pale tawny color, and just enough motion to make things frolicsome and lively. Add to these an approaching sunset of unusual splendor, a broad tumble of clouds, with much golden haze and profusion of beaming shaft and dazzle.

"In the midst of all this, in the clear drab of the afternoon light, there steamed up the river the large, new Camden ferry-boat, the Wenonah, as pretty an object as you could wish to see, lightly and swiftly skimming along, all trim and white, covered with flags, transparent red and blue, streaming out in the breeze.

"Indeed, the boat and the scene made a picture worth contemplating. Only a new ferry-boat, and yet in its fitness comparable with the prettiest product of nature's cunning and rivalling it. High up in the transparent ether gracefully balanced and circled four or five great sea-hawks, while here below, amid the pomp and picturesqueness of sky and river, swarmed this creation of artificial beauty and motion and power, in its way no less perfect."

The dimensions of the Wenonah are, length, 158 feet; width, 54 feet; depth of hold, 12 feet. The wheels are 18½ feet in diameter and 7¼ feet face. The cylinders are 44 inches in diameter, with 10 feet stroke. The boat is substantially as well as elegantly finished, having been constructed for strength and durability, especially for service in heavy ice.

The Forth Bridge.

IT is stated that except as regards site, there is nothing in common between the original bridge of St. Thomas Bouch and that which has been agreed upon by the consulting engineers of the three great English Companies interested in the East Coast route. It will be remembered that, after the fall of the Tay Bridge, the Forth Bridge works then in progress were stopped, and the question of building a trustworthy bridge of any kind across the Firth of

Forth was referred afresh to Mr. T. E. Harrison, Mr. W. H. Barlow, and Mr. John Fowler. It is intended to give such strength and stability to the proposed bridge that, even if every important bridge and building in the country were levelled to the ground by a tornado pressure of 112 lbs. per square foot, the Forth Bridge would remain unscathed, and approve itself the strongest and stiffest bridge in the world. The strength of the several members of the structure will, it is said, be such that, even assuming the 1,700 feet span were loaded with a couple of 900 tons trains, each consisting of two of the heaviest engines built, at the head of fifty of the heaviest coal trucks, and that at the same time the bridge were struck by the aforesaid hypothetical, but physically impossible, tornado, not a single rivet or joint would there be started, nor would there be the slightest chance of the structure being overturned or injured in any respect.—*Herapath's Railway Journal.*

Improving the Channel of the Harlem River.

Senator Miller, of New York, on the 18th inst., presented to the U. S. Senate a memorial signed by Thomas Dickson, president of the Delaware and Hudson Canal Company, Brown Bros. & Co., and other perminent capitalists of this city, urging the passage of a joint resolution now pending before Congress to authorize the Secretary of War to contract with Charles Stoughton and others to construct a channel 300 feet in width and 15 feet deep along the course of the Harlem River, from the Hudson River at Spuyten Duyvil creek to the outer end of Randall's Island. Mr. Stoughton and his associates, the memorial states, propose to furnish the right of way free and render the projected channel navigable by July, 4 1884, for the sum of $1,300,000. As will readily appear, the completion of this work would be of great advantage to coal shippers to the ports along the Sound and to New England.

As Mad as a Hatter.

The most striking (in two senses) thing about the hatter's art, in the old time when felt hats were made by hand, was the beating up of the felt. Dipping the mass of wool and hair from which his fabric was to be formed, frequently into hot water, the hatter was then wont to fly at it, as if in passion, and give it a violent beating with two sticks, one held in each hand till it was matted together into the felt, which in time, after numerous combings and dressings and shearings, became the stylish beaver worn by the men of fifty years ago. The hatter seemed to be very mad at this object of his labor, and "mad as a hatter" needed no explanation in those days.

The Marquis of Bute started a daily paper in Wales, and after sinking about $400,000 in the concern shut up the shop. As a marquis he is all right, but in journalism the Bute is on the other leg.

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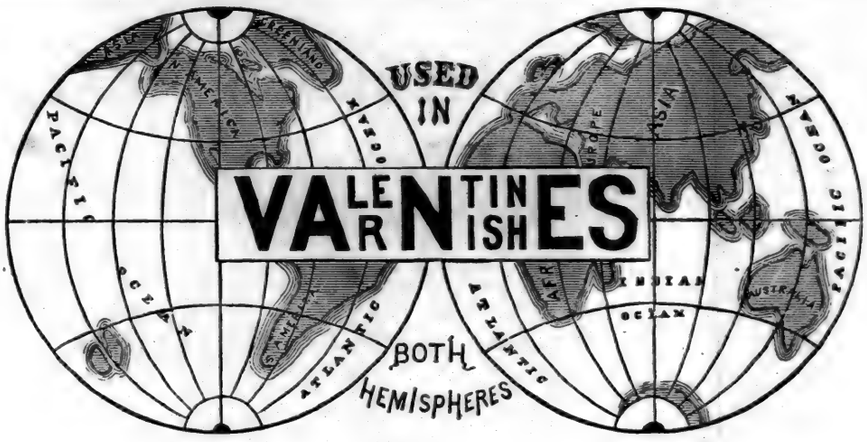
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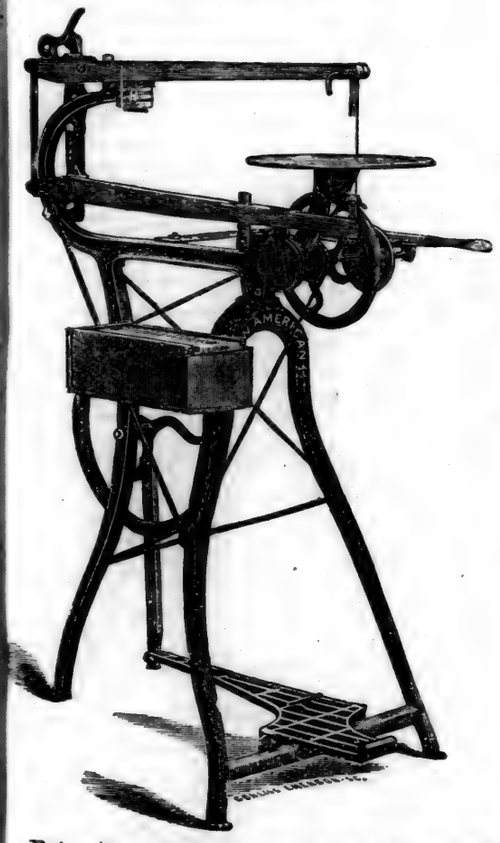
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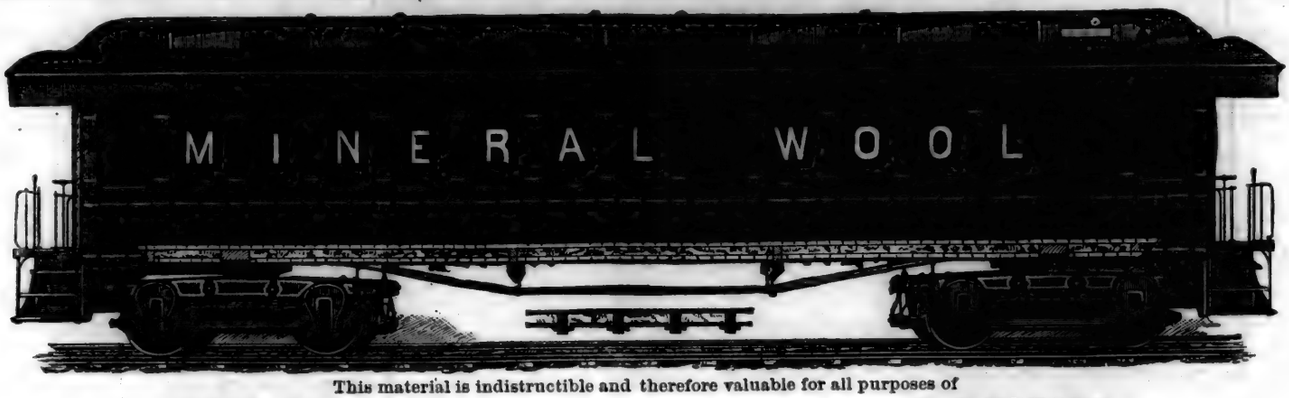
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SECOND QUARTO SERIES.—VOL. XXXVIII., No. 4.] NEW YORK, JANUARY 28, 1882. [WHOLE No. 2,388.—VOL. LV.

Railroad Sanitation.

(Read at the Savannah meeting of the American Public Health Association, 1881.] By S. S. HERRICK, M. D., Secretary of the Louisiana State Board of Health.

A.—ITS OBJECTS.

THE following are conceived to be appropriate objects for a railway sanitary system :

1. A surgical and medical service, designed for the relief of sufferers (passengers and employees) from the casualties of travel upon the lines, for affording medical attendance in ordinary diseases contracted by employees, and for superintending their personal hygiene.

2. Physical examination of those engaged in the movement of trains, with reference to defects of sight and hearing, and diseases of the heart, lungs and great blood vessels, as a prerequisite to their employment.

3. Inspection of the sanitary condition of passenger coaches, of grounds and buildings, and recommendation of improvements wherever needed. As occasion presents, counsel in the selection of sites and in the construction of works and buildings.

4. A meteorological service affiliated, if practicable, with the National Signal Service.

5. To guard against danger of infecting railroad coaches, stock and goods cars, by transportation of diseased persons or animals, or of infected personal baggage or merchandise ; against danger of conveying contagion from one point to others, and against injury to stock *in transitu* from overcrowding, long confinement and deprivation of food and water.

6. To confer with national, state and local sanitary authorities, with the view of obviating or moderating restrictions on travel and traffic; and to represent the company in sanitary and quarantine consultations, wherever its interests may be affected.

B.—ITS ADVANTAGES.

1. Relief to the victims of railway accidents is generally recognized by the managers as a measure of policy as well as justice, and many of the most important companies have arrangements for carrying out this purpose. It is hardly necessary to say that the whole relief service of a company should be under the superintendence of a single medical head, for the purpose of securing uniformity and efficiency of action, and economy in cost.

There is good reason to believe that a system of medical attendance upon employes could be so organized and administered as to conduce materially to the advantage of both the men and the corporations employing them.* The merchant marine of the United States has a system, for many years in successful operation, which is of incalcuable benefit to mariners and is self-supporting, from a tax of forty cents per month upon all who are entitled to its benefits. This is a model worthy of imitation.

It is undeniable that the efficiency of men in any organization is in direct relation to continuity of action. Interruptions by sickness are among the most common and the most serious disturbing causes. To reduce these to a minimum and to secure with the least possible delay the return of trained employes to their familiar duties, is an object of great importance. The certainity of having medical relief within reach at all times would operate powerfully in producing contentment and regular continuance in their occupations.

In large cities, established general hospital would be available for this kind of relief, as well as for the surgical casualties before mentioned ; but the individuals there treated for railroad companies should be under super vision of their own medical officers, to prevent abuse of privilege and secure the best attendance. At other points suitable infirmaries should be established and placed in charge of local practitioners, employed by special contract for specified duties. These would be conveniently located at the termini of roads and at the intermediate points where work-shops are situated and the crews of trains reside. No compulsory hospital fee need be imposed, for the advantages of the system would be ample inducement for its voluntary adoption by the men, and it would naturally be extended so as to include their families in its scope and give them attendance at home.

But we must not lose sight of prevention, which is proverbially of manifold value above the cure of disease. The single example of malaria, so prevalent throughout the greater part of our country, so mighty a destroyer of life and so potent a disturber of man's industries, affords a boundless scope for the exercise of personal prophylaxis under medical supervision. The crews of night trains are especially liable to malarial affections, which might be mostly prevented by suitable regulations, including the proper preventive remedies.

It is obvious indeed that precautionary measures, under medical superintendence, could advantageously be used to guard men against the whole list of preventable diseases. Besides, there would be great gain in early treatment of ordinary ailments, which would be encouraged by placing facilities within reach of all.

The medical adviser would also, as far as practicable, secure men, while on the route, against prolonged fasting and deprivation of sleep, against unnecessary exposure to cold and storm, and secure for them wholesome food and water.*

It might be supposed that the instinct of self preservation on the part of men, aided by the good sense of managers, would clearly lead to suitable hygienic measures ; but the same supposition applies to people of all classes and occupations, while sanitarians are convinced that at least half of the ailments of mankind in civilized life are strictly preventable. It is generally agreed that private individuals and corporations are more successful than government in the execution of important works with dispatch and economy ; but the government shows more wisdom in caring for the lives and health of its servants, both in curing and in preventing disease.

2. We have just seen that neither employes nor employers recognize the value of personal hygiene for the avoidance of preventable diseases; but it might rationally be supposed that the former would not willingly risk their lives, nor the latter the lives and property of their patrons, as well as their own property, on railroad trains with blind men in charge. Yet this risk is actually run, and we know not how often, on most of the railroads in this country. Observation has proved that about 4 per cent of men are incapable of distinguishing between the colors used for signals ; † and a still larger proportion cannot recognize objects far enough to stop a train in time to escape danger. Under certain circumstances these men are practically blind, and occasions come when disaster ensues.

* A newspaper paragraph recently announced the projected establishment of a hospital at Aurora, Ill., by the Chicago, Burlington and Quincy Railroad Company.

* It is not unusual, during a busy season, for the crews of freight trains to be kept on duty for 36 hours or more, without opportunity for sleep. This is not only a wrong to the men, but it endangers trains very seriously. I have the recent testimony of an intelligent engineer, that he had lighted a cigarette to keep himself awake at his protracted task and woke to find his clothing on fire from the cigarette which dropped from his lips while he was overcome by sleep.

† It is known that color-blind men may distinguish between colored lights by their intensity; but with a light burning low, and in storm or mist, they must fail.

It is hardly necessary to mention here that an Act of Congress requires all pilots of steam vessels carrying the American flag at sea and those navigating the waters of the U. S., to pass an examination testing their color sense and visual acuteness ; and that the legislatures of Connecticut and Massachusetts have made the same requirement of railroad engineers, firemen, conductors and signal men. It is probable that similar provisions will be enacted in other States at no distant day, unless railroad companies forestall action by voluntary adoption of an efficient system carried out by their own medical officers. Indeed, there is good evidence that this will gradually or rapidly become an established fact upon the most important roads, since it has already gone into effect upon a number ; for instance, the Penn. R. R. and others leading out of Philadelphia, the Ill. Central, etc.

The Board of R. R. Commissioners in Massachusetts reported, in 1880, that such examinations are practiced generally on the railroads of England, France, Germany, Italy and Sweden, although not required by law ; while they are so required in Holland. It thus appears that the railroad companies in the most enlightened countries of Europe have rendered legislation on this subject unnecessary.

At the present time the most important question at issue is, whether these examinations may be made by laymen, officers of the companies, or whether they should be made exclusively by medical men or experts. The Massachusetts R. R. Commissioners hold that the former are competent, but this is controverted by the experts appointed by the Connecticut Board of Health to enforce the lesislative act of that State. Thus Professor W. H. Carmalt, of Yale College, one of the examiners for Connecticut, testifies that experience has taught him his former error in supposing that laymen might make the examinations. He found that the reports of railroad superintendents and others who had made examinations were often incorrect, the tests being applied either superficially or in ignorance of the subject : for instance, they failed to distinguish between true color blindness (a fatal defect) and color stupidity (simple ignorance of the names of colors). Besides, cataract, in any degree, is a fatal defect, but one which a layman is incompetent to detect in an early stage. In short, a medical examination is needed for the protec tion of the men as well as the public.

Again, men occupying positions vital to the safety of railroad trains might suddenly be stricken down at the post of duty through some organic defect of the heart, or aneurism of a large artery, or pulmonary hemorrhage, which would surely be anticipated by a careful medical examination, but not otherwise.

Deafness, too, would be a disqualification, but a layman should not be expected nor reqnired to define the boundary between admission and rejection or to apply the tests.

It appears, from the testimony of Prof. Carmalt, that the principal of natural selection soon eliminates railroad engineers laboring under serious visual defects, for out of seven rejected by him for color blindness he found only one who was over 32 years old. The average age was 26½ years. These, like their elder *confreres*, would be eventually condemned as incorrigibly unlucky, but perhaps at frightful cost of life and property.

Another important consideration is, that accidents traceable to such physical defects of employes as could be detected by medical examination would certainly place the company at fault and responsible for damages to person and property; while, on the other hand, the absence of such defects would go far in exoneration from such responsibility. Morever, in case palpable physical defects be proved, claim for exemplary damages would be made, and probably allowed.

(To be continued.)

PERSONAL.

Walter Shanly, late manager of the St. Lawrence and Ottawa, has been appointed chief engineer of the Canada Atlantic Railway.

John W. Smith has been appointed general superintendent of the St. Louis, Keokuk and Northwestern Railway, with office at Keokuk.

Albert Foster has been appointed secretary to the receivers for the Philadelphia and Reading Railroad Company, and F. B. Kaercher for the Coal and Iron Company.

Mr. George C. Wilkens, superintendent of the Baltimore Division of the Northern Central Railway, was appointed receiver of the Washington and Alexandria Railroad.

The East Pennsylvania, East Mahanoy, Reading and Columbia, and Chester and Delaware River railroads, operated by the Reading Railroad, elected officers on the 23d inst. G. A. Nicolls, of Reading, Penn., was elected president of each.

P. A. Blanchard, brother of vice-president Blanchard, of the New York, Lake Erie and Western Railway, and for a number of years assistant freight agent for the Erie in New York City, has been appointed foreign freight agent for that road for Boston and its vicinity.

The American Society of Civil Engineers has received from Brazil an album of photographs handsomely bound, and having on the cover the following inscription : "The Engineers' Club de Rio de Janeiro, to the American Society of Civil Engineers, in memory of their common associate, William Milnor Roberts : pictures of the Dom Pedro Sequendo Railroad, the last road he traveled."

The American Society of Civil Engineers held its annual meeting in this city on the 18th inst. The society now numbers 605 members. During the fiscal year which ended on the 3d of December, 1881, the demands on the society for engineers far exceeded the number of members open to engagements. It was decided to hold the next convention at Washington. Ashbel Welch, of Lambertville, N. J., was re-elected president for the ensuing year, and J. B. Eads, of St. Louis, and Wm. H. Paine, of Brooklyn, vice-presidents.

The Receivers of the Philadelphia and Reading Railroad Company have authorized the payment, on and after Feb. 10, of the interest on the general mortgage bonds due last July and amounting to about £600,000.

The Use of the Lemon.

As a writer in the London "Lancet" remarks, few people know the value of lemon juice. A piece of lemon bound upon a corn will cure it in a few days; it should be renewed night and morning. A free use of lemon juice and sugar will always relieve a cough. Most people feel poorly in the spring, but if they would eat a lemon before breakfast every day for a week—with or without sugar, as they like—they would find it better than any medicine.

Lemon juice used according to this receipt will sometimes cure consumption: put a dozen lemons into cold water and slowly bring to a boil ; boil slowly until the lemons are soft, but not too soft, then squeeze until all the juice is extracted, add sugar to your taste, and drink. If they cause pain, or loosen the bowels too much, lessen the quantity and use only five or six a day until you are better, and then begin again with a dozen a day. After using five or six dozen, the patient will begin to gain flesh and enjoy food. Hold on to the lemons, and still use them very freely several weeks more.

Another use of lemons is for a refreshing drink in the summer, or in sickness at any time. Prepare as directed above, and add water and sugar. But in order to have this keep well, after boiling the lemons, squeeze them and strain carefully ; then to every half pint of juice add one pound of loaf or crushed sugar, boil and stir a few minutes more until the sugar is dissolved, skim carefully, and bottle. You will get more juice from the lemons by boiling them, and the preparation keeps better.

Rest Awhile.

Come apart and rest awhile, men of business; believe me, there is now and then a profitable venture in doing nothing at all. In the power to put business aside, and abiding now and then in a perfect quiet, things sometimes solve themselves, when we give them that advantage, which refuse to come clear for all trying. We all know how, by simply taking some perplexity into the deepest silence this side of death —a good night's sleep—we can do better sometimes than if we sat up and wrought at a task all night. When Matthew Murray of Leeds wanted to see his way through some sore perplexity in his inventions, and all other efforts were of no use, he rested day and night from all noise, and all effort, except the effort an active man has to keep himself quiet ; and then the thing he wanted would steal in and look at him, and light on him, and stay as birds used to light on the old hermits, no more afraid of them than of the trees under which they sat.

The following recipe is said to produce a good brown tone upon brass : The article, after having been thoroughly cleansed and freed from all traces of grease, then polished, is dipped for about half a minute in a cold solution of 10 grams of hypomanganate of potash, 50 grs. green vitriol, 5 grs. muriatic acid, and 1 litre water ; then rinse well and dry in fine soft sawdust. If a reddish cast is desired, dip the article into a second bath heated to 60 degs. C., of 10 grs. chromic acid, 10 grs. chloric acid, 10 grs. hypomanganate of potash, and 50 grs. blue vitriol (sulphate of copper) dissolved in 1 litre water. The latter mixture alone produces a light bronze. The article may afterward be heated in an oven, which operation, it is said, produces a very rich tone.

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CONSOLIDATION IN THE SOUTH-WEST.

THE event of the week in railroad and financial circles was the purchase by Mr. C. P. Huntington and Mr. Jay Gould, jointly, of a controlling interest in the St. Louis and San Francisco Railway Company, the announcement of which was made on Wednesday, creating a decided sensation on Wall street. In July, 1866, the Atlantic and Pacific Railroad Company was chartered by act of Congress to build a road from Springfield, Ill., by way of Albuquerque, over what is known as the 35th parallel route to the Pacific coast. The St. Louis and San Francisco company was organized in 1876 and has been interested with the Atchison, Topeka and Santa Fe company during the past two years pushing the construction of the 35th parallel line Westward from Albuquerque. Of late there has been considerable discussion and planning among the officers of the Southern Pacific, and of the companies interested in building the new line, concerning an arrangement for stopping the construction of the latter and making instead a connection with the Southern Pacific near the Colorado River. One-half of the stock of the Atlantic and Pacific company is owned by the St. Louis and San Francisco company, and the other half by the Atchison, Topeka and Santa Fe.

The purchase of a controlling interest in the St. Louis and San Francisco company by Mr. Gould, representing the Missouri Pacific, and Mr. Huntington, representing the Southern Pacific, opens the way for working in harmony the Atchison, Topeka and Santa Fe and the two roads most directly affected by the construction of the rival line, as originally proposed. The details of the transaction are not made known in full as yet, though the stock, bought through the banking house of J. & W. Seligman & Co., is said to have been of the three kinds, common, preferred and first preferred, and at the market rates for stock of the lower issues on the day of the sale, the purchase of a majority would indicate a transaction amounting perhaps to about $6,000,000. It is said that under this combination the Atlantic and Pacific Railroad will probably be extended to the border of California, and then connect with the Southern Pacific, about 250 miles remaining to be built to effect the connection at the Colorado River.

WHO IS RESPONSIBLE?

SOME time ago a lady called upon one of the famous portrait painters of Boston, to have her portrait painted. He gave her his terms to which she agreed and the time was arranged for her sittings. She went regularly, and for the first three sittings was very attentive to the wishes of the artist and he had strong hopes of making a picture worthy of his high reputation. At the fourth sitting, however, she began to criticise his work and make suggestions. At the remaining sittings she not alone criticised and made suggestions, but had one or more friends with her who claimed and exercised the same privilege. The artist being a man of great good sense, recognized the fact that he was employed by the lady, and was taking her money; and consequently she had a right to dictate her wishes in the matter, and so long as he remained in her employ he must obey.

It is a well defined maxim in business that the one who pays the money has the right to dictate to the employee, and the employee has no right to take the money unless he is willing to obey. This artist rigidly observed the suggestions of this lady and her friends, and the portrait was finished accordingly. At last it was finished and sent home. The lady and her friends were satisfied and the bill was paid. Some time afterwards a visitor, being shown the picture, noticed that the artist's name did not appear anywhere, and called the attention of the lady to this fact. This was a very serious omission as the reputation of the artist was such that his name was deemed needful to give character and value to the portrait. She therefore called at his studio, and informed him of the omission, at the same time requesting him to call at the house and place his name on the portrait, that people might know that it was his work. In the most polite manner, he reminded the lady that he had painted the portrait according to the suggestions of herself and her friends. He had not painted the portrait according to his own ideas. If he had done so he would gladly place his name on it, for then it would be his picture; but as he had painted it according to their suggestions it was not his picture but theirs, and he had no right to claim any honor attending it, and he certainly should not take any share of the disgrace, if any. He would cheerfully paint the names of the ladies whose suggestions he followed, on it, because it was really their work, but he would not paint his own on, because it was not his work.

The above incident, taken from the actual experience of a portrait painter, simply illustrates the position in which many men are placed. A man is made a superior officer of some railway. He makes the road his special study. The cars are lighted with candles or oil lamps. He knows that in case of an accident, it is a very easy matter for the light fancy-work in the cars to ignite from the upsetting of the lamp or the being brought in contact with the lighted candle. The cars are heated by either wood or coal stoves, which an accident may easily convert into a medium of total destruction of the car. No need of probable loss of life to enter into the calculation. It is quite sufficient for him to take into account only the proper care of property of which he has charge. He therefore wishes to adopt the safest way of lighting and heating cars, and is met by suggestions so forcibly put that they become objections. The parties making these objections have the power to retain or remove this officer, and because of this he is obliged to do as they suggest and not as his judgment dictates. For years the trains run back and forth and no accident occurs. The directors and stockholders are very much pleased with semi-annual dividends. The officer is retained because he has followed suggestions, but

all the time has rankling in his breast that he is not allowed to act according to his best judgment, and that some day, for no fault of his, he will stand before the world a condemned man. That day comes at last. The years of safety have come to an end, for two trains have collided, and in addition to the wreck of locomotives and cars, fire has been added by the upsetting of stoves and lamps, and what might have been saved from the wreck is quickly devoured by it, and a number of persons are roasted to death. The papers spread the news before the community, and write editorials on the management. The officer appointed to superintend may read some remarks reflecting on his management. But is it his management, or the management of others, to which his name is affixed? Now, the portrait painter informed the ladies who meddled with his work that they might put their names to it as their work, but he would not put his because he was merely the instrument in their hands.

Why not have this plan adopted in railroad management? If influential parties interfere with the man who is hired and supposed to know his business, let them do it with the knowledge that their names take the responsibility. Within a few days a notable accident has occurred on one of our largest railways. What the collision failed to do, fire accomplished. Valuable cars were consumed by it, and far more valuable lives were ended.

Who is to blame? It is an easy matter, as some of the officers and newspapers are doing, to place the blame on the brakeman of the express train for not going the proper distance to signal the approaching train. We do not propose to question the subject of his culpability in the matter, but to the editors of this paper, it seems very strange that a man of such small wages can be so responsible.

We have a printer's devil, and when an accident occurs in our office so as to prevent the subscribers receiving their paper on time, we have as much right to hold him responsible as a railroad management has to hold responsible for an accident, one of its lowest grade and poorest paid officials. We claim that the responsibility rests higher than these subordinate officers. It rests with those whose authority is such that they are able to have in use on the road all the appliances necessary for safety. If on the road in question the block system had been in use there would have been no collision. If the cars had been heated and lighted on the latest and most approved plan, there would not have been the roasting of many persons to death. The brakeman is not responsible for these things. Let those who are, place their names to the picture, but do not ask the poor brakeman to place his.

INCORPORATION.

THE Metropolitan Railway Company of Hamilton county, Ohio, has been incorporated with a capital of $1,000,000.

THE North Cook County Elevated Railway Company of Chicago has been incorporated. Capital stock $1,000,000. The incorporators are: Eugene B. Payne, Edgar A. Fellows and Eugene J. Fellows; also the South Cook County Elevated Railway Company; capital stock $1,000,000. Incorporators: William W. Riley, Frank A. Bartholomew, and H. A. Edwards.

A CERTIFICATE of incorporation has been filed at Columbus, Ohio, of the Chicago and Hocking Valley Railroad Company; capital stock $20,000,000. This is understood to be a consolidation of the Springfield Northern and the Dayton and Hocking Valley schemes. The former, as contemplated, is a line from Springfield to Fort Wayne. The two lines come together at Clifton, 3 miles from Springfield.

ARTICLES of incorporation have been filed with the Secretary of State of Illinois, of the Peoria and Illinois River Shore Line Railway Company; capital, $100,000. The proposed road will run from the North line of Peoria township to the South line of Hollis township, both in Peoria county. The principal office is to be in Peoria, and the corporators are: Gardner T. Barker, Edward S. Easton, Adolph Woolner, James W. Johnson, Jacob Schwabacher, John H. Francis, all of Peoria.

ARTICLES of association of the St. Louis and Carondelet Railway Company have been filed with the Secretary of State of Missouri, capital, $500,000. The length of the main line is to be about 11 miles; the length of the branch road is to be about 4 miles, making a total of about 15 miles. The road is to be broad-gauge. The incorporators are to be Edward F. Winslow, Jesse Seligman and James D. Fish of New York; C. W. Rogers, James Dunn, A. C. Douglas and John O'Day of St. Louis.

A CERTIFICATE of incorporation has been filed with the Secretary of State of Ohio, of the Spring Street and Mt. Vernon Avenue Street Railway Company of Columbus. The incorporators are Jesse W. Dunn, Colonel Orland Smith, R. C. Hoffman, G. C. Hoover, Wm. Felton and E. L. DeWitt. The proposed line commences at the intersection of Dennison avenue and Spring street, and extends thence to the corporation line. The capital stock of said company is to be $30,000 and the number of shares 600.

ARTICLES of incorporation of the St. Louis and Lake Erie Railroad Company were filed in the office of the Secretary of State of Illinois on the 23d inst. The capital stock of the company is $3,000,000, and it is proposed to construct a railroad from East St. Louis to connect with the Indianapolis, Decatur and Springfield Railway at a point near the East line of Mason county. The names and places of residence of the board of directors are: Geo. E. Leighton and J. Rogers Maxwell, New York; Benj. S. Henning, Brooklyn; and Edward F. Leonard and John W. Bunn, of Springfield, Ill. The principal office of the company will be at East St. Louis.

ARTICLES of incorporation of the Shawneetown and Paducah Railroad Company were filed in the office of the Secretary of State of Illinois, on the 18th inst. It is proposed to construct a road from Shawneetown to a point on the West bank of the Ohio river, opposite, or nearly opposite, the city of Paducah, Ky., with a branch road to the city of Metropolis, and also a branch to Eldorado. The principal business office is to be at Shawneetown, Ill. The capital stock is $1,500,000. The directors are: Richard W. Townshend, Shawneetown; Marshall M. Pool, Shawneetown; Fred H. Sellers, Bowlesville; Bluford Wilson, Springfield; W. P. Sloan, Golconda; I. M. Biggers, Paducah; Joseph W. Thompson, Paducah; Edward F. Winslow, New York; James H. Wilson, Boston; John C. Bocker, Golconda; E. F. Leonard, Springfield.

CONSTRUCTION.

IT is said in Durban that an American company has proposed to construct a railway from Delagoa Bay.

IT has been decided to extend the Jacksonville and Southeastern Railroad from Litchfield, Ills., to Centralia.

THE Chicago, Milwaukee and St. Paul Railway has reached Perry, Iowa, 137 miles from Marion, on the Council Bluffs Division.

THE Jefferson City and Little Rock is completed for a distance of 25 miles, and the grading is nearly finished to the Osage River.

THE Mexican National Railway is now operating regular passenger trains 25 miles west of Laredo, and track is laid several miles beyond.

A CONTRACT has been signed for the extension of the Houston and Texas Central Railway to a connection with the St. Louis and San Francisco road.

MESSRS. Hobart, Green & Co., have the award for the construction of the Atlantic and Pacific Railroad from Vinita to the Arkansas River, a distance of 50 miles.

MESSRS. MCMILLAN, proprietors of the Prince Edward Railway, have entered into a contract with a Pennsylvania iron company to deliver 45,000 tons of iron ore by December next.

THE road-bed for the additional double track which the Pennsylvania Railroad is building between Philadelphia and New York is being graded along the Northern outskirts of Philadelphia.

THE province of New Brunswick now has 984 miles of railway in operation, said to be a greater mileage, in proportion to population, than that of any other province, state, or coun-

try. New Brunswick has more miles of road than Portugal, Denmark, or Norway, and nearly as many as Holland, and more than either New Hampshire, Connecticut, or Vermont. There are eleven lines of road in the province, the Chatham Branch, 9 miles in length, being the shortest, and the Inter-colonial, 343 miles, the longest.

T. B. JONES & Co., have the contract for four miles of the Virginia Valley Railroad, near Midway. Masons, Gooch & Hoge have 35 carts and mules and 35 convicts on their Valley Railroad work.

THE double track on the Providence and Worcester Railroad has been completed as far as the signal between Plummers and Whitins, where a ledge has been encountered which makes the work go on slowly.

A MOVEMENT is on foot to construct a railroad between Port Jefferson and Patchogue. The residents along the proposed line have expressed their willingness to give the right of way. The cost of the labor is estimated at $5,000.

THE first cable car in Chicago was run on the South Side City Railway, on the 20th inst. The cars of that line will be regularly run by the new process in a few days. The cable was manufactured by Messrs. Poole & Hunt, of Baltimore.

AT a recent letting of the New Orleans and Northeastern Railroad in Cincinnati, Dr. Alexander W. Carpenter, formerly of Baltimore, was awarded 12 miles of grading and trestling in Mississippi ; also, together with J. H. Tobler, 13 miles on the same road in Louisiana.

A COLOSSAL railroad scheme has been projected in New Mexico, which contemplates the construction of 18 railroads in that Territory, all to be tributary to the Atchison, Topeka and Santa Fe Railroad. The capital stock of the company is $37,000,000, and it is claimed that $14,555,800 has been subscribed.

A CORPS of engineers is at work surveying the new locomotive railroad of the Pennsylvania Coal Company, between Pittston and Hawley, Pa. The new route will be 50 miles long, and connect with the company's Lackawaxen branch running between Hawley and Lackawaxen, and leased by the New York, Lake Erie and Western Railroad.

THE Mexican Central Railway has reached a point 43 miles from El Paso. The sand hills, which were considered the most difficult part of the route South, have been surmounted, and the road-bed has been completed for more than one-third of the distance to Chihuahua. The track is to be laid hereafter at the rate of two miles per day.

THE New York, West Shore and Buffalo Railroad is being built by the North River Construction Company, of which Gen. E. F. Winslow is president. The officers of the company are : Gen. Horace Porter, president ; Chas. Baird, vice-president ; Chas. Paine, general manager ; Walter Katte, engineer ; Alexander Taylor, secretary. The road is to be built from Weehawken to Buffalo, a distance 425 miles. Grading is now being done between Weehawken and Syracuse, a distance of 280 miles. It will be a double track road the whole distance. A 67 pound steel rail will be used. It is expected that the road will be in operation to Schenectady by the early fall.

ORGANIZATION.

THE St. John's and Suwanee Railroad Company has been organized to build a railroad from Melrose in Alachua county, Fla., through Gainesville to the Suwanee River, near Fort Fanning, a distance of sixty miles.

AT the annual meeting of the Portland and Ogdensburg Railway Company on the 17th inst., Samuel J. Anderson was elected president, with the following directors : Horatio N. Jose, Weston F. Miliken Joseph S. Richor, Joel Eastman, James P. Botler, Roswell M. Richardson, Willard W. Thomas, Jr., Samuel Waterhouse, and Francis Fessenden.

THE grantees of the Laconia and Lake Village (N. H.) Horse Railroad charter have organized with the choice of Albert G. Folsom, president; W. L. Melcher, treasurer and J. P. Hutchinson, clerk. The capital is fixed at $10,000, with the right to increase it to $30,000. The road will be two miles in length, and it is expected that ground will be broken early in the coming summer.

AT the annual meeting of the shareholders of the New York, Ontario and Western Railway Company, held on the 18th inst., the following persons were chosen directors for the ensuing year : Edward F. Winslow, Horace Porter, Charles F. Woerishoffer, Henry Villard, Henry Amy, Frederick Butterfield, John L. Nisbet, William Adams, Thomas C. Clark, Theodore Houston, Conrad N. Jordan, George B. Greer and Charles J. Canda.

THE Manhattan Storage and Warehouse Company, with a capital of $500,000, was organized on the 21st inst., the following named gentlemen being the incorporators: C. G. Francklyn, C. M. Fry, A. Iselin, R. T. Wilson, J. M. Bradley, W. H. Guion, W. Jay, A. P. Stokes, H. B. Hyde, J. J. McCook, J. A. Stewart, J. H. Rhoades, J. A. Bostwick, H. V. Newcomb, W. R. Travers, S. B. Funch, M. Bayard Cutting, R. B. Minturn, Fred. Sturges, C. D. Leverich, M. B. Brown, W. A. Wheelock, E. R. Bell, H. A. Hurlburt, H. E. Hawley. The object of the company is to erect absolutely fire-proof warehouses for the storage of merchandise and furniture.

CONSOLIDATION.

THE directors of the Louisville, Evansville and St. Louis Railway Company of Illinois and Indiana (formed by the consolidation of the Louisville, New Albany and St. Louis and the Evansville, Rockport and Eastern Railroads) are : Jonas B. French, F. B. White, Wm. J. Hart, James Wilson, of Springfield, Ill., Edward Cummings of Covington, Ky., Bennett H. Young, of Louisville, Ky., H. B. Housen of Saratoga, N. Y., Wm. Heilman and W. F. Nesbitt of Evansville, Ind. The officers are: John Goldtwaite, Boston, president; St. John Boyle, Louisville, vice president. John Lyman of New Albany, secretary; and George F. Evans of Boston, treasurer. The party of the first part has authority to build a road from New Albany, Ind., to Mt. Vernon, Ill. The party of the second part authority to construct a line from Evansville to Jasper and other points, with a branch to Rockport, Ind. Both roads are partially built. The capital stock is $6,000,000.

THE Lehigh and Hudson and Warwick Valley Railroad companies have been consolidated under the name of the Lehigh and Hudson Railroad Company. The directors of the consolidated company are : Grinnell Burt, president of the Warwick Valley; George R. Blanchard, vice president of the New York, Lake Erie and Western ; D. B. Halstead, president National Exchange Bank of New York ; Ex-Senator Thomas C. Platt; W. C. Sheldon, banker, of New York, John S. Martin, wholesale commission merchant, New York ; John H. Seed, wool-dealer, New York; Garrett A. Hobart, president of the New Jersey Senate; F. A. Potts, of New Jersey; Richard Wisner and George W. Sanford of Warwick, Orange Co.; Charles Scranton, of Oxford, N. J. ; and James B. Titman, of Sparta, N. J. The officers are: Grinnell Burt, president ; George R. Blanchard, vice president : D. D. Halstead, treasurer, and Thomas P. Fowler, secretary. The Warwick Valley Railroad extends from Graycourt, on the New York, Lake Erie and Western Railroad, to McAfee, Sussex county, N. J., and the Lehigh and Hudson from the latter point to Belvidere, on the Delaware River. The whole line, which will be completed early in the spring so that trains can run over its entire length, will be 63 miles long. Regular trains will run over the lower portion of it early in February. Large stores of freight are now awaiting transportation over the line. Along its line in Orange county, New York, and Sussex and Warren counties, New Jersey, there are numerous mines, and the new road will ship an immense tonnage of ore. The line passes through a continuous mineral belt and a rich agricultural district. The Warwick Valley part of it has been doing for years the largest milk business of any road of its length in the country.

Philadelphia and Reading Companies.

The following is the comparative statement of the Philadelphia and Reading Railroad Company and the Philadelphia and Reading Coal and Iron Company for the month of December, 1881 and 1880 :

	Profit for month. 1881.	1880.
Railroad traffic	$834,454.67	$511,655.09
Canal traffic	8,666.66	18,040.62
Steam colliers	43,708.24	27,071.49
Richmond coal barges	1,115.16	Loss 994.24
Total Railroad Co	$870,611.31	$,519,692.72
Reading Coal & Iron Co	66,931.23	20,766.93
Total of all	$937,542.54	$540,456.65
TONNAGE & PASSENGERS.	*Month.*	*Month.*
Tons of coal on railroad	760,344.17	518,231.03
Tons of merchandise	586,921.17	436,211.03
Passengers carried	926,608	751,316
Coal transp by stm colliers	47,034.13	41,990.05
TONS OF COAL MINED.		
By Coal and Iron Company	383,839.08	209,223.09
By tenants	129,503.10	112,071.07
Total mined	513,442.18	321,294.16

The cancelled war debt and internal improvement bonds which have been redeemed out of the proceeds of the four per cent loan created by the refunding bill enacted by the last legislature of Delaware amounted, on the 18th inst., to $772,000, viz: war bonds, $413,000; Junction and Breakwater Railroad bonds, $220,000 ; Breakwater and Frankfort Railroad bonds, $139,000. This leaves about $80,000 outstanding which have not been presented for payment.

New York Stock Exchange.

(Thursday's quotations follow money article.)

Closing Prices for the week ending Jan. 25.

	Th.19.	F.20.	Sat.21.	M. 23.	Tu.22.	W.25.
Adams Express	148	.....	147	148	.....	.....
Albany and Susq	.....	.....	.....	133	.....	.....
1st mortgage	.....	.....	.....	.....	.....	.....
2d mortgage	.....	.....	.....	.....	.....	.....
American Express	93½	94¼	.....	.....	94	.....
Atlantic & Pac. Tel.	.....	.....	.....	.....	.....	.....
Burl., C. R. & Nor.	.....	82¾	.....	.....	85	84
1st mortgage 5s	100	.....	.....	100	100	.....
Canada Southern	55½	55	55	53½	53¼	53½
1st mortgage guar	96¾	96½	95¾	.....	95	.....
Central of N. Jersey	96½	.....	96¼	94⅞	94⅛	95⅛
1st mort. 1890	.....	.....	.....	.....	.....	118⅜
7s, consol. ass	114¾	.....	.....	114¾	114¾	.....
7s, convertible ass.	.....	.....	.....	.....	.....	.....
7s, Income	104	103½	103	103¾	.....	.....
Adjustment	.....	.....	109½	.....	.....	107
Central Pacific	90¾	90¾	90¾	.....	87½	88¾
6s, gold	114¾	.....	114	.....	.....	114
1st M. (San Joaq)	.....	.....	.....	108	.....	.....
1st M. (Cal. & Or.)	.....	.....	.....	.....	.....	.....
Land grant 6s	106	.....	.....	.....	23½	.....
Chesapeake & Ohio	25	25	24	.....	.....	24
1s, series B	82¾	82	82¼	84½	.....	82
Chicago and Alton	.....	134	134	133¾	131¼	132½
Preferred	.....	.....	.....	.....	.....	.....
1st mortgage	.....	.....	.....	.....	.....	.....
Sinking Fund	115	.....	.....	.....	.....	.....
Chi,, Bur. & Quincy	137	136¾	136¾	135	134¾	135½
7s, Consol. 1903	.....	.....	.....	126¾	.....	.....
Chi., Mil. & St. Paul	109	108¾	108¼	106¾	106¾	108
Preferred	.....	.....	121¼	.....	.....	.....
1st mortgage, 8s	.....	.....	.....	.....	.....	.....
2d mort., 7 3-10s	.....	.....	.....	.....	.....	.....
7s, gold	.....	.....	.....	.....	.....	123½
1st M. (La. C. div)	118	.....	.....	118½	118½	.....
1st M. I. & M. div.)	.....	.....	.....	.....	.....	.....
1st.M. (I. & D. ext.)	.....	120	.....	.....	.....	.....
1st M. (H.&D. div.)	.....	.....	.....	.....	.....	.....
1st M.(C. & M.div.)	.....	.....	.....	.....	.....	.....
Consolidated S. F.	121¾	.....	120½	.....	.....	119¾
Chi. & Northwestern	127½	126¾	126⅝	125⅞	126¾	128½
Preferred	.....	139	.....	138¾	137¾	139
1st mortgage	.....	.....	.....	110¾	.....	.....
Sinking Fund 6s	.....	.....	.....	.....	.....	.....
Consolidated 7s	133	.....	134½	.....	.....	.....
Consol. Gold bo'ds	.....	125	.....	.....	.....	.....
Do. reg	.....	.....	.....	.....	.....	.....
Chi., R. Isl. & Pac.	133¾	133½	133½	.....	132½	132½
6s, 1917, c	126	125	126	125	.....	.....
Clev.,Col.,Cin.&Ind.	...	.....	80¼	79¾	80½	.....
1st mortgage	.....	.....	.....	.....	.....	.....
Clev. & Pittsburg gr.	.....	.....	137½	135	.....	134½
7s, Consolidated	.....	.....	.....	.....	.....	.....
4th mortgage	.....	.....	.....	.....	.....	.....
Col.,Chi.,& Ind. Cent.	20¾	20½	19½	19½	19⅜	19¼
1st mortgage	.....	.....	.....	.....	.....	.....
2d mortgage	.....	.....	.....	.....	.....	.....
Del. & Hud Canal.	107½	107	106⅞	106	106	106¾
Reg. 7s, 1891	.....	.....	113¾	.....	.....	.....
Reg. 7s, 1884	104	104	.....	.....	.....	.....
7s, 1894	.....	117½	.....	.....	.....	.....
Del.,Lack.& Western	125¾	125	124½	123½	123	124½
2d mortgage 7s	.....	.....	.....	.....	.....	.....
7s, Consol. 1907	.....	.....	.....	.....	.....	.....
Erie Railway	.....	.....	.....	.....	.....	.....
1st mortgage	.....	.....	.....	.....	.....	.....
2d mort. 5s, ext.	.....	.....	.....	.....	.....	.....
3d mortgage	.....	.....	.....	.....	.....	.....
4th mort. 5s, ext.	.....	.....	.....	.....	.....	.....
5th mortgage	.....	112	.....	.....	.....	.....
7s, Consol. gold	.....	.....	130	.....	129¾	.....
Great West. 1st mort	.....	.....	.....	...	.....	111
2d mortgage	.....	.....	.....	.....	.....	.....
Hannibal & St. Jo.	96¼	96¾	96⅛	95⅛	95⅛	95
Preferred	109⅜	108	108	107	107	107½
8s, Convertible	.....	.....	.....	.....	109	.....
Houston & Tex. Cen	.....	.....	.....	84	.....	83½
1st mortgage	.....	.....	111	.....	.....	.....
2d mortgage	.....	.....	.....	.....	.....	.....
Illinois Central	135¾	135½	135	133¼	132½	134¼
LakeShore&MichSo	114⅞	114⅞	114¼	112	111¾	112⅝
Consol. 7s	.....	.....	.....	.....	.....	.....
Consol. 7s, reg	.....	.....	.....	.....	.....	.....
2d Consolidated	.....	.....	.....	.....	.....	.....
Leh. & W. B. 7s, Con	.....	.....	.....	.....	.....	.....
Long Dock bonds	.....	.....	.....	.....	.....	.....
Louisville & Nash.	97½	96	95⅞	93¼	93⅛	95
7s, Consolidated	122¾	.....	.....	.....	.....	123
Manhattan	.....	49¾	50	50	52	55½
Met. Elevated	.....	86¾	.....	87	87	86
1st mortgage	100¼	101¼	100¾	101	101	101
Michigan Central	88¾	88¾	87⅞	85¾	85¾	85¾
7s, 1902	.....	125	.....	.....	.....	.....
M. S. & N. I. 1st, S. F	.....	.....	.....	.....	.....	.....
Morris & Essex	122½	122	122¼	122¾	122	121½
1st mortgage	.....	.....	.....	.....	.....	.....
2d mortgage	.....	.....	.....	.....	.....	.....
7s of 1871	.....	.....	.....	.....	.....	.....
7s, Convertible	.....	.....	.....	.....	.....	.....
7s, Consolidated	.....	.....	.....	.....	.....	.....
N.Y. Cen. & Hud. R.	134¾	134½	133¾	131¾	130¾	131⅛
6s,S. F. 1883	102¾	103	103	.....	.....	.....
6s, S. F., 1887	.....	.....	110¼	.....	110	.....
1st mortgage	.....	.....	134½	.....	.....	134½
1st mortgage, reg.	.....	.....	.....	.....	.....	.....
N. Y. Elevated	.....	105	.....	.....	105	107
1st mortgage	.....	.....	116½	116½	.....	116½
N. Y. & Harlem	.....	.....	.....	.....	.....	.....
Preferred	.....	.....	.....	.....	.....	.....
1st mortgage	.....	.....	.....	.....	.....	.....
1st mortgage, reg	.....	.....	.....	.....	.....	.....
N. Y., Lake Erie & W	41⅞	41⅞	41⅝	40	40	40⅜
Preferred	82¾	82	82	80	80¼	80½
2d Consolidated	99⅞	99½	99¼	98⅜	99	99¼
New 2d 5s fund	96½	.....	.....	.....	.....	.....
N.Y.,N.Hav'n&Hart	.....	171	171	170	171	.....
North Mo. 1st mort	120¾	.....	.....	.....	.....	.....
Northern Pacific	36½	.....	35½	34¾	34¾	35
Preferred	74⅞	75	74½	72¼	71⅞	72¾
Ohio & Mississippi	36¼	36	36⅛	34¼	35	34½
Preferred	.....	.....	.....	.....	.....	.....
2d mortgage	.....	.....	.....	.....	.....	.....
Consolidated 7s	.....	.....	115½	.....	.....	.....
Consol. S. Fund	.....	.....	117¾	.....	.....	.....
Pacific Mail S. S. Co	41¾	41¾	41	40⅝	41⅛	41⅜
Pacific R. R. of Mo.	.....	.....	.....	.....	.....	.....
1st mortgage	.....	.....	108½	108½	.....	109½
2d mortgage	.....	.....	.....	.....	.....	.....
Panama	.....	.....	.....	195	.....	195
Phila. & Reading	59¾	59¾	61¾	62¾	62⅝	63⅞
Pitts,Ft.W.&Chi.gtd	.....	134½	.....	.....	.....	.....
1st mortgage	.....	.....	.....	.....	.....	.....
2d mortgage	.....	.....	.....	.....	.....	.....
3d mortgage	.....	130	.....	.....	.....	.....
Pullman Palace Car	144	142¾	140	134	136	139
Quicksil'r Min'g Co	14	14	.....	.....	.....	.....
Preferred	62½	62	62	61¾	.....	60
St. Louis & San Fran	.....	40	40½	40	.....	45¾
Preferred	.....	58	57⅝	57¾	59	64¼
1st Preferred	102½	102¼	.....	102¼	102½	102½
St. L., Alt'n & T. H.	.....	43¾	42½	40	.....	.....
Preferred	.....	.....	.....	.....	.....	.....
1st mortgage	.....	.....	.....	.....	.....	.....
2d mort. pref	110	.....	100	.....	.....	.....
Income bonds	.....	.....	.....	.....	.....	.....
St. L., Iron Mt. & S	.....	.....	.....	.....	.....	.....
1st mortgage	.....	118	....	.....	117½	117¾
2d mortgage	109	109	.....	.....	.....	.....
Toledo and Wabash	.....	.....	.....	.....	.....	.....
1st mortgage	.....	.....	.....	.....	.....	.....
2d mortgage	.....	.....	.....	.....	.....	.....
7s, Consolidated	106	105	.....	105	.....	.....
St. Louis Division	.....	.....	.....	.....	.....	.....
Union Pacific	119⅜	118⅜	118½	117½	116⅝	117½
1st mortgage	.....	115¼	115¾	115½	.....	115
Land Grant 7s	.....	113½	.....	.....	.....	.....
Sinking Fund 8s	.....	.....	.....	.....	.....	.....
United States Ex	.....	.....	77	78	78	80
Wabash, St. L.& Pac	36¾	36¾	36¾	35	35	36¼
Preferred	69¾	69	68⅝	66⅝	66⅝	67¾
New mort. 7s	.....	.....	.....	.....	.....	106
Wells-Fargo Ex	.....	130½	.....	129	.....	.....
Western Pacific b'ds	.....	.....	.....	.....	110½	.....
Western Union Tel.	82	81¾	80⅝	79½	79½	80¼
7s., S. Fconv., 1900	.....	.....	118	.....	.....	.....
FEDERAL STOCKS:—						
U. S. 4s, 1907, reg	.....	.....	118¾	.....	118¾	.....
U. S. 4s, 1907, coup.	118¾	118½	.....	.....	.....	.....
U. S. 4½s, 1891, reg.	114½	115	.....	.....	.....	.....
U. S. 4½s, 1891, coup	114¾	.....	.....	.....	.....	.....
U. S. 5s, 1881, reg	.....	.....	.....	.....	.....	.....
U. S. 5s, cont'd at3½	102¼	102¾	.....	102¾	102⅝	102⅝
U. S. 6s cont'd at3½	.....	101	.....	.....	.....	.....
Dt. of Col. 3-65s, reg	.....	.....	.....	.....	.....	.....
Dt. of Col.3-65s,coup	.....	.....	.....	.....	.....	.....

Boston Stock Exchange.

Prices for the Week Ending Jan. 25.

	Th.19.	F. 20.	Sat.21.	M.23.	Tu.24.	W.25
Atch.,Top.&San.Fe.	95¾	94⅝	94¾	93⅝	92	91⅞
1st mortgage	.....	.....	120	.....	.....	.....
2d mortgage	.....	.....	.....	.....	.....	.....
Land Grant 7s	.....	116¾	116¼	116½	.....	.....
Boston & Albany	166	165½	.....	166	164	166
7s reg	.....	.....	.....	.....	.....	.....
Boston and Lowell	.....	103	.....	.....	102	103
Boston & Maine	146¼	.....	.....	145	145½	.....
Boston& Providence	.....	163	.....	.....	162	162
Bos'n,Hart.& Erie7s	68	....	66¾	65½	64¾	65⅜
Burl.& Mo.R.L.G.7s	.....	.....	.....	.....	.....	.....
Burl.& Mo.R.in Neb	.....	.....	.....	.....	.....	.....
6s, exempt	.....	.....	.....	.....	.....	.....
4s	.....	.....	.....	.....	.....	.....
Chi.,Burl. & Quincy	137¼	136⅝	137	136	134¼	135
7s	.....	.....	.....	.....	.....	.....
Cin.,Sand&Clev($50)	.....	27¾	27¼	26	26¼	25
Concord ($50)	.....	.....	.....	.....	.....	.....
Connecticut River	.....	.....	.....	.....	.....	165
Eastern	36¼	35½	34	35	34¼	34
New 4½ Bonds	.....	107½	.....	.....	.....	.....
Fitchburg	133	....	.....	.....	134¼	.....
N.Y. & New England	.....	61¾	.....	61¾	60	59¾
7s	117½	.....	.....	.....	.....	.....
Northern N. H	.....	.....	.....	.....	.....	109
Norwich&Worcester	155	.....	.....	.....	.....	.....
Ogden & Lake Cham	.....	.....	.....	.....	.....	.....
Preferred	.....	.....	.....	.....	.....	.....
Old Colony	125	125¾	.....	125¾	127	.....
Ph.,Wil.&Balt.($50)	62¾	.....	.....	.....	.....	.....
Portl'd,Saco & Ports	.....	.....	.....	.....	.....	.....
Pueblo & Ark Val	.....	.....	.....	.....	.....	.....
7s	.....	.....	116¾	.....	.....	.....
Pullman Palace Car	144½	.....	141	134	136	137
Union Pacific	.....	118¾	.....	118	.....	117
6s	.....	.....	.....	.....	.....	.....
Land Grant 7s	.....	.....	.....	.....	.....	.....
Sinking Fund 8s	...	120¼	120¼	120	.....	.....
Vermont & Canada	.....	.....	.....	.....	.....	.....
Vermont & Mass	.....	.....	.....	.....	.....	134
Worcester & Nashua	58¾	.....	.....	.....	.....	58¼
Cambridge (Horse)	.....	.....	.....	.....	.....	.....
Metropolitan(Horse)	77	77	.....	75½	.....	.....
Middlesex (Horse)	.....	.....	.....	.....	.....	.....
Cal.&Hecla Min'gCo	243¾	243	.....	.....	.....	245½
Quincy	54¾	53¾	52¼	51¾	49¾	52½

Philadelphia Stock Exchange.

Closing Prices for the Week Ending Jan. 25.

	W.18.	Th.19.	F.20.	Sat.21.	M.23.	Tu.24
Allegh'y Val. 7 3-10s	.....	.....	.....	.....	120	120
7s, Income	.....	.....	57	.....	.....	.....
Camd'n & Am. 6s, '83	.....	.....	.....	.....	.....	.....
6s, 1889	.....	.....	.....	.....	.....	.....
Mort. 6s, 1889	114	.....	.....	.....	114	113¾
Camden & Atlantic	25	.....	.....	.....	.....	.....
Preferred	.....	.....	.....	.....	.....	.....
1st mortgage	.....	.....	.....	.....	.....	.....
2d mortgage	.....	.....	.....	.....	.....	.....
Catawissa	18	.....	.....	.....	.....	.....
Preferred	.....	.....	.....	.....	.....	53¼
7s, new	.....	.....	.....	.....	.....	.....
Del. & Bound Brook	.....	.....	.....	.....	.....	.....
7s	.....	.....	.....	.....	.....	.....
Elmira&Williamsp't	.....	.....	.....	.....	.....	.....
Preferred	.....	.....	.....	.....	.....	.....
Hunt. & B. Top Mt.	.....	.....	.....	.....	.....	.....
Preferred	29¼	.....	.....	28⅞	29	.....
2d mortgage	.....	.....	.....	.....	.....	.....
Lehigh Navigation	43⅝	.....	43	43¼	42½	42½
6s, 1884	105½	.....	105½	105½	.....	104¾
Gold Loan	111	111	.....	.....	.....	111
Railroad Loan	.....	.....	.....	.....	.....	.....
Conv. Gold Loan	.....	.....	112½	.....	.....	.....
Consol. Mort, 7s	.....	117	.....	.....	116¾	116¾
Lehigh Valley	62½	62½	62½	62½	62¼	62½
1st mort. 6s, coup	.....	.....	.....	.....	.....	120
1st mort. 6s, reg	.....	.....	.....	.....	.....	.....
2d mort. 7s	.....	.....	.....	134	134	.....
Consol mort. 6s	.....	.....	.....	.....	.....	.....
Consol.mtg.6s,reg	...	118	.....	.....	.....	.....
Little Schuylkill	.....	.....	.....	.....	.....	.....
Minehill&Sch.Hav'n	60	60	.....	60	.....	.....
North Pennsylvania	60	60¼	60½	61	62½	.....
1st mortgage 6s	.....	.....	.....	.....	.....	.....
2d mortgage 7s	.....	.....	.....	.....	.....	.....
Genl. mtg.7s,coup	.....	.....	.....	.....	.....	.....
Genl. mtg. 7s, reg	.....	.....	.....	.....	.....	.....
Northern Central	50½	.....	50¼	50½	.....	.....
5s	96½	.....	.....	.....	.....	.....
Northern Pacific	36½	36⅝	36⅛	35¾	35	34⅝
Preferred	75⅝	74⅞	75	74¼	72¼	71⅜
Pennsylvania R. R.	62¼	62⅜	62½	62½	61½	61⅜
1st mortgage	.....	.....	.....	.....	.....	.....
Gen'l mort	120⅜	.....	.....	.....	.....	.....
Gen'l mort reg.	.....	.....	.....	.....	.....	.....
Consol. mort. 6s	.....	.....	117	.....	.....	.....
Consol. mort. reg	.....	.....	.....	.....	.....	.....
Pa.State 6s 2d series	.....	.....	.....	.....	.....	.....
do 3d series	.....	.....	.....	.....	100	.....
do 5s, new	.....	116	.....	.....	.....	.....
do 3s,	.....	.....	.....	.....	.....	.....
Phila. & Reading	29⅞	30	31⅛	32¼	31¼	31¼
1st mortgage 6s	.....	.....	.....	.....	.....	.....
7s of 1893	.....	.....	.....	.....	.....	.....
7s, new convert	.....	.....	.....	.....	.....	.....
Consol. mort. 7s	.....	.....	125½	.....	125½	.....
Consol. mort. reg.	.....	.....	.....	.....	.....	.....
Gen'l mort. 6s	98⅝	98¾	98¾	98¾	98⅝	98½
Philadelphia & Erie	.....	.....	.....	.....	.....	19
1st mortgage 5s	105⅜	.....	.....	.....	.....	.....
2d mortgage 7s	114	.....	114	.....	.....	.....
Pittsb.,Cin.&St.L.7s	.....	.....	122½	.....	.....	123
Pitts.,Titusv.&Buff.	20½	20⅝	20¾	20½	19⅝	19¼
7s	.....	.....	.....	.....	.....	.....
Schuylkill Navi't'n	.....	.....	.....	.....	.....	.....
Preferred	.....	.....	.....	.....	.....	.....
6s, 1872	.....	.....	.....	.....	.....	.....
6s, 1882	89	90	....	89	.....	88¾
United Co. of N. J.	184	184½	.....	184½	184¼	184¼
Hestonville, (Horse)	.....	.....	.....	.....	.....	.....
Chestnut&Wal.(do)	.....	.....	.....	.....	.....	.....
Green & Coates (do)	.....	.....	.....	.....	.....	.....

Baltimore Stock Exchange.

Closing Prices for the Week Ending Jan. 17.

	W. 18.	Th. 19.	F. 20.	Sat. 21.	M. 23.	Tu. 24
Baltimore & Ohio..	195	195¼	.....	.....	.....	.....
6s, 1880.....	.....	.....	.....	.....	.....	.....
6s, 1885.....	.....	.....	.....	.....	.....	.....
Central Ohio ($50)..	.....	.....	.....	.....	.....	.....
1st mortgago.....	.....	111	.....	.....	.....	.....
Marietta & Cincin'ti	.....	.....	.....	.....	.....	.....
1st mortgage, 7s..	.....	.....	.....	123¾	123	125
2d mortgage, 7s..	105¼	105¼	105¾	105¾	105⅛	105⅛
3d mortgage, 8s..	.....	59	58¾	58¾	58⅛	58⅛
Northern Cen. ($50)	.....	.....	50¾	.....	.....	.....
2d mort., 6s 1885..	.....	...	.....	.....	.....	.....
3d mort., 6s, 1900.	.....	.....	.....	.....	.....	.....
6s, 1900, gold.....	114	....	.....	.....	114	114
6s, 1904, gold.....	.....	.....	.....	.....	.....	.....
Orange & Alex. 1st.	.....	....	.....	.....	.....	.....
2d mortgage, 6s...	.....	.....	.....	.....	.....	.....
3d mortgage, 8s...	.....	.....	.....	.....	.....	.....
4th mortgage, 8s..	.....	.....	.....	.....	.....	.....
O., Alex. & Manas's 7s	.....	.....	.....	.....	.....	.....
Pitts. & Connellsv. 7s	.....	.....	.....	.....	.....	.....
Virginia 6s, Consol.	63½	63½	63	.....	63¾	65
Consol. coupons..	71⅜	69½	61¾	63	64	63¾
10-40 bonds.....	.....	39½	40¼	40	40	43
Def'd Certificates.	.....	16½	16½	16½	.....	.....
Western Maryland..	.....	.....	.....	.....	14⅞	.....
1st M., end. by Balt	.....	.....	.....	.....	.....	.....
2d M., do .	.....	.....	.....	.....	.....	.....
3d M., do .	.....	.....	.....	.....	.....	.....
1st M., unendors'd	.....	.....	.....	.....	.....	.....
2d M., end. WashCo	.....	.....	.....	.....	.....	.....
2d M., preferred..	.....	.....	.....	.....	106½	.....
City Passenger R R.	.....	.....	.....	.....	.....	.....

London Stock Exchange.

	Closing Prices— Dec. 30.		Jan. 6.	
Baltimore & Ohio (sterling).....	114	116	114	116
Cairo & Viencennes com. stock	36	38	36	38
Do. preferred 5 per cent.....	90	92	90	92
Central of N. J. $100 share.....	93	98	93	98
Do. Cons. Mortgage.....	115	117	115	117
Do. Adjustment Bonds.....	104	109	104	109
Do. Income Bonds.....	104	107	104	107
Det., G'd Haven & Mil. Equip bds	112	114	112	114
Do. Con. M. 5p.c., till '83 aft'r 6p.c	110	112	110	112
Illinois Central $100 shares.....	134½	135½	132	133
Lehigh Valley Cons. mortgage..	115	119	115	119
Louisville & Nashville mort 6s.	105	107	105	107
Do. Sink. Fund bds (S. & N. Ala)	103	105	103	105
Do. capital stock $100 shares.	105	107	103	105
N. Y. Cent. & Hud. R. mt. bds..	134	137	134	137
Do. $100 shares.....	135	136	132	134
Do mort. bonds (stg.).....	123	125	120	122
N. Y., Lake Erie & West., $100 shs	42½	43	40	40½
Do. 6 p. c. pref. $100 shares ..	87	89	84	86
Do. 1st Con. Mort. bds (Erie) .	131	13[illegible]	131	133
Do. do. Funded Coupon bds.	127	129	127	129
Do. 2d Consol Mort. bonds...	102	104	100	102
Do. do. Funded Coupon bds..	97	100	97	100
Do. Gold Income bonds.....	95	100	95	100
N. Y., Pa. & Ohio 1st mort. bonds.	50	51	45	46
Do. Prior Lien bds (sterling)..	104	108	104	108
Pennsylvania, $50 shares.....	63	64	62	63
Do. Con. Sink Fund Mort....	119	121	118	122
Philadelphia & Reading $50 shs	35	36	32	33¼
General Consol Mortgage.....	116	118	116	118
Do. Improvement Mortgage..	103	105	103	105
Do. Gen. Mtg. '74, ex-def'd coup.	99½	100½	100	101
Do. Scrip for the 6 def. ½ coup.	95	100	92	97
Pittsb., Ft. W. & Chi. Eq. bds....	105	109	105	109
St. L. Bridge 1st mort. gold b'd.	126	128	126	128
Do. 1st pref. stock.....	102	104	102	104
Union Pa. Land Grant 1st. mtg.	115	119	115	119

AMERICAN RAILROAD JOURNAL.

Financial and Commercial Review.

THURSDAY EVENING, Jan. 26, 1882.

THE rate for call loans on stocks during the forenoon was 4@5 per cent, and on United States bonds 2@3 per cent. Time money on stocks was loaned for four months at 5 per cent. Prime mercantile paper was 5@5½ per cent. In the afternoon the rate was 4 per cent, but in the last hour fell to 3 per cent, and at the close stood at 3½ per cent.

In the foreign exchange market, short exchange was about steady at 4.88½@.489, while long drafts were rather heavy at 4.83¾@4.84¼, the preferred rates of the prime drawers being 4.85 and 5.89¼. Cable transfers are 4.89¾@4.90. and prime commercial bills 4.82@¼. The market for continental bills is firm, with actual rates as follows: francs, 5.13¾@5.14⅛ and 5.19⅜@5.20; marks, 94⅝@¾ and 95⅜@¾ and guilders, 40 and 40⅛.

At the special meeting of the stockholders and directors of the Chicago and Grand Trunk Railroad Co., held in Chicago on the 18th inst., it was decided to prepare a second mortgage of $6,000,000, secured by bonds running forty years, with interest at 5 per cent per annum, payable semi-annually. At the meeting $6,000,000 out of $6,600,000 stock was represented. The money obtained by the mortgage will be used in paying off a $2,000,000 mortgage at 5 per cent and in providing new rolling stock and a superior equipment. Seventy miles of track will be laid with steel rails, thus making an all-steel track. Forty engines and 1,000 freight cars will be added to the rolling stock before August next.

The Comptroller of the Currency has authorized the following National Banks to begin business: Hudson National Bank, of Hudson, Massachusetts, capital, $100,000; Merchants' National Bank, of Dunkirk, New York, $100,000; Springfield National Bank, of Springfield, Ohio, $100,000.

The statement of the Philadelphia and Reading Companies for the month of December, 1881, being the first month of the current fiscal year, shows that the total receipts of the Railroad Co. were $1,850,888.73, and the expenses, excluding rentals and interest, $980,277.42, leaving a profit of $870,611.31. The gross receipts of the Coal and Iron Co. were $1,380,788.55, and the expenses, including interest, $1,313,857.32, making the profit for the month $66,931.23. The profit of both companies for the month was $937,542.54, a gain of $397,085.89 as compared with December, 1880.

The receipts of the Staten Island Railroad and Ferry Co. for the year 1881 were $304,000, and the expenses (including $50,000 for a new ferry boat) $224,000, leaving a balance of $80,000. Excluding the boat there is a surplus of $130,000; deducting from which $21,000 for interest on the bonded debt, leaves a surplus for the year of $109,000, which, on a capital of $210,000, shows a profit of 50 per cent per annum.

From the report of the Railroad Commissioners of Minneasota we learn that for the year ending June 30, 1881, the number of miles operated in the State was 3,140, an increase of 147 miles over the preceding year. The gross earnings during the same time were $13,921,339, an increase of $3,146,513; and the net earnings, $5,580,923, an increase of $1,110,498. The number of acres sold was 381,587, a decrease from the former year of 125,364, and the receipts therefrom $1,333,564, a decrease of $41,804. The sales of lands is the only item of business that shows a decrease. This was largely compensated for by sales in the last half of 1881, the Manitoba Railway Company alone selling 47,695 acres and receiving in cash $87,983 in the six months ending December 31, 1881. All the railroads of the State have been greatly improved by relaying tracks with steel rails and new iron and by other betterments. During the year there were 178 miles of new railroad completed in the State, and nearly as much is graded or under way. The total number of miles in operation December 31, 1881, was 3,278. The State revenue derived from railroad taxes for the calendar year 1880 was $323,443, an increase of $74,000 over 1879. For the year 1881 it will approach $400,000. This tax will in the near future be sufficient to pay the interest on the State debt, including the lately refunded State railroad bonds, and also to pay the ordinary executive, judicial and legislative expenses of the State Government.

The gross earnings of the Richmond and Danville Railroad for the quarter ending December 31, 1881, (including $15,587.45 from interest on investments) were $1,130,613.52, the expenses $590,211.63, and the net earnings $540,401.89; from which deduct interest on bonded and floating debt, $87,110.34; rent of Piedmont Railroad, $15,000; interest Northwestern North Carolina Railroad, $195; rental North Carolina Railroad, $65,000; rental Atlanta and Charlotte Air Line Railroad $116,374.98; rental Richmond and York River Railroad, $21,462.48—total, $305,142.80, leaving a surplus of $235,259.09.

The payment of the railroad bonded debt of Minnesota having been completed by the issue of new bonds, the old bonds have been destroyed. Out of 2,275 old bonds 2,152 were redeemed by the issue of 3,815 new bonds and the payment of about $300,000 cash. The whole amount of bonds and money paid out in redemption of old bonds, settlement of claims against the railroads and cash payment of coupons is $413,000. The State has invested in the new bonds $1,154,000. This aggregate covers half the amount of the old bonds with interest for twenty-three years.

The bonded indebtedness of Yuba county, Cal., amounting to $131,000 has been refunded from 8 to 6 per cent interest, payable in 20 years.

The valuation of New Jersey in 1881 amounted $527,455.222, which is an increase of nearly nine million over 1880, and is higher than the valuation of 1879, but lower than the valuation of any other year except those mentioned since 1869.

The president of the Denver and Rio Grande Railway Company has issued a circular in which he states that the finances of his company have always been kept entirely distinct from those of the Mexican companies, that no money is owing it by either of these companies, and that it does not owe any money to them or either of them. The entire unfunded liabilities of the Denver and Rio Grande Railway Co., including January coupons and dividends and back coupons and dividends not yet demanded, are $2,224,015; against which the company has on hand, in cash, authorized London Exchange and other equivalent of cash, $2,000,865; or including mail pay due by the United States Government to November 30, $2,229,834. It owes n money to any bank, wherever situated except $125,000 to a New York bank, which bears 6 per cent interest, and is due in April. The same bank has now on deposit nearly fourfold that amount to the credit of this company. Besides the above cash and equivalent the company has other resources amounting to $3,803,145, applicable to the completion of its lines (on which a large amount of work has already been done) and of which sum it is esti

mated only $1,927,800 will be required to complete the Utah connection.

From a return recently published we learn that the street and road tramways in the United Kingdom have, during the six years that they have been in use in that country, shows a remarkable development. On the 30th June, 1881, they had an authorized share capital of £7,602,509, of which £5,096,030 is paid up, whereas on June 30, 1876, the authorized share capital was only £3,141,700, of which £1,702,879 was paid up. Adding in the sum raised by loans and debentures, the total authorized capital now amounts to £10,906,575. The total amount expended is £6,939,838. The length of miles open for traffic has risen from 158 in 1876 to 483 in 1881. The companies own 15,220 horses now as compared with 9,222 in 1878, 40 locomotive engines now against 14 in 1878, and 2,045 cars now against 1,124 in 1878. The number of passengers carried has increased from 146,001,223 in 1878 to 205,623,510 in 1881; the gross receipts from £1,145,465 to £1,576,301, the working expenses from £868,315 to £1,239,896, and the net receipts from £230,956 to £336,405.

The receipts into the State Treasury of California for the year ending June 30, 1881, (including $1,078,305.37 balance from the previous year) were $6,365,608.59, and the expenditures $5,385,118.82, leaving a balance in the treasury June 30, 1881, of $980,489.77.

Attention is called to the yearly statement of the Liverpool and London and Globe Insurance Company, which, among other features, shows assets of nearly $5,000,000 in the hands of United States Trustees. Real estate furnishes one-fifth of this amount.

The closing quotations on Thursday were: Adams Express, 145@149; American Express, 93@94; Chicago, Burlington and Quincy, 134½@135; Canada Southern, 53½@53¾; Chicago and Northwestern, 127½@127⅝; do. pref., 139@139⅜; Chicago and Alton, 133¾@134; Central of New Jersey, 94⅞@95; Central Pacific, 88⅞@89¼; Chicago, Milwaukee and St. Paul, 107½@107⅝; Cleveland, Columbus, Cincinnati and Indianapolis, 79½@80½; Columbus, Chicago and Indiana Central, 19½@19⅝; Delaware and Hudson Canal, 106½@106¾; Delaware, Lackawanna and Western, 124⅛@124¼; Hannibal and St. Joseph, 94⅜@95; do. pref., 107½@108; Illinois Central, 133½@134; Lake Erie and Western, 34@34½; Lake Shore and Michigan Southern, 112@112⅛; Metropolitan Elevated, 87@88; Manhattan Elevated, 54½@55; Michigan Central, 86⅜@86½; New York Elevated, 106@110; New York, Lake Erie and Western, 40¼@40⅜; New York Central and Hudson River, 130¾@130⅞; Northern Pacific, 35@35½; do. pref., 72⅝@73; Ohio and Mississippi, 34@@35; Panama, —@195; Pacific Mail, 41¼@41½; Texas and Pacific, 47@48; Union Pacific, 117⅛@117⅜; United States Express, 78@79½; Western Union Telegraph, 80½@80⅝; Wabash, St. Louis and Pacific, 36@36¼; do. pref., 67¼@68; Wells-Fargo Express, 127@130.

The following quotations of sales of Railway and other securities, for the week, are in addition to those given elsewhere in our columns:

New York.—Atlantic and Pacific 1st, 97; American Dock and Imp., Co., 99⅛; Atchison, Colorado and Pacific 1st, 97; Boston and New York Air Line pref., 63; Buffalo and Erie 7s new, 124; Cairo and Fulton 1st, 110½; Central Pacific, State Aid bonds, 102½; Chicago, St. Paul and Minneapolis 1st, 111½: Chesapeake and Ohio 1st pref., 34; do. 2d pref., 25; do. 1st, Series A, 103½; do. cur. int., 50½; Chicago, St. Paul, Minneapolis and Omaha, 35⅛; do. pref., 100½; do. consol., 99¾, Central Iowa, 35⅛; do. 1st, 114; Chicago, St. Louis and New Orleans, 81½; Chicago and Eastern Illinois, 113; do. 1st, 104; Chicago and Northwestern S. F. 5s, 100½; Cleveland, Columbus, Cincinnati and Indiana consol., 124; Columbus, Chicago and Indiana Central Income, 72½; do. 1st, Trust Co. certif. ass. sup., 122; Chicago, Milwaukee and St. Paul 1st, La C. and Dav. div. 94; do. 1st, S. M. div., 104; do. Chicago and Pacific W. div., 95½; Denver and Rio Grande, 70½: do. 1st, 114; do. 1st consol., 104; Danbury and Norwalk, 65: Delaware and Hudson 1st, Penn. div., 128; East Tennessee, Virginia and Georgia, 14⅝; do. pref., 24⅝; do. inc., 56; do. 5s, 79½; Evansville and Terre Haute 1st, 80; do. 1st, 97; Green Bay, Winona and St. Peter, 14; do. 1st, 95; Gulf, Colorado and Santa Fe 1st, 107¼; Houston and Texas Central Gen'l mort., 99½; Indiana, Bloomington and Western, 46; do. 1st, 89½; International and Gt. Northern 1st, 107; Indianapolis, Decatur and Springfield 1st, 105; Illinois and Southern Iowa 1st, 102; Kansas Pacific 1st consol., 103⅞; do. 6s, Denver div. ass., 108½; Keokuk and Des Moines pref., 49; Lehigh and Wilkesbarre consol. ass., 108; Louisville, New Albany and Chicago, 75; Long Island, 50¾; Lake Erie and Western, 34; Mobile and Ohio, 33; do. 1st deben., 111½; do. 1st mort., 96; Marietta and Cincinnati 2d pref., 7; Manhattan Beach, 25; Minneapolis and St. Louis, 20; do. pref., 60; do. 1st, 115; do. Iowa Ext. 1st, 111; Missouri, Kansas and Texas, 36⅜; do. consol. 7s, 106⅞; do. 2d, 70; do. gen'l mort. 6s, 82¾; Missouri Pacific, 102¼; do. 1st consol.; 103½; do. 3d, 112; Memphis and Charleston, 79⅞; Milwaukee, Lake Shore and Western, 47½; Metropolitan Elevated 2d, 100¼; Michigan Central 5s, 97¾; New York, Ontario and Western, 26⅛; Norfolk and Western pref., 55; do. Gen'l mort., 102⅞; Nashville, Chattanooga and St. Louis, 83; do. 1st, 115; New Orleans Pacific 1st, 90; Northern Pacific 1st, 97; New York City and Northern Gen'l mort., 81; Ohio Central, 24; do. 1st, 97¾; do. inc., 45; Oregon and Transp., 65; Oregon Railway and Nav., 138; do. 1st, 106; Ohio and Mississippi Springfield div. 1st, 120; Ohio Southern 1st, 90; Peoria, Decatur and Evansville, 33¾; do. 1st, 103; Pittsburg, Bradford and Buffalo 1st, 93; Quincy and Toledo 1st, 106; Rome, Watertown and Ogdensburg, 21; do. 1st consol., 91; Richmond and Allegany, 28¾; do. 1st, 103; Richmond and Danville, 202; do. W. P., 180; do. 1st, 105; Rochester and Pittsburg, 27¼; Rensselaer and Saratoga, 139; do. 1st, 135; Syracuse, Binghamton and New York 1st, 123½; St. Paul and Sioux City 1st, 110; St. Louis, Kansas City and Northern, Omaha div. 1st, 113½; St. Paul Minneapolis and Manitoba, 109; do. 1st, 109½; do. Dakota ext., 106; St. Paul and Duluth, 27; do. pref., 68; South Carolina 1st, 99½; Southern Pacific of California 1st, 104; South Pacific 1st, 103½; St. Louis and San Francisco 2d, Class B, 92; do. C, 91; do. Equip., 97½; St. Louis and Iron Mountain 1st, pref. inc., 97; do. Arkansas Branch 1st, 110; Toledo Delphos and Burlington, 13; do. inc., 15; Texas and Pacific, 48; do. inc. L. G., 72⅛; Rio Grande div. 1st, 87⅞; Toledo, Peoria and Western 1st, 111⅝; Texas Central S. F. 7s, 107; Wabash, St. Louis and Pacific, Gen'l mort. 6s, 89; do. Iowa div. 6s, 93⅜; do. Chicago div., 85; Alabama, Class A, 81¼; do. C, 82; Arkansas 7s, L. R. & Ft. Smith, 27; do. 6s, fund., 39¼; Missouri 6s, 1888, 108½; do. 1887, 108½; do. 1889'-90, 110½; North Carolina S. T., 3d class, 6; do. 4s, consol. 84½; South Carolina 6s, non-fund., 7; Tennessee 6s, old, 75; do. new, 75; Am. Dist. Tel., 35; Sutro Tunnel, ⅞; Consol. Coal, 32; Colorado Coal and Iron, 41½; do. 1st, 88; Maryland Coal, 26; Deadwood, 5½; Homestake, 16½; Mariposa, 2; do. pref., 2½; Ontario, 35; Robinson, 3¾; Standard, 16.

Boston.—Atlantic and Pacific 6s, 95¾; do. Income 6s, 24¼; Atchison Income 8s, 102½; Boston Land, 8⅛; Boston Water Power, 6⅛; Burlington and Missouri River in Nebraska 6s, non-exempt, 104; Boston, Revere Beach and Lynn, 122; Connotton Valley, 18; do. 7s, 90; do. 7s, Straitsville div., 75; Central of Iowa, 32⅛; Chicago, Iowa and Nebraska, 148; Chicago, Burlington and Quincy, Denver ext., 87; Eastern Illinois R. R., 113½; Flint and Pere Marquette, 22; do. pref., 93; Fort Scott Branch 7s, 111½; Kansas City, St. Joseph and Council Bluffs 7s, 118; Kansas City, Fort Scott and Gulf, 78; do. pref., 125; do. 7s, 111½; Kansas City Lawrence and Southern 5s, 105½; Little Rock, Missouri River and Texas, 89; Little Rock and Fort Smith, 63½; do. 7s, 112; Marquette, Houghton and Ontonagon pref., 117½; do. 6s, 103; Mexican Central 7s, 85; do. blocks, new, 91; New York and New England 6s, 107; New Mexico and Southern Pacific 7s, 115⅛; Northern Pacific 6s, 98¾; Rutland, 4½; do. pref., 26⅜; do. 6s, 101⅛; Sonora R. R., 20; do. 7s, 87; do. block, No. 4, 110; do. No. 3, 175; Summit, 13½; Toledo, Delphos and Burlington, 6⅞; do. S. E. div. 6s, 65; Wisconsin Central, 19¾; do. 2d Series, 48; Allouez Mining Co., 3¼; Brunswick Antimony, 15; Copper Falls, 3⅞; Franklin, 14½; Huron, 3¼; Harshaw, 3½; Minnesota, 50; National, 2⅞; Napa consol. Quicksilver, 7; Osceola, 34; Pewabic, 14½; Phœnix, 2½; Ridge, 4; Silver Islet, 20; Sullivan, 1⅞; Star, 1.

Philadelphia.—American Steamship Co. 6s, 107; Central Transportation, 35; Chesapeake and Delaware Canal 6s, 89; Harrisburg and Lancaster 6s, 102¾; Nesquehoning Valley, 57½; New Orleans Pacific 6s, 91½; Pittsburg 7s, W. L., 126; do. 7s, Av., 1885, 107; Philadelphia, Wilmington and Baltimore 4s, 96; Philadelphia and Reading scrip, 82¾; Pennsylvania Canal 6s, 99½; Pennsylvania Company 4½s, 98½; Shamokin Valley and Pottsville 7s, 116; Shamokin, Hazleton and Wilkesbarre 5s, 97; Schuylkill Nav. 6s, 1895, 63; Texas and Pacific 6s, 107; do. consol. mort. 6s, 99¾; West Jersey 6s, 117; do. 7s, 122; West Chester and Philadelphia 2d 7s, 117½. The latest quotations are: City 6s, —@118; do. free of tax, 126@130; do. 4s, new, 102@109; Pennsylvania State 6s, 3d series, 100@101; do. 5s, new loan. 115@116½; do. 4s, new, 107@111; Philadelphia and Reading R. R., 31⅜@31½; do. consol. mort. 7s, reg., 125@—; do. mort. 6s, 117@121; do. gen'l mort. 6s, coupon, 98½@98¾; do. 7s, 1893, 118@125;

do. new, conv., 73@77 ; United New Jersey R. R. and Canal, 184½@184¾ ; Buffalo, Pittsburg and Western, 19@19¼ ; Pittsburg, Titusville and Buffalo 7s, 102⅜@103 ; Camden and Amboy mort. 6s, 1889, 113½@114 ; Pennsylvania R. R., 61@61⅛; do. general mort. reg., 123½@— ; do. consol. mort. 6s, reg., 119½@124; Little Schuylkill R. R. 55½@56 ; Morris Canal, 65@75 ; do. pref., 165@169½; Schuylkill Navigation, 5¾@6 ; do. pref., 12¾@13¼ ; do. 6s, 1882, 88½@89½ ; do. 1872, 107@108 ; Elmira and Williamsport pref., 58@60 ; do. 6s, 113@—; do. 5s, 95@—; Lehigh Coal and Navigation, 42½@42⅞; do. 6s, 1884, 105¼@105¾ ; do. R. R. loan, 118@— ; do. Gold Loan, 111⅜@111⅝ ; do. consol. 7s, 116½ @117 ; Northern Pacific, 34¾@35 ; do. pref., 72⅛@72¾ ; North Pennsylvania, 62⅜@62⅝ ; do. 6s, 105@105⅜ ; do. 7s, 123½@— ; do. General mort. 7s, reg., 119½@124 ; Philadelphia and Erie, 19@20; do. 7s, 113@114½ ; do. 5s, 105@ 105½ ; Minehill, 60@60¼ ; Catawissa, 18@18½ ; do. pref., 53@53½ ; do. new pref., 50½@53½ ; do. 7s, 1900, 120@— ; Lehigh Valley 61¾@62¼; do. 6s, coupon, 121@— ; do. reg., 121½@122½; do. 2d mort. 7s, 133½@134½ ; do. consol. mort. 117½@118; Fifth and Sixth streets (horse), 149 @150 ; Second and Third, 114½@115½; Thirteenth and Fifteenth, 79¾@80¼ ; Spruce and Pine, 47@50 ; Green and Coates, 99@100 ; Chestnut and Walnut, 94@95 ; Germantown, 60@70; Union, 110@125 ; West Philadelphia, 100@112 ; People's 13¾@14⅛; Continental, 100 @104.

Baltimore.—Atlantic Coal, 1.10 ; Atlanta and Charlotte, 81¾ ; do. 1st, 109¼ ; Baltimore City 6s. 1884, 104½ ; do. 6s, 1890, 114½ ; do. 6s, 1886, 107 ; do. 5s, 1916, 120¾ ; do. 5s, 1894, 114; do. 4s, 1920, 111½ ; Baltimore and Ohio 2d pref., 121; Canton Co. 6s, gold, 108½; Chesapeake and Ohio Canal, 6s, 35 ; Chicago and Eastern Illinois 1st, 101½ ; Columbia and Greenville 1st, 103½ ; George's Creek Coal, 98; Maryland Defense 6s, 103¼ ; Northern Central 5s, 96½ ; Ohio and Mississippi, Springfield div. 1st, 120½; Richmond and Danville gold bonds, 103 ; Richmond and Alleghany, 30 ; South Side (Va.) 2d 6s, 102 ; Virginia Black scrip, 33 ; do. Peelers, 39 ; do. coupons, 37 ; Virginia Midland, 91 ; do. 1st pref., 125 ; do. 2d pref., 125 ; do. 2d mort., 111; do. 3d mort., 95; do. 5th mort., 98½ ; Virginia and Tennessee 6s, 101½. The latest quotations are : Atlanta and Charlotte, —@82 ; do. 1st, —@110 ; Baltimore and Ohio, 195@200 ; do. 6s, 1885, 107@108 ; Baltimore City Passenger R. R., 41@42½; Baltimore City 6s, 1886, 107@ 107½ ; do. 6s, 1884, 104½@105½ ; do. 6s, 1890, 114@114½ ; do. 6s, 1900, 127⅛@— ; do. 6s, 1902, 128@— ; do. 4s, 1920, 111½@112 ; Columbia and Greenville 1st, 103@103½; Central Ohio 1st, —@111¼ ; Marietta and Cincinnati 1st, 124@ 125 ; do. 2d, 105⅛@105¼ ; do. 3d, 58½@58⅝ ; Norfolk Water 8s, 130@— ; Northern Central, 49@50¼ ; do. 6s, 1900, gold, 113¼@—; do. 1904, gold, 112½@— ; do. 5s, 1926, 95¼@97 ; Norfolk and Western pref., 56@57 ; Ohio and Mississippi Springfield div. 1st, 120¼@121; Pittsburg and Connellsville 7s, 120@122½ ; Richmond and Danville, 200@250; Virginia consols., 63½@64 ; do. 10-40s, 39¾@40; Virginia Midland 5th mort., 98@98¾; Western Maryland 2d pref., 106¾@—; do. 2d mort., guar. by Washington Co., 110@ — ; Wilmington, Columbia and Augusta, 108½ @109½.

The Coal Trade.

THE leading coal carrying companies make the following reports of their tonnage for the week ending January 14, and for the year to same date, compared with their respective amounts carried to the same time last year:

	Week.	1882.	1881.
Reading Railroad	156,709	1,017,718	722,618
Schuylkill Canal	.....	27,655	.....
Lehigh Valley	142,323	801,105	526,790
Delaware, Lackawanna and Western	87,952	158,452	104,330
Shamokin	20,344	30,522	32,563
Central R. R. of New Jersey	92,577	132,698	92,399
United R. R. of New Jersey	35,482	63,014	47,131
Pennsylvania Coal	23,058	42,895	31,871
Delaware and Hudson Canal	81,778	131,109	83,413
Huntingdon and Broad Top Mountain	11,859	22,716	19,099
Penn. and New York	34,853	192,796	138,304
Clearfield, Pa	51,267	90,352	65,353

The total tonnage of anthracite coal from all the regions for the week ending January 14, as reported by the several carrying companies, amounted to 592,801 tons, against 347,228 tons in the corresponding week last year, an increase of 245,573 tons. The total amount of anthracite mined for the year is 967,878 tons, against 665,775 tons for the same period last year, an increase of 302,103 tons. The quantity of bituminous coal sent to market for the week amounted to 46,304 tons, against 32,701 tons in corresponding week last year, an increase of 13,603 tons. The total amount of bituminous mined for the year is 115,122 tons, against 104,224 tons for the corresponding period last year, an increase of 10,898 tons. The total tonnage of all kinds of coal for the week is 639,105 tons, against 379,929 tons in corresponding week last year, an increase of 529,176 tons, and the total tonnage for the coal year is 1,083,000 tons, against 769,999 tons to same date last year, an increase of 313,001 tons. The quantity of coal and coke carried over the Pennsylvania Railroad for the week ending January 14 was 213,360 tons, of which 154,673 tons were coal and 58,687 tons coke. The total tonnage for the year thus far has been 398,178 tons, of which 283,776 tons were coal and 114,402 tons coke. These figures embrace all the coal and coke carried over the road east and west. The Pennsylvania Railroad tonnage for 1881 amounted to 9,209,309 tons, of which 6,793,743 was coal and 2,415,563 coke. We have received no report of the Cumberland coal shipments for the week ending January 14. The Reading Railroad shipment for last week, ending January 21, was 98,500 tons, of which 17,980 tons were sent to and 13,560 tons shipped from Port Richmond, and 11,682 tons sent to and 15,796 tons shipped from Elizabethport. —*Phil. Ledger, Jan.* 23.

American Silk Association.

THE annual report of the Silk Association of America shows that the imports during December of dress silks were $727,060 in 1877, and $940,198 in the last month. The total imports of silk and silk mixed goods were $1,136,129 in December, 1877, and $1,896,204 in December, 1881. The values of importations in December of laces in the past five years were : 1877, $65,579; 1878, $44,758; 1879, $42,642; 1880, $98,400, 1881, $247,462.

During the year 1880 dress silk goods to the amount of $17,665,038 and silk ribbons to the amount of $3,563,848 were imported. During the last year dress goods to the amount of $16,959,043 and silk ribbons to the amount of $2,614,918 were imported. In 1880 silk and silk mixed goods to the amount of $4,751,946 were imported, and in 1881 the importations amounted to $4,267,394. The total values of all kinds of silk goods imported during 1880 was $33,305,460 ; in 1881 the total value was $31,636,377. The report further states that in 1880 20,899 bales of raw silk, valued at $11,478,727 were received at the ports of New York and San Francisco; and in 1881 21,692 bales, valued at $11,936,865, were received. The importation of waste silk was very large during the last year. The manufacture of silk goods from waste silk was almost annihilated in 1880, but regained its prosperity in 1881. There were 492 bales of waste silk, valued at $204,604, received at the ports of New York and San Francisco in 1880; and in 1881, 2,010 bales, valued at $769,186 were imported.

Anthracite Coal Tonnage.

THE following is a comparative statement of the anthracite coal tonnage for the months of December, 1881 and 1880 :

	1881.	1880.
Reading Railroad	633,116	407,089
Lehigh Valley Railroad	595,024	369,553
Central Railroad of New Jersey	406,837	276,888
Delaware, Lackawanna & Western	425,914	310,150
Delaware and Hudson Canal	300,730	213,009
Pennsylvania Railroad	180,532	149,675
Pennsylvania Coal Co.	142,163	106,018
New York, Lake Erie and Western Railroad	40,408	46,473
Total	2,724,726	1,878,857

For the years 1881 and 1880, the statement compares as follows :

	1881.	1880.
Reading Railroad	6,940,283	5,933,922
Lehigh Valley Railroad	5,721,869	4,394,532
Central Railroad of New Jersey	4,085,423	3,470,141
Delaware, Lackawanna & Western Railroad	4,388,968	3,350,348
Delaware and Hudson Canal	3,211,496	2,674,704
Pennsylvania Railroad	2,211,383	1,864,031
Pennsylvania Coal Co.	1,475,800	1,138,466
New York, Lake Erie and Western Railroad	465,230	411,094
Total	28,500,016	23,437,242

The total increase for the month of December was 845,969 tons ; and for the year 5,062,574 tons. The stock of coal on hand at tide water shipping points on the 31st of December was 497,024 tons against 392,315 tons the 30th of November, an increase for the month of 104,709 tons. The amount on hand December 31, 1880, was 500,373 tons. Of the total production in 1881, 13,951,383 tons, or 48.96 per cent, was from Wyoming region; 5,294,676 tons or 18.58 per cent, from Lehigh region, and 9,253,958 tons, or 32.46 per cent, from Schuylkill region. Competitive tonnage, including all coal which for final consumption or in transit reaches any point on Hudson river or the Bay of New York, or which passes out of the Capes of the Delaware except pea and dust: 1880, 10,088,159 tons; 1881, 12,169,030 tons.

The stockholders of the Richmond and Danville Railroad Company have authorized the President to subscribe on behalf of the company for 10,000 shares of the new stock of the Richmond and West Point Terminal Railway and Warehouse Company; also to issue debenture bonds to the amount of $4,000,000, payble forty-five years after date and bearing 6 per cent interest payable semi-annually.

Important Facts and Figures.

THE subjoined statements, showing in a variety of forms the rapid increase arising from interest (rent or usury being very nearly synonymous terms) charged for the use of accumulated wealth—which we take from a lecture delivered some time since in Association Hall, New York, by Wallace P. Groom, on the "Currency Needs of Commerce"—contain much "food for thought" for all classes, old or young, man or woman, employer or employed; for interest affects the price of every commodity in the most vital manner.

Many carelessly infer that the increase of money at six per cent is just twice as rapid as at three per cent; but in reality the increase is vastly more rapid than this. In one hundred years, at six per cent, the increase on any given sum is about eighteen times as much as at three per cent.

If one dollar be invested and the interest added to the principal annually, at the rates named, we shall have the following result as the accumulation of one hundred years:

One Dollar, 100 years, at	1	per cent	.....	$2⅛
do	do	2	do	.....	7⅜
do	do	2½	do	.....	11¾
do	do	3	do	.....	19⅛
do	do	3½	do	.....	31⅛
do	do	4	do	.....	50½
do	do	4½	do	.....	81½
do	do	5	do	.....	131
do	do	6	do	.....	340
do	do	7	do	.....	868
do	do	8	do	.....	2.203
do	do	9	do	.....	5,543
do	do	10	do	.....	13,809
da	do	12	do	.....	84,675
do	do	15	do	.....	1,174,405
do	do	18	do	.....	15,145,007
do	do	24	do	.....	2,551,799,404

There are probably few, however familiar with the subject of the rapid increase of capital put at interest, who would not be startled at the statement that the cost of the outfit of Christopher Columbus in his first voyage of discovery, put at interest at six per cent, would by this time have amounted to *more than the entire money value of this continent, together with the accumulations from the industry of all who have lived upon it.* If any doubt this, let them reckon the amount, estimating the entire outfit to have cost only the small sum of $5,000, and remembering that money doubles, at six per cent, in a little less than twelve years—or accurately, in eleven years, ten months and twenty-one days. Allowing it to double every twelve years, this $5,000 at interest at six per cent since 1492, it will be found, would have amounted to $17,895-700,000,000; which, estimating the population of the entire continent of America (North and South) to be eighty-five millions, or seventeen million families (averaging five members each) would give more than a $1,000,000 as the possession of every one of these. The interest upon $1,000,000 at six per cent is $60,000, which would now be the princely annual income of each of these seventeen million families from the accumulations up to this time upon so small a sum as that named for the outfit of the discovery.

In Hildreth's "History of the United States," it is stated that Manhattan Island—afterward called New Amsterdam, now the City of New York—was bought by the Dutch from the Indians, for 60 guilders, or $24, and this only about two hundred and fifty years ago. And yet, if the purchasers could have securely placed that $24 where it would have added to the principal annually interest at the rate of seven per cent, the accumulation would exceed the present market value of all the real estate of the City and County of New York.

Again, if a man at the age of twenty-five should commence business with a capital of $100,000, and could by any possibility add thereto interest at our legal rate of seven per cent annually, the result would be (in round numbers as follows:

Age.	Capital.
25	$100,000
35	200,000
45	400,000
55	800,000
65	1,600,000
75	3,200,000
85	6,400,000

Now the growth of national wealth is only about three and one-eight per cent per annum, notwithstanding the assertion of those who have placed it much higher, through comparing the old valuations with the new (which have been greatly increased), instead of taking as the basis of their calculation, as they should have done, the actual number of horses, cattle, hogs, sheep, etc., etc., at the different periods. It is plain therefore, that the great mistake most men make is in attempting to use borrowed capital at an immensely high rent, ordinarily termed interest, which, by the use of gold as currency, is often forced still higher. While the growth of the national wealth remains at the present rate, the average man who attempts to pay even seven per cent for all the capital he can get should not expect to avoid bankruptcy as the result.

Cincinnati Iron Market.

OFFICE OF E. L. HARPER & Co.
Cincinnati, Jan. 24, 1882.

THERE is no material change to note in the market. The demand for all grades is large and fully up to the ability of sellers to meet. All grades are in light supply and the market closes strong at the quotations given below.

We quote as follows:

	No.			Mos.
FOUNDRY.				
Hanging Rock Charcoal	1	29 50@30	75	4
Strong Neutral Coke	1	27 00@28	00	4
American Scotch	1	26 50@27	50	4
GREY FORGE.				
Neutral Coke	25	50@26	50	4
Cold Short	24	00@25	00	4
CAR WHEEL AND MALLEABLE.				
Hanging Rock Cold Blast	36	00@38	00	4
" Warm Blast	30	00@32	00	4
Lake Superior 1 and 2	32	00@33	00	4
Lake Superior 3 to 6	34	00@36	00	4
Southern Car Wheel	36	00@40	00	4

Pennsylvania Railroad.

The statement of the business of all lines of the Pennsylvania Railroad Company east of Pittsburg and Erie for December, 1881, as compared with the same month in 1880, shows

An increase in gross earnings of	$183,923
An increase in expenses of	106,894
An increase in net earnings of	$76,989

The twelve months of 1881, as compared with the same period in 1880, show

An increase in gross earnings of	$2,864,110
An increase in expenses of	2,082,762
An increase in net earnings of	$779,348

All lines west of Pittsburg and Erie for the twelve months of 1881 show a surplus over liabilities of $2,713,152, being a loss, as compared with the same period in 1880, of $358,900.

Hoe Out Your Row.

ONE day a farmer's lazy boy
Was hoeing out the corn,
And moodily had listened long
To hear the dinner horn.
The welcome blast was heard at last,
And down he dropped his hoe,
But the good man shouted in his ear,
"My boy, hoe out your row."

Although a "hard one" was the row,
To use a plowman's phrase,
The lad, as sailors have it,
Beginning well to "haze,"
"I can," said he, and manfully
He seized again his hoe,
And the good man smiled to see
The boy hoe out his row.

The lad the text remembered,
And proved the moral well,
That perseverance to the end
At last will nobly tell,
Take courage, man! resolve you can,
And strike a vigorous blow;
In life's great field of varied toil,
Always "hoe out your row."

Fun on a Ferryboat.

WHEN a Fulton ferryboat was lying in its Brooklyn slip yesterday, a gentleman entered the ladies' cabin, and seeing that the after department was occupied only by men, the ladies having, in accordance with their custom, gone as far forward as possible, evidently supposed himself on the other side of the boat, and, quietly lighting his pipe, proceeded to solace himself with a smoke. A minute afterward a lady entered, and the smoker politely directed her to the other cabin. She looked somwhat surprised, hesitated for an instant, and went out, while all in the cabin who had watched the proceeding laughed so heartily that the gentleman with the pipe asked his neighbor what the matter was.

"It is you who ought to have gone into the other cabin," was the reply. "This is the ladies' department."

The smoker looked wildly around him, recognized the situation, and hurried out with a very red face. He must have met the lady on her way back, for five seconds afterwards she entered and took the seat he had just vacated and her countenance bore as bright a bloom as that of the smoker. The occupants of the cabin laughed silently, while they pretended not to see her.

THE official report of the anthracite coal tonnage for the month of December and the past year shows that the tonnage of the various carrying companies for the month was 2,724,-726 tons, and for the year 28,500,016 tons, an increase of 5,062,774 tons as compared with the previous year. Of this amount the Philadelphia and Reading Railroad carried 6,940,283 tons, the Lehigh Valley Railroad 5,721,869 tons, the Central Railroad of New Jersey 4,085,423 tons, the Delaware, Lackawanna and Western Railroad 4,338,968 tons, the Delaware and Hudson Canal Company 3,211.496 tons, the Pennsylvania Railroad 2,211,363 tons, the Pennsylvania Coal Company 1,475,385 tons, the New York, Lake Erie and Western Railroad 465,230 tons. Of the total production 48 96-100 per cent was from the Wyoming region, 18 58-100 from the Lehigh region, and 32 46-100 from the Schuykill region. The stock of coal on hand at tidewater shipping points at the close of the year was 497,024 tons.

LIVERPOOL AND LONDON AND GLOBE
INSURANCE COMPANY.

STATEMENT JANUARY 1, 1881.

Gross Fire Assets	$12,167,538 44
Fire Liabilities, including paid-up Capital	5,875,957 54
Net Surplus	**$6,291,580 90**

STATEMENT U. S. BRANCH, JAN. 1, 1882.

ASSETS.

Real Estate	$953,000 00
Loans on Bond and Mortgage	1,288,586 00
United States Government Bonds	1,552,687 50
Cash in Banks	527,354 16
Other Admitted Assets	455,961 96
	$4,777,589 62

LIABILITIES.

Outstanding Losses	$461,094 20	
Unearned Premiums	1,988,017 96	
All other Liabilities	499,870 07—	2,948,482 23
Surplus		**$1,829,107 39**
Income 1881		$3,086,873 09
Expenditures, 1881		2,620,263 72

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NEW YORK, December 23d, 1881.

The Board of Directors of this company have this day declared a QUARTERLY DIVIDEND of TWO per cent upon its capital stock, payable on WEDNESDAY, the first day of February next at this office.

The transfer books will be closed at 3 o'clock P. M. on Saturday, the 31st instant, and will be reopened on the morning of Saturday, the fourth day of February next.

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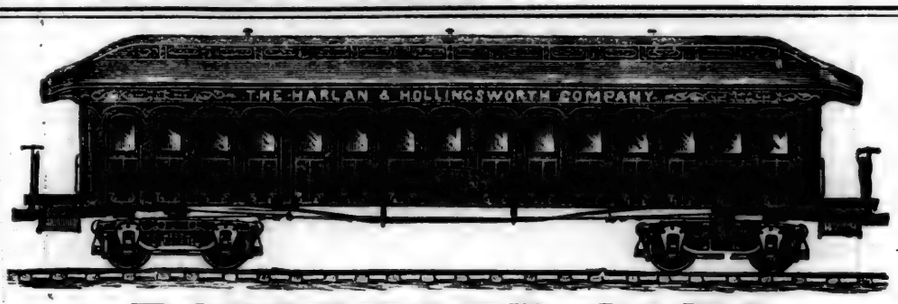
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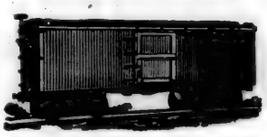


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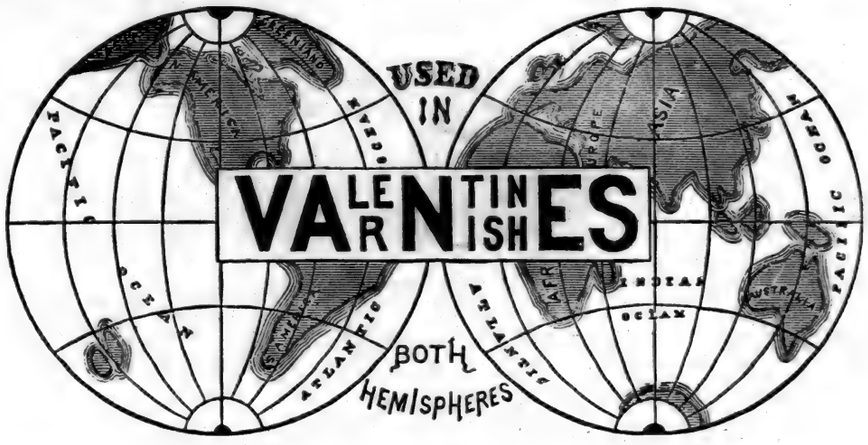
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American Railroad Journal.

ESTABLISHED 1831.

Steam Navigation, Commerce, Finance, Banking, Machinery, Mining, Manufactures.

SECOND QUARTO SERIES.—VOL. XXXVIII., No. 5.] NEW YORK, FEBRUARY 4, 1882. [WHOLE No. 2,389.—VOL. LV.

Railroad Sanitation.

(Continued from last week.)

(Read at the Savannah meeting of the American Public Health Association, 1881.] By S. S. HERRICK, M. D., Secretary of the Louisiana State Board of Health.

3. If it be admitted that the personal hygiene of railroad employes is a matter of any importance to the company, it follows that the advice of a sanitarian would be valuable in relation to passenger cars, to buildings and grounds, and in the selection of sites and the creation of works and buildings. It is not supposed that practical railroad managers regard disease as a special dispensation of providence, when they build without due regard to drainage, removal of excreta or proximity to marshes. These and other similar blunders simply indicate neglect to secure suitable sanitary advice, and not a spirit of fatalism ; but the same managers are careful to have the services of competent mechanical engineers and builders. The time is happily past when sanitation can be stigmatized as a profane scheme to cheat divine providence; let us hope that managers of corporations may soon cease to count it a fruitless tax on their revenues. "Public health is public wealth" has some time been repeated for an axiom, and corporations aim at securing a share of the public wealth ; can they therefore either justly or safely disregard the public health ?

4. For some years the national government has sustained a meteorological service, for the benefit of the agricultural and commercial interests. These are the very interests which support railroads, and it is plainly an advantage to the companies to co-operate with and extend this service, both to enable them to guard their own property from damage by storms and for the benefit of the agriculturists who give them business. The cost would be trivial, for the observations could be made and forwarded by telegraph operators, and it is not improbable that the necessary instruments would be furnished by the government. The affiliation of this branch of railroad sanitation with the National Signal Service would be so manifestly advantageous to all concerned, that it could not fail of adoption.

5. Railroad companies are constantly liable to receive persons and animals affected with contagious diseases for transportation in their cars, and no one would assert that it is proper to admit them. It is too much to expect that the ordinary officers of a company could be depended on to recognize and ward off all danger of this kind. Some advantage might be derived from printed rules, prepared by a medical man, but instances would arise calling for a medical diagnosis; and then a physician's certificate should be obtained to settle the doubts of the station-agent or train-conductor before admitting a suspected person on the train. As animals are generally shipped only at a few important stations, it would be easy to have the herds inspected by an expert beforehand.*

It is beyond question that many animals are destroyed, and still more injured, during transportation by overcrowding and by confinement too long without food and water. Strict rules should be framed to govern this kind of traffic, and nothing short of special supervision can secure their enforcement. Safety requires that this supervision should be exercised from a sanitary standpoint, and so constantly that its influence may never be wanting.

6. The experience of the yellow fever epidemic of 1878 taught the managers of railroads running out of New Orleans particularly the usefulness of medical officers in their service during actual or threatened pestilence. The judicious efforts of sanitarians in 1879 prevented a general resort to the shot-gun quarantines which characterized the year 1878. Had there been a sanitary organization in 1878 upon the railroads, it is certain that they would have been spared much pecuniary loss, and the people along their lines much needless alarm and deprivation of the comforts of life.

In the presence of danger from pestilence, people look to their physicians. The medical adviser of a railroad company can come to a rational and probably satisfactory understanding with his professional brethren; and, if the people are distrustful, he can bring other medical men to meet them whom they will trust.

Occasions arise when legislation, or discussion of questions in medical or other bodies, might effect the sanitary and material interests of railroads, and when their accredited medical representatives might be of great benefit. Their value would be most appreciated in their absence, as with life preservers in shipwreck.

But whatever advantages may be claimed for railroad sanitation, either to the public or to the companies, the question of its adoption by any management will turn upon its probable financial success. It seems to be generally agreed that any system of relief maintained by a railroad company is better than to let the victims of accidents shift for themselves and look for reimbursement from the courts. To put the service directly under the general management would be like leaving the workshops or the operation of the road without separate supervision. The superintendence is an expense, but it is not presumed that men are best judges of what they are to do at a particular time, though they may know how to do it.

As to physical defects, there can be but little doubt that it will cost a company more to find them out by a series of accidents, than to pay an expert to discover them before the men are trusted with lives and property.

In fact, every feature of this service is designed to secure the company against pecuniary loss : 1, by reducing the cost of actual disasters to the lowest amount ; 2, by adopting precautions to obviate disasters; 3, by preserving the health and securing the efficiency of employes ; 4, by avoiding the stigma of "common carriers" of contagion and destroyers of live stock, with its incidental losses ; 5, by obviating interruption of business through quarantine obstructions and expensive lawsuits for damages to person and property. It has therefore the essential nature of insurance, with the substitution of the element of *prevention* for that of *reimbursement*. What a gain would it be to fire and marine insurance if this substitution could be achieved by any system capable of formulation.

A few remarks upon the *personnel* of a railroad sanitary service might here be appropriate. Suppose 1,000 miles of single track road to be under the same general management, one medical man should be capable of exercising sanitary superintendence of the whole. But it is to be understood that he must renounce private practice and every other occupation except this duty. Then there should be a district surgeon at every point where the crews of trains shift. The work shops would naturally fall into this arrangement. District surgeons would attend the hospitals and be sent for in case of accidents within their own or adjoining districts. These surgeons might attend to private practice. Their compensation from the company would be according to a settled tariff for surgical cases. Hospital service and the

* Since the above was written, a Kentucky stock-dealer has informed me that he suffered a loss of more than $8,000 a few years ago from glandered horses and mules, which he is satisfied were infected in railroad cars. This he was constrained to bear without recourse to the transportation companies, from difficulty of establishing proof and aversion to litigation.

medical attendance of employes and their families might be at a fixed salary.

Examinations for physical condition of employes would be made and carefully recorded by the chief surgeon, and he would also be the inspector of hospitals and all wounded persons. At every point where cattle in large numbers are shipped, there must be an inspector of stock (a physician or veterinarian), to see that no diseased animals are admitted and the rules enforced relative to overcrowding, etc.

In addition to the above, it might be expedient to make arrangements with local physicians at all important stations along the lines to render service, in case of accidents, at fixed rates of compensation.

I cannot doubt that such a sanitary organization would conduce to the common benefit of companies and employes : to the later, by contributing to their health and comfort ; to the former, by diminishing interruptions and derangements in their operations ; while their mutual relations would become more harmonious and friendly, and danger of strikes and riots correspondingly diminished. In like manner its influence would be salutary, as affecting the relations of the company with the public. Norwithstanding the proverbial recklessness of the average American traveler touching his personal safety, there is a large fraction who value security from preventable accidents and diseases, and would manifest preference for a management where this consideration is recognized. They are the most intelligent and influential portion of the public and the best patrons of transportation companies.

In the rivalry of numerous and competing routes, managers are wont to boast of the advantages which they offer in respect to economy, speed, comfort, and even safety. Liberal expenditures are made to promote speed and comfort, in the confident expectation that they will be returned in augmented business receipts. It is certain that much might be done for promoting safety in the manner herein indicated, and that the public might be invited to appreciate the offer through the usual advertising mediums. There is good reason to presume that many would be sensible to such an inducement and give preference to the safer pathway. Thus the premium on the insurance would be returned, and the saving of life and property would be clear gain.

THE END.

Union Pacific Railway.

THE Secretary of the Interior has transmitted to Congress the report of the Government Directors of the Union Pacific Railway Company for 1881. The Directors claim that enormous benefits have resulted in the West from the completion of this railroad in developing latent resources. The report contains a detailed statement of the progress made in the construction of branch lines and of changes in the main road itself calculated to increase its efficiency. There were 75,692 acres of land sold for the nine months ending November 30, 1879, at an average of $4.93 per acre. The local earnings of the company are said to be now 90 per cent of the surplus earnings, while at the beginning of its operations the through freight represented 70 per cent of the earnings. The Directors have not considered it necessary to go into the financial operations of the company, as these matters are embraced in the report to the Auditor of Railroad Accounts, which has been published. Speaking of the general condition of the road, the Directors say the track from Council Bluffs to Ogden could scarcely be in better condition. There is no smoother running road in the country. It is well ballasted with good cross-ties at suitable distances apart, and all but about 50 miles has been laid with steel rails. Every effort is made to keep the road in complete repair. Between Council Bluffs, Iowa, and Ogden, Utah, there were laid during 1881, up to September 1, 17,559.54 tons of steel rails, which would be equivalent to about 192 miles of steel track laid during the season. Several hundred feet of pile bridges have been filed with embankment, and the road has been raised and widened in many places. The maximum grade was originally 79.2 feet per mile. It has been a constant source of annoyance to the company, often requiring the division of freight trains to pass the steep grades. It has been reduced to 21 feet per mile, and 50 cars will be as easily hauled as 18 were before the change. It required a large outlay, not only to remove the earth, but to build the embankment necessary to overcome this grade. The unprecedented freshets in the Spring of 1881, and the long continued high water, worked serious damage to a considerable portion of the road in the Platte Valley, East of Columbus. All these damages have been repaired, and the road-bed has been raised at exposed places to high-water mark, all along the line through the Platte Valley from Elkhorn to Columbus. The Directors comment upon the great tide of immigration now nowing to the West, and say it is likely to increase for years to come. In conclusion the report says that there can no longer be a doubt as to the ability of the Union Pacific Railway Company to pay back every dollar it has received from the Goverment for construction purposes.

Heat in Silver Mines.

IF there are to be found anywhere in the world a set of human salamanders we may claim the credit of having them here on the Comstock. What would scorch a man who lives wholly on the surface chills a miner inured to the heat of the lower levels. A miner who has been for some months past working in one of the hottest sections of the Comstock, a day or two since gave an *Enterprise* reporter his experience of the heat which miners are often called upon to encounter. He says that in working at points where the thermometer marks a temperature of 115 to 120 degrees great thirst is experienced. No ice-water is too cold to be swallowed with a relish. Men go to the water-barrel, in which huge chunks of ice are floating about, and will take their picks and chop up the ice in order that the water may be rendered colder by being filled with fine fragments. Often this does not satisfy them, and they chew and swallow lumps of ice. The natural temperature of the human body is about 98 degrees Fahrenheit. Therefore when a man remains in a hot place for an hour, or even half an hour, his blood and his whole body become heated to a temperature of 115, 120 degrees, or whatever may be the temperature of the place in which he is at work. It is then that the miner begins to pour down ice-water and eat ice. The strangest thing about the business is that it does not hurt any of the men. Often they swallow such quantities of ice-water that their stomachs will not retain it, and in vomiting it up it will feel cold in their mouths and against their teeth. All they do on such occassions is to swallow more of the same water, but more cautiously.—*Virginia (Nev.) Enterprise.*

Imports of Dry Goods at New York.

The Imports of Foreign Dry Goods at New York for the month of January, were :

ENTERED FOR CONSUMPTION.

	1880.	1881.	1882.
Manufs. of wool....	$1,516,412	$1,311,541	$1,868,998
Manufs. of cotton...	2,346,615	2,498,788	2,776,525
Manufs. of silk.....	2,374,558	2,032,814	2,922,136
Manufs. flax.....	1,710,446	964,717	1,037,023
Miscell. dry goods...	660,038	607,390	767,153
Total ent. for consumption.....	$8,608,069	$7,415,250	$9,641,835

WITHDRAWN FROM WAREHOUSE.

	1880.	1881.	1882.
Manufs. of wool.....	$498,983	$695,492	$544,319
Manufs. of cotton...	461,746	930,999	658,110
Manufs. of silk.....	407,144	580,233	518,853
Manufs. of flax.....	490,664	684,183	468,336
Miscell. dry goods..	154,064	194,572	197,925
Total withdr'n from warehouse.....	$2,012,601	$3,085,479	$2,387,543
Add ent. for con....	8,608,069	7,415,250	9,641,835
Total thrown on the market.....	$10,620,670	$10,500,729	$12,029,378

ENTERED FOR WAREHOUSING.

	1880.	1881.	1882.
Manufs. of wool....	$501,638	$578,274	$643,490
Manufs. of cotton..	416,839	735,142	752,097
Manufs. of silk.....	326,731	528,088	585,035
Manufs. of flax....	658,025	619,307	481,184
Mis. dry goods.....	203,579	252,425	222,799
Total ent. for warehouse	$2,106,812	$2,713,236	$2,684,605
Add entered for consumption	8,608,069	7,415,250	9,641,835
Total entered at port	$10,714,881	$10,128,486	$12,326,440

The Imports of Foreign Dry Goods at New York for seven months ending with January were :

ENTERED FOR CONSUMPTION.

	1880.	1881.	1882.
Manufs. of wool...	$10,388,185	$10,121,729	$12,229,246
Manufs. of cotton	9,967,255	11,116,180	12,544,501
Manufs. of silk....	15,631,545	15,932,311	19,681,366
Manufs of flax....	7,599,117	5,658,476	7,565,901
Mis. dry goods....	4,100,959	4,541,256	4,985,174
Total entered for consumption ...	$47,687,061	$47,409,952	$57,006,188

WITHDRAWN FROM WAREHOUSE.

	1880.	1881.	1882.
Manufs. of wool..	$3,808,235	$5,888,429	$4,785,838
Manufs. of cotton.	1,991,538	3,130,125	2,233,038
Manufs. of silk....	2,347,272	4,029,116	3,031,738
Manufs. of flax...	2,216,974	3,032,428	2,420,309
Mis. dry goods....	834,818	1,288,754	1,291,743
Total withdrawn from warehouse.	$11,198,837	$17,368,852	$13,762,666
Add entered for consumption ...	47,687,061	47,409,952	57,006,188
Total thrown on the market.....	$58,885,898	$64,778,804	$70,768,854

ENTERED FOR WAREHOUSING.

	1880.	1881.	1882.
Manufs. of wool...	$3,790,776	$5,977,403	$4,199,178
Manufs. of cotton.	2,026,563	3,117,705	2,246,313
Manufs. of silk....	2,457,665	4,123,580	3,262,829
Manufs. of flax....	2,746,500	3,158,893	2,392,346
Mis. dry goods....	993,842	1,834,693	1,339,347
Total entered for warehouse	$12,015,346	$18,212,272	$13,440,018
Add entered for consumption ...	47,687,061	47,409,952	57,006,188
Total ent. at port.	$59,702,407	$65,622,225	$70,446,206

The figures given above represent the net gold value of the goods as invoiced, without the addition of freight or duty.

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LEGAL RIGHTS OF PASSENGERS.

THE recent disaster at Spuyten Duyvil sharply emphasizes several features in present systems of railroad management. The accident has occurred, the dead cannot be brought to life, the injuries received cannot be repaired with money, no adequate reparation can be made for wounded hearts. But does the law provide no remedy whatever in such cases? Must travelers injured on a railroad accept a coroner's verdict in full satisfaction for broken bones? What remedies have the relatives of the persons killed in that terrible disaster? What remedies have the survivors? What are the legal rights of passengers who have been injured in a railroad collision?

The general rule is that where an injury happens to a passengers on a railroad the person injured makes out a *prima facie* case by showing that he had a ticket, that the accident happened, and that in consequence of this accident he sustained damage. When these facts are made to appear, it is for the railroad company to excuse the *prima facie* failure of duty; to show that, notwithstanding, the accident happened in spite of the use, by the company, its servants, and the contractors by whom its road, appliances, and coaches are built, of the greatest degree of diligence practicable under the circumstances. In other words, it must show, in order to rebut this presumption, that the accident resulted from circumstances against which human care and foresight could not guard.

Carriers of passengers are bound to use extraordinary care and skill to secure the safety of their passengers. In the language of the New York State Court of Appeals, it has been said that "every wayfarer must take the risks incident to the mode of travel he adopts; but these risks are only those which cannot be avoided by the carrier of passengers by the utmost degree of care and skill in the preparation and management of the means of conveyance." The Supreme Court of the United States expresses the doctrine more strongly when it says, "When carriers undertake to convey persons by the powerful but dangerous agency of steam, public policy and safety require that they shall be held to the greatest possible care and diligence. The personal safety of passengers should not be left to the sport of chance or negligence of careless agents. Any negligence in such cases may well deserve the epithet of 'gross.'" Railroad companies must adopt such rules and regulations for the running of their trains as will insure safety, and after adopting them they must conform to them or be responsible for injuries to passengers resulting from a departure from them.

Inasmuch as a railroad company, like other corporations, must become liable for the most part through the acts of its servants or agents, it is liable for the acts of the servants in its employment, although its servants do not follow or actually disobey its instructions, general or special. It is no answer for a railroad company to say that the negligence of a stranger concurred with the negligence of the company to the injury of a passenger. If the New York Central Railroad can prove, for instance, that the primary cause of the accident at Spuyten Duyvil was the pulling of the cord of the air brake by one of the passengers it will not relieve it from the failure of the brakeman Melius to go back, or from any other negligence on its part which contributed to the injury. Assuming the facts to be as stated by newspaper reports, the survivors of the accident have an undoubted cause of action against the railroad company.

The damages recoverable for the bodily pain and suffering of those injured are not limited to the suffering experienced before the trial of the case, but extend to such future suffering as will probably result from such injuries. At common law, where a person was killed by the negligence of a person or corporation no right of action survived; but the statute law of England, which has been followed in New York State, provides an action for damages not to exceed five thousand dollars in case of death upon a railroad, caused by the fault of the company, although such death was instantaneous. There can be no doubt whatever but that the injured survivors of the Spuyten Duyvil disaster and the relatives of those who were killed in that accident have a complete remedy at law, although that remedy is lamentably inadequate.

We have no reason to believe that the New York Central Railroad will refuse to make all the reparation in their power to the friends of those who were injured, but we have very briefly stated the law applicable in such cases, thinking that it might be of general interest.

TRUST COMPANIES.

A TRUST company differs, or should differ, from a National or a State bank in several particulars. In the first place a Trust Company should never be a bank of issue; that is, it should have no circulation of its own, no bills or notes on the market subject to redemption on demand. In the second place, it should never be a bank of discount. National and State banks can rightfully take the risk of discounting paper for their depositors, for as a rule they hold no funds in trust, and are organized as mediums of exchange between business men. A Trust Company, however, is not designed as any such medium, and in its capacity of a guardian cannot assume the usual business risks. In the third place a Trust Company should never for an instant engage in any speculative enterprises, either in the investment or loaning of its moneys, no matter how fair a promise such enterprises may give. The object of a Trust Company is not so much to make money as to carefully guard and return with a fair interest when called for the funds committed to its care. In addition to the above there are other things a Trust Company should not attempt, but these three that are mentioned will serve to guide the mind in that direction sufficiently for all intents and purposes. These thoughts lead us to the contemplation of what is the object and what the purposes of a Trust Company. The name implies that such a company is a corporation formed for the purpose of holding property in trust.

This is so broad and comprehensive that we have taken the pamphlet of one of our safest Boston companies, to specify these purposes in detail.

"Said corporation shall have power to receive and hold moneys or property in trust or on deposit from courts of law or equity, including courts of probate and insolvency, executors, administrators, assignees, guardians, trustees, corporations, or individuals, upon such terms or conditions as may be obtained or agreed upon."

In harmony with the foregoing powers the courts are authorized to direct, by decree or otherwise, any moneys or property under their control, to be deposited with such companies, provided said companies shall assent to execute the trust to be committed to them.

With such almost unlimited powers of receiving moneys and property, and the courts so fully authorized to use them as depositories, it follows as an act of wise legislation that the act of incorporation should regulate by law the character of investments for such a company. These investments for this Boston company are specified to be, the authorized loans of the United States, or any of the New England States; or counties, cities or towns of any of the New England States ; in the first mortgage bonds of any railroad company which has earned and paid regular dividends for two years preceding such investment, or in the bonds of any such railroad company as is unencumbered by mortgage, or in the stock of such railroad companies incorporated by this State ; and the said corporation may make loans upon mortgages on real estate within this commonwealth, or upon the notes of corporations created under the laws of this commonwealth, and the notes of individuals with a sufficient pledge as collateral of any of the aforesaid securities. In fact, such a company may invest in those securities which are permitted to savings banks and under like restrictions. The Commonwealth granting the act of incorporation provides for certain stated examinations by the savings bank commissioner, which, with the examinations given by the committee appointed by the directors and stockholders, do not leave much room for malfeasance in office, except through the criminal neglect of those examining.

But something more is needed than what has already been stated in order to secure absolute safety. A corporation which is authorized to act as agent for the purpose of issuing, registering, or countersigning the certificates of stock, bonds, or other evidences of indebtedness of any corporation, association, municipality, state or public authority, and to receive and make payments on account of the same, require a safeguard more absolute than is covered by the honesty of its employes and the examination by properly appointed officials. Such a corporation requires that the men owning the stock—the individual stockholders—shall severally and collectively be men of undoubted character as well as ability. The New England Trust Company of Boston meets this point with a courage that is worthy of imitation. In their By-Laws appear the following articles.

APPRAISAL AND SALE OF SHARES OF CAPITAL STOCK.

ARTICLE. 7. Any member of this corporation who shall be desirous of selling any of his shares; the executor or administrator of any member deceased; and the grantee or assignee of any shares sold on execution, shall cause such, their shares respectively, to be appraised by the directors, which it shall be their duty to do on request, and shall thereupon offer the same to them for the use of the corporation, at such appraised value; and if said directors shall choose to take such shares for the use of the corporation, such member, executor, administrator, or assignee shall, upon the payment or tender to him of such appraised value thereof, and the dividends due thereon, transfer and assign such share or shares to said corporation; provided, however, the said directors shall not be obliged to take such shares at the appraised value aforesaid, unless they shall think it for the interests of the company ; and if they shall not, within ten days after such shares are offered to them in writing, take the same and pay such member, executor, administrator, or assignee therefor the price at which the same shall have been appraised, such member, executor, administrator, or assignee shall be at liberty to sell and dispose of the same shares to any person whatever.

ARTICLE 7. (Amended January 16, 1878.) It shall be the duty of such executor, administrator, grantee or assignee to offer said shares for appraisal and to be taken by the corporation, if it shall so elect, whenever requested by the Actuary or Secretary, and no dividends or interest shall be paid or allowed after a failure to comply with such request : provided, that such request shall not be made until after the payment of one dividend and the expiration of six months from the death of the owner, or sale as aforesaid; but the offer may be made at any earlier period if the party shall prefer.

ARTICLE. 8. The directors shall have power, and it shall be their duty, to sell and dispose of the shares which may be transferred as aforesaid to the corporation, whenever, in their judgment, it can be done with safety and advantage to the corporation; and in all sales made by the directors, under any of the aforesaid provisions, it shall be their duty to sell the shares to such persons as shall appear to them, from their situation and character, most likely to promote confidence in the stability of the institution ; no greater number than one hundred shares being assigned to any one person ; nor in the case of a person already a member, a greater number than will be sufficient to increase his previous number to one hundred shares.

So far this company has strictly adhered to these articles, and all stock offered has been bought by the company ; and the stock thus bought has been sold by the company, the directors voting on the list of applicants as to who should be elected to become a stockholder. By strictly adhering to these articles, a company originally composed of the best citizens of Boston has been enabled to always remain the same, as these men, having all the power, are careful not to associate with themselves men of doubtful character or speculative tendencies.

Now as railroad companies have great need and use for just such corporations, it well becomes the directors of these roads to pay particular attention to the question of who are the stockholders of a Trust Company before giving it power to act as its agent. That Trust Company whose stock is hawked about or sold in open market is liable sooner or later to fall into the hands of designing men who will manipulate its moneys to the detriment of all interested. The National and State banks cannot well be close corporations, but a Trust Company should never be anything else. Here is a point about which railroad companies have not been strenuous enough, and we call their attention to it, in their dealings with Trust Companies.

CONSTRUCTION.

HORSE-CAR lines are projected between many villages in Italy on the roads built by the old Romans.

THE track of the Guaymas Railroad in Sonora is now laid to within 20 miles of Hermosillo, and it is being extended at the rate of a mile and a half per day.

THE terminus of the Pembina Mountain branch of the Canada Pacific Railway has been definitely located on N ½, sec. 30, Tp. 3, R 8, the site of Manitoba City.

THE Northern and Union Pacific Railroad companies have arranged for a third rail on the Utah Northern, so that equal privileges can be enjoyed at Helena and Butte, Montana.

THE work of construction on the California Southern Railroad is being vigorously pushed. On the 18th ult. the track was four miles above San Ysadora, on the Santa Margarita Ranch.

THE new ferry boat Jamaica, built for the Nassau Ferry Company of New York, was launched from the Harlan & Hollingsworth yard, in Wilmington, Delaware, on the 31st ult.

IT is announced in Rochester that the New York, Lake Erie and Western Railroad Company has decided to build a line from Dansville, Livingston county, to join the main line at Burns, Alleghany county.

THE contract for building a railway tunnel under the St. Lawrence river, at Montreal, has been awarded to J. B. Rouilliard, for $3,500,000, including drainage and lighting complete, the work to be finished in 1885.

THE New Bedford Standard says that the Whitney Company have abandoned the project of constructing the Cape Cod Canal, careful estimates made on the recent surveys showing the cost to be more than a million dollars above what was expected.

THE contract for building the Pemigewassett Valley Railroad has been awarded to Patrick Kiernan, of Chelsea, Mass., who has already sublet most of the work. Operations are to begin February 8, and the road is to be finished to Woodstock by November 1.

THE superintendent of the Boston and Maine Railroad purposes to inclose the heater in every new car which he builds in a compartment of riveted boiler iron. The extra expense will be only $100, a small sum compared with the cost of a car and the dangers thus avoided.

IT is reported that the Canada Pacific Railway Company have enough material now at the end of their track beyond Brandon to construct upward of twenty miles additional road, and expect to have enough forwarded to the same point by the first of May to construct 300 miles of road next season.

THE engineers of the Philadelphia and Reading Railroad Company commenced on the 30th ult. the survey for a new branch road connecting Shamokin and Danville. This is one of the necessities of the recent connection of the Pine Creek road with the New York Central branch at Williamsport, and will be a short cut from the East Mahanoy coal fields. At present all the coal destined for the West must

be carried around the two sides of a triangle via East Mahanoy and the Catawissa Railroad to Danville, making in all about sixty miles. The new branch will be only fifteen miles in length.

THE project of extending the Ulster and Delaware Railway from Stamford, its present western terminus, to Cooperstown, a distance of 22 miles west, is being again agitated by the citizens of the latter village. It is claimed that by such extension a considerable saving of distance and time between that point and New York and other leading points would be effected.

THE Richmond and Danville Company have completed the Western North Carolina Railroad to Paint Rock and Pigeon River. Trains are now running to both points. This completion was made within the time as extended by Gov. Jarvis and treasurer J. M. Worth, and put an end to all talk of a forfeiture of the contract because the road was not completed by November 1, 1881.

THE New York, Lackawanna and Western Railroad has been completed in single track for a distance of 146 miles, leaving only 40 or 50 miles of track more to be laid. This completed distance is not in one continuous line, but the road has been finished with double track as far west as Waverly, to which place trains are running regularly. It is expected that the line will be extended at an early day as far as Elmira.

PERSONAL.

JAMES A. MILLHOLLAND manager of the Georges Creek and Cumberland Railroad, has invented an important improvement in the coal-car brake.

JOHN THOMAS has received the appointment of general superintendent of the Chicago division of the Baltimore and Ohio Railroad, with headquarters at Chicago.

DR. H. O. WALKER has received the appointment of surgeon of the Wabash, St. Louis and Pacific Railway for all points on the line between Detroit and Adrian.

B. E. Nichols has been appointed traveling freight agent of the Illinois branch and the Springfield division of the Illinois Central Railroad, in place of W. W. Chamberlain, resigned.

WM. E. RUTTER, of Elmira, N. Y., car tracer of the Pennsylvania Railroad, and father of James H. Rutter, third vice-president of the New York Central and Hudson River Railroad, died suddenly on Saturday of heart disease, aged 70.

THE mother of the Marquis of Bath, whom the Prince and Princess of Wales visited last month, was a Baring, and her son is credited with the remark that it would take two generations to wash the stain of commercial blood off his escutcheon.

WHEN the Central Vermont Railroad was built, J. R. Booth of Burlington worked as a common bridge hand. Now he is the largest timber limit owner in Canada, owning 2,225 square miles, or 1,423,360 acres—an area equal to more than one-fifth of the State of Vermont.

WM. J. WALKER, late of the Gilsey House, New York, has been appointed superintendent of the Baltimore and Ohio Railroad Company's hotels. His headquarters will be at the Queen City Hotel, at Cumberland, Md. Mr. Walker succeeds Captain J. P. Dukehart, who has held the position of manager of the company's hotels for about two years.

AT a meeting of the directors of the St. Louis and San Francisco Railroad in this city on the 27th ult., Jay Gould, Russell Sage, C. P. Huntington and Leland Stanford were elected members of the board. Places were made for them by the resignation of Walter L. Frost, Alden Speare and Francis B. Hayes of Boston; and Ozias Bailey of White Cloud, Kansas.

S. T. FULLER has been appointed general superintendent and chief engineer of the Northern division of the Mexican National Construction Company and the Mexican National Railway Company, as also general superintendent and chief engineer of the Texas-Mexican Railway. His duties as general superintendent and chief engineer will extend over all the lines of these companies north of San Luis Potosi, including the Matamoras division.

IT will doubtless be remembered by many that Marcus Morton was elected Governor of Massachusetts by one vote. After his retirement from office, the Governor was going to Boston from a neighboring town in a train which was late. It was half past 12 o'clock, and a lady who was anxious to be in Boston inquired of the Governor what time, in his opinion, the train would reach the station. Taking out his watch, and with a twinkle in his eye, he replied, "I generally get in by one."

ORGANIZATION.

THE directors of the Providence, Warren and Bristol Railroad Company, elected on the 30th ult., are: T. P. I. Goddard, William R. Robeson, Henry A. Whitney, William Goddard, Francis M. Weld and Royal C. Taft. Mr. Whitney was re-elected president.

AT the recent annual meeting of the Elkhart, Niles and Lake Michigan Railroad Company, the following directors were elected: F. M. Gray, Thomas L. Stevens, E. L. Badger, J. C. Larimore, of Niles; H. W. Williams, of Benton Harbor; J. Wade, W. S. Jones, Cleveland; C. W. Beck, Elkhart; C. E. Cowgill, Wabash. At a meeting of the directors F. M. Gray was elected president; E. S. Badger, vice-president; J. C. Larimore, treasurer; and George F. Edwards, secretary.

THE stockholders of the Cambria Iron Company, at their recent meeting in Philadelphia, re-elected the following board of directors: E. Y. Townsend, D. J. Morrel, C. S. Wurtz, John M. Kennedy, Geo. L. Oliver, Samuel Welsh, I. V. Williamson, David Reeves and Henry Lewis. At a subsequent meeting of the directors, E. Y. Townsend was re-elected president; Charles Wurtz, vice-president; Daniel J. Morrell, general manager; John T. Kille, treasurer, and W. S. Robinson, secretary.

AT the annual meeting of the Fitchburg Railroad Company, held in Boston on the 31st ult., the following gentlemen were unanimously elected directors, the first five being of the old board: William B. Stearns, Seth Bemis, Robert Codman, Rodney Wallace, C. U. Cotting, Franklin N. Poor, and Charles T. Crocker. Subsequently the directors organized by the choice of William B. Stearns as president; T. Whittemore, clerk; and M. D. Benson, treasurer.

THE first annual meeting of the stockholders of the New York, Chicago and St. Louis Railway Company was held at Cleveland, Ohio, on the 31st ult., at which the following directors were unanimously elected: C. R. Cummings, of Chicago, Ill.; C. S. Brice, of Lima, Ohio; Samuel Thomas, of Columbus, Ohio; Daniel P. Eells, of Cleveland, Ohio; Gov. Charles Foster, of Fostoria, Ohio; George I. Seney John T. Martin, H. R. Lyman, Walston H. Brown, William Flannery, and Alexander White. No report was made.

THE following gentlemen were elected directors of the Jersey Shore, Pine Creek and Buffalo Railroad Company, at the annual meeting of the stockholders held at Coudersport, Penn., on the 23d ult.: Walter Sherwood, John W. Bailey, Jerome B. Niles, Anson Hardt, William Howell, Jr., E. G. Schieffeline, Jefferson Harrison, William H. Vanderbilt, Cornelius Vanderbilt, Augustus Schell, William K. Vanderbilt, George J. Magee. The officers are Henry Sherwood, president; George S. Magee, vice-president; Cornelius Vanderbilt, treasurer.

AT a meeting of the stockholders of the Allen Paper Car Wheel Company, held the first day of February, 1882, the following named persons were elected directors of the company, for the ensuing year: A. G. Darwin, A. P. Condit, R. J. Beach, J. C. Beach, Stephen F. Gale, J. E. Gillette, R. N. Allen, C. G. Hammond, Geo. C. Clarke. Subsequently, at a meeting of the board of directors, the following officers were elected: A. G. Darwin, president; J. E. Gillette, 1st vice-president; Geo. C. Clarke, 2nd vice-president; J. C. Beach, treasurer, C. H. Antes, secretary.

Discipline.

THE absence of discipline among subordinates is usually attributed to a lack of that capacity in the management, as the successful and competent chief, if possessed of the organizing and executive ability demanded by his position, is expected to display the necessary power for diffusing his system throughout all branches of the service.

Discipline, if properly administered, always commends itself to intelligent subordinates, and they soon hold that superior in high esteem who requires a strict obedience to every order, by which their own as well as the public safety is assured. They become inspired, under such control, with a true pride of office, such as is known in military circles as "*esprit de corps.*"

A competent and thorough disciplinarian is never a tyrant, but exhibits a wholesome control, is easily approached, and has a willing ear for all wrongs. His power proceeds from unremitting attention to his own duties and his personal recognition of all orders, rather than from any severity of manner; though the penalty of disobedience may and should be swift and sure.

New York Stock Exchange.

(Thursday's quotations follow money article.)

Closing Prices for the week ending Feb. 1.

	Th.26.	F.27.	Sat.28.	M. 30.	Tu.31.	W.1.
Adams Express	.....	147	....	147	.....	.....
Albany and Susq	.....	.....	132	.....	.....	.....
1st mortgage	.....	.....	.....	.....	.....	.....
2d mortgage	.....	.....	.....	.....	.....	.....
American Express	93½	93	94	.....	94	92½
Atlantic & Pac. Tel.	.....	.....	.....	.....	.....	.....
Burl., C. R. & Nor	.....	.....	.....	.....	.....	.....
1st mortgage 5s	100½	....	100	98	100	99⅜
Canada Southern	53¾	54½	54¾	52¼	53	53
1st mortgage guar	95⅜	95½	95¼	95	95	95
Central of N. Jersey	94⅞	96	95⅜	94⅝	94½	94½
1st mort. 1890	.....	119¾	.....	.....	.....	.....
7s, consol. ass	115	115	115	115¼	.....	.....
7s, convertible ass.	.....	.....	.....	.....	.....	.....
7s, Income	.....	.....	.....	.....	102	.....
Adjustment	.....	.....	.....	.....	.....	103
Central Pacific	88¼	89⅛	88⅞	87¾	88¾	88¼
6s, gold	114¼	114⅜	.....	114	114	.....
1st M. (San Joaq)	.....	.....	.....	.....	.....	.....
1st M. (Cal. & Or.)	.....	.....	.....	.....	.....	.....
Land grant 6s	.....	.....	.....	.....	.....	105¾
Chesapeake & Ohio	23½	.....	24¼	24¼	23⅛	23¾
1st, series B	.....	.....	.....	81½	81	.....
Chicago and Alton	.....	134½	134⅜	133¾	132⅝	133
Preferred	.....	.....	.....	.....	.....	.....
1st mortgage	.....	121	.....	.....	.....	.....
Sinking Fund	.....	.....	.....	.....	.....	.....
Chi., Bur. & Quincy	135½	138	137½	134¼	134	135
7s, Consol. 1903	.....	126	.....	.....	126	.....
Chi., Mil. & St. Paul	107½	109⅛	108⅝	107¾	108	109
Preferred	.....	122⅛	122½	121½	121⅞	122¾
1st mortgage, 8s	.....	.....	.....	.....	.....	132½
2d mort., 7 3-10s	.....	.....	.....	.....	.....	.....
7s, gold	125	.....	.....	.....	.....	.....
1st M. (La. C. div)	.....	.....	.....	.....	.....	.....
1st M. I. & M. div.)	119	.....	.....	.....	.....	.....
1st. M. (I. & D. ext.)	.....	.....	.....	.....	.....	.....
1st M. (H.&D. div.)	.....	.....	.....	.....	.....	.....
1st M. (C. & M. div.)	122½	123	.....	.....	.....	.....
Consolidated S. F.	119	120	120	.....	119	120
Chi. & Northwestern	127⅜	130⅜	129¾	129⅛	130¾	135¼
Preferred	139¼	149½	140½	139½	140	144
1st mortgage	.....	.....	.....	.....	.....	.....
Sinking Fund 6s	.....	111	.....	.....	.....	.....
Consolidated 7s	134	.....	.....	.....	.....	.....
Consol. Gold bo'ds	127	124	127	.....	126¼	126⅜
Do. reg	127	.....	.....	.....	.....	.....
Chi., R. Isl. & Pac.	133¾	133½	133½	132½	132¼	132½
6s, 1917, c	.....	.....	.....	126	.....	126
Clev., Col., Cin. & Ind.	80¼	.....	81½	.....	78¼	79½
1st mortgage	.....	.....	.....	.....	.....	.....
Clev. & Pittsburg gr.	.....	.....	.....	.....	.....	135
7s, Consolidated	.....	.....	.....	.....	.....	.....
4th mortgage	.....	.....	.....	.....	.....	.....
Col., Chi., & Ind. Cent.	19¾	19¾	19¾	19½	19¼	19½
1st mortgage	.....	.....	.....	.....	.....	.....
2d mortgage	.....	.....	.....	.....	.....	.....
Del. & Hud Canal.	106½	107	107	106½	106½	106½
Reg. 7s, 1891	.....	.....	.....	.....	.....	.....
Reg. 7s, 1884	.....	104½	.....	.....	.....	.....
7s, 1894	.....	.....	119½	.....	.....	.....
Del., Lack. & Western	124½	125⅞	125¾	124½	125¾	126¾
2d mortgage 7s	.....	.....	.....	.....	.....	.....
7s, Consol. 1907	.....	.....	.....	.....	.....	.....
Erie Railway	.....	.....	.....	.....	.....	.....
1st mortgage	.....	.....	.....	.....	.....	.....
2d mort. 5s, ext	.....	107½	.....	.....	.....	.....
3d mortgage	.....	.....	.....	.....	107	107½
4th mort. 5s, ext.	.....	.....	.....	.....	.....	.....
5th mortgage	.....	.....	.....	.....	.....	112
7s, Consol. gold	.....	.....	.....	.....	.....	.....
Great West. 1st mort	.....	.....	.....	.....	.....	.....
2d mortgage	.....	.....	.....	.....	.....	.....
Hannibal & St. Jo	95¼	95¼	95⅛	95	94¾	95¼
Preferred	107¼	109¼	109	107	108½	108¾
8s, Convertible	.....	.....	.....	.....	.....	.....
Houston & Tex. Cen	.....	83¾	83½	83¼	.....	80½
1st mortgage	.....	111½	110	.....	.....	.....
2d mortgage	.....	.....	.....	124	.....	124
Illinois Central	134	135⅝	135	133¾	134½	135¾
Lake Shore & Mich So	112	112¾	111⅝	109⅞	110¼	111
Consol. 7s	.....	.....	.....	.....	.....	.....
Consol. 7s, reg	.....	.....	.....	.....	.....	.....
2d Consolidated	.....	.....	.....	.....	.....	.....
Leh. & W. B. 7s, Con	.....	.....	.....	.....	.....	.....
Long Dock bonds	.....	.....	.....	.....	.....	.....
Louisville & Nash.	95	96¼	94⅛	93¼	94	94¼
7s, Consolidated	.....	.....	.....	.....	.....	.....
Manhattan	55	55¼	54¾	54½	53¾	53
1st pref	.....	97½	98	98	.....	.....
Met. Elevated	.....	87⅞	.....	86	....	85
1st mortgage	100½	100¾	100¾	100¾	100⅛	100⅛
Michigan Central	86⅛	87⅛	86⅜	85⅜	85¾	86¼
7s, 1902	.....	.....	.....	.....	.....	.....
Morris & Essex	122	.....	123¾	.....	.....	.....
1st mortgage	.....	.....	138	.....	.....	.....
2d mortgage	.....	.....	.....	.....	.....	.....
7s of 1871	.....	125	.....	.....	.....	123
7s, Convertible	.....	.....	.....	.....	.....	.....
7s, Consolidated	.....	.....	.....	.....	.....	.....
N. Y. Cen. & Hud. R.	130⅞	131½	130¼	129⅛	129¾	130¾
6s, S. F. 1883	.....	.....	.....	.....	.....	102⅜
6s, S. F., 1887	.....	.....	.....	.....	.....	.....
1st mortgage	.....	134¼	.....	.....	133½	134
1st mortgage, reg.	.....	.....	.....	.....	.....	.....
N. Y. Elevated	.....	109¾	.....	108	.....	.....
1st mortgage	116½	116¾	.....	.....	116½	116½
N. Y. & Harlem	.....	.....	.....	.....	.....	.....
Preferred	.....	.....	.....	.....	.....	.....
1st mortgage	135	.....	.....	.....	.....	.....
1st mortgage, reg	.....	.....	.....	.....	.....	.....
N. Y., Lake Erie & W	40¾	40¾	10¼	39	39½	39¾
Preferred	.....	.....	81¼	79	79½	79½
2d Consolidated	99¼	100	99½	98⅞	98½	98⅝
New 2d 5s fund	.....	.....	.....	95½	.....	.....
N. Y., N. Hav'n & Hart	.....	171¼	.....	.....	171⅝	171½
North Mo. 1st mort	.....	.....	119	119¾	.....	120
Northern Pacific	35¼	35⅝	35¼	34¼	34	34¼
Preferred	72⅞	74	72¾	71⅜	70¾	72⅛
Ohio & Mississippi	.....	34¼	34½	33¾	32⅝	33¼
Preferred	.....	.....	.....	.....	100¼	.....
2d mortgage	.....	.....	.....	.....	.....	.....
Consolidated 7s	.....	.....	.....	.....	117¼	.....
Consol. S. Fund	.....	.....	.....	.....	.....	.....
Pacific Mail S. S. Co	41¾	42⅝	42⅞	41⅝	42	41⅞
Pacific R. R. of Mo.	.....	.....	.....	.....	.....	.....
1st mortgage	110	.....	109	.....	.....	.....
2d mortgage	.....	.....	.....	.....	111½	.....
Panama	.....	.....	.....	.....	190	.....
Phila. & Reading	63¾	64¼	63⅜	61½	61⅞	62½
Pitts., Ft. W. & Chi. gtd	.....	.....	.....	.....	.....	.....
1st mortgage	.....	.....	.....	.....	.....	.....
2d mortgage	.....	.....	.....	.....	.....	.....
3d mortgage	.....	.....	.....	.....	.....	.....
Pullman Palace Car	139	139½	140	135¾	135	136¾
Quicksil'r Min'g Co	.....	.....	.....	.....	.....	.....
Preferred	.....	61½	.....	.....	60¾	.....
St. Louis & San Fran	44	44¾	43½	42	41¼	41¼
Preferred	64	64	63	61½	58	57¾
1st Preferred	102	100½	101½	.....	.....	98½
St. L., Alt'n & T. H.	38	37	.....	36	39	35
Preferred	.....	.....	.....	32	41	81
1st mortgage	.....	.....	.....	.....	.....	.....
2d mort. pref	.....	110	.....	.....	.....	.....
Income bonds	.....	.....	.....	.....	.....	.....
St. L., Iron Mt. & S	.....	.....	.....	.....	.....	.....
1st mortgage	.....	.....	.....	.....	.....	115
2d mortgage	.....	109	.....	109	109	109
Toledo and Wabash	.....	.....	.....	.....	.....	.....
1st mortgage	.....	.....	111	.....	.....	.....
2d mortgage	.....	.....	.....	.....	.....	.....
7s, Consolidated	106	.....	.....	.....	.....	103½x
St. Louis Division	.....	.....	.....	.....	112½	...
Union Pacific	117½	117¾	117½	116¾	116⅞	117½
1st mortgage	115½	.....	115¾	116	.....	.....
Land Grant 7s	.....	.....	.....	.....	.....	113½
Sinking Fund 8s	123	.....	122	.....	.....	.....
United States Ex	79¼	79½	78	.....	77	.....
Wabash, St. L. & Pac	36¼	36⅜	36½	35½	35⅝	36½
Preferred	68	68⅞	67⅞	66¾	67	67¾
New mort. 7s	.....	.....	.....	.....	.....	.....
Wells-Fargo Ex	.....	130½	.....	.....	.....	.....
Western Pacific b'ds	.....	.....	.....	.....	.....	.....
Western Union Tel.	80½	82⅛	81	79¾	79⅞	80⅛
7s., S. F conv., 1900	.....	.....	.....	.....	116½	.....
FEDERAL STOCKS :—						
U. S. 4s, 1907, reg	118¼	118¼	.....	.....	.....	.....
U. S. 4s, 1907, coup.	118	118¼	.....	.....	.....	.....
U. S. 4½s, 1891, reg.	.....	.....	.....	.....	.....	.....
U. S. 4½s, 1891, coup	.....	.....	.....	.....	.....	.....
U. S. 5s, 1881, reg	.....	.....	.....	.....	.....	.....
U. S. 5s, cont'd at 3½	.....	.....	.....	.....	.....	.....
U. S. 6s cont'd at 3½	.....	.....	.....	.....	.....	.....
Dt. of Col. 3-65s, reg	.....	.....	.....	.....	.....	.....
Dt. of Col. 3-65s, coup	107½	.....	.....	.....	.....	.....

Boston Stock Exchange.

Prices for the Week Ending Feb. 1.

	Th.25.	F. 27.	Sat.28.	M.30.	Tu.31.	W. 1
Atch., Top. & San. Fe.	90¼	90½	89¼	87	86¾	87⅛
1st mortgage	.....	119	.....	.....	118½	.....
2d mortgage	.....	.....	.....	.....	.....	.....
Land Grant 7s	.....	.....	.....	.....	.....	.....
Boston & Albany	.....	165	166	.....	.....	167¼
7s reg	.....	.....	.....	.....	.....	.....
Boston and Lowell	.....	.....	.....	.....	103¼	.....
Boston & Maine	145½	145½	145	145	145	145½
Boston & Providence	.....	.....	.....	.....	.....	.....
Bos'n, Hart. & Erie 7s	65½	65¼	65⅜	62½	62¾	64
Burl. & Mo. R. L. G. 7s	.....	.....	.....	.....	.....	.....
Burl. & Mo. R. in Neb	.....	.....	.....	.....	.....	.....
6s, exempt	.....	114¾	.....	.....	114	.....
4s	.....	40	.....	.....	.....	.....
Chi., Burl. & Quincy 7s	134⅞	135½	137¼	134¼	134	135½
Cin., Sand. & Clev ($50)	25½	.....	26⅜	26	25¼	.....
Concord ($50)	.....	.....	.....	.....	.....	.....
Connecticut River	.....	.....	.....	.....	.....	.....
Eastern	.....	.....	35	34	.....	.....
New 4½ Bonds	108¼	109	110	109	109	108½
Fitchburg	133¼	133½	133¾	.....	.....	134½
N. Y. & New England	60¾	60¾	60	.....	.....	59
7s	117½	.....	117	117¼	117	117
Northern N. H.	.....	.....	.....	.....	.....	.....
Norwich & Worcester	.....	.....	.....	.....	.....	.....
Ogden & Lake Cham	.....	.....	.....	.....	.....	.....
Preferred	.....	.....	.....	.....	.....	.....
Old Colony	124⅜	125	124½	.....	.....	.....
Ph., Wil. & Balt. ($50)	.....	64	.....	64	.....	.....
Portl'd, Saco & Ports	.....	.....	.....	.....	.....	113⅜
Pueblo & Ark Val	.....	.....	.....	.....	.....	.....
7s	.....	.....	115	.....	115	116
Pullman Palace Car	.....	139	141¼	.....	134	135¾
Union Pacific	117¼	.....	118¼	.....	116⅛	117⅛
6s	.....	.....	.....	.....	.....	.....
Land Grant 7s	.....	.....	.....	.....	.....	.....
Sinking Fund 8s	.....	.....	.....	.....	.....	.....
Vermont & Canada	.....	.....	.....	.....	.....	.....
Vermont & Mass	.....	.....	.....	.....	134	134
Worcester & Nashua	.....	.....	.....	.....	.....	.....
Cambridge (Horse)	.....	.....	.....	.....	.....	.....
Metropolitan (Horse)	.....	76⅜	.....	.....	.....	.....
Middlesex (Horse)	.....	.....	.....	.....	.....	.....
Cal. & Hecla Min'g Co	.....	.....	235	.....	231	.....
Quincy	53	52	43½x	42	.....	.....

Philadelphia Stock Exchange.

Closing Prices for the Week Ending Jan. 31.

	W.25.	Th.26.	F.27.	Sat.28.	M.30.	Tu.31
Allegh'y Val. 7 3-10s	.....	.....	.....	.....	.....	.....
7s, Income	.....	55	56	.....	.....	55¾
Camd'n & Am. 6s, '83	.....	.....	.....	.....	.....	.....
6s, 1889	.....	.....	.....	.....	.....	.....
Mort. 6s, 1889	.....	.....	.....	.....	.....	.....
Camden & Atlantic	.....	.....	.....	.....	.....	.....
Preferred	.....	.....	.....	.....	.....	.....
1st mortgage	.....	.....	.....	.....	.....	.....
2d mortgage	.....	165½	.....	.....	.....	.....
Catawissa	20	20	20	19¾	19¾	.....
Preferred	53¾	54	.....	54¾	54¾	55
7s, new	.....	.....	.....	.....	.....	.....
Del. & Bound Brook	.....	.....	.....	.....	.....	.....
7s	.....	126	.....	126	.....	.....
Elmira & Williamsp't	.....	.....	.....	.....	.....	.....
Preferred	.....	.....	.....	.....	.....	.....
Hunt. & B. Top Mt.	.....	14½	.....	.....	.....	.....
Preferred	.....	.....	.....	27½	26	26
2d mortgage	.....	.....	.....	.....	.....	.....
Lehigh Navigation	42¼	43	42½	42⅝	42½	42¾
6s, 1884	.....	105	103	.....	105	.....
Gold Loan	.....	111¾	.....	.....	110¾	110¾
Railroad Loan	.....	.....	.....	.....	116¾	.....
Conv. Gold Loan	.....	.....	.....	.....	.....	.....
Consol. Mort, 7s	.....	.....	116¾	.....	.....	.....
Lehigh Valley	62	62½	62½	62¼	61¾	66½
1st mort. 6s, coup	.....	.....	.....	.....	121¼	.....
1st mort. 6s, reg	.....	.....	.....	.....	.....	.....
2d mort. 7s	134	.....	.....	134	.....	.....
Consol mort. 6s	.....	.....	118	118¾	.....	.....
Consol. mtg. 6s, reg	.....	118½	.....	.....	119½	.....
Little Schuylkill	56	56	.....	56	56	.....
Minehill & Sch. Hav'n	.....	.....	61	.....	.....	.....
North Pennsylvania	.....	62¼	62	62¼	.....	62¾
1st mortgage 6s	106	.....	.....	.....	.....	.....
2d mortgage 7s	.....	.....	.....	.....	.....	.....
Genl. mtg. 7s, coup	.....	.....	123	.....	123	.....
Genl. mtg. 7s, reg	.....	.....	.....	.....	.....	.....
Northern Central	.....	.....	.....	.....	48½	.....
5s	.....	.....	.....	96	.....	96
Northern Pacific	35	35¼	35½	35¼	34½	34
Preferred	72¾	73	74	72¾	71¼	70¾
Pennsylvania R. R.	61¼	61¼	61⅝	61½	60⅜	60¾
1st mortgage	.....	.....	.....	.....	.....	.....
Gen'l mort	.....	.....	.....	.....	.....	.....
Gen'l mort reg	.....	.....	.....	.....	.....	.....
Consol. mort. 6s	.....	.....	.....	.....	117	.....
Consol. mort. reg	.....	.....	.....	.....	.....	.....
Pa. State 6s 2d series	.....	.....	.....	.....	.....	.....
do 3d series	.....	.....	.....	.....	.....	100
do 5s, new	.....	.....	.....	116	.....	.....
do 3s,	.....	.....	.....	.....	.....	.....
Phila. & Reading	31⅞	31⅞	32½	31¾	30⅝	30¾
1st mortgage 6s	.....	.....	.....	.....	.....	.....
7s of 1893	.....	.....	.....	.....	.....	.....
7s, new convert	.....	.....	.....	.....	.....	.....
Consol. mort. 7s	.....	.....	.....	125	.....	.....
Consol. mort. reg	.....	.....	.....	.....	.....	.....
Gen'l mort. 6s	98½	93⅝	98⅞	99	99	98¾
Philadelphia & Erie	19	19	.....	.....	.....	16
1st mortgage 5s	.....	.....	105½	105½	.....	105½
2d mortgage 7s	.....	.....	.....	114	.....	.....
Pittsb., Cin. & St. L. 7s	.....	124	124	.....	.....	.....
Pitts., Titusv. & Buff.	19¾	19¾	19½	19½	18¼	18½
7s	.....	.....	102	.....	.....	.....
Schuylkill Navi't'n	.....	.....	.....	.....	.....	.....
Preferred	.....	.....	12¾	12¾	.....	12¾
6s, 1872	.....	.....	.....	107	.....	.....
6s, 1882	87½	89	.....	.....	89	.....
United Co. of N. J.	185	185	185¾	185¾	186	186
Hestonville, (Horse)	.....	....	18	18	.....	17
Chestnut & Wal. (do)	.....	.....	.....	.....	.....	.....
Green & Coates (do)	.....	.....	.....	.....	.....	...

Baltimore Stock Exchange.

Closing Prices for the Week Ending Jan. 31.

	W. 25.	Th. 26.	F. 27.	Sat. 28.	M. 30.	Tu. 31.
Baltimore & Ohio..	.....	.....	195¼	.....	.....	.....
6s, 1880.....	.....	.....	.....	.....	.....	.....
6s, 1885.....	.....	.....	.....	107½	.....	.....
Central Ohio ($50)..	.....	.....	.....	50	.....	.....
1st mortgage.....	.....	.....	111	.....	.....	.....
Marietta & Cincin'ti	.....	.....	.....	.....	.....	.....
1st mortgage, 7s..	.....	122	22	125¾	.....	.....
2d mortgage, 7s..	104¾	104½	105¾	105¾	105½	.....
3d mortgage, 8s..	53½	58¾	59	59	58¼	.....
Northern Cen. ($50)	.....	.....	49¾	.....	48¼	.....
2d mort., 6s 1885..	105½	105¾	.....	.....	.....	.....
3d mort., 6s, 1900.	.....	.....	.....	.....	.....	.....
6s, 1900, gold.....	.....	.....	114½	114	114	.....
6s, 1904, gold.....	.....	112¾	.....	.....	.....	.....
Orange & Alex. 1st.	.....	.....	.....	.....	.....	.....
2d mortgage, 6s...	.....	.....	.....	.....	.....	.....
3d mortgage, 8s...	.....	.....	.....	.....	.....	.....
4th mortgage, 8s..	.....	.....	.....	.....	.....	.....
O.,Alex.&Manas's 7s	.....	.....	.....	.....	.....	.....
Pitts.& Connellsv.7s	.....	.....	.....	.....	.....	.....
Virginia 6s, Consol.	64½	63¾	63	62¾	62	.....
Consol. coupons..	64	65	65½	.....	.....	.....
10-40 bonds.....	42	40¾	.....	40	40	.....
Def'd Certificates.	15½	.....	.....	.....	.....	.....
Western Maryland..	.....	14½	.....	.....	.....	.....
1st M.,end.by Balt	.....	.....	.....	.....	.....	.....
2d M., do .	.....	.....	.....	.....	.....	.....
3d M., do .	.....	.....	.....	.....	.....	.....
1st M.,unendors'd	.....	.....	.....	.....	.....	.....
2d M.,end.WashCo	.....	.....	.....	.....	.....	.....
2d M., preferred..	.....	.....	106	.....	.....	.....
City Passenger R R.	.....	.....	.....	41	.....	.....

London Stock Exchange.

	Closing Prices— Jan. 13.		Jan. 6.	
Baltimore & Ohio (sterling).....	114	116	114	116
Cairo & Viencennes com. stock	36	38	36	38
Do. preferred 5 per cent.....	90	92	90	92
Central of N. J. $100 shares.....	93	98	93	98
Do. Cons. Mortgage.....	115	117	115	117
Do. Adjustment Bonds.....	104	109	104	109
Do. Income Bonds.....	104	107	104	107
Det.,G'd Haven & Mil. Equip bds	112	114	112	114
Do.Con.M.5p.c.,till'83aft'r6p.c	110	112	110	112
Illinois Central $100 shares.....	135½	136½	132	133
Lehigh Valley Cons. mortgage..	115	119	115	119
Louisville & Nashville mort 6s.	105	107	105	107
Do. Sink. Fund bds (S.&N.Ala)	102	104	103	105
Do. capital stock $100 shares.	97	99	103	105
N. Y. Cent. & Hud. R. mt. bds..	134	137	134	137
Do. $100 shares.....	136¾	137¾	132	134
Do mort. bonds (stg.).....	123	125	120	122
N.Y.,Lake Erie & West.,$100 shs	42¼	42¾	40	40½
Do. 6 p. c. pref. $100 shares ..	87	89	84	86
Do. 1st Con. Mort. bds (Erie) .	131	133	131	133
Do. do. Funded Coupon bds.	127	129	127	129
Do. 2d Consol Mort. bonds...	101	103	100	102
Do. do. Funded Coupon bds..	97	100	97	100
Do. Gold Income bonds.....	93	95	93	100
N.Y.,Pa.& Ohio 1st mort. bonds.	47	48	45	46
Do. Prior Lien bds (sterling)..	104	108	104	108
Pennsylvania, $50 shares.....	63	64	62	63
Do. Con. Sink Fund Mort....	116	118	118	122
Philadelphia & Reading $50 shs	33¼	33¾	32	33¼
General Consol Mortgage.....	116	118	116	118
Do. Improvement Mortgage..	103	105	103	105
Do.Gen.Mtg.'74,ex-def'd coup.	99	101	100	101
Do. Scrip for the 6 def. ½ coup.	92	97	92	97
Pittsb., Ft. W. & Chi. Eq. bds....	105	109	105	109
St. L. Bridge 1st mort. gold b'd.	126	128	126	128
Do. 1st pref. stock.....	102	104	102	104
Union Pa. Land Grant 1st. mtg.	115	119	115	119

AMERICAN RAILROAD JOURNAL.

Financial and Commercial Review.

THURSDAY EVENING, Feb. 2, 1882.

IN the morning hours stockholders generally paid 5@6 per cent for call loans. Borrowers on call on Government securities were accommodated at 2@3 per cent. Time loans on stocks were hard to get at 6 per cent. Mercantile paper was 5@6 per cent. In the afternoon the quotation for call loans was 6 per cent, but in the last hour fell to 4@5 per cent, and at the close to 3@4 per cent.

The actual rates for sterling exchange were 4.89½@⅝ for demand bills, 4.83½@4.84⅛ for 60 day bills, 490½@4.91½ for cables, and 4.81¾@4.82 for prime commercial bills. The actual rates for continental bills are as follows: francs, 5.11¼@5.12½, and 5.17½@5.18¾; marks, 94⅜@94⅞, and 95¾@⅞, and guilders 40¼ and 40¾.

There had been redeemed at the Treasury Department at Washington to the 31st ult., $19,178,900 bonds included in the 105th and $15,112,050 included in the 106th call, leaving $5,709,050. Interest ceased on 24th December on the 105th call, and on 30th January on the 106th call. The next call to mature is for $20,000,000, due 12th March next.

From the message of the Governor of Rhode Island, delivered on the 31st ult., we learn that the bonded indebtedness of the State at the close of the year was $2,118,500—a decrease during the year of $129,011. The sinking fund amounts to $723,122.

At the annual meeting of the stockholders of the Fitchburg Railroad Company, held in Boston on the 31st ult., the annual report of the directors was presented and accepted. The number of directors was increased from five to seven, and the old board unanimously re-elected, with the addition of Franklin N. Poor and Charles T. Crocker. On motion it was voted that the directors be authorized to issue 20-year additional bonds to the amount of $500,000, necessary for the funding of the floating debt, and also that all issues of bonds by them already made be hereby ratified and approved. It was also voted that the acts and doings of the directors in regard to the change of the location of the railroad in Belmont, and in releasing the company's rights to certain land in Belmont with the consent of the Legislature of Massachusetts to the Mass. Central R. R. Co., under the agreement made between the two railroads December 14, 1880, is hereby ratified and approved. This vote refers to the agreement whereby the Massachusetts Central provided a new road-bed for the Fitchburg in Belmont, leasing the old road-bed for their own tracks.

The annual report of the State Treasurer of Maine shows receipts of $1,417,526.83 and expenditures of $1,435,460.21; balance on hand, $142,405.26. There was paid on the public debt, $83,000; and for interest on the same, $336,681.

The gross earnings of the Chicago, Burlington and Quincy Railroad for the month of November, 1881, were $1,816,133, the expenses $912,980, and the net earnings $903,153; for the month of November, 1880, the gross earnings were $1,835,860, the expenses $858,206, and the net earnings $978,653; showing a decrease in gross earnings of $21,726, with an increase in expenses of $54,774, making a decrease in the net earnings of $76,500. From January 1, to November 30, 1881, the gross earnings were $19,270,964; the expenses $9,703,161, and the net earnings $9,567,803; for the corresponding period of the previous year the gross earnings were $18,902,476, the expenses $8,681,494, and the net earnings $10,220,982; showing an increase in gross earnings of $368,488, with an increase in expenses of $1,021,667, making a decrease in the net earnings of $653,179.

In the United States House of Representatives, at Washington, on the 30th ult., the proposition to restore to the Government unearned lands held as grants by certain railroad companies was, on motion of Mr. Townsend, of Ohio, referred to the Committee on Judiciary by a vote of 161 to 58.

The report of the Western Maryland Railroad Company states that the gross earnings for the year ending September 30, 1881, were $461,871 01, the expenses $375,919.02, and the net earnings $85,951.99. Compared with the previous year there was an increase in gross earnings of $64,306.92, with an increase in expenses of $66,633.84 making a decrease in the net earnings of $2,326.92. There were moved during the ear 498,000 passengers and 291,259 tons of freight, being equivalent to the movement of 12,277,592 passengers and 7,278,431 tons of freight a distance of one mile, which, compared with 1880, shows an increase of 1,571,677 passengers and 633,103 tons of freight carried a distance of one mile.

The annual report of the Commissioner of Patents for the year ending December 31, 1881, shows that the total receipt of the office during the year were $853,665.89, and the expenditures $605,173.28. The balance in the Treasury on account of the patent fund Jan. 1, 1882, amounted to $1.880,119.32. The receipts, as stated above, exceed those of any previous year by nearly $100,000, and the excess of receipts over expenditures—$248,492.61—has been correspondingly greater. In no former year have there been so many applications for patents though the number of patents granted in 1876 exceeded that of the past year.

The gross earnings of the Delaware, Lackawanna and Western Railroad for the year ending December 31, 1881, were $27,396,525.98; the expenses $19,632,661.65, and the net earnings $7,763,864.33; from which deduct interest and rentals, $3 558,493.74, leaving as net profits the sum of $4,205,370.59. The balance due on account of bonds paid and retired March 1, 1881, is $1,200,000; the surplus account, $7,585,297; the capital stock. $26,200,000; and the bonded debt, 4,044,900. The construction account stands at $30,873,356; materials on hand, $1,121,850; stocks and bonds, $6,265,520. The accounts receivable are $3,804.507, and the accounts payable $3,035,037, a difference of $769,469, which added to the above, shows that the total property and assets now amount to $39,030,197.

The Supreme Court of the United States has affirmed the decision of a lower court awarding to the Pacific Mail Steamship Company $292,000, with interest at five per cent from the 1st of March last, in settlement of arrears of payment for mail service.

The closing quotations on Thursday were: Adams Express, 145@148; American Express, 92@93; Chicago, Burlington and Quincy, 135¼@136; Canada Southern, 53@53½; Chicago and Northwestern, 134⅛@135; do. pref., 142½@143¼; Chicago and Alton, 133⅞@134¾; Central of New Jersey, 94⅞@95; Central Pacific, 89½@89⅝; Chicago, Milwaukee and St. Paul, 109½@109½; do. pref., 122½@122¾; Cleveland, Columbus, Cincinnati and Indianapolis, 80@81; Columbus, Chicago and Indiana Central, 19½@19¾; Delaware and Hudson Canal, 107@107½; Delaware, Lackawanna and Western, 127⅛@128; Hannibal and St. Joseph, 95½@95½; do. pref., 108@108½; Illinois Central, 135¾@136½; Lake Erie and Western, 32½@33; Lake Shore and Michigan Southern, 111⅛@111¼; Metropolitan

Elevated, 85@86 ; Manhattan Elevated, 53@53½ ; do. 1st pref., 97@98 ; Michigan Central, 86⅜@86⅞ ; New York Elevated, 107@108 ; New York, Lake Erie and Western, 39¾@38⅞ ; do. pref., 80@80⅜ ; New York Central and Hudson River, 131@131½ ; Northern Pacific, 34½@34⅝; do. pref., 71⅞@72 ; Ohio and Mississippi, 33½@33⅝; Pacific Mail, 44@44½ Texas and Pacific, 47¾@47⅞ ; Union Pacific, 118½@118⅝ ; United States Express, 77@78 ; Western Union Telegraph, 80½@80⅝; Wabash, St. Louis and Pacific, 36½@36⅝; do. pref., 67½@67⅝ ; Wells-Fargo Express, 128@129.

The following quotations of sales of Railway and other securities, for the week, are in addition to those given elsewhere in our columns:

New York.—Atchison, Colorado and Pacific 1st, 98 ; Atlantic and Pacific 1st, 97 ; do. inc., 37½ ; Boston and New York Air Line pref., 63¾; Cleveland and Toledo S. F., 108 ; Chicago, St. Louis and New Orleans, 84 ; Chicago, St. Paul, Minneapolis and Omaha, 35⅞; do. pref., 100⅞ ; do. consol., 99⅝ , Chesapeake and Ohio 1st pref., 33¾; do. 2d pref., 25 ; do. Pur. Money Fund, 112; do. 1st, Series A, 102; do. cur. int., 50½; Central Iowa 35 ; do. 1st, 112½; Cedar Falls and Minnesota, 18½ ; Chicago, Milwaukee and St. Paul S. M. div., 1st, 103 ; do. La C. and Dav. div. 1st, 95 ; do. S. W. div., 107 ; Chicago and Northwestern S. F. 5s, 100; Cleveland, Columbus Cincinnati and Indianap. consol., 123½; Columbus, Chicago and Indiana Central Inc., 71; do. 1st, 125; Chicago, Burlington and Quincy 8s, 103½; Denver and Rio Grande, 71⅜; do. 1st, 113½ ; do. consol., 104½ ; Des Moines and Ft. Dodge, inc., 73 ; East Tennessee, Virginia and Georgia, 14⅝ ; do. pref., 24; do. 1st, 115; do. inc., 56½ ; do. 5s, 80; Erie and Pittsburg consol., 105 ; Evansville and Terre Haute 1st, 96 ; Green Bay, Winona and St. Peter, 14 ; Georgia R. R. and Bank, 167½ ; Gulf, Colorado and Santa Fe 1st, 107 ; Hannibal and Central Mo. 1st, 106 ; Hudson River 2d S. F., 110 ; Houston and Texas Central 1st, Western div., 108; Indianapolis, Decatur and Springfield pref. 40 ; do. 2d inc., 69 ; Indiana, Bloomington and Western, 46; International and Gt. Northern 1st, 107 ; Illinois and Southern Iowa 1st, 103½; Kansas Pacific 1st consol., 103 ; do. 6s, Denver div. ass., 108½ ; do. 6s, 1896, 110 ; Lafayette, Bloomington and Muncie 1st, 102 ; Long Island. 50½ ; Lake Erie and Western, 33; do. 1st, 106½ ; Louisville, New Albany and Chicago, 74; do. 1st, 101½; Louisville and Nashville Gen'l mort., 101 ; Minneapolis and St. Louis pref., 60 ; do. 1st, 115 ; do. Iowa Ext. 1st, 111 ; Marietta and Cincinnati 1st pref., 12; Missouri, Kansas and Texas, 36⅜ ; do. consol. 7s, 104½ ; do. 2d, 68½; do. gen'l mort. 6s, 82½ ; Missouri Pacific, 102¾; do. 1st consol. 102½ ; do. 3d, 112 ; Memphis and Charleston, 74 ; Milwaukee, Lake Shore and Western, 46½ ; do. 1st, 100¾; Manhattan Beach, 28 ; Mobile and Ohio, 33½ ; do. 1st deben., 93 ; do. New mort., 112½ ; Metropolitan Elevated 2d, 90½ ; New York, Ontario and Western, 25½; Norfolk and Western pref., 55 ; do. Gen'l mort., 102¾ ; Nashville, Chattanooga and St. Louis, 85; do. 1st, 115 ; Northern Pacific 1st, 96 ; New Orleans Pacific 1st, 90 ; Oregon Railway and Nav., 130 ; do. 1st, 106; Ohio Central, 23⅜; do. 1st, 97¾ ; do. inc., 43; Ohio Southn, 19¾ ; do. 1st, 90 ; do. inc , 43 ; Oregon and Transp., 68 ; Ohio and Mississippi Springfield div. 1st, 121½ ; Peoria, Decatur and Evansville, 34½; do. 1st, 102¾ ; Pennsylvania Co. 4½s, 98 ; Rochester and Pittsburg. 27; Rome, Watertown and Ogdensburg, 21¼ ; do. 1st, 91 ; Richmond and Allegany, 30⅞ ; do. 1st, 92; ; Richmond and Danville, 222½; do. W. P., 219 ; do. 1st, 105½ ; St. Louis, Iron Mountain and Southern 1st pref. inc., 97 ; do. Cairo, Arkansas and Texas 1st, 110 ; St. Paul Minneapolis and Manitoba, 109 ; do. 1st, 109¾; St. Louis, Kansas City and Northern, Omaha div.1st, 113; St. Paul and Sioux City 1st, 110 ; Southern Pacific of California 1st, 103¾; South Pacific 1st, 104 ; St. Louis and San Francisco 2d, Class B, 91¾; do. C, 91½; South Carolina 1st, 98 ; Toledo Delphos and Burlington inc., 24 ; Texas and Pacific, 47⅜ ; do. inc. L. G., 70½ ; do. Rio Grande div. 1st, 85 ; Utah Central, 100 ; Winona and St. Peter 2d, 120; Wabash, St. Louis and Pacific Gen'l mort. 6s, 86½ ; do. Chicago div. 1s,, 85¼; Alabama, Class A, 82 ; Louisiana consol. 7s, 68⅜; Missouri 6s, 1888, 109 ; do. 6s, 1889 and 1890, 111¼ ; do. 6s, 1886, 106½ ; North Carolina 6s, S. T., 3d class, 6½; do. 4s, consol. 85 ; Tennessee 6s, new, 73¾ ; do. old, 73½; Am. Dist. Tel., 31 ; Colorado Coal and Iron, 40½; do. 6s, 88; Cam. Coal, 31¾ ; Maryland Coal, 20; Sutro Tunnel, ¾ ; Homestake, 19 ; Little Pittsburg, 1¾; Ontario, 34 ; Robinson, 2½; Standard, 16¾.

Philadelphia.—American Steamship Co. 6s, 107 ; Central Transportation, 35¼ ; Catawissa new pref., 54; Chesapeake and Delaware Canal 6s, 89 ; Morris Canal pref., 169; Nesquehoning Valley, 57½ ; Pennsylvania Company 4½s, 97 ; Philadelphia and Reading scrip, 86¾ ; do. Inc. 97; Philadelphia, Germantown and Norristown, 106½ ; Philadelphia City 6s, new, 1900, 130 ; do. 4s, Series E, 103 ; Philadelphia, Wilmington and Baltimore 4s, 95¼ ; People's Passenger R. W. 5s, 92½ ; Sunbury, Hazleton and Wilkesbarre 2d, 34 ; Steubenville and Indiana 7s, M. & N., 103 ; Susquehanna Canal 6s, 75 ; Schuylkill Nav. 6s, 1895, 65; Western Pennsylvania 6s, Pittsburg Branch, 107½. The latest quotations are : City 6s, —@118 ; do. free of tax, 126@130; do. 4s, new, 102@109; Pennsylvania State 6s, 3d series, 100@101 ; do. 5s, new loan. 115¾@116¼; do. 4s, new, 107@111 ; Philadelphia and Reading R. R., 31¼@31⅜; do. consol. mort. 7s, reg., 125½@126½ ; do. mort. 6s, 117@121 ; do. gen'l mort. 6s, coupon, 98½@98¾; do. 7s, 1893, 118@125; do. new, conv., 74@76; United New Jersey R. R. and Canal, 185⅜@186⅛ ; Buffalo, Pittsburg and Western, 18¼@18⅝ ; Pittsburg, Titusville and Buffalo 7s, 101⅜@102 ; Camden and Amboy mort. 6s, 1889, 113½@114; Pennsylvania R. R., 61½@62; do. general mort. reg., 121@—; do. consol. mort. 6s, reg., 119½@124; Little Schuylkill R. R. 55½@56½ ; Morris Canal, 65@75 ; do. pref., 168½@169½; Schuylkill Navigation, 5¾@6 ; do. pref., 12½@13 ; do. 6s, 1882, 89@90 ; do. 1872, 107@108 ; Elmira and Williamsport pref., 58@60 ; do. 6s, 113@—; do. 5s, 95@—; Lehigh Coal and Navigation, 42¾@44; do. 6s, 1884, 105@105½; do. R. R. loan, 116¼@118 ; do. Gold Loan, 110¾@111 ; do. consol. 7s, 116½@116¾ ; Northern Pacific, 34¾@35 ; do. pref., 71⅛@72 ; North Pennsylvania, 61½@62½ ; do. 6s, 105@106⅛ ; do. 7s, 121@—; do. General mort. 7s, reg., 119½@124 ; Philadelphia and Erie, 15⅞@16⅛; do. 7s, 114@115; do. 5s, 105⅛@105½; Minehill, 60½@60½ ; Catawissa, 19½@20¼; do. pref., 54⅝@55 ; do. new pref., 53⅞@54⅛ ; do. 7s, 1900, 120@— ; Lehigh Valley 61½@62 ; do. 6s, coupon, 120@122 ; do. reg., 121@122 ; do. 2d mort. 7s, 133½@134½ ; do. consol. mort. 119@120½; Fifth and Sixth streets (horse), 149@150 ; Second and Third, 110@115 ; Thirteenth and Fifteenth, 75@80 ; Spruce and Pine, 45@50 ; Green and Coates, —@85 ; Chestnut and Walnut, 90@95 ; Germantown, 60@70; Union, 110@115 ; West Philadelphia, 105@110 ; People's 14@15 ; Continental, 100@102.

Boston.—Atlantic and Pacific Income, 33 ; do. 6s, 95; Atchison Income 8s, 102; Atchison, Topeka and Santa Fe mort. 5s, 99 ; Boston, Clinton, Fitchburg and New Bedford, 45 ; do. pref., 129 ; Boston Water Power Co., 6⅛ ; Boston Land, 8 ; Burlington and Missouri River in Nebraska 6s, non-exempt, 103½; Cincinnati, Sandusky and Cleveland 7s, 104 ; Central of Iowa, 34 ; Connecticut and Passumpsic Rivers R. R., 93 ; Chicago, Burlington and Quincy 4s, 87¼ ; Chicago and West Michigan, 77 ; do. do. 5s, 95; Chicago, Milwaukee and St. Paul 6s, Dubuque div., 104 ; Connotton Valley, 18 ; Detroit, Lansing and Northern pref., 117; Flint and Pere Marquette, 22½ ; do. pref., 93; Iowa Falls and Sioux City, 84 ; Kansas City, Fort Scott and Gulf 7s, 111¾ ; Kansas City, St. Joseph and Council Bluffs 7s, 115¾ ; Kansas City Lawrence and Southern 5s, 105½ ; Little Rock Fort Smith, 65; do. 7s, 111; Massachusetts Central 6s, 93 ; Marquette, Houghton and Ontonagon, 60 ; Mexican Central blocks, new, 94 ; Maine Central, 38 ; New York and New England 6s, 107; Ogdensburg and Lake Champlain 6s, 98 ; Portsmouth, Great Falls and Conway 4½s, 87 ; Rutland, 4½; do. pref., 27; do. 6s, 101 ; Summit Branch, 13⅜ ; Sonora R. R., 20; do. 7s, 87; do. block, No. 4, 110 ; do. No. 3, 150 ; Toledo, Delphos and Burlington, 7 ; do. 6s, S. E. div., 67½ ; do. inc., 16 ; Wisconsin Central, 19; Allouez Mining Co., 3 ; Blue Hill, 50 ; Brunswick Antimony, 15 ; Catalpa, 55c. ; Douglas, 50c. ; Franklin, 12¼ ; Harshaw, 3¼ ; Huron, 3 ; Indian Queen, 3 ; Mesnard, 75c. ; National, 2½; Napa consol. Quicksilver, 6¾ ; Osceola, 34 ; Pewabic, 13½ ; Phœnix, 2½ ; Silver Islet, 26½ ; Sullivan, 2.

Combustion of Fuel.

By Prof. S. N. Carvalho.

What is the Scientific Theory of the Combustion of Coal?

We know that carburetted hydrogen and the other compounds of carbon require given quantities of atmospheric air to affect their combustion. What is carburetted hydrogen? On analyzing this gas we find that it consists of two volumes of hydrogen and one of carbon vapor.

What is carbon?

Carbon is only charcoal in a state of purity—that is to say, it is unmixed with any foreign ingredients.

In its purity it is a simple compound, and the work of the chemist is to unmake or separate from common charcoal these foreign ingredients to produce pure carbon.

Diamond is pure crystalized carbon. Carbon is found in considerable quantities in all organized bodies, but is most abundant in the vegetable creation, and it is principally obtained from wood. Is pure carbon black? No; chemists have failed to separate it entirely from hydrogen. Sir Humphey Davy says the most perfect that has been prepared contains five per cent of hydrogen.

Combustion is a sudden chemical combination of some substances by means of heat with oxygen, attended by the evolution of greater heat. The most available of all substances for fuel is coal. The quantity of carbon in the

Best anthracite coal is	92.34
Hydrogen	3.00
Nitrogen	0.58
Oxygen	2.57
Ash	1.51
	100.00

You said that carbon was found most abundant in vegetable substances. Is, then, carbon vegetable oxygen?

Yes; without doubt. The rankness of vegetation which must have existed in the carboniferous era, and the uniformity of climate which appears to have prevailed almost from the pole to the equator, would seem to imply a higher temperature of the earth's crust, and an atmosphere more laden with humidity and carbonic acid than exist in our day; but whatever may have been the geological conditions affecting the origin of coal, we may regard the deposits of that mineral (its present form) as vast magazines of power stored up at periods immeasurably distant for our use.

The principle of conservation of force and the relationship now established between heat and motion, enable us to trace back the effects which we now derive from coal, to equivalent agencies exercised at the period of its formation. George Stephenson, unaided by theoretical knowledge, rightly said that coal was the embodiment of power originally derived from the sun.

The small parcel of solar radiation which is arrested by the earth, and which constitutes less than the 2000-millionth part of the total energy sent forth from the sun, must be the power which enabled the plants of the carboniferous period to wrest the carbon they required, from the oxygen with which it was combined, and eventually to deposit it as the solid material of coal.

In our day the reunion of that carbon with oxygen restores the energy expended in the former process, and thus we are enabled to utilize the power originally derived from the luminous centre of our planetary system.

The phase of the earth's existence suitable for the extensive formation of coal appears to have passed away for ever; but the quantity of that invaluable mineral which has been stored up throughout the globe for our benefit is sufficient (if used discreetly) to serve the purposes of the human race for thousands of years, and it may be considered practically inexhaustible.

Does coal or fuel enter into combination at once, on the application of heat, and that during such combustion it evolves the gaseous matter it contains?

No; This view is neither correct nor scientific, and evades an important feature on the use of coal, namely, the order in which the gaseous and solid portions come into use as heat-giving media.

When heat is applied to bituminous coal what becomes of it? What is the effect?

When fresh coal is thrown on incandescent coals in the furnace, instead of increasing the temperature, it becomes at once an absorbent of the heat, and the source of the volatilization of the bituminous parts; in a word, of the generation of gas.

Now, as volatilization is the most cooling process of nature, by reason of the quantity of heat which is directly converted from the sensible to the latent state, so long as any of the bituminous constituents remain to be evolved from any atom or division of the coal; its carbonaceous part remains black, at a comparatively low temperature, and utterly inoperative as a heating body; in other words, carbon has to wait its turn for that heat which is essential to its own combustion.

To be Continued.

The Coal Trade.

THE leading coal carrying companies make the following reports of their tonnage for the week ending January 21, and for the year to same date, compared with their respective amounts carried to the same time last year:

	Week.	1882.	1881.
Reading Railroad	101,450	1,119,168	886,528
Schuylkill Canal	.....	27,655	.....
Lehigh Valley	62,202	863,307	668,774
Delaware, Lackawanna and Western	52,204	220,657	186,102
Shamokin	19,691	50,213	51,972
Central R. R. of New Jersey	71,333	204,032	167,184
United R. R. of New Jersey	26,516	89,531	81,309
Pennsylvania Coal	11,183	54,078	50,346
Delaware and Hudson Canal	49,852	180,961	150,421
Huntingdon and Broad Top Mountain	10,579	33,296	26,117
Penn. and New York	23,066	215,862	165.399
Clearfield, Pa	51,259	141,602	98,366

The total tonnage of anthracite coal from all the regions for the week ending January 21, as reported by the several carrying companies, amounted to 367,078 tons, against 545,924 tons in the corresponding week last year, a decrease of 178,846 tons. The total amount of anthracite mined for the year is 1,334,950 tons, against 1,211,729 tons for the same period last year, an increase of 123,227 tons. The quantity of bituminous coal sent to market for the week amounted to 100,826 tons, against 64,790 tons in corresponding week last year, an increase of 36,036 tons. The total amount of bituminous mined for the year is 215,948 tons, against 169,014 tons for the corresponding period last year, an increase of 46,934 tons. The total tonnage of all kinds of coal for the week is 467,904 tons, against 610,714 tons in corresponding week last year, a decrease of 142,810 tons, and the total tonnage for the coal year is 1,550,904 tons, against 1,380,743 tons to same date last year, an increase of 170,161 tons. The quantity of coal and coke carried over the Pennsylvania Railroad for the week ending January 21 was 218,639 tons, of which 152,890 tons were coal and 65,149 tons coke. The total tonnage for the year thus far has been 622,817 tons, of which 436,666 tons were coal and 180,151 tons coke. These figures embrace all the coal and coke carried over the road east and west. We have received no report of the Cumberland coal shipments for the week ending January 21. The Reading Railroad shipment for last week, ending January 28, was 92,500 tons, of which 9,600 tons were sent to and 10,300 tons shipped from Port Richmond, and 15,900 tons sent to and 12,300 tons shipped from Elizabethport. Work was suspended for three days last week, which accounts for the small tonnage over the Reading Railroad.—*Phil. Ledger, Jan.* 30.

Fire Extinguishers on Railroads.

THE recent horrible scenes connected with the wreck on the New York Central and Hudson River Railroad, when the fearful loss of life was so excruciatingly augmented by the lack of any appliances whatever for extinguishing fire, have led to some good out of all their gloom if they have directed serious attention to the needs in this direction, as they evidently have. It was a sight as shameful as it was sad to see an elegant express train at a standstill, and its five hundred passengers watching two of its drawing-room cars and their precious contents burning, while the only available means for even attempts at putting out the flames was found in the light snow on the hillside, which was rolled into balls and thrown upon the fire. It is a pitiable picture indeed, in its weakness and lack of forthought, to hold up by the side of railroad advancement in other directions. But the picture will have its influence. A demand is made that all possible appliances for relief in such emergencies shall be provided, and that the demand is being complied with in some directions is a most reassuring fact. Two hundred fire extinguishers have recently been purchased for the Boston and Albany Railroad, and other companies are busily at work arranging for the adoption of such appliances to be carried on the exterior or interior of passenger coaches, as may seem most desirable after investigation and experiments have assisted in deciding what the best equipment is. Extinguishers are now in use on a number of roads, among them the Illinois Central Railroad. Mr. S. F. Hayward, general agent of the Fire Extinguisher Manufacturing Co., 407 Broadway, informs us that some time ago Mr. W. K. Ackerman, president of that road, said: "This company has in use four hundred of your small Extinguishers, and five of the large tanks on wheels, which we hold at our principal shops. We have found them of incalculable benefit to us, and their use has resulted in the saving of an immense amount of our property from fire. In fact, very shortly after bringing them into general use on the road, we ceased insuring altogether. We keep up a full supply and have a specially appointed officer to superintend them and see that they are properly filled for use." An account kept at the auditor's office of that road, charging current premiums and crediting losses from time to time, showed the savings on insurance in six years to be over $200,000.

THE census returns give the annual production of iron ore in Lehigh county as 321,322 tons. This is the largest product of any county in Pennsylvania. Next comes Lebanon with 286,000 tons, Berks with 253,000 tons, Blair with 155,000 tons and Northampton with 105,000 tons. The iron ore in Lehigh county is

produced from about 200 mines, while that in Lebanon comes almost entirely from a single one—the great ore bank at Cornwall. The entire production in Pennsylvania in 1880 is given as 2,186,0 0 tons, and that of the United States as 7,970,000 tons. The average royalty per ton was 42 cents and the average market price $2.90.

INCORPORATION.

THE Canton Street Railroad Company, of Canton, Ohio, has been incorporated with a capital of $30,000.

THE Palmer Wire Company of Palmer, has been chartered with a capital of $50,000 for the manufacture of iron, Bessemer, and cast steel wire and iron goods of any name, nature or description.

ARTICLES of incorporation have been filed in the office of the Secretary of State of Oregon, of the Stayton and Mehama Canal, Logging and Transportation Company; capital, $10,000. The incorporators are S. A. Jones, John A. Shaw and Wm. E. Price. Principal office, Stayton.

A CHARTER was issued at the State department at Harrisburg, Pa., on the 26th ult., to the Tionesta and Allegheny Valley River Railroad Company, with a capital of $580,000. The new road will extend from South Oil City, Venango county, to Sheffield, Warren county, a distance of 58 miles. Thomas H. Wilson, of Venango, is president.

CONSOLIDATION.

THE lines of the Canadian Pacific Railway have been consolidated in such a way that all west of Lake Superior to the Pacific coast will be known as the Western division, and all the the Atlantic line, as the Eastern division. W. C. Van Horne, late of the Chicago, Milwaukee and St. Paul Railway, is general manager of the entire trans-continental road, and has two superintendents under him to operate the respective divisions. The subordinate positions are all being filled on a permanent basis. The official list is principally American and gives umbrage to Canadians.

THE Virginia Legislature has passed a bill authorizing the Peninsular Railroad Company to consolidate with or receive a conveyance of "the railroad property and rights of the Worcester and Somerset Railroad Company," and thereafter "to hold, own, extend, complete, manage and operate said railaoad." Section 2 authorizes an increase of the capital stock $1,500,000. Section 3 empowers the Peninsular Railroad Company to change its name to the "New York, Philadelphia and Norfolk Railroad Company." William Painter has been elected president, and J. L. Bates treasurer of the company.

THE largest steel sailing vessel ever construced was launched a few days ago at Belfort, England. She is named the Garfield, after the late president. She is 2,220 tons register, is 292 feet in length, 24 feet 9 inches depth and 41 feet breadth. She has been built for the White Star Line, and is intended for the Australian and Californian trades.

Cincinnati Iron Market.

OFFICE OF E. L. HARPER & Co.
Cincinnati, Jan. 31, 1882.

WE have to report a continued good demand fully up to the supply. All lots of standard quality offered find ready sale at current rates; all grades are in light supply. Forge Irons especially so. The mills here are running to their fullest capacity and report large inquiries for future deliveries, but are not anxious to book many such orders at present prices. The market closes strong at the quotations given below.

We quote as follows:

	No.		Mos.
FOUNDRY.			
Hanging Rock Charcoal	1	29 50@30 75	4
Strong Neutral Coke	1	27 00@28 00	4
American Scotch	1	26 50@27 50	4
GREY FORGE.			
Neutral Coke		25 50@26 50	4
Cold Short		24 00@25 00	4
CAR WHEEL AND MALLEABLE.			
Hanging Rock Cold Blast		36 00@38 00	4
" Warm Blast		30 00@32 00	4
Lake Superior 1 and 2		32 00@33 00	4
Lake Superior 3 to 6		34 00@36 00	4
Southern Car Wheel		36 00@40 00	4

Northern Central Railway.

THE Northern Central Railway Company furnishes the following comparative statement of its gross earnings and operating expenses for the month of December:—

	1881.	1880.
Gross earnings	$476,623 26	$494,310 48
Operating expenses	321,633 66	270,404 36
Net earnings	$154,989 60	$223,906 12

For the twelve months ended December 31, the gross earnings, operating expenses, and net earnings were:—

	1881.	1880.
Gross earnings	$5,443,700 00	$5,050,387 29
Operating expenses	3,787,445 91	3,255,268 45
Net earnings	$1,656,254 09	$1,795,118 84

Philadelphia and Erie Railroad.

THE Philadelphia and Erie Railroad Company makes the following exhibit of business for the month of December, 1881:

Gross earnings	$282,772 41
Gross expenses	200,940 66
Net earnings	$81,831 75
Net earnings, 1880	113,408 10
Decrease	$31,576 35
Net earnings year 1881	$1,024,248 75
Net earnings year 1880	1,369,379 35
Decrease	$345,130 60

JAMES H. TAYLOR, of St Catharines, has been appointed assistant superintendent of the Kingston and Pembroke Railway.

A NEW iron steamship, 286 feet long, 40½ feet beam, 25 feet depth of hold, and 1,900 tons burden, was launched at Roach's yard at Chester, Pa., on the 28th ult. for the Old Dominion line.

LONDON contains fourteen strictly terminal railway stations, from which no fewer than 2,202 trains depart daily, and nearly 1,600 of these leave between hours of 10 A. M. and 10 P. M. The largest number of departures from a single terminus is 320, after which come two stations with 312 and 295, respectively. These figures are exclusive of the immense system supplying the city with local transit.

Lime-Kiln Club Deliberation.

"DOAN' seek to make angels of yourselves," quietly began Brother Gardner, as the meeting opened. "In de fust place dis am no sort o' kentry fur angels, an' in de next place you would be mighty lonesome. De man or woman who becomes so sweet an' soft an' good dat dey expect ebery minit to rise up an' fly, doan' take as much comfort as folks who feel dat it will be a clus shave to git inter heaven. A little wickedness pickles a man an' makes him keep all de better. When I trade mules wid a man I prefer that he should suspect me wid an intenshun to make an eben $25 by de operashun. When I deal wid a butcher I like to feel dat he will work in fo' ounces of bone fur ebery eight ounces of meat if I doan' watch him. I like to have de bootmaker tell me dat American cowskin am French calf, an' I am pleased when de sto' clerk warrants fo' cent caliker to wash like sheet-iron. De man who am not a leetle wicked has no chance to feel sorry; no use for prayer; no need of churches. He cannot say to a fellow-man: 'I wronged you—I'm sorry—shake.'

"De man who neber sins makes a poor nex' doah neighbor. De woman who keeps feelin' of her shoulders to see if wings have started makes a poor mother an' wuss house-wife. If you have neber injured a man an' gone to him an' axed his pardon an' made up, you doan' know what real happiness am. If your conscience has neber driben you to prayer you can't feel de goodness of de Lawd. My advice to you am to be a leetle wicked—not 'nuf to make men fear or hate you, but just 'nuff to keep you convinced dat you must help to support churches un' pay clus attenshun to what de preachers say, or you'll be left behin' when de purceshun starts."

A Big Head of Steam.

TOPNOODY made up his mind that he was not going to be bossed any longer by his wife, so when he went home at noon he called out imperiously, "Mrs. Topnoody! Mrs. Topnoody!" Mrs. T. came out of the kitchen with a drop of sweat on the end of her nose, a dish-rag tied round her head, and a rolling-pin in her hand. "Well, sir," she said, "what'll you have?" Topnoody staggered, but braced up. "Mrs. Topnoody, I want you to understand, madame,"—and tapped his breast, dramatically—"I am the engineer of this establishment." "Oh, you are, are you? Well, Topnoody, I want you to understand that I"—and she looked dangerous—"I am the boiler that will blow up and sling the engineer over into the next county. Do you here the steam escaping, Topnoody?" Topnoody heard it, and he meekly inquired if there was any assistance he could render in the house-work.

WE began to make steel rails in America only fourteen years ago, turning out 2,000 tons that year. They then cost $166 a ton. Three years ago they were down to $42 a ton, and are now up to $60. We made 900,000 tons last year. They cannot be made here, it is said, under $40 a ton, while the English have made and sold them for $20 a ton. In England the materials of steel rails are found close together, while here they have to be transported a long distance. English labor is one-third less than here, and English skilled labor one-half less.

THE LAKE SHORE AND MICHIGAN SOUTHERN RAILWAY COMPANY,

TREASURER'S OFFICE, GRAND CENTRAL DEPOT,
NEW YORK, December 23d, 1881.

The Board of Directors of this company have this day declared a QUARTERLY DIVIDEND of TWO per cent upon its capital stock payable on WEDNESDAY, the first day of February next at this office.

The transfer books will be closed at 3 o'clock P. M. on Saturday, the 31st instant, and will be re opened on the morning of Saturday, the fourth day of February next.

E. D. WORCESTER, Treasurer.

THE THIRTY-NINTH SEMI-ANNUAL CASH DIVIDEND of the ILLINOIS CENTRAL RAILROAD COMPANY, being three and a half (3½) per cent on its capital stock, will be paid by the undersigned March 1, 1882, to shareholders as registered at the close of business on the 11th of February, after which and until the 4th day of March the transfer-books will be closed.

L. V. F. RANDOLPH, Treasurer.

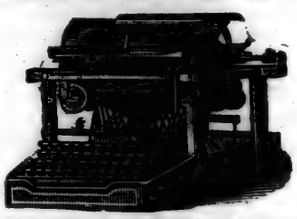
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Ten new Locomotives, Standard Gauge, June and July delivery.
New 3ft. Gauge Locomotives, summer delivery.
One Second-hand Tank Locomotive 3ft. Gauge, rebuilt good as new, January delivery.
Second-hand Standard Gauge Locomotive and Passenger Cars.
Thirty new Box Cars Standard Gauge, immediate delivery.
New Flat and Coal Cars, January delivery.
New Passenger and Combination Coaches 3ft. Gauge, early delivery.
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HOME
INSURANCE COMPANY OF NEW YORK,

OFFICE: NO. 119 BROADWAY.

FIFTY-SEVENTH SEMI-ANNUAL STATEMENT,

Showing Condition of the Company on the 1st day of

JANUARY, 1882.

CASH CAPITAL	$3,000,000 00
Reserve for Unpaid Premiums	1,943,733 00
Reserve for Unpaid Losses	245,595 36
Net Surplus	1,806,180 90
CASH ASSETS	$6,995,509 26

Summary of Assets

Held in the United States available for the PAYMENT of LOSSES by FIRE, and for the protection of Policy Holders of FIRE INSURANCE.

Cash in Banks	$ 130,172 31
Bonds and Mortgages, being first lien on Real Estate [worth $3,600,750]	1,555,858 00
United States Stocks [market value]	4,079,500 00
Bank and Railroad Stocks and Bonds [market value]	664,625 00
State and Municipal Bonds [market value]	121,750 00
Loans on Stocks, payable on demand [market value of Collaterals, $341,507.50]	229,750 00
Interest due on 1st January, 1882	85,819 19
Premiums uncollected and in hands of Agents	80,635 08
Real Estate	47,399 68
Total	$6,995,509 26

J. H. WASHBURN, *Secretary.*
T. B. GREENE, } *Ass't Sec's.*
W. H. BIGELOW, }

CHAS. J. MARTIN, *President.*
A. F. WILMARTH, *Vice-Pres't.*
D. A. HEALD, *2d Vice-Pres't.*

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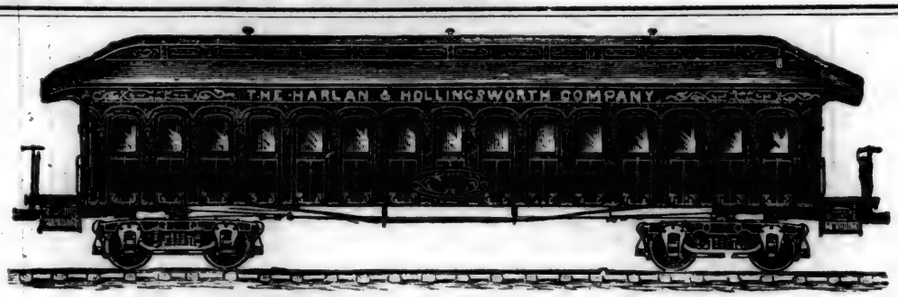
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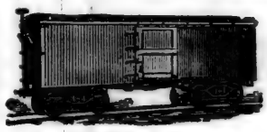


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NEW YORK, LAKE ERIE, AND WESTERN RAILWAY.

TO THE TRAVELING PUBLIC.

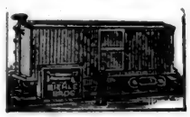
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And for a whole year the official records of the United States Post Office Department show the arrivals of the Erie Railway trains in New York, on time, to be from 15 to 27 per cent ahead of competing lines.

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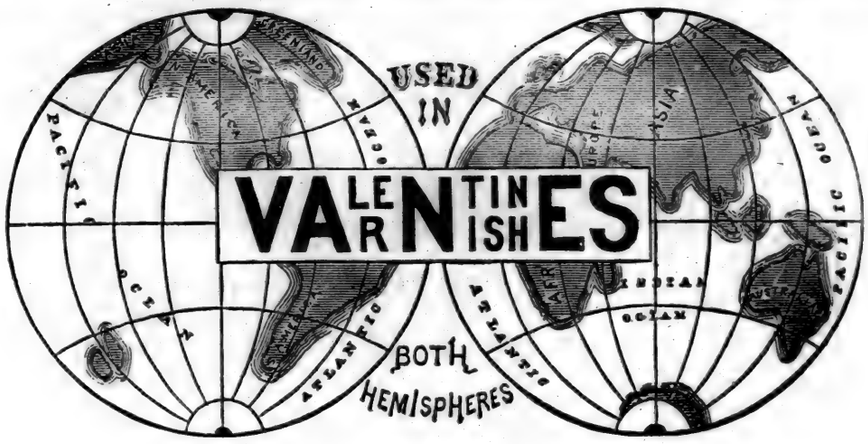
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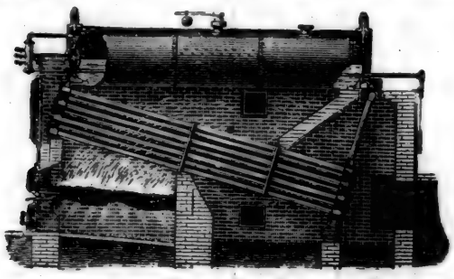
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General Offices, Bridgeport, Ct. January 2, 1882.



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Pullman Sleeping Car attached, running through to Cincinnati without change. (Only Line running Pullman Cars from Boston.) This car runs *via* Erie Railway and N.Y., P. & O. R.R., making direct connection for Louisville, St. Louis, Kansas City, New Orleans, and all points in Texas and New Mexico.

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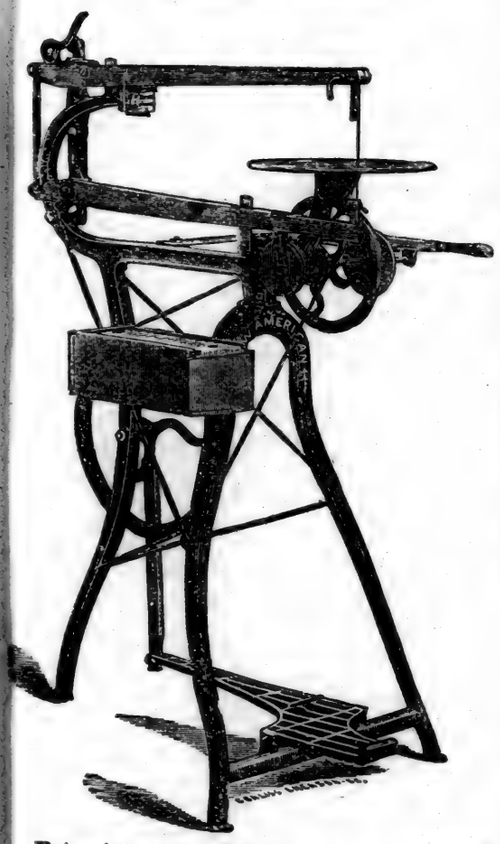
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SECOND QUARTO SERIES.—VOL. XXXVIII., No. 6.] **NEW YORK, FEBRUARY 11, 1882.** [WHOLE No. 2,390.—VOL. LV.

Combustion of Fuel.

By Prof. S. N. Carvalho.

[Out of "Pro-Bono Publico."]

WHAT IS THE SCIENTIFIC THEORY OF THE COMBUSTION OF COAL?

[Continued from last week.]

And we also see if this bituminous part be not consumed and turned to account, it would have been better if it had not existed in the coal, as such heat would in that case have been saved and become available for the business of the furnace. And to this circumstance may be attributed the alleged comparative greater heating properties of coke or anthracite over bituminous coal.

Then coal cannot be ignited or converted into flame?

Coal gas may be converted into flame; coke may be ignited; but coal can neither be ignited nor converted into flame.

Can smoke be consumed or burned?

Smoke, properly speaking, being once formed, cannot be ignited or inflamed in the same furnace.

Hydrogen and carbon are the constituents of the gas evolved from the application of heat to bituminous coal. This gas is carbureted hydrogen, and carbureted hydrogen is sometimes called olefeant gas.

The philosophy of combustibility is here explained.

Combustibility is not a quality of the combustible taken by itself. It is, in the case now before us, the union of the combustible with oxygen, and which, for this reason is called the "supporter," neither of which, when taken alone, can be consumed.

In ordinary language a body is said to burn when its elements unite with the oxygen of the air, and forms new products. One of them, the hydrogen, is termed the burning or combustible body, and the oxygen is said to be the supported. But this language, though convenient for common use, Dr. Kane says, is incorrect as a scientific expression; for oxygen may be burned in a vessel of hydrogen, as well as hydrogen in a vessel of oxygen, the one and the other being equally active in the process, and being related to each other every way alike.

Then, strictly speaking, combustion means union?

Yes; but then we must remember that coal gas, whether generated in a retort for illuminating purposes, or in a furnace for heating purposes is essentially the same. It is not inflammable, as by itself it can neither produce flame nor permit continuance of flame in other bodies. A lighted taper introduced into a jar of carburetted hydrogen (coal gas) so far from inflaming the gas, is itself instantly extinguished.

The great object in entering so elaborately into this subject is because it is of the greatest importance that those persons to whom are entrusted the firing of furnaces, as well as to those who construct them for boiler purposes, should understand the subject thoroughly. *Effective combustion for practical* purposes is more a question regarding *air* than the *gas*, because when we throw coal on the fire in the furnace, we have no control over the quantity of the gas, but we can control the atmospheric air in all the essentials to perfect combustion.

The following facts are collated from C. W. Williams, and other celebrated writers.

CHEMICAL COMBINATION

is the ascertaining the quantity of oxygen with which any gas will chemically combine, and the quantity of atmospheric air required for supplying such quantity of oxygen. Here then we are called upon for chemical proofs, which we shall exemplify in the simplest manner possible. These several quantities, depending on the faculty of each in combining with certain definite proportions of the other—the supported; these respective proportions being called "equivalents," or combining volumes. Now, this doctrine of "equivalents," the all-convincing proof of the truth of chemistry, reduces to a mere matter of calculation that which would otherwise be a complicated tissue of uncertainties.

WEIGHTS AND VOLUME OF THE GASY COMPOUND.

An atom of hydrogen is double the bulk of an atom of carbon vapor, yet the latter is six times the weight of the former.

Again, an atom of hydrogen is double the bulk of an atom of oxygen; yet the latter is eight times the weight of the former. So of the constituents of atmospheric air—nitrogen and oxygen—an atom of the former is double the bulk of an atom of the latter; yet in weight it is fourteen to eight.

We have seen that there are two descriptions of hydro-carbon gases, in the combustion of which we are concerned, both being generated in the furnace, and even at the same time, viz: the carbureted and the bi-carbureted hydrogen gases; the proportion of the latter in coal gas being estimated at about ten per cent. For the sake of simplifying the explanation I will confine myself to the first.

On analyzing this gas we find that it consists of two volumes of oxygen and one of carbon vapor, the gross bulk of these three being condensed into the bulk of a single atom of hydrogen, that is into 2-5ths of their previous bulk.

Now, let us examine analytically an atom of atmospheric air. Atmospheric air is composed of two atoms of nitrogen and one atom of oxygen; each of the former being double the volume of an atom of the latter, while their relative weight are as fourteen to eight; the gross volume of the nitrogen, in air, being thus four times that of the oxygen, and in weight as twenty-eight to eight.

In the coal gas we found the constituents condensed into two-fifths of their gross bulk. This is not the case with air, an atom of which is the same, both as to bulk and weight, as the sum of its constituents, as here shown. Thus, we find the oxygen bears a proportion in volume to that of the nitrogen, as one is to five; there being but twenty per cent of oxygen in atmospheric air, and eighty per cent nitrogen.

We now proceed to the ascertaining of the separate quantity of oxygen required by each of the constituents (of the gas) so as to effect its perfect combustion. With respect to this reciprocal situation, the great natural law is, that bodies combine in certain fixed proportions only, both in volume and weight.

The important bearings of this elementary principle, as laid down by Berzelius, cannot be more strikingly illustrated than in the combinations of which

THE ELEMENTS OF ATMOSPHERIC AIR ARE SUSCEPTIBLE.

We shall devote a short space to explain this, although it may not be exactly in connection with the combustion of fuel.

Oxygen unites chemically with nitrogen in five different proportions, forming five distinct bodies, each essentially different from the others, thus:

1 atom of nitrogen, weight 14, unites with 1 atom of oxygen, weight 8, forming nitrous oxyde 22 gross weight.

1 atom of nitrogen, weight 14, unites with 2 atoms of oxygen, weight 16, forming nitric oxyde, 30 gross weight.

1 atom of nitrogen, weight 14, unites with 3 atoms of oxygen, weight 24, forming hypo-nitrous acid, 38 gross weight.

1 atom of nitrogen, 14 weight, unites with 4 atoms of oxygen, weight 32, forming nitrous acid, 46 gross weight.

1 atom of nitrogen, 14 weight, unites with 5 atoms of oxgyen, weight 49, forming nitric acid, 54 gross weight.

We here find the elements of the air we breathe by a mere change in the proportions in which they are united, forming so many distinct substances, from the Laughing Gas (or what is used as anesthetic) nitrous oxide, up to that most destructive agent, nitric acid, commonly called aqua fortis.

(TO BE CONTINUED.)

[FOR THE AMERICAN RAILROAD JOURNAL.]

Warming and Ventilating Railroad Cars.

MUCH time and money have been expended in testing various processes for warming and ventilating railroad cars. Not much, however, has been expended in this direction by the railroad companies. They have been shrewd enough to let outside parties do that. Many of them have been, and are still, content to put in the cars the old-fashioned cast-iron stove. The more tasty cover it up with a casing of handsome sheet-iron, and call it a patent safety regulator. Some do not even take the trouble to do that, but when you enter their cars the first thing you see is one of those red hot stoves, ready to spread death and destruction even with a slight concussion, to say nothing about the upsetting of the cars. One of the great lines between the East and the West is, or was a short time since, still using the old fashioned wood stove put in by our "Dads," when coal was in little use on the cars. The parties most interested seem to care the least about the matter, while there are but few lines of any extent that have not lost enough money by fires to pay for good heaters. The fact is the heating and ventilating of railroad cars seems to be but little understood. The currents of air in and around a train in rapid motion seem to be different from those that surround us in our homes or when the cars are at rest. Who has not gone into cars in the depot heated to suffocation, when but a short time in motion would make them uncomfortably cool. When the cars pass through a current of air laden with unpleasant odors how almost instantaneously does it pervade the whole car. This shows that if there is proper ingress and outlets the atmosphere is changed almost at once—much more rapidly than we can change the air in our houses or places of public resort.

There is another matter that seems to have escaped the attention of our railroad companies, and it is so self-evident that the wonder is that it has not been universally adopted. I mean the placing of thermometers in the cars. The temperature and clothing of the passengers is as varied as their faces. One wrapped in shawls, overcoats and under-wear enough to stand the cold of Greenland, calls the attention of the brakeman to his stove, it being entirely too hot, that he is roasting the passengers alive, &c. The brakeman, ready to accommodate everyone, as they always are, opens the stove doors to allow them to cool off. He has hardly done so before your thin nervous individual, with hardly heat enough in his body to keep his soul in it, rushes up to our bewildered shovel and poker man, exclaiming, "Zounds, man, are you going to freeze us all!" Now, all this "unpleasantness" could be avoided by putting a thermometer in the car where everyone could see it. The brakeman could then point the passengers to his authority for regulating the temperature of the cars, and they could see for themselves whether he was right or not. The expenditure of a few cents would remove the cause of a great deal of trouble, and the experiment has proved that with the proper heating apparatus and the right attention the air of the car can be as well regulated as that of our most comfortable dwellings. These, however, are minor points in regard to the comfort and safety of railroad traveling. The main question is, Can any means be devised by which these horrid burnings that fill so many homes with woe and mourning almost every winter be avoided? If they can, does not the cause of humanity, if nothing else, demand that they should be adopted.

Railroad companies are all very particular about their locomotives; the strongest and best materials alone are used in their construction. But when it comes to warming their cars, which is really of more importance to the passengers as regards their safety and comfort than the means of locomotion, they are content to use the most flimsy stoves, made of thin cast-iron plates, and thinner sheet-iron, that fly to pieces with very slight concussions, or from the overturning of the cars. Since the recent disaster much has been said and written about warming cars. Some propose steam, but certainly a little reflection would convince anyone that this would not do. The fire used in generating the steam would be as dangerous as any other, and besides the passengers would be exposed to the scalding steam, thus adding another horror to those already so frequent. Some of your legislators talk about compelling railroad companies to carry fire-extinguishers. If I understand the nature of the gas used in these machines, it is as fatal to life, almost, as fire itself. The hot water heaters used in sleeping cars have very frequently been found wanting, notably in the recent disaster on the Hudson River Road. None of the appliances that have been used have been found reliable in such a great smash up as that just mentioned, and the question naturally arises. Can anything be found or used that would be available to prevent such woeful burnings? In our ordinary transactions, where we have great force or powerful concussions to resist we are careful to select the best materials we can get, and we put them together in the strongest possible manner. Why not do this in getting up stoves for our railroad cars? Why not make them of the best boiler iron, riveted together in the strongest possible manner, so that even the boiler of the locomotive itself is not stronger? This can be done and has been done, affording the same quantity of heat, at the same or even less cost than the stoves in common use. Possibly they may require a little more attention from the train men or car tenders at the stations, but is that to be put up against the burnings and sufferings that so often occur? Are railroads to be run with as little possible work as will barely enable them to get through for the benefit of car cleaners and fire tenders? Suppose it does take some more trouble to attend to this kind of a stove or heater! Do not the advantages derived from them more than offset the extra work? Another thing about these wrought iron heaters: Everyone that has had any experience in warming houses knows that the hot air from a wrought-iron heater is much more healthy and agreeable than that from cast-iron. Red hot cast-iron seems to act chemically on the atmosphere, depriving it of some of its constituents, rendering it unpleasant and unwholesome. Is not the great point under consideration worthy of some experiments to demonstrate how far such heaters may be substituted for these magazines of destruction now found in our very best and most popular cars? Do not railroads owe it to the public to make some effort for greater safety than is now afforded?

J. O.

WATSONTOWN, PENN., Feb. 4, 1882.

HOW THE FRENCH AND ENGLISH TRAVEL.—If you are traveling at night, with French fellow-travelers, the difference between English and French people will show considerably. The Frenchman will put on a soft silk cap; he will tie a handkerchief round his neck; he will even tie a scarf over his head and under his chin in order to be secure from the draughts; he will take off his boots and produce an old pair of slippers from his bag; and he will dispose himself for sleep, carefully covering himself with rugs. The Frenchwoman will be equally prudent. She will put on a long, loose jacket, of pretty material and pretty make, you may be sure, and under this she can afford to loosen the tight dress-bodice that fashion requires. She also will produce an elegant pair of slippers, matching the jacket, and will swathe her head and shoulders in a dainty woolen fichu, of the same color as jacket and slippers. In the early morning, when daylight is breaking over the silent land, and bursting in streaks into the carriage, the French travelers refresh themselves with an informal toilet. The lady pours some *eau de rose* or *eau de lavande* into a tin cup, and with the corner of a small towel, brought on purpose in the handbag, wipes her face diligently. With her brush and comb she arranges her hair, and she adjusts her hat or bonnet, packs up her long jacket, slippers, etc., and is usually taut and trim when, at the next station, it is announced that *cafe au lait* is served at the buffet, and that the train will stop for twenty minutes.

We English more often tumble out of the railway-carriage in a condition that would lead one to think we had passed the night in a peasant's cabin. The English travelers disdain the precaution to which I have referred: they will declare that they cannot sleep in the train, therefore it would be useless to make any preparations. Presently they begin to nod and sway about, and finally, being only fallible human beings, fall asleep, their hats being flattened against the back of the carriage, their clothes creased and tumbled, and their feet aching because of the unwonted confinement in stiff walking-boots. Thus they sleep in the utmost discomfort. When the morning comes, then they are pitiable to look upon; and seen in the early sunlight, it will be hard to believe that the Frenchman is not more learned in the art of traveling than the Englishman.—*From Tinsley's Magazine.*

AMERICAN Railroad Journal. ESTABLISHED 1832.

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Mr. FREDERIC ALGAR, Nos. 11 and 12 Clements Lane, Lombard Street, London, E. C., England, is the authorized European Agent for the JOURNAL.

AT the annual meeting of the AMERICAN RAILROAD JOURNAL CO., held at the office of the Company, No. 284 Pearl street, New York, February 8, the following officers were elected:

GEO. F. SWAIN, *President.*
S. PROCTOR THAYER, *Vice-President.*
EDW. A. WRIGHT, *Treasurer,*
CHAS. T. VALENTINE, *Secretary.*

New York, Saturday, February 11, 1882.

Entered at the Post Office at New York City as Second-Class Mail Matter.

THE offices of the AMERICAN RAILROAD JOURNAL were removed last week from 23 Liberty street to 284 Pearl street, in the Market National Bank Building, corner of Pearl and Beekman streets. The JOURNAL has experienced in its career of over fifty years but few changes in its management or places of abode, having been located for about thirty years at its old quarters near Printing House Square. The erection of new buildings in Park Row necessitated a removal to temporary quarters last year. The changes of the past year and the rapidly increasing business with which the JOURNAL is being favored, and for which it takes this opportunity for thanking its new and old time patrons, have led to our securing, permanently, more desirable offices in a better location, and enlarged facilities for perfecting further improvements of the JOURNAL.

SAVINGS BANKS.

EVERY once in a while we are asked the question, "What is the best investment for a poor man?" We have never hesitated to reply, "The savings bank that pays only four per cent interest." Many to whom we have given this reply have looked at us incredulously, and expressed a doubt as to their safety. Others have sneered at the smallness of the rate of interest, and claimed that they could let their money to better advantage and feel fully as safe as they would if their money was in the savings bank. It is very easy to see the process of reasoning by which many come to this conclusion. The savings banks must loan money at a higher rate than they allow depositors, or must fail in time. These banks have loaned money at a higher rate than they have paid, and have failed; hence the depositor reasons that he had better take the higher rate and run the risk of his borrower failing than to loan at the lower rate and run the risk of the bank failing. This state of feeling is the natural result of so many savings banks failing a few years ago, whereby many poor men lost the bulk of their hard-earned savings. Many of these men had worked years for small wages, out of which, by dint of the closest economy and self-denial, they had managed to lay aside a little every year, looking forward to their old age as being provided for by these savings. The banks failed, and the economy and self denial of these poor men were wasted.

There is no use in disputing the fact that the savings banks for many years prior to these failures were guilty of many mistakes, to say the least. Looking at results, we might say they were criminal. When we take a result to be condemned, it does not make much difference whether the author was a knave or a fool, for the character of the author does not alter the result. A man takes potash by mistake, and another takes potash intentionally. Because one takes it ignorantly, as a fool, and the other intentionally, as a knave, potash does not change its character but performs its same deadly mission in both cases. Just so in regard to the management of savings banks. Some were managed by fools and some by knaves. The result was the same in both cases—failure of the banks, and loss and suffering to the depositors. The banks which did not lose sight of the purpose for which they were created, while they were assailed as old fogyish and conservative, did not fail, and are in existence to-day, sound and respected.

Now that years have elapsed since these failures, and the wounds caused by them have in a measure healed, it is well to look at the causes producing them. In writing of these causes we leave out entirely the banks that were intentionally dishonest, and deal with those whose intentions are good.

The first cause we write of refers to those banks having for managers men who were engaged in real estate speculations. These men had bought a large tract of land, and were engaged in building houses which they sold for one-fourth cash and three-fourths mortgage. These mortgages they had no difficulty in placing in the savings banks of which they were managers. The building of houses had increased the value of their land from ten cents a foot to fifty cents. The cost of the houses was additional. A savings bank managed by such men did not have to wait many years before it held two hundred thousand dollars worth of mortgages on property valued at two hundred and fifty or three hundred thousand dollars, the original cost of which land was only twenty thousand dollars. A revulsion in business prosperity takes place; there ceases to be a demand for real estate; parties holding are anxious to sell, as the money is needed in business; real estate depreciates fifty to seventy-five per cent, and the mortgages are now worth less than half their face value. The bank loses one hundred thousand dollars or more of its depositors' money, and fails.

Another cause of failure is in the starting of a bank for the purpose of giving some man a position, or, as it is termed in street parlance, making a "snug berth" for some relative or friend too high toned to start at the foot of the ladder and work his way up. In such an institution the trustees are apt to be only figure-heads, as they have no interest in the matter, their interest ceasing as soon as they had made a snug berth for their baby. A man thus placed generally has an idea that he must astonish his friends by some clever stroke of business and thus gain the name of financier, as well as add to the surplus of the bank. His operations are in wild-cat securities because they promise best, and the result is he does astonish his friends, but he does not add to the surplus of the bank. On the contrary, he and the trustees come down town some fine day to find a long row of depositors waiting to draw their money out. They realize that there is a run on their bank.

Another cause of failure is found in the mean advantage some rich men take in using the savings bank as an investment. In some of the States the depositors in savings banks are exempt from taxation on their deposits. In consequence some very close calculators have figured that the rate of interest paid by savings banks nets them more income than other investments equally safe, after deducting taxes.

So they open accounts in their name personally, as trustee for A, B, etc., until they have as many accounts open as they are worth thousands of dollars, if the limit in the bank happens to be a thousand dollars to each account. This system gives a popular bank, at times, more money than it can use advantageously, and it finds itself paying twice as high a rate of interest as it receives. The end of such a condition is easily told. The last cause, with which this article will deal, is what is known in business as "undue competition." All savings banks that have failed can probably trace their downfall to this cause, or to this cause with some one of the others. It is first noticed in a bank advertising to pay interest monthly instead of semi-annually. Then some other bank steps in and agrees to pay one half of one per cent more. The evil spreads until the startling announcement is made that such and such a bank will pay seven per cent. People flock to this bank with their deposits. Wise men shake their heads and advise their friends to keep away. The president recognizes that he has a herculean job, and becomes a sharper. Some one desires a loan There is such a thing as legal interest. Legal interest will not pay seven per cent, and the expenses of running a bank. The one desiring the loan is requested to see the president. There is a long conversation, the end of which is the borrower pays the bank the legal interest and the president a bonus of two per cent more. All money loaned this way makes an enemy of every borrower so accommodated. Every borrower so accommodated is to a great degree a worthless customer, and his security far from gilt-edged. A light money market, and a run is made on the bank, and the bank is obliged to close its doors.

Now what is the remedy to be applied to make *all* savings banks safe? There is but one remedy, and that is a return to the original design of the institution. The State recognizes as a fact that every man with a dollar saved has a personal interest in maintaining law and order, and the protection of property. The breakers of law, the disturbers of order the destroyers of property, are men who have nothing to lose, and hope by so doing to make a gain out of their lawlessness. To make it an object for all men to save something, some States passed a law exempting savings bank deposits from taxation, at the same time designating by legislation certain classes of investments as proper for these banks to invest their funds in. The design was to give these banks the means of earning with their deposits a rate of interest small enough to command the best securities; and yet large enough to enable them, after deducting necessary expenses, to pay the depositor a fair rate of interest. This rate of interest would necessarily be less than the bank received, and therefore not as large as the depositor would receive had he capital enough of his own to make an investment. In this fact we gather the whole intention and scope of a savings bank. It was not designed as a pool managed by real estate speculators to cash mortgages they received from their costumers; it was not designed as a snug berth for some high toned man; it was not designed as a loop-hole through which some rich men could escape paying taxes; it was not designed as a business in which competition was expected or justifiable. On the contrary, the design was that such institutions were to be managed with such strict prudence and economy that none but gentlemen of philanthropic tendencies could afford to be officers and managers. Not being framed nor designed as places of business, in the strict sense of the word, it follows as naturally as day follows night that they were instituted for the benefit of the workingman. This being the case it was the duty of such an institution, while it paid a rate of interest large enough to encourage savings, to use its influence, when any depositor's savings became large enough, to urge him to draw out and make an investment. This is a duty the bank owed to the State in making the man a tax-payer, and also a duty to the man in helping him to earn a larger rate of interest, and at the same time enjoy the feeling of being a tax-paying citizen. In this season of prosperity when statistics announce a return of confidence in savings banks, and poor men are using them for their savings once more, we have deemed it our duty to point out the causes of failures in years past, and to prescribe the remedy which will prevent failures in future. This remedy is simply a return to the plan originally designed when savings banks were instituted.

In conclusion we do not hesitate to raise the warning cry to every man, woman and child, to avoid as they would the small-pox, that bank which offers more than four per cent per annum, and to draw out of the bank their money just as soon as they have saved enough to buy a single share of stock which is approved by savings bank law. By observing these two precautions the poor man will have taken the surest means of protecting his own.

CONSTRUCTION.

Track laying began on the Texas and St. Louis railroad east from Texarkana on the 3d inst.

The new Madison and Milwaukee branch of the Chicago and Northwestern Railway was formally opened on the 1st inst.

Work is to be commenced at once on the Greenwood, Laurens and Spartanburg Railroad at Greenwood, S. C. A force of convicts has been hired from the State and teams and tools secured.

A despatch from Guaymas, dated January 29, says that the track of the Sonora Railroad is laid for forty miles beyond Hermosillo. The want of ties will delay the further prosecution of the work at present.

A letter from Mineral Point, Ohio, says that Duffin & White, who had six miles of very heavy work of the extension of the Cleveland and Valley railroad, have their work nearly completed. They have one solid rock cut 57 feet deep and 1,500 feet long.

The new oil fields along the line of the Philadelphia and Erie railroad have necessitated the construction of a branch line some six miles in length, to the locality of the Blue Jay wells. This extension has already been graded, and the roadbed is now nearly finished.

It is proposed to build a railroad from Salisbury, N. C., northward into the Yadkin Valley and following that river to East Bend, and thence by Danbury to the Virginia line and to a connection with the Danville and New River road. The project is based upon the assumption that the Virginia Midland has finally abandoned its North Carolina extension.

The Lehigh Valley Railway Company are now making surveys for an extension of their road from Elmira to Buffalo, N. Y., which, if constructed, will make the third or fourth new trunk line across New York State to compete with the New York Central, the New York, Lake Erie and Western, and the Erie Canal for Western traffic.

The tunnel under the Welland Canal, through which the trains of the Great Western Railway pass, has been exempted from the operation of the fifth sub-section of the Act-44 V. chap. 24, relating to the height of clear and open headway to be maintained between the undermost parts of bridges, tunnels, etc., and the tops of the highest cars of a railway.

The Midland Railway Company of Canada, have contracted for 8,000 tons of steel rails, to be delivered during the months of May and June next. These rails will complete the old Midland with steel throughout, and also provide sufficient to lay the Toronto and Ottawa division of the Midland over its entire length. It is hoped to have the Toronto and Ottawa running by December next.

The report of the West Virginia Central and

Pittsburgh Railway Company shows that on the 1st of January last 12 miles of the road, extending to Elk Garden Mines, in Mineral county, has been completed, and that steel rails for 40 more miles of track have been contracted for at $58 per ton. Twenty miles of additional grading is well advanced. The remaining 16 miles to reach the summit between the waters of the Potomac and Cheat rivers will be under contract in the spring. The company commenced shipping coal to Baltimore last October, and now 300 tons a day are mined and shipped.

At a meeting of the Mexican National Construction Company held in this city on the 2d inst., it was decided to increase the capital stock to $3,000,000, the reason being that the mileage is greater than was contemplated at the time of the previous subscription. It is said that all the added stock has been subscribed for. It was announced at the meeting that 302 miles of the 729 had been completed, that 550 had been graded, and that ties for 582 miles and rails and rolling stock for the entire distance had been provided. The road is completed as follows: El Salto Division, 50 miles; Zoluca, 21; Monterey, 35; Zacatecas, 12; Matamoras, 4½; Tlaxcala, 2½; total miles in Mexico, 125; completed line in Texas from Corpus Christi to Laredo, 167 miles; total miles now finished, 302.

The Kinzua creek flows at the bottom of a ravine between Bradford and Alton, Pa., over 300 feet deep and 2,250 feet wide. This chasm has for years prevented a railroad connection between that region and Pittsburgh. The New York, Lake Erie and Western Railroad Company is now spanning the ravine with a bridge to make the long-desired connection by extending its Bradford branch to Johnstown, Pa. The bridge will be the highest railroad bridge in the world—305 feet. This is 60 feet higher than Niagara Suspension bridge, 170 feet higher than the great bridge across the Ohio at Cincinnati, 180 feet above the High Bridge, New York; 170 feet higher than the East River bridge, and 45 feet higher than Portage railroad bridge over the Genesee River. The Kinzua structure will consume 40,000,000 pounds of iron. It will require 30,000 yards of masonry. The cost will be over $500,000. The Bradford branch will connect with the low grade division of the Allegheny Valley Railroad and will make a short through route between New York and Pittsburg.

In good hands:—He was a country young fellow, a little awkward and bashful, but of sterling worth of character. She was a Cincinnati belle and had sense enough to appreciate his worth, despite his awkwardness and bashfulness, and was his *fiancee*. On a gloomy Sunday evening this winter they were standing in front of the window in the parlor of her home on East Walnut Hills, watching the snowflakes rapidly falling outside. He was not up in society small talk, and being hard up for something to say remarked, as he watched the snow falling, "This will be hard on the old man's calves and sheep." "Never mind, dear," said she, slipping her arm around him; "I will take care of one of them."—*Cincinnati Commercial.*

Varieties of Steel.

The Siemens-Martin, Bessemer, and Thomas systems of making steel, in revolutionizing the manufacture of this metal have given us, says *Iron*, three new descriptions of steel; but they have not entirely displaced the older processes, by which large quantities are still produced. A brief reference, therefore, to some of the most common names, the products of the older mode of manufacture, and still in use at present, will be of service. Blister steel is made by causing the carbon of charcoal to penetrate iron in a heated state. German steel is blister steel rolled down into bars. Sheet steel is made by hammering blister steel. Double sheet steel is made by cutting up blister steel and putting it together and hammering again. Crucible steel is made by melting in a pot blister steel and wrought iron, or unwrought iron, and charcoal and scrap. Of the newer classes of steel, Bessemer steel is made by blowing air through cast-iron, burning out the silicon and carbon. Siemens-Martin or open-hearth steel is made by melting pig iron and mixing wrought iron or scrap steel or iron ore to reduce the silicon and carbon. Thomas steel is steel produced like Bessemer steel, in converters, the main difference being the basic lining.

Boiler Explosions.

At this time, when so many terrible disasters are happening in the most unexpected directions, it is not reassuring to minds sadly shocked by the appalling results of these calamities to consider the dangers to which we are constantly exposed through liability to boiler explosions; but it is certainly essential that it should be considered and realized, and measures taken to diminish the liability to the lowest possible degree. Out of 331,218 boilers inspected by a noted boiler insurance company in this country, up to January 1, 1881, 36,627 were found to have dangerous defects showing the startling fact that about one boiler in nine in common use was in a dangerous condition. The list of casualties from boiler explosions every year is long enough and fearful enough in its fatality and destructiveness to property, but when the number of defective boilers is proven to be so large, it becomes a wonder that the list of casualties is not even larger. It is to be hoped that the proportion of defective to safe boilers has been considerably changed since the investigations referred to above were made, through the more extended adoption of improved boilers, and the advancement of skill in boiler construction and management. But, however this may be, there are few subjects worthy of more careful study and investigation than this in regard to securing the utmost safety possible, in the important work of providing steam power for its myriad of uses.

The word "mystery" is most frequently the only one used in attempts at explaining the causes of boiler explosion. But stripped of all technical verbiage and attempts at smoothing over by mystifying, the cause of boiler explosions generally can be explained as being simply a want of strength sufficient to withstand the pressure, which may be due to either of three causes; original faulty construction, or a weakening by strains through unequal expansion caused by unequal heating of different portions of the boiler, or corrosion from long use or improper setting. In an excellent work on the generation and use of steam recently issued by The Babcock and Wilcox Co., 30 Cortlandt street, a large amount of useful information on the construction and operation of boilers, is given together with mention of some of the chief causes of boiler explosions and means for avoiding them. Concerning unequal expansion it says: "There is good reason for believing that most of the mysterious explosions of boilers which stand the inspectors' test, and then explode at a much less pressure, are due to the weakening effects of unequal expansions; for a boiler that will stand a hundred pounds test this week, cannot explode the next week at fifty pounds pressure, unless it has suddenly become wonderfully reduced in strength, and no corrosion or other natural cause with which we are acquainted, save expansion, can produce this result. When we consider that strains from difference of expansion are generally greatest when firing up, and when there is no pressure in the boiler, we can see that the time may arrive when a crack is started or the parts weakened, so as to give way under a moderate pressure just after the test has been made; and the reason why so many boilers explode in getting up steam, or soon after, or in pumping in cold water, or, even as in a recent case in England, while cooling off."

The three elements of safety conspicuously needed are plainly, ample strength, freedom from unequal expansion, and such arrangement of parts that if a rupture does occur it need not necessarily result in a serious disaster. To meet these requirements and at the same time to provide the essential characteristics', of economy, accessibility and durability. The Babcock and Wilcox Company have produced their water-tube boiler, the leading features of which are described as follows: "Being composed of wrought iron tubes, and a drum of comparatively small diameter, it has a great excess of strength over any pressure which it is desirable to use. As the rapid circulation of the water insures equal temperature in all parts, the strains due to unequal expansion cannot occur to deteriorate its strength. The construction of the boiler, moreover is such that, should unequal expansion occur under extraordinary circumstances, no objectionable strain can be caused thereby, ample elasticity being provided for that purpose in the method of construction. In this boiler, so powerful is the circulation that as long as there is sufficient water to about half fill the tubes, a rapid current flows through the whole boiler; but if the tubes should finally get almost empty, the circulation then ceases and the boiler might burn and give out; by that time, however, it is so nearly empty as to be incapable of harm if ruptured."

The invalid of the Boston *Post* draws the following beautiful definition of justice from a simple incident of domestic life: "We don't want Guiteau hung. The sentence is too light. Let him have the neuralgia, as we had it yesterday, the balance of his life, and justice will be satisfied."

New York Stock Exchange.

(Thursday's quotations follow money article.)

Closing Prices for the week ending Feb. 8.

	Th. 2.	F. 3.	Sat. 4.	M. 6.	Tu. 7.	W. 8.
Adams Express	.....	147	.....	.....	.....	.....
Albany and Susq.	.....	.....	.....	.....	.....	.....
1st mortgage	.....	.....	.....	.....	.....	.....
2d mortgage	.....	.....	.....	.....	.....	.....
American Express	92	92	92½	92⅝	93	.....
Atlantic & Pac. Tel.	.....	.....	.....	.....	.....	.....
Burl., C. R. & Nor.	85½	.....	84	.....	.....	.....
1st mortgage 5s	100	100	.....	99¾	100	.....
Canada Southern	53¼	54	52¼	53	.....	54
1st mortgage guar	94½	95	95	94⅞	95	95
Central of N. Jersey	94⅞	96½	95¾	95½	96	95⅞
1st mort. 1890	.....	.....	.....	.....	.....	.....
7s, consol. ass	115	115½	115	.....	.....	115½
7s, convertible ass.	.....	.....	.....	.....	.....	.....
7s, Income	.....	103½	.....	.....	.....	.....
Adjustment	108¼	108¼	108	.....	108	.....
Central Pacific	89¼	89¼	89½	89½	91½	91
6s, gold	114	.....	.....	.....	113¾	.....
1st M. (San Joaq)	.....	.....	.....	.....	.....	.....
1st M. (Cal. & Or.)	.....	.....	.....	.....	.....	.....
Land grant 6s	.....	.....	.....	.....	.....	.....
Chesapeake & Ohio	23¾	23¾	24¼	24	24¾	24¾
1st, series B	.....	81	81	81¼	.....	82
Chicago and Alton	.....	.....	134½	134½	135	135½
Preferred	.....	.....	.....	.....	.....	.....
1st mortgage	.....	.....	.....	.....	.....	.....
Sinking Fund	.....	.....	.....	.....	.....	.....
Chi., Bur. & Quincy	135¼	136	135¼	135½	135½	135¾
7s, Consol. 1903	126½	126½	.....	.....	.....	126¾
Chi., Mil. & St. Paul	109¾	109¾	108¾	109¼	109⅝	109⅝
Preferred	122½	122½	.....	122	122	.....
1st mortgage, 8s	.....	.....	.....	.....	135	.....
2d mort., 7 3-10s	.....	.....	.....	.....	.....	.....
7s, gold	.....	.....	.....	125	.....	.....
1st M. (La. C. div)	.....	.....	.....	118¾	.....	.....
1st M. I. & M. div.)	.....	.....	.....	.....	.....	.....
1st M. (I. & D. ext.)	.....	.....	.....	.....	.....	.....
1st M. (H. & D. div.)	.....	.....	.....	.....	.....	114
1st M. (C. & M. div.)	.....	.....	.....	.....	.....	.....
Consolidated S. F.	119⅝	.....	119¾	.....	120	.....
Chi. & Northwestern	135	133¾	132¾	133¾	133¾	134
Preferred	143¾	143¼	143¾	142¾	143½	143½
1st mortgage	.....	.....	.....	.....	.....	107
Sinking Fund 6s	110	.....	.....	110¾	.....	.....
Consolidated 7s	.....	.....	.....	.....	.....	.....
Consol. Gold bo'ds	.....	126¾	.....	.....	.....	126
Do. reg.	.....	.....	.....	.....	.....	.....
Chi., R. Isl. & Pac.	133½	133	133¾	133½	.....	133
6s, 1917, c	.....	.....	.....	.....	.....	126½
Clev., Col., Cin. & Ind.	80	81	.....	80½	82	.....
1st mortgage	.....	.....	125	.....	.....	.....
Clev. & Pittsburg gr.	.....	.....	.....	134	.....	.....
7s, Consolidated	.....	.....	.....	.....	.....	.....
4th mortgage	.....	.....	.....	.....	.....	.....
Col., Chi., & Ind. Cent.	19⅝	19½	19¼	19½	19	19
1st mortgage	.....	.....	.....	.....	.....	.....
2d mortgage	.....	.....	.....	.....	.....	.....
Del. & Hud Canal.	107	107⅝	108	108¼	108⅝	108½
Reg. 7s, 1891	.....	.....	.....	.....	.....	.....
Reg. 7s, 1884	.....	.....	.....	105	.....	.....
7s, 1894	.....	.....	.....	.....	.....	.....
Del., Lack. & Western	127⅝	128	127½	127½	127⅝	128½
2d mortgage 7s	.....	.....	.....	.....	.....	.....
7s, Consol. 1907	.....	.....	.....	.....	.....	.....
Erie Railway	.....	.....	.....	.....	.....	.....
1st mortgage	.....	.....	.....	126	.....	.....
2d mort. 5s, ext.	.....	.....	.....	.....	.....	.....
3d mortgage	.....	.....	.....	.....	.....	.....
4th mort. 5s, ext.	.....	.....	.....	.....	.....	.....
5th mortgage	.....	113	.....	.....	.....	.....
7s, Consol. gold	.....	.....	129⅜	129⅜	.....	130
Great West. 1st mort	.....	.....	.....	.....	.....	.....
2d mortgage	.....	.....	106	105¾	.....	.....
Hannibal & St. Jo.	95⅜	94⅞	94⅜	94½	.....	98
Preferred	107¾	107	107	107⅞	107½	108
8s, Convertible	.....	.....	.....	.....	.....	.....
Houston & Tex. Cen	82	.....	.....	.....	81½	.....
1st mortgage	.....	.....	.....	.....	.....	.....
2d mortgage	.....	124	124	124	.....	.....
Illinois Central	136¼	136¾	.....	136⅜	136¾	136½
LakeShore & MichSo	111¼	111¾	110½	111¼	111¾	111¼
Consol. 7s	.....	.....	.....	.....	.....	.....
Consol. 7s, reg	.....	.....	.....	.....	.....	.....
2d Consolidated	.....	126¼	.....	.....	.....	.....
Leh. & W. B. 7s, Con	.....	.....	.....	.....	.....	.....
Long Dock bonds	.....	.....	.....	.....	.....	.....
Louisville & Nash.	94½	94⅞	94	94½	95	94
7s, Consolidated	.....	.....	123	.....	.....	.....
Manhattan	53¼	53	53	53	53½	55¾
1st pref.	.....	.....	97	96¼	.....	96½
Met. Elevated	.....	.....	.....	86	88	90½
1st mortgage	100½	100½	.....	.....	101	.....
Michigan Central	86¾	87	86½	86⅝	87	86¾
7s, 1902	.....	.....	126¼	.....	.....	.....
Morris & Essex	121½	123	.....	123	123	123
1st mortgage	.....	.....	136½	.....	.....	.....
2d mortgage	.....	.....	.....	.....	.....	.....
7s of 1871	123	.....	122	122¼	125	.....
7s, Convertible	.....	.....	.....	.....	.....	.....
7s, Consolidated	.....	.....	122	.....	.....	.....
N. Y. Cen. & Hud. R.	131	131½	130¾	131⅛	131⅜	131⅜
6s, S. F. 1883	.....	.....	.....	.....	.....	.....
6s, S. F., 1887	.....	.....	.....	.....	.....	.....
1st mortgage	.....	.....	.....	.....	.....	.....
1st mortgage, reg.	133½	.....	.....	.....	.....	124
N. Y. Elevated	.....	.....	.....	108⅞	.....	.....
1st mortgage	116½	.....	116½	.....	116½	116½
N. Y. & Harlem	.....	.....	.....	.....	.....	.....
Preferred	.....	.....	.....	.....	.....	.....
1st mortgage	.....	.....	.....	135	.....	.....
1st mortgage, reg	.....	.....	.....	.....	.....	.....
N. Y., Lake Erie & W	39⅞	40¼	39¾	39⅞	40¼	39⅞
Preferred	80	.....	79¼	.....	80	79½
2d Consolidated	98	98¾	98¾	99	99	99
New 2d 5s fund	.....	.....	.....	.....	.....	96¾
N. Y., N. Hav'n & Hart	171½	.....	172	.....	171¾	.....
North Mo. 1st mort	.....	.....	.....	.....	120½	.....
Northern Pacific	34¾	34½	31⅛	.....	34	34½
Preferred	72	72¾	72½	72¾	72¾	73¼
Ohio & Mississippi	33¾	34¼	34	34¼	35¾	34¾
Preferred	.....	.....	.....	.....	.....	.....
2d mortgage	122	.....	.....	.....	.....	.....
Consolidated 7s	.....	.....	.....	118¼	.....	.....
Consol. S. Fund	118⅛	.....	.....	.....	.....	.....
Pacific Mail S. S. Co	44½	45¼	43⅞	44⅞	44¾	44¼
Pacific R. R. of Mo.	.....	.....	.....	.....	.....	.....
1st mortgage	106x	.....	.....	106	106¾	.....
2d mortgage	.....	.....	.....	.....	111¾	.....
Panama	.....	190	.....	.....	.....	.....
Phila. & Reading	62⅜	52⅞	62⅜	62⅜	62⅜	63¼
Pitts, Ft. W. & Chi. gtd	.....	134	.....	135½	.....	.....
1st mortgage	.....	.....	.....	.....	.....	.....
2d mortgage	.....	.....	.....	.....	.....	.....
3d mortgage	.....	.....	.....	.....	.....	.....
Pullman Palace Car	137	137¼	139	138⅛	138¾	139
Quicksil'r Min'g Co	.....	12¼	13	.....	.....	.....
Preferred	61	61½	.....	61¾	61⅞	62
St. Louis & San Fran	41	40	40	40⅞	41½	44½
Preferred	57	57	57½	.....	57⅛	60⅞
1st Preferred	95	94	93	.....	59	95⅞
St. L., Alt'n & T. H.	41¼	.....	.....	.....	39	39
Preferred	85	84	.....	84	85	.....
1st mortgage	.....	.....	.....	.....	.....	.....
2d mort. pref.	.....	.....	.....	.....	.....	.....
Income bonds	.....	.....	.....	.....	.....	.....
St. L., Iron Mt. & S	.....	.....	.....	.....	.....	.....
1st mortgage	115	116	.....	.....	.....	.....
2d mortgage	109½	.....	.....	.....	109¾	.....
Toledo and Wabash	.....	.....	.....	.....	.....	.....
1st mortgage	.....	.....	.....	.....	.....	.....
2d mortgage	.....	.....	108	105½	.....	.....
7s, Consolidated	.....	.....	.....	.....	.....	.....
St. Louis Division	.....	.....	.....	.....	.....	.....
Union Pacific	118¾	119	118¼	118¾	119	119
1st mortgage	.....	115½	.....	115¾	.....	116
Land Grant 7s	.....	113¾	113¼	.....	.....	.....
Sinking Fund 8s	122	.....	121¾	.....	122½	.....
United States Ex	.....	78½	78⅜	77	76½	.....
Wabash, St. L. & Pac	36½	36¾	35¾	36½	36¼	36¾
Preferred	67⅝	67⅞	66⅝	67	67⅜	67¼
New mort. 7s	.....	.....	.....	.....	.....	102
Wells-Fargo Ex	128	.....	130	.....	128	.....
Western Pacific b'ds	110½	.....	.....	.....	.....	110½
Western Union Tel.	80½	81	80¾	80⅞	81⅞	81¾
7s., S. F conv., 1900	.....	116	.....	.....	.....	.....
FEDERAL STOCKS :—						
U. S. 4s, 1907, reg	.....	.....	.....	.....	.....	118¼
U. S. 4s, 1907, coup	.....	118½	.....	118¼	118¾	.....
U. S. 4½s, 1891, reg	.....	.....	.....	.....	113⅞	113⅝
U. S. 4½s, 1891, coup	.....	.....	.....	.....	.....	.....
U. S. 5s, 1881, reg	.....	.....	.....	.....	.....	.....
U. S. 5s, cont'd at 3½	.....	102¾	.....	.....	.....	.....
U. S. 6s cont'd at 3½	.....	101	.....	.....	.....	.....
Dt. of Col. 3-65s, reg	.....	.....	.....	.....	.....	.....
Dt. of Col. 3-65s, coup	.....	.....	.....	.....	.....	106½

Boston Stock Exchange.

Prices for the Week Ending Feb. 8.

	Th. 2.	F. 3.	Sat. 4.	M. 6.	Tu. 7.	W. 8.
Atch., Top. & San. Fe.	89	88¾	87	87	87¾	87¾
1st mortgage	.....	.....	.....	.....	.....	.....
2d mortgage	.....	.....	.....	.....	.....	.....
Land Grant 7s	.....	114¼	.....	.....	.....	.....
Boston & Albany	167	.....	.....	167½	167⅜	.....
7s reg	.....	.....	.....	.....	.....	.....
Boston and Lowell	105	104¾	104⅝	104	104	.....
Boston & Maine	145½	145½	.....	145¼	145¼	.....
Boston & Providence	163	.....	.....	.....	.....	.....
Bos'n, Hart. & Erie 7s	64¾	62	61¾	.....	.....	61
Burl. & Mo. R. L. G. 7s	.....	.....	.....	.....	.....	.....
Burl. & Mo. R. in Neb	.....	.....	.....	.....	.....	.....
6s, exempt	.....	.....	.....	.....	.....	.....
4s	84	.....	.....	.....	.....	.....
Chi., Burl. & Quincy	135¾	136¼	135	135⅛	135¾	.....
7s	.....	.....	.....	.....	.....	.....
Cin., Sand. & Clev ($50)	25¾	25¾	25½	.....	.....	.....
Concord ($50)	.....	.....	.....	.....	.....	.....
Connecticut River	.....	.....	.....	.....	.....	.....
Eastern	34½	.....	33	.....	.....	34
New 4½ Bonds	108½	.....	108	108½	.....	108½
Fitchburg	135	135½	135½	.....	.....	.....
N. Y. & New England	59	55⅞	55	55	55½	56
7s	117	.....	116½	116⅞	116⅞	117
Northern N. H.	107	.....	.....	.....	.....	107½
Norwich & Worcester	.....	.....	.....	.....	.....	.....
Ogden & Lake Cham	.....	.....	30	.....	.....	.....
Preferred	.....	.....	.....	.....	.....	.....
Old Colony	124	124½	124	124	125	127
Ph., Wil. & Balt. ($50)	.....	.....	.....	.....	.....	.....
Portl'd, Saco & Ports	.....	.....	.....	.....	.....	113½
Pueblo & Ark Val	.....	.....	.....	.....	.....	.....
7s	.....	116½	.....	.....	115	.....
Pullman Palace Car	.....	.....	138	139	139	.....
Union Pacific	.....	119	118¾	118⅞	119¾	119¾
6s	.....	.....	.....	.....	.....	114¾
Land Grant 7s	111½	.....	.....	.....	.....	.....
Sinking Fund 8s	.....	.....	.....	.....	.....	.....
Vermont & Canada	.....	.....	.....	.....	.....	.....
Vermont & Mass	.....	.....	.....	.....	.....	.....
Worcester & Nashua	60	.....	.....	.....	.....	59
Cambridge (Horse)	.....	.....	.....	.....	120	.....
Metropolitan (Horse)	.....	76½	.....	.....	.....	.....
Middlesex (Horse)	.....	.....	.....	.....	.....	.....
Cal. & Hecla Min'g Co	232	234	232½	232½	233	232
Quincy	41¼	42	41¼	41	41	41¾

Philadelphia Stock Exchange.

Closing Prices for the Week Ending Feft. 7.

	W. 1.	Th. 2.	F. 3.	Sat. 4.	M. 6.	Tu. 7.
Allegh'y Val. 7 3-10s	.....	120½	120½	.....	121	.....
7s, Income	.....	55¾	56	56	56	55
Camd'n & Am. 6s, '83	.....	.....	.....	.....	.....	.....
6s, 1889	.....	.....	.....	.....	.....	.....
Mort. 6s, 1889	.....	114	114	.....	.....	.....
Camden & Atlantic	35	.....	.....	.....	.....	.....
Preferred	.....	.....	.....	.....	.....	.....
1st mortgage	.....	.....	.....	.....	.....	.....
2d mortgage	.....	.....	.....	.....	.....	.....
Catawissa	20	19¼	19	.....	.....	18¾
Preferred	.....	.....	55	.....	.....	55
7s, new	.....	.....	.....	.....	.....	.....
Del. & Bound Brook	.....	.....	.....	130	.....	.....
7s	.....	.....	.....	.....	.....	.....
Elmira & Williamsp't	.....	.....	.....	.....	.....	.....
Preferred	26	.....	.....	.....	.....	.....
Hunt. & B. Top Mt.	.....	.....	.....	14	12¾	13¾
Preferred	.....	27	28¾	28	.....	28
2d mortgage	.....	.....	.....	.....	.....	.....
Lehigh Navigation	42⅝	43½	43½	43	43½	43¾
6s, 1884	.....	.....	.....	.....	.....	.....
Gold Loan	.....	.....	111½	.....	111½	111¾
Railroad Loan	.....	.....	.....	.....	.....	.....
Conv. Gold Loan	.....	.....	.....	.....	.....	.....
Consol. Mort, 7s	.....	.....	116½	116¾	.....	.....
Lehigh Valley	62	62	62¼	62¼	62¼	62¼
1st mort. 6s, coup	.....	.....	.....	.....	.....	.....
1st mort. 6s, reg	.....	.....	.....	.....	.....	.....
2d mort. 7s	.....	.....	134	.....	.....	.....
Consol mort. 6s	118½	.....	120	.....	120	.....
Consol. mtg. 6s, reg	119¼	.....	.....	.....	.....	120¼
Little Schuylkill	.....	56	.....	.....	.....	.....
Minehill & Sch. Hav'n	61	.....	.....	.....	.....	.....
North Pennsylvania	.....	.....	64	64	64	64
1st mortgage 6s	.....	106	105½	.....	.....	.....
2d mortgage 7s	.....	.....	.....	.....	.....	.....
Genl. mtg. 7s, coup	.....	.....	.....	.....	.....	.....
Genl. mtg. 7s, reg	.....	.....	.....	.....	.....	.....
Northern Central	48½	.....	49¼	.....	.....	50
5s	.....	.....	.....	.....	96	.....
Northern Pacific	34½	35	34¾	34½	34½	35
Preferred	71⅞	71⅞	72½	72	72⅝	72¾
Pennsylvania R. R.	60¾	61¼	61½	61	61½	61½
1st mortgage	.....	.....	.....	.....	.....	.....
Gen'l mort	.....	.....	.....	.....	.....	121¾
Gen'l mort reg	.....	.....	.....	.....	.....	.....
Consol. mort. 6s	.....	117	117	.....	.....	117
Consol. mort. reg	.....	.....	.....	.....	.....	117¼
Pa. State 6s 2d series	.....	.....	.....	.....	.....	.....
do 3d series	.....	.....	.....	.....	.....	.....
do 5s, new	.....	.....	.....	.....	116	.....
do 3s	.....	.....	.....	.....	.....	.....
Phila. & Reading	31⅜	31½	31½	31¼	31¾	31¼
1st mortgage 6s	.....	.....	.....	.....	.....	.....
7s of 1893	.....	.....	.....	.....	.....	.....
7s, new convert	.....	.....	.....	.....	74	.....
Consol. mort. 7s	.....	.....	.....	.....	.....	.....
Consol. mort. reg	126	.....	.....	.....	.....	.....
Gen'l mort. 6s	98¾	99	99¾	99¾	100	100
Philadelphia & Erie	16	16	.....	16¼	16	16⅛
1st mortgage 5s	.....	.....	.....	.....	.....	.....
2d mortgage 7s	.....	.....	.....	.....	.....	114
Pittsb., Cin. & St. L. 7s	.....	.....	120	.....	.....	.....
Pitts., Titusv. & Buff.	18⅜	18⅜	18⅞	18½	18⅜	19⅛
7s	.....	.....	.....	95½	.....	.....
Schuylkill Navi't'n	.....	.....	.....	.....	.....	.....
Preferred	12¾	12½	12½	12¾	13	13
6s, 1872	.....	.....	.....	.....	.....	.....
6s, 1882	89¼	.....	91	.....	.....	.....
United Co. of N. J.	186	185⅞	185⅞	185⅞	.....	186¼
Hestonville, (Horse)	.....	.....	.....	.....	.....	.....
Chestnut & Wal. (do)	.....	.....	.....	.....	.....	.....
Green & Coates (do)	.....	.....	.....	.....	.....	.....

London Stock Exchange.

	Closing Prices			
	Jan. 13.		Jan. 6.	
Baltimore & Ohio (sterling)	114	116	114	116
Cairo & Viencennes com. stock	36	38	36	38
Do. preferred 5 per cent	90	92	90	92
Central of N. J. $100 share	93	98	93	98
Do. Cons. Mortgage	115	117	115	117
Do. Adjustment Bonds	104	109	104	109
Do. Income Bonds	104	107	104	107
Det.,G'd Haven & Mil. Equip bds	112	114	112	114
Do.Con.M.5p.c.,till'83aft'r6p.c	110	112	110	112
Illinois Central $100 shares	135½	136½	132	133
Lehigh Valley Cons. mortgage	115	119	115	119
Louisville & Nashville mort 6s	105	107	105	107
Do. Sink. Fund bds (S.&N.Ala)	102	104	103	105
Do. capital stock $100 shares.	97	99	103	105
N. Y. Cent. & Hud. R. mt. bds.	134	137	134	137
Do. $100 shares	136¾	137¾	132	134
Do mort. bonds (stg.)	123	125	120	122
N.Y.,Lake Erie & West.,$100 shs	42¼	42¾	40	40½
Do. 6 p. c. pref. $100 shares	87	89	84	86
Do. 1st Con. Mort. bds (Erie)	131	132	131	133
Do. do. Funded Coupon bds.	127	129	127	129
Do. 2d Consol Mort. bonds	101	103	100	102
Do. do. Funded Coupon bds.	97	100	97	100
Do. Gold Income bonds	93	95	95	100
N.Y.,Pa.& Ohio 1st mort. bonds.	47	48	45	46
Do. Prior Lien bds (sterling)	104	108	104	108
Pennsylvania, $50 shares	63	64	62	63
Do. Con. Sink Fund Mort.	116	118	118	122
Philadelphia & Reading $50 shs	33¼	33¾	32	33¼
General Consol Mortgage	116	118	116	118
Do. Improvement Mortgage	103	105	103	105
Do.Gen.Mtg.'74,ex-def'd coup.	99	101	100	101
Do. Scrip for the 6 def. ½ coup.	92	97	92	97
Pittsb., Ft. W. & Chi. Eq. bds	105	109	105	109
St. L. Bridge 1st mort. gold b'd.	126	128	126	128
Do. 1st pref. stock	102	104	102	104
Union Pa. Land Grant 1st. mtg.	115	119	115	119

AMERICAN RAILROAD JOURNAL.

Financial and Commercial Review.

THURSDAY EVENING, Feb. 9, 1882.

THE rate for call loans on stocks this morning was 4 to 6 per cent, and 2@3 per cent on United States bonds. Time loans were 5@6 per cent, which were also the quotation for prime mercantile paper. In the afternoon the quotation for call loans at the Stock Exchange was 4½ per cent.

The posted rate for demand Sterling was 4.-90⅝, and the actual rate 4.89⅝@4.89¾. The actual rates for 60 day sterling were 4.84@4.84⅜. Cable transfers were 4.90⅝@4.91¼. Prime commercial bills were 4.82⅜@4.83. For Continental bills, the actual rates were: francs, 5.-13¾@5.14⅜, and 5.18¾@5.19⅜; marks, 94⅜@⅝ and guilders 40¼@40¾.

The new Wilmington (Del.) loan of $60,000, bearing 4½ per cent interest, has been placed in Philadelphia at rates ranging from par to 101½.

Three bids were received at New Orleans on the 1st inst. to sell to the State of Louisiana $600,000 worth of her four per cent bonds, the lowest of which was $118.58. The bids were all rejected.

The report of the receiver of the Lebanon Springs Railroad Company, filed at Albany on the 1st inst. shows receipts for the quarter ending Dec. 31 (including a balance of $8,701) of $80,660, and disbursements of $68,614. The earnings during the same period were $23,661. The assets amount to $320,876 and the liabilities to $312,203, the latter including $293,111 in Receivers certificates.

The Pullman Palace Car Company have decided to increase the capital stock of the company $2,523,600, which adds 25 per cent to the present amount of stock. Stockholders of record of Feb. 18 have the option to subscribe between that date and March 1 for an amount of the new stock not exceeding one-fourth of their present holdings at par. The payments for this new issue will be 50 per cent on or before March 1 and 50 per cent between that date and May 8. Applications can be made at the Farmers' Loan and Trust Co., New York, New England Trust Co., Boston, and at the company's office in Chicago.

The Chief Justice of the Supreme Court of Missouri has refused the application for a writ of error to the United States Supreme Court in the Hannibal and St. Joseph mandamus case, there being no Federal question involved in the suit.

The United States Court, Philadelphia, is authority for the statement that the Philadelphia and Reading receivership would not last more than about three months.

The House of Representatives on the 2d inst. refused to release the Philadelphia and Reading Railroad Company from the payment of a tax of $483,700.

At the annual meeting of the Guarantee Company of North America, held at Montreal on the 3d inst., a statement was presented showing that of 5,737 risks offered during the year 5,075 were accepted and bonds issued, the new annual premiums being $36,784.80. The total revenue of the year was $80,173.78. The surplus as regards shareholders was $19,368.45, and the total resources for the security of policyholders was $722,060.82. A dividend of six per cent. on the paid-up capital had been paid for the year and over $5,000 added to the reserve.

By the new contract between the Pacific Mail Steamship Company and the Union Pacific Railroad Company, the former is to receive from the latter $95,000 per month, and six months' notice must be given before either party can withdraw. The old contract, abrogated some time ago by the railroad company, allowed the Pacific Mail Co. $110,000 per month.

According to the annual report of Mr. Ainsworth R. Spofford, Librarian of Congress, the library now numbers 420,092 volumes, as against 396,788 volumes one year ago. The accessions during 1881 embraced 23,304 volumes and 12,834 pamphlets. The business of the copy-right department exhibits a slight increase for 1881. The report concludes with an appeal for additional accommodations.

The statement of the financial condition of the East River Bridge Company to the 31st of January, 1882, shows that there have been received from New York, $4,537,900; from Brooklyn, $8,657,037, and from other sources, $344,-010. The cash expenditures to that date were $13,439,590.56. The cash on hand amounts to $99,356.49, and the liabilities, $101,353.45.

The Governor of Wisconsin, in surrendering the gubernatorial chair, announced that the State was entirely out of debt, and had a balance of $117,000 in the treasury. Her neighbor, Minnesota, however, has been struggling to repudiate certain railroad bond obligations and has finally settled them at 50 cents on the dollar.

The new constitution of Missouri, said to be the most perfect in the country, provides that no railroad or other transportation company shall grant free passes or tickets, or tickets at a discount, to members of the General Assembly or any other State officer, and the acceptance of the same shall be a forfeiture of office.

The statement of exports of petroleum and petroleum products from the United States during the month of December last, as furnished by the Bureau of Statistics, shows a total of 45,250,872 gallons, representing a value of $4,140,430, showing an immense increase over the exports for the corresponding month of 1880, which were 28,474,292 gallons, showing a value of $3,041,638. For the year 1881 the total exports of these products were valued at $48,546,103 as against $34,505,645 for the previous year. Shipments from New York alone during December last aggregated 32,338,638 gallons, valued at $3,010,548.

The total production of wool in 1881 compares with the four next preceding years as 290, 264, 232½, 211, and 208¼ million pounds, and the domestic consumption in 1881 was 251¾ million pounds, compared with 348½, 296, 246, and 258⅝ million pounds in next preceding years. The foreign imports in 1881 were 51,620,757 pounds, against 107,541,306 pounds in 1880.

The Missouri State Fund Commissioners have issued an order calling in two hundred and fifty 5-20 State renewal bonds for payment on the 1st of March. When these bonds are paid, the amount reduced since January 1, 1871, will be $752,000.

The closing quotations on Thursday were: Adams Express, 147@14$; American Express, 92@93; Chicago, Burlington and Quincy, 135½@136; Canada Southern, 53¼@53¾; Chicago and Northwestern, 135@135⅛; do. pref., 143¾@144; Chicago and Alton, 135¼@135½; Central of New Jersey, 96⅜@96; Central Pacific, 91½@91⅝; Chicago, Milwaukee and St. Paul, 109¾@109⅞; do. pref., 122@122½; Columbus, Chicago and Indiana Central, 18½@18¾; Delaware and Hudson Canal, 108⅜@108½; Delaware, Lackawanna and Western, 127¼@127⅜; Hannibal and St. Joseph, 96½@97; do. pref., 108½@109⅛; Illinois Central, 136¼@136½; Lake Erie and Western, 34@—; Lake Shore and Michigan Southern, 111⅝@111¾; Metropolitan Elevated, 89⅝@90; Manhattan Elevated, 56@56¾; do. 1st pref., 96@97½; Michigan Central, 86⅜@86⅞; New York Elevated, 107@108⅜; New York, Lake Erie and Western, 39¼@39⅜; do. pref., 79@—; New York Central and Hudson River, 131⅜@131⅝; Northern Pacific, 34½@35; do. pref., 73⅝@73⅞; Ohio and Mississippi, 34⅛@34¾; Pacific Mail, 44⅝@45; Texas and Pacific, 48⅜@48½; Union Pacific, 119@119¼; United States Express, 75½@76¾; Western Union Telegraph, 81¾@81⅞; Wabash, St. Louis and Pacific, 36¾@36⅞; do. pref., 67¼@67⅜; Wells-Fargo Express, 126½@—.

The following quotations of sales of Railway and other securities, for the week, are in addition to those given elsewhere in our columns:

New York.—Atlantic and Pacific 1st, 95; Am. Dock and Imp. 5s, 100; Atchison, Colorado and Pacific 1st, 98½; Boston and New York Air Line pref., 68½; Belleville and Southern Illinois 1st, 121½; Columbus, Chicago and Indiana Central Inc., 70¼; do. 1st Trust Co. certif. ass. sup., 118; Charlotte, Columbia and Augusta, 74; Chicago, St. Louis and New Orleans, 81½; Chesapeake and Ohio 1st pref., 37; do. 2d pref., 25⅜; do. cur. int., 52; do. 1st, Series A, 102½; Chicago, St. Paul, Minneapolis and

Omaha, 35⅞; do. pref., 101⅜; do. consol., 99⅜; Central Iowa 35½; do. 1st, 111½; Columbia and Greenville pref., 96; do. 2d, 96; Chicago, Milwaukee and St. Paul S. M. div., 1st, 103½; do. La C. and Dav. div. 1st, 94; do. S. W. div. 1st, 106¾; Cairo and Fulton 1st, 109; Chicago and Alton Inc., 104; Chicago and Northwestern S. F. 5s, 101; Cleveland, Columbus, Cincinnati and Indianap. consol., 124½; Denver and Rio Grande 71½; do. 1st, 113; do. 1st consol., 104½; Danbury and Norwalk, 65; East Tennessee, Virginia and Georgia, 14¾; do. pref., 23½; do. 5s, 78; do. inc., 56½; do. 1st, 115; Evansville and Terre Haute 1st consol., 96; Green Bay, Winona and St. Peter 1st, 91½; Hudson River 2d S. F., 110; Hannibal and Central Mo. 1st, 108; Indiana, Bloomington and Western, 46¾; International and Gt. Northern 1st, 106; Indianapolis, Decatur and Springfield 1st, 103½; Kansas Pacific 1st consol., 103†; do. 6s, F. & A., 1895, 110; do. 6s, Denver div. ass., 108½; Lafayette, Bloomington and Muncie 1st, 102½; Louisville and Nashville Gen'l mort., 6s, 101½; do. Evansville, Henderson and Nashville 1st, 100; do. Cecilian Br. 1st, 111½; Louisville, New Albany and Chicago, 71; do. 1st, 101½; Long Island, 51½; Lake Erie and Western, 34; do. 1st, 104½; Metropolitan Elevated 2d, 91; Manhattan Beach, 30½; Marietta and Cincinnati 1st pref., 12½; do. 2d pref., 8¾; Mobile and Ohio, 32⅜; do. New mort., 113; Missouri, Kansas and Texas, 37½; do. gen'l mort. 6s, 83; do. consol. 7s, 103½; do. 2d, 69¾; Missouri Pacific, 103⅝; do. 1st consol. 100½; do. 3d, 112; Memphis and Charleston, 76; Milwaukee, Lake Shore and Western, 47; do. inc., 75; do. 1st, 100¾; Minneapolis and St. Louis 1st, 115¼; do. 1st, Iowa Ext. 111¾; Michigan Central 5s, 98¼; Nashville, Chattanooga and St. Louis, 83¾; do. 1st, 115½; New York, Ontario and Western, 26¾; Norfolk and Western pref., 57; do. Gen'l mort., 103; Northern Pacific 1st, 96; New Orleans Pacific 1st, 91; New York City and Northern Gen'l mort., 80; Ohio Central, 24¾; do. 1st, 98; do. inc., 45; Oregon Railway and Nav., 134½; do. 1st, 106; Oregon Transp., 71; Ohio Southern, 20; do. 1st, 91½; Ohio and Mississippi, Springfield div. 1st, 121½; Peoria, Decatur and Evansville, 35¼; do. inc., 72; do. Evansville div. 1st, 103½; Rome, Watertown and Ogdensburg, 21⅝; do. 1st consol. 90; Rochester and Pittsburg, 28½; do. inc., 39½; Richmond and Allegany, 31⅛; do. 1st, 95; Richmond and Danville, 240; do. W. P., 240; do. 1st, 105½; St. Louis and San Francisco 2d, Class B, 90½; do. C, 89; St. Louis, Alton and Terre Haute dividend bonds, 52; St. Paul and Duluth, 30¾; do. pref., 70; St. Paul Minneapolis and Manitoba, 112; do. 1st, 109⅜; do. 2d, 105⅝; South Carolina, 30; do. 1st, 99; do. inc., 45; Southern Pacific of California 1st, 104; Scioto Valley 1st, 100½; St. Louis, Kansas City and Northern, R. E. 7s, 108; St. Louis, Iron Mountain and Southern 5s, 84¾; Toledo Delphos and Burlington, 14; do. inc., 22½; Texas and Pacific, 48¼; do. inc. L. G., 70; do. Rio Grande div. 1st, 84¾; Texas Central 1st, 107½; Wabash, St. Louis and Pacific Gen'l mort. 6s, 88; do. Chicago div. 1s,, 86½; do. Toledo, Peoria and Western 1st, 112; do. Iowa div. 1st, 93; Warren R. R. 2d mort., 121; Arkansas 7s, L. R., P, B. and N. O., 23; Alabama, Class A, 81⅜; Louisiana consol. 7s, 68; Missouri 6s, 1887, 109½; do. 1888, 109⅜; do. H. & St. J. issue, 1886, 101¼; South Carolina 6s, non-fund., 8¾; Tennessee 6s, old, 67⅜; do. new, 69½; Am. Dist. Tel., 39; Sutro Tunnel, ⅞; Colorado Coal and Iron, 40½; do. 1st, 86; Maryland Coal, 19; New Central Coal, 18; Deadwood Mining, 6¾; Homestake, 19; Little Pittsburg, 1¾; Ontario, 35; Robinson, 2½; Standard, 17½; Starmount, 1½.

Philadelphia.—Central Transportation, 35¼; Camden and Atlantic, 35; Huntingdon and Broad Top Mt. consol. 5s, 89; Harrisburg and Lancaster 6s, 102¾; New Orleans Pacific 1st, 91⅜; Pennsylvania Company 106; Philadelphia and Reading R. R. scrip, 82; do. Inc. 7s, 97½; Pittsburg 7s, W. L., 126½; do. Av. 7s, 107¼; Perkiomen R. R. 6s, 104; Philadelphia, Wilmington and Baltimore 4s, 95¾; Pennsylvania Canal 6s, 99; Philadelphia, Germantown and Norristown, 106; Sunbury, Hazleton and Wilkesbarre 2d, 30; Schuylkill Nav. 6s, 1895, 65; Susquehanna Canal 7s, 59½; do. pref. 6s, 75; Susq. Coal 6s, 109; Texas and Pacific 1st mort. 6s, 107; do. consol. mort. 6s, 99¼; Warren and Franklin 7s, 111¼. The latest quotations are: City 6s, —@118; do. free of tax, 126@130; do. 4s, new, 102@109; Pennsylvania State 6s, 3d series, 100@101; do. 5s, new loan, 115½@116; do. 4s, old, 107@111; Philadelphia and Reading R. R., 31½@31⅝; do. consol. mort. 7s, reg., 125@—; do. mort. 6s, 117@—; do. gen'l mort. 6s, coupon, 99¾@100¼; do. 7s, 1893, 125@—; do. new, conv., 74@76; United New Jersey R. R. and Canal, 185½@186⅝; Buffalo, Pittsburg and Western, 19@19½; Pittsburg, Titusville and Buffalo 7s, 96@98; Camden and Amboy mort. 6s, 1889, 113½@114¼; Pennsylvania R. R., 61½@61½; do. general mort. reg., 121¼@122⅛; do. consol. mort. 6s, reg., 116½@117; Little Schuylkill R. R. 56@56½; Morris Canal, 65@—; do. pref., 166@169½; Schuylkill Navigation, 5½@6; do. pref., 12½@13; do. 6s, 1882, 92@94; do. 1872, 107@108; Elmira and Williamsport pref., 58@65; do. 6s, 113@—; do. 5s, 98@100; Lehigh Coal and Navigation, 43⅜@43½; do. 6s, 1884, 106@—; do. R. R. loan, 116@118; do. Gold Loan, 111@111½; do. consol. 7s, 116½@117; Northern Pacific, 34¼@34½; do. pref., 72¾@72⅞; North Pennsylvania, 63@64; do. 6s, 105@106½; do. 7s, 121@—; do. General mort. 7s, reg., 119@123; Philadelphia and Erie, 16@16¼; do. 7s, 114@115; do. 5s, 104@106; Minehill, 61@62; Catawissa, 18½@19; do. pref., 54½@55; do. new pref., 53@54½; do. 7s, 1900, 120@—; Lehigh Valley 62@62¼; do. 6s, coupon, 120@122; do. reg., 121@122; do. 2d mort. 7s, 133@—; do. consol. mort. 120@120½; Fifth and Sixth streets (horse), 149@150; Second and Third, 110@115; Thirteenth and Fifteenth, 75@80; Spruce and Pine, 45@50; Green and Coates, 80@85; Chestnut and Walnut, 90@94; Germantown, 60@70; Union, 110@115; West Philadelphia, 105@110; People's 14½@16¼; Continental, 100@102.

Boston.—Atlantic and Pacific 6s, 95; do. Income 6s, 30; Boston Land, 8¼; Boston Water Power, 6½; Boston, Clinton, Fitchburg and New Bedford, 47; do. pref., 129; Burlington and Missouri River in Nebraska 6s, non-exempt, 104; Chicago, Burlington and Quincy 4s, 87; do. 4s, Denver ext., 84½; do. 5s, 1919, 105; do. 5s, 1901, 102½; Cincinnati, Sandusky and Cleveland 7s, 61; Cheshire R. R., 59; Connotton Valley, 18; do. 7s, Straitsville div., 75; Central of Iowa, 34; do. 2d, 49½; Flint and Pere Marquette, 23; do. pref., 92½; Highland Street R. R., 138; Iowa Falls and Sioux City, 82½; Kansas City, Fort Scott and Gulf, 75; Kansas City Lawrence and Southern 5s, 105; Kansas City, St. Joseph and Council Bluffs 7s, 113; Louisiana and Missouri River, 15; Little Rock and Fort Smith, 65; do. 7s, 110⅞; Maine Central, 39; Marquette, Houghton and Ontonagon, 54½; do. pref., 111; Mexican Central 7s, 84; do. block, old, 109; do. new, 93; Northern Pacific 6s, 97; New York and New England 6s, 107; New Mexico and Southern Pacific 7s, 114; Ogdensburg and Lake Champlain 6s, consol., 96; do. inc., 48; Rutland, 4½; do. pref., 26; Sonora, 24½; do. 1st 7s, do. block, No. 4, 109; Summit Branch, 13; Toledo, Delphos and Burlington, 6⅝; do. inc. M. L., 22; do. 6s, S. E. div., 66½; do. income, 16; Wisconsin Central, 19¾; do. pref., 31; Atlantic Mining Co., 14; Allouez, 2¾; Brunswick Antimony, 15; Blue Hill, 50c.; Crescent, 37½c.; Catalpa, 50c.; Franklin, 12; Harshaw, 3¾; Huron, 2½; National, 2⅜; Osceola, 32; Pewabic, 14; Phœnix, 2½; Ridge, 3; Sullivan, 1⅝; Silver Islet, 20.

NOTHING is more injurious to a man than the dead level of prosperity.—*Moody.*

No man ever became great or good except through many and great mistakes.—*Gladstone.*

AN agonized father applied to Superintendent Walling to assist him in finding his boy. "Has he any particular marks about his person by which he can be identified?" asked the official. "Yes," was the reply, "when he overfeeds himself he has awful cramps in his stomach."

THE United States engineers who were detailed to examine the route of the proposed ship canal through the Jersey flats, connecting the docks of the Central Railroad of New Jersey with the deep water of the Kill-von-Kull inlet, report that the cutting of a channel 21 feet deep at mean low water and 300 feet wide at bottom will cost $7,134,980.

THE dimensions of the tnnnel under the St. Lawreuce are to be as follows: Entire length, about 21,700 feet; open cuttings on Hochelaga side, 2,500 feet, and on the Longueuil side 5,220 feet; tula length of tunnel proper, 14,980 feet. It is to be 26 feet wide inside and 23 high. It will be lined with brick masonry throughout, except the fronts, which will have façades of stone. The arch will vary from 20 to 30 inches in thickness, according to the character of the ground to be supported.

THE first report of the Railroad Commissioners of Kentucky, just issued, claims that much good has already been accomplished by the commission, and suggests further legislation. It contains a letter from the New York Chamber of Commerce, in which it is declared that the success of the Georgia Railroad Commission has demonstrated the fact that, with adequate powers, a commission can secure equality and publicity in railroad management without injury to the roads and with great benefit to the public.

Statement of the Public Debt of the United States, February 1, 1882,

DEBT BEARING INTEREST.

	Amount Outstanding.	Accrued Interest.
6 per cent loan, 1861-'81, continued at 3½ per ct.	$81,624,200 00	$238,070 58
6 per cent loan 1863-'81 continued at 3½ per ct	47,855,700 00	139,579 12
5 per cent funded loan of 1881	401,503,900 00	3,513,145 47
4½ per cent funded loan of 1891	250,000,000 00	1,875,000 00
4 per cent funded loan of 1907	738,788,750 00	2,462,629 00
4 per cent refunding certificates	559,100 00	1,863 67
3 per cent navy pension fund	14,000,000 00	35,000 00
Aggregate of debt bearing interest	$1,534,331,600 00	$8,265,287 84
Interest due and unpaid		1,953,060 31

DEBT ON WHICH INTEREST HAS CEASED SINCE MATURITY.

	Amount Outstanding.	Interest due & unpaid.
4 to 6 per cent. old debt, 1837.	$57,665 00	$64,174 81
5 per cent. Mexican indemnity stock, 1846	1,104 91	85 74
6 per cent. bonds, 1847	1,250 00	22 00
6 per cent. bounty land scrip, 1847	3,275 00	213 06
5 per cent. Texas indemnity bonds, 1850	20,000 00	2,945 00
5 per cent. bonds, of 1858	8,000 00	....
5 per cent. bonds, of 1860	10,000 00	600 00
6 per cent. 5-20 bonds, 1862, called	370,700 00	8,439 82
6 per cent. 5-20 bonds, June, 1864, called	58,650 00	170 95
6 per cent. 5-20 bonds, 1865, called	76,750 00	18,895 79
5 per cent. 10-40 bonds, 1864, called	472,400 00	110,073 76
6 per cent. Consol. bonds, 1865, called	407,800 00	15,650 92
6 per cent. Consol. bonds, 1867, called	1,097,550 00	204,112 15
per cent. Consol. bonds, 1868, called	298,950 00	23,759 12
6 per cent. loan, Feb. 8, 1861, matured Dec. 31, 1880	100,000 00	5,430 00
per cent. funded loan 1881, called	2,742,200 00	70,653 12
Oregon War Debt, March 2, 1881, matured July 1, 1881.	129,150 00	6,202 50
6 per cent loan of July 17 and Aug. 5, 1861, matured June 30, 1881	914,850 00	35,077 50
6 per cent loan of July 17 and Aug., 5 1861, continued at 3½ per cent, matured Dec. 24, 1881, and Jan. 29, 1882, called	6,316,150 00	29,530 06
6 per cent. loan of March 3, 1863, matured June 30, 1881.	268,650 00	7,093 50
1-10 to 6 per cent. Treasury notes, prior to 1846	82,525 35	2,668 06
1-10 to 6 per cent. Treasury notes, 1846	6,000 00	206 00
6 per ct. Treasury notes, 1847.	950 00	57 00
3 to 6 per cent. Treasury notes, 1857	1,700 00	99 00
6 per ct. Treasury notes, 1861.	3,000 00	364 50
7 3-10 per cent. 3 years' Treasury notes, 1861	16,300 00	1,104 43
5 per cent. 1 year notes, 1863..	43,085 00	2,166 35
5 per cent. 2 year notes, 1863.	34,200 00	1,729 80
6 per ct. compound interest notes, 1863-64	224,290 00	45,779 89
7 3-10 per cent. 3 years' Treasury notes, 1864-65	140,900 00	4,752 92
6per cent. certificates of indebtedness, 1862-63	4,000 00	253 48
4 to 6 per cent. temporary loan, 1864	2,960 00	244 19
3 per cent. certificates, called.	5,000 00	394 31
Aggregated of debt on which Interest has ceased since maturity	$13,920,005 26	$662,949 73

DEBT BEARING NO INTEREST.

Demand notes, 1861-62	$59,890 00	
Legal tender notes, 1862-63	346,681,016 00	
Certificates of Deposit	11,400,000 00	
Coin certificates, 1863	5,188,120 00	
Silver certificates, 1878	68,999,670 00	
Unclaimed interest		7,256 51
Fractional currency, 1862, 1863 and 1864 $15,445,427 67		
Less amount estimated as lost or destroyed, act of June, 21, 1879 8,375,934 00		
	7 069,493 67	
Aggregate of debt bearing no interest	$439,398,189 67	$7,256 51

RECAPITULATION.

	Amount Outstanding.	Interest.
Debt bearing interest in coin, viz:		
Bonds at 6 per cent., continued at 3½ per cent.	$129,479,900 00	
Bonds at 5 per cent, continued at 3½ per cent.	401,503,900 00	
Bonds at 4½ per cent.	250,000,000 00	
Bonds at 4 per cent.	738,788,700 00	
Refunding certificates	579,100 00	
Navy pension fund, 3 p.c	14,000,000 00	
	$1,534,331,600 00	$10,218,348 15
Debt on which interest has ceased since maturity.	13,920,005 26	662,949 73
Debt bearing no int., viz:		
Old demand and legal-tender notes	$346,740,906 00	
Certificates of deposit	11,400,000 00	
Coin & silver certificates.	74,187,790 00	
Fractional currency	7,069,493 67	
	$439,398,189 67	
Unclaimed interest		7,256 51
	$1,987,649,794 93	$10,888,554 39
Total debt, principal and interest to date, including interest due and unpaid	$1,998,538,349 32	

AMOUNT IN TREASURY.

Interest due and unpaid	$1,953,060 31
Debt on which interest has ceased	13,920,005 26
Interest thereon	662,949 73
Gold and silver certificates	74,187,790 00
U. S. notes held for redemption of certificates of deposit	11,400,000 00
Cash balance available February 1, 1882.	143,901,663 29
	$246,025,468.59
Debt, less am't in Treas'y Feb. 1, 1882	$1,765,491,717 09
Debt, less am't in Treasury Feb. 1, 1882	1,752,512,880 73
Decrease of debt during the month	$12 978,836 36
Decrease of debt since June 30, 1881	$88,085,931 25

BONDS ISSUED TO THE PACIFIC RAILROAD COMPANIES, INTEREST PAYABLE IN LAWFUL MONEY.

	Amount Outstanding.	Accrued Interests not paid.
Central Pacific bonds, 1862-64	$25,885,120 00	$129,425 60
Kansas Pacific bonds, 1862-64	6,303,000 00	31,515 00
Union Pacific bonds, 1862-64	27,236,512 00	136,182 56
Cent. Branch Union Pacific bonds, 1862-64	1,600,000 00	8,000 00
West'n Pacific Bonds, 1862.64	1,970,560 00	9,852 80
Sioux City & Pacific bonds, 1862-64	1,628,320 00	8,141 60
Totals	$64,623,512 00	$325,117 56

Interest paid by the United States, $53,405,977 38; interest repaid by transportation of mails, &c., $14,804,-021,94; interest repaid by cash payments: 5 per cent. net earnings, $655,198.87; balance of interest paid by United States, $37,946,756.57.

The foregoing is a correct statement of the public debt, as appears from the books and Treasurer's returns in the Department at the close of business, January 31, 1882.

CHARLES J. FOLGER,
Secretary of the Treasury.

Cincinnati Iron Market.

OFFICE OF E. L. HARPER & CO.
Cincinnati, Feb. 7, 1882.

THE demand has been fair during the past week. No change to note in prices.

We quote as follows:

FOUNDRY.

	No.			Mos.
Hanging Rock Charcoal	1	29 50@30	75	4
Strong Neutral Coke	1	27 00@28	00	4
American Scotch	1	26 50@27	50	4

GREY FORGE.

Neutral Coke	25	50@26	50	4
Cold Short	24	00@25	00	4

CAR WHEEL AND MALLEABLE.

Hanging Rock Cold Blast	36	00@38	00	4
" Warm Blast	30	00@32	00	4
Lake Superior 1 and 2	32	00@33	00	4
Lake Superior 3 to 6	34	00@36	00	4
Southern Car Wheel	36	00@40	00	4

The Scotch Iron Trade.

THE statistics of the Scotch iron trade for 1881 have been issued. The production for the year has been 1,176,000 tons, against 1,049,000 last year, while the consumption in foundries and malleable iron and steel works was 397,000 tons this year, against 384,000 last. The exports have been 578,000 tons, against 671,000; while the stocks in stores and in makers' hands were 940,000 tons, against 739,000 last year, being an increase of 201,000. The number of furnaces in blast at the beginning of this week was 105, against 124 on the corresponding date, last year. The average price of manufacturers' warrants was 49s 1½d, against 54s 6d last year. The highest price this year was 53s 9d, and the lowest 45s; whereas last year the highest was 73s 3d and the lowest 44s 9d. The quantity of malleable iron and steel made in Scotland was 361,000 tons, against 292,000 in 1880, and the quantity of Cleveland and Cumberland iron consumed in Scotland was 420,000 tons, of which 240,000 were in foundries and 180,000 tons in malleable iron and steel works. Last year the quantity consumed was 355,000 tons.

The Coal Trade.

THE leading coal carrying companies make the following reports of their tonnage for the week ending January 28, and for the year to same date, compared with their respective amounts carried to the same time last year:

	Week.	1882.	1881.
Reading Railroad	96,557	1,215,725	975,495
Schuylkill Canal	.....	27,655	.....
Lehigh Valley	57,760	921,068	728,495
Delaware, Lackawanna and Western	48,427	269,084	247,216
Shamokin	17,572	67,785	69,374
Central R. R. of New Jersey	68,525	272,557	247,833
United R. R. of New Jersey	18,522	108,054	107,367
Pennsylvania Coal	11,723	65,802	67,945
Delaware and Hudson Canal	28,545	209,507	198,572
Huntingdon and Broad Top Mountain	12,578	45,874	35,888
Penn. and New York	21,824	237,687	183,664
Clearfield, Pa.	43,400	185,002	130,745

The total tonnage of anthracite coal from all the regions for the week ending January 28, as reported by the several carrying companies, amounted to 318,327 tons, against 314,752 tons in the corresponding week last year, an increase of 3,575 tons. The total amount of anthracite mined for the year is 1,653,283 tons, against 1,526,481 tons for the same period last year, an increase of 126,802 tons. The quantity of bituminous coal sent to market for the week amounted to 90,362 tons, against 67,014 tons in corresponding week last year, an increase of 23,348 tons. The total amount of bituminous mined for the year is 306,310 tons, against 236,028 tons for the corresponding period last year, an increase of 70,282 tons. The total tonnage of all kinds of coal for the week is 408,689 tons, against 381,766 tons in corresponding week last year, an increase of 26,923 tons, and the total tonnage for the coal year is 1,959,593 tons, against 1,762,509 tons to same date last year, an increase of 197,084 tons. The quantity of coal and coke carried over the Pennsylvania Railroad for the week ending January 28 was 193,754 tons, of which 136,384 tons were coal and 57,370 tons coke. The total tonnage for the year thus far has been 810,571 tons, of which 573,050 tons were coal and 237,-521 tons coke. These figures embrace all the coal and coke carried over the road east and west. The shipments of bituminous coal from the mines of the Cumberland coal region during the week ended January 28 were 39,812 tons, and for the year to that date 150,689 tons an increase of 51,402 tons as compared with the corresponding period of 1881. The coal was

carried to tidewater as follows : Baltimore and Ohio Railroad—week, 32,905 tons ; year, 123,-266 tons ; increase compared with 1881, 38,115 tons. There were no shipments by canal. Pennsylvania Railroad—week, 6,754 tons ; year, 26,710 tons ; increase compared with 1881, 12,-574 tons. The Reading Railroad shipment for last week, ending February 4, was 157,000 tons, of which 16,800 tons were sent to and 13,300 tons shipped from Port Richmond, and 22,000 tons sent to and 16,800 tons shipped from Elizabethport.—*Phil. Ledger, Feb.* 6.

ORGANIZATION.

THE officers of the Union Canal Company are: President—Grant Weidman. Managers—Frederick Fraley, Charles M. Bayard, George DeB. Keim and Thomas C. Zulick. Secretary and Treasurer—George S. Bowman.

THE directors of the Pittsfield and North Adams Railroad Company, elected on the 8th inst., are: C. W. Chapin, of Springfield ; Henry Colt, of Pittsfield ; Edward Jackson, Frank H. Appelton, and Ignatius Sargent, Jr., of Boston.

THE following gentlemen were elected directors of the Providence and Worcester Railroad Company on the 6th inst. : George A. Leete, Wm. S. Slater, Paul Whiton, Gideon L. Spencer, Elijah B. Stoddard, Lyman A. Cook, Moses B. Goddard, Amos D. Lockwood, Frederick Grinnell, Joseph E. Davis, John Dean, Oscar J. Rathbun, David K. Phillips, Josiah Lasell.

AT the annual meeting of stockholders of the Huntingdon and Broad Top Mountain Railroad Company on the 7th inst., the following board of directors was elected : B. Andrews Knight, president ; Rathmell Wilson, John Devereux, I. V. Williamson, James Long, James Whittaker, Joseph H. Trotter, William P. Jenks, C. W. Wharton, Samuel Field, Thomas R. Patton, Jacob Naylor and Spencer M. Janney.

AT the annual election for directors of the Guarantee Company of North America, held in Montreal, Canada, on the 3d inst., the following gentlemen were were chosen: Sir A. T. Galt, the Hon. James Ferrier, John Rankin, D. Lorn McDougall, W. J. Buchanan, Edward Rawlings, John Paton, of New York, John L. Blaikie, of Toronto, and James G. Ross, of Quebec.

THE directors of the Boston, Barre and Gardner Railroad Company, elected on the 1st inst., are : Levi Heywood, of Gardner, Mass. ; Calvin Foster, H. M. Witter and William W. Rice, of of Worcester, Charles Heywood, of Gardner ; Nelson D. White, of Winchendon, Stephen Salisbury, Jr., A. George Bullock, Wm. H. Morse, E. B. Stoddard and Samuel R. Heywood, of Worcester. President George S. Barton declined a re-election.

THE stockholders of the Columbus and Xenia Railroad Company have elected the following directors : J. R. Swan, John W. Andrews, B. A. Harrison, Robert Neil, P. W. Huntington, George M. Parsons, Alfred Thomas, Robert S. Smith, Henry Hanna, C. P. Cassilly and Thos. D. Messler. The directors organized by electing J. R. Swan president, and Robert S. Smith secretary and treasurer.

AT the recent annual meeting of the New London, Conn., Northern Railroad Company, held in New London, the following were elected directors for the ensuing year : William W. Billings, New London ; William H. Barnes, New London ; Benjamin Stark, New London ; Augustus Brandegree, New London ; Robert Cott, New London ; J. N. Harris, New London ; Thomas Ramsdell, Windham ; C. H. Osgood, Norwich ; William Allen Butler, New York ; William H. Hill, Boston ; James A. Rumrill, Springfield, Maes. At a subsequent meeting of the directors the following officers were chosen : President and Treasurer, Robert Coit, New London ; secretary, J. A. Southard, New London.

Psalm of Marriage.

TELL me not in idle jingle,
"Marriage is an empty dream,"
For the girl is dead that's single,
And girls are not what they seem.

Life is real. Life is earnest.
Single blessedness a fib.
"Man thou art, to man returnest,"
Has been spoken of the rib.

Not enjoyment and not sorrow
Is our destined end or way,
But to act that each to-morrow
Finds us nearer marriage-day.

Life is long, and youth is fleeting,
And our hearts though light and gay,
Still like pleasant drums are beating
Wedding marches all the way.

In the world's broad field of battle,
In the bivouac of life,
Be not like dumb driven cattle.
Be a heroine—a wife.

Trust no future, howe'er pleasant,
Let the dead past bury its dead.
Act—act to the living present.
Heart within and hope ahead.

Lives of married folks reminds us
We can live our lives as well,
And departing, leave behind us,
Such examples as shall "tell,"

Such examples that another,
Wasting time in idle sport,
A forlorn, unmarried brother,
Seeing, shall take heart and court.

Let us then be up and doing,
With a heart on triumph set,
Still contriving, still pursuing,
And each one a husband get.

WITHOUT CAPITAL.—It is bad beginning business without capital. It is hard marketing with empty pockets. We want a nest-egg, for hens will lay where there are eggs already. It is true you must bake with the flour you have ; but if the sack is empty, it might be quite as well not to set up for a baker. Making bricks without straw is easy enough, compared with making money when you have none to start with. You, young gentlemen, stay as a journeyman a little longer, till you have saved a few pounds ; fly when your wings have got feathers ; but if you try it too soon, you will be like the young rook that broke its neck through trying to fly before it was fledged. Every minnow wants to be a whale, but it is prudent to be a little fish while you have but little water ; when your pond becomes the sea, then swell as much as you like. Trading without capital is like building a house without bricks, making a fire without sticks, burning candles without wicks; it leads men into tricks, and lands them in a fix.—*John Ploughman* (*Spurgeon*).

THE Philadelphia *Press* advises railroads to look for trainmen in the South, because there is no color blindness there.

AMONG all animals man is the only one who tries to pass for more than he is, and so involves himself in the condemnation of seeming less.

A COCKNEY inquired at the post office the other day for a letter for "'Enery Hogden." He was told there was none. "Look 'ere," he replied angrily, "you've examined a hodd letter for my name ; it don't commence with a haitch ; it begins with a ho. Look in the ole that's got the ho's.

A STREET-CAR conductor carelessly carried his bell-punch home, and allowed his children to play with it. The next day, when the company informed him that he was nine million, nine hundred and ninety-nine fares short, his hair rose so rapidly that his hat, in banging against the ceiling, broke out fifteen yards of plaster.

THE nail mills comprise the chief industry of Wheeling, W. Va. Seven of these mills have an aggregate capital stock of $3,260,000, and these seven mills earned and paid dividends during the past year aggregating $712,000, or about 23 per cent. At the same time the stock in these mills has largely appreciated in value.

GENTLEMAN meets a friend and takes him home to dinner. Arriving at the house he leaves him in the sitting room to announce the fact to his wife. The friend, hearing directly a clamor of tongues in the adjoining room, decorates the keyhole with his ear. Shrill Voice—"Always the way, bringing people home without a minute's warning! Him, too! Why couldn't you leave him to batten on his usual free-lunch route?" Hoarse Voice—"Ssh!" Shrill Voice—"I won't ssh!" Hoarse Voice—"I tell you you will. Oh, if he wasn't in the room outside, wouldn't I just give you——" The friend, shouting through the keyhole—"I ain't here any longer ; give it to her." (Exit, slamming the door.)

Woke Up The Wrong Man.

THE commercial traveler of a Philadelphia house, while in Tennessee, approached a stranger as the train was about to start and said :

"Are you going on this train?"

"I am."

"Have you any baggage?"

"No."

"Well, my friend, you can do me a favor, and it won't cost you anything. You see, I've two rousing big trunks, and they always make me pay extra for one of them. You can get one checked on your ticket, and we'll euchre them. See?"

"Yes, I see ; but I haven't any ticket."

"But I thought you said you were going on this train?"

"So I am ; I'm the conductor."

"Oh!"

He paid extra, as usual.

THE LAKE SHORE AND MICHIGAN SOUTHERN RAILWAY COMPANY,

TREASURER'S OFFICE, GRAND CENTRAL DEPOT,
NEW YORK, December 23d, 1881.

The Board of Directors of this company have this day declared a QUARTERLY DIVIDEND of TWO per cent upon its capital stock, payable on WEDNESDAY, the first day of February next at this office.

The transfer books will be closed at 3 o'clock P. M. on Saturday, the 31st instant, and will be reopened on the morning of Saturday, the fourth day of February next.

E. D. WORCESTER, Treasurer.

THE THIRTY-NINTH SEMI-ANNUAL CASH DIVIDEND of the ILLINOIS CENTRAL RAILROAD COMPANY, being three and a half (3½) per cent on its capital stock, will be paid by the undersigned March 1, 1882, to shareholders as registered at the close of business on the 11th of February, after which and until the 4th day of March the transfer-books will be closed.

L. V. F. RANDOLPH, Treasurer.

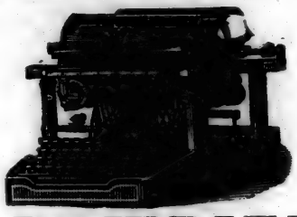
FOR SALE.

Six new 3ft. Gauge Locomotives, 18 to 24 tons, June, July and August delivery.
Ten new 4ft. 8½in. or 5ft. Gauge Locomotives, June, July, and August delivery.
Two new Ladder Tank Locomotives, 3ft. Gauge, 10 tons, May and June delivery.
Second-hand Standard Gauge Locomotives and Passenger Cars, immediate delivery.
New Box, Flat, and Gondola Cars, 4ft. 8½in. and 3ft. Gauge, for immediate delivery.
New Passenger and Combination Cars, 3ft. Gauge, delivery 30 days.
New Passenger and Combination Cars 4ft. 8½in. Gauge, delivery 60 days.
New Car Wheels, Iron and Steel Rails.
Narrow-Gauge Rolling stock a specialty.

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A WRITING-MACHINE which combines ease with rapidity and accuracy, and economy with elegance and convenience.

Adapted to general use. Every machine guaranteed.

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38 Madison Street, Chicago.
124 South 7th Street, Philadelphia.
21 South Howard St., Baltimore.

[Mention this paper.]

D. N. BEARDSLEY & CO.,
MANUFACTURERS OF
Superior Oak and Chestnut Lumber,
AND RAILROAD TIES.
Oak Car Timber a Specialty.
OFFICE: 9 MURRAY ST.,
NEW YORK.

HOME
INSURANCE COMPANY OF NEW YORK,

OFFICE: NO. 119 BROADWAY.

FIFTY-SEVENTH SEMI-ANNUAL STATEMENT,

Showing Condition of the Company on the 1st day of

JANUARY, 1882.

CASH CAPITAL	$3,000,000 00
Reserve for Unpaid Premiums	1,943,733 00
Reserve for Unpaid Losses	245,595 36
Net Surplus	1,806,180 90
CASH ASSETS	$6,995,509 26

Summary of Assets

Held in the United States available for the PAYMENT of LOSSES by FIRE, and for the protection of Policy Holders of FIRE INSURANCE.

Cash in Banks	$ 130,172 31
Bonds and Mortgages, being first lien on Real Estate [worth $3,600,750]	1,555,858 00
United States Stocks [market value]	4,079,500 00
Bank and Railroad Stocks and Bonds [market value]	664,625 00
State and Municipal Bonds [market value]	121,750 00
Loans on Stocks, payable on demand [market value of Collaterals, $341,507.50]	229,750 00
Interest due on 1st January, 1882	85,819 19
Premiums uncollected and in hands of Agents	80,635 08
Real Estate	47,399 68
Total	$6,995,509 26

J. H. WASHBURN, *Secretary.*
T. B. GREENE, } *Ass't Sec's.*
W. H. BIGELOW, }

CHAS. J. MARTIN, *President.*
A. F. WILMARTH, *Vice-Pres't.*
D. A. HEALD, *2d Vice-Pres't.*

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(Members of the Boston Stock Exchange.)

Devote special attention to the purchase and sale of Stocks and Bonds in the Boston market, the careful selection of securities for investment, and the negotiation of commercial paper.

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John H. Davis & Co.,
BANKERS AND BROKERS,
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Interest allowed on temporary and standing deposits. Stocks and Bonds bought and sold on Commission only, either on Margin or for Investment.

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—BUY AND SELL—
BILLS OF EXCHANGE
—ON—
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AVAILABLE IN ANY PART OF THE WORLD, AND IN *FRANCS* IN MARTINIQUE AND GUADALOUPE.

Make TELEGRAPHIC TRANSFERS OF MONEY between this and other countries, through London and Paris.

Make Collections of Drafts drawn abroad on all points in the United States and Canada, and of drafts drawn in the United States on Foreign Countries.



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GENERAL AGENT,
407 Broadway, N. Y.

OFFICE OF

AMERICAN REFRIGERATOR LINE,

New York, Oct., 1881.

Shippers of Foreign, Domestic, and Fresh Fruit, Imported Liquors, Patent Medicines, Essential Oils, Mineral Waters, Lager Beer, Ales and Porters, Oysters, or, in fact, any class of goods that needs protection from heat or cold while in transit to the West and Southwest, either in Summer or Winter, will do well to ship the same by the new and elegant cars of the

AMERICAN REFRIGERATOR TRANSIT COM'Y.

Guaranteed Bills of Lading given.

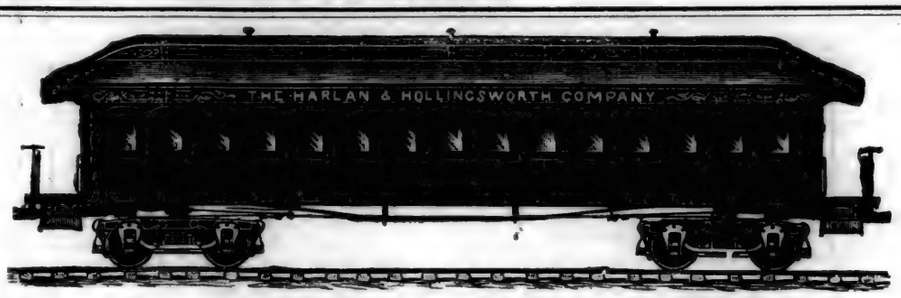
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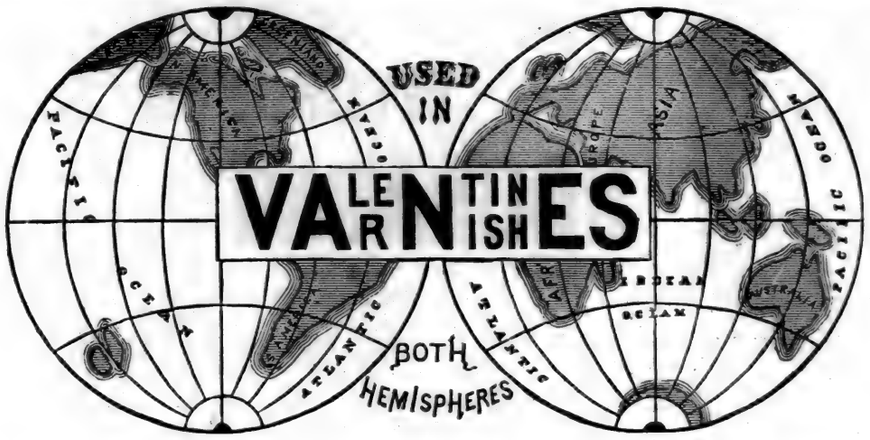
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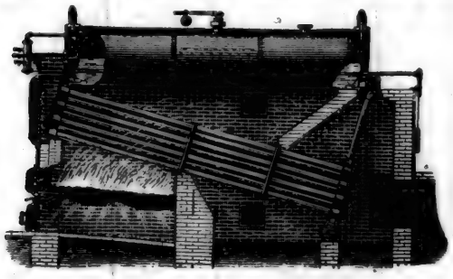
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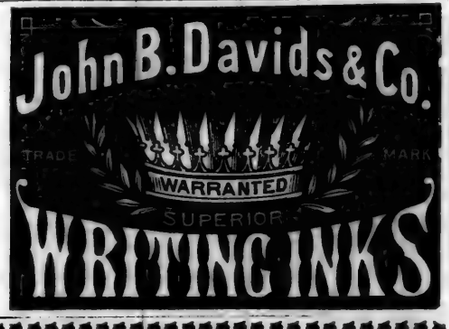
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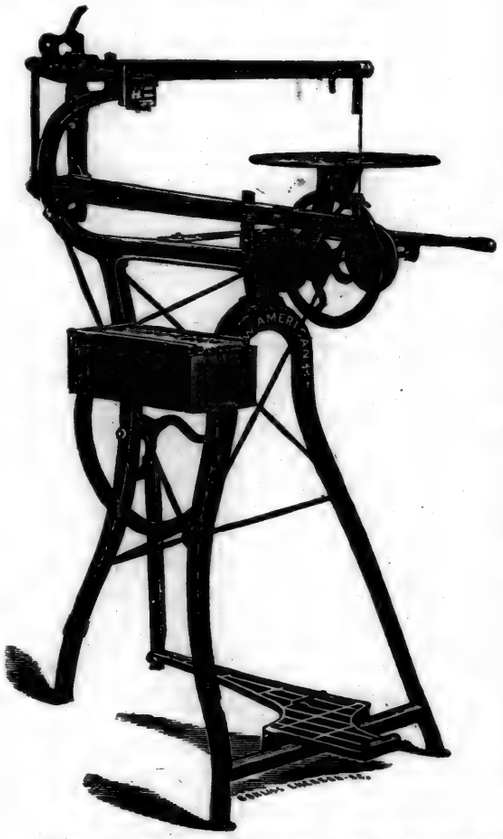
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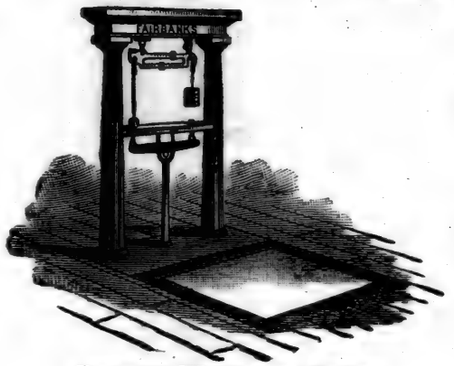
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SECOND QUARTO SERIES.—VOL. XXXVIII., No. 7.] NEW YORK, FEBRUARY 18, 1882. [WHOLE No. 2,391.—VOL. LV.

The Shaw Locomotive.

THE Hinkley Locomotive Works, of Boston, Mass., have lately built a locomotive after the designs of Henry F. Shaw, of Roxbury, Mass., intended to obviate those strains on the frame of the ordinary locomotive that are caused by the alternating thrusts of the unbalanced moving parts on each side of the machine. The impulse of the change of direction of the heavy side of wheel, etc., is in a "fore-and-aft" direction on one side of the engine, while it is vertical, either upward or downward, as the case may be, on the other side at the same instant, the former tending to rack the frame and the latter cause lateral oscillations, which it actually does, more or less, to the great damage of the road bed. The effect is far greater if the engine is rocking from side to side than what would be due to the simple impulse of the preponderating weight of the reciprocating and revolving parts. The plan of the Shaw locomotive is to place a duplicate set of revolving and reciprocating parts on either side of the engine, so connected that one set on each side will be thrusting in the same direction at the same instant, and thus tend to correct this hitherto unavoidable objection to outside cylinder locomotives.

A trial trip was recently made with this new machine on the Camden and Atlantic railroad, The Philadelphia *Inquirer* gives the following as the dimensions of the four cylinders, etc.: They are, "10½ inches in diameter, 24 inches stroke, equal to a 14½x24 of the ordinary locomotive. The cylinders are placed side by side in the same place. Four cylinders are contained within two castings, and do not increase the width of the locomotive as much as might at first be supposed.

"One slide valve admits and exhausts steam to and from each pair of cylinders, which are placed side by side; the valves are operated by the usual link motion and rock arm (as is customary upon ordinary locomotives), thus avoiding the complication that would arise from the use of a separate slide valve for each cylinder. This engine, when running, cannot be distinguished from the ordinary locomotive having only two cylinders, as the steam is taken and exhausted from the opposite ends of two cylinders simultaneously.

"Many experiments have been made in balancing, reciprocating with rotating parts to run steadily with each other, on locomotive engines, as they are now built, involving some of the finest mechanical calculation; but all of them have been unsuccessful.

"This locomotive is built for fast running, and it is claimed that there is an increase in the area of wearing surfaces, perfect balancing of the revolving parts, due to dividing the work between four steam cylinders. One of the remarkable tests that have been applied to this locomotive is to place it on four jack screws and elevate it clear of the track, and then to open the throttle valve and run the engine at a speed of two hundred and seventy-five revolutions per minute in this position without disturbing it, while an ordinary locomotive in this position would be disturbed at three revolutions per minute.

"The time made between Camden and Atlantic was seventy-seven minutes, which included two stoppages of six minutes at Egg Harbor and Absecom, the actual running time being seventy-one minutes. The fastest mile was made in fifty-eight seconds, and two consecutive miles, each fifty-nine seconds, three cars on the train."

Tunnelling the St. Lawrence.

OUR reporter met Mr. Rouillard, the contractor for the construction of the Hochelaga tunnel, and in answer to enquiry learned that he is now progressing with the work of organizing his staff, so that he will be able to proceed with the work as soon as he can comply with legal forms for expropriating property. He has had considerable experience in tunnelling, as a mining engineer principally, and has gained much experience in the Rocky Mountain region. The Comstock mining tunnel, sunk to a depth of five miles, he is well acquainted with, having been engaged there upon the work for some time. He sees no difficulty now in the way of successfully tunnelling the bed of the St. Lawrence, as they will be cutting through Utica shale all or nearly all the way.

"Is the danger of tunnelling as great as that of bridge making?"

"I think not. Just think how many were killed in making the Victoria Bridge before it was finally completed."

"There were a good many killed in the New York tunnel?"

"Yes, but that is a much more difficult work than cutting through rock. I believe that there are fewer accidents in tunnels than upon railway bridges. You rarely ever hear of trains coming together in tunnels. We will have a double track and thus will be able to do much more business than is done by the Victoria Bridge. Now, I have often been compelled to wait at St. Lambert for a couple of hours before we could get into Montreal, owing to the crowded state of traffic over Victoria Bridge. For all that, I believe that we will not interfere with the G. T. Railway business, because by the time we have our tunnel completed there will be traffic enough for both of our routes."

"When do you expect to have the work finished?"

"In 1885 we hope to have trains running through. In general I believe that tunnels are cheaper than bridges in the long run, and I believe that in the case of our tunnel we are specially fortunate in that respect. If we do one quarter of the business done by the Grand Trunk at five dollars a car, we will pay eight per cent on a capital of four million. That, however, is a matter I have no concern with, as I am not fortunate enough to hold the stock of the road. I am the contracting engineer; Mr. Walter Shanly is the Company's engineer. He, as you are aware, is a gentleman who has had a great deal to do with tunnels."

"How does your work compare with the Hoosac tunnel as to difficulty?"

"There is no comparison. That tunnel is much longer, and great difficulties were met with. They worked the tunnel from different shafts let into the mountain, while we will work both ends, knowing precisely what we have to do—so far as can be known. Besides, we have the benefit of the experience of that and other works. In case of accident, we can foresee it and provide against it. For example, if we feel a general dampness in the wall in which we are working, we use the compressed air, which excludes or rather offers a resistance to the outer pressure until we are able to provide the remedy. In case we strike a fissure, we are warned by keeping a drill always running several feet in advance of the workers. The spirt of the water through this hole would warn us, and then the compressed air would be our protection again."

"Did they not have these appliances in New York?"

"Yes; but they did not keep building the supports quite close enough to the roof and sides of the tunnel. This should always be done. In fact they should keep a little ahead of the excavation, as can easily be done by boring around the sides and building close up to it."

"Have they never had accidents in the Thames tunnel?"

"Yes; they had an accident there and great loss of life at one time—caused, I think, by a vessel dropping her anchor above the tunnel. Nothing has since happened, and that tunnel has been in use more than half a century. We will likely have no trouble of that kind."

In concluding, Mr. Robillard said he did not quite know where they were to locate the entrance and exit of the tunnel, but hoped to meet the press men in 1885 in the centre of the tunnel under the bed of the St. Lawrence to celebrate a completed work.—*Montreal Daily Witness.*

An Odious Monopoly in Danger.

Unless all signs fail, the lunch-basket will soon cease to be the indispensable companion of the trip between New York and Boston. The journey now consuming seven hours will be done with ease in four. For this no thanks will be due to the New York, New Haven and Hartford and connecting lines. No one ever had occasion to thank that monopoly for anything. Owning the only rail route between the two cities, its sole aim is the extraction of the largest amount of money for the least service from persons unfortunately compelled to patronize it. At a time when all enterprising railroad companies are quickening their speed, this monopoly jogs along at the old gait of thirty to thirty-four miles an hour—the latter being its "lightning" pace. The Pennsylvania transports New Yorkers to Philadelphia in two hours or less—at the rate of forty-five miles an hour. Daily trains are whirled from New York to Chicago (about one thousand miles) in twenty-six hours, or thirty-eight miles an hour. It remains for one of the richest railroad lines in the world to keep up its old, slow style and penurious habits and dilapidated rolling-stock, with the same sublime indifference to modern improvements that it shows to the comfort of passengers.

A dining or restaurant car attached to the express trains would be an immense convenience, enabling passengers to dispense with the primitive and clumsy lunch-basket or saving them the necessity of bolting an indigestible apology for a meal at New Haven, Springfield, or some other point in five or ten minutes of stoppage. Two great and rich cities support this monopoly. All they have ever asked in return for the high fares is a sufficiency of accommodations—either a speed high enough to reduce the trip to four or five hours, or proper facilities for breaking the seven hours' fast on board. But the line denies everything to its patrons, studying its own views of self interest first, last and always. Not the least of the popular objection to it is the rate of fare charged. It costs $5 to go from New York to Boston, without the privilege of stopping over anywhere. Last summer trains were run from Chicago to Boston via the Grand Trunk at $5 a head, and the combination of lines concerned made money at it. But the New York, New Haven and Hartford and its allies have been under no competition save from the Sound steamers, and can charge almost what they please. A competing all-rail route is needed to bring down the fares to their proper limits and to make a veteran monopoly less offensive in other respects. We are happy to say that there is a rod in pickle for it. Long-suffering Boston, less patient than New York under grievances, is undertaking to provide one want of the times—a really first-class, literally fast-rail communication between the two cities. Boston has plenty of spare capital, and has been fortunate in most of her railroad investments. She is not frightened by the $45,000,000 or $50,000,000 that may be needed to build the air-line, which alone will satisfy her. Reasonable prospects of a fair return of her money is all she asks or expects. The promoters of the scheme are not without good arguments. They claim that there is business enough between New York and Boston for the exclusive support of an air-line that would have no stopping places (for express trains) from end to end. The distance, as the crow flies, is but little over 170 miles. This could be traversed in four hours' at less than forty-five miles an hour. The present rail distance is 233 miles. It is evident that the rival line would have an enormous advantage over the old concern. It is possible for even despots to confer benefits on civilization—as when the Russian Czar marked out with a ruler and pencil the present railroad route between St. Petersburg and Moscow. New York and Boston will feel much obliged to any power in this republican country strong enough to lay down a straight rail line from one city to the other, and by this means give a needed lesson to a monopoly which is a disgrace to the age and a standing reproach to Yankee enterprise!—*N. Y. Journal of Commerce.*

Safety from Fire in Cars.

ADMIRABLE SYSTEMS OF LIGHTING AND HEATING A TRAIN.

Railroad companies will suffer until their trains are rendered absolutely safe against fire. The first serious attempt of this kind is likely to be made by the Boston and Providence and the Stonington railroad companies, who are considering the adoption of the Graydon Safety Heater on the well known steamboat train between Stonington and Boston. It consists in taking steam from the engine, passing it around the train and back into the water-tank in the tender. The heater acts automatically, keeping an even, pleasant heat, and, of course, it can set nothing on fire. Neither can it by any possibility scald any one, no matter how severe or sudden may be an accident; it cannot be interfered with by the train being snowed up or thrown off the track, even though its fuel should run low. It costs less than $40 to put it into a car, about $10 to put the necessary attachment to a locomotive, and less than $90 for each baggage car. There is absolutely no expense for heat, since the exhaust steam can be used, or the "blow-off," without taking any efficient force from the engine; moreover, it heats the feed water to a temperature of more than 100 degrees, so that warm water is pumped into the boiler instead of cold. Its cheapness, economy, simplicity, durability, and above all, its absolute safety, make it the heater, above all others, that will satisfy the public and the railroad companies, for it is the only one that takes steam from the engine successfully.

But even though the stoves in each car were dispensed with, the lamps would still be grave sources of danger; and as light is as essential as heat, no train can be considered absolutely safe until this difficulty is overcome by a safety contrivance. This contrivance has been found in the Pintsch system of lighting by gas. This gas is supplied from a reservoir on the top of the car, where it is stored under a pressure of about six or seven atmospheres. It is prepared by a special process which secures a large proportion of carbon, producing a very white light, and it does not condense and clog under pressure as ordinary gas would. An automatic valve regulates the pressure and the flow, so that no ordinary bump, or shock, or jolting, interferes in the slightest with the steadiness of the light.

This system is in use in Germany and in England, where the writer has seen it in constant operation for months on all the trains of the Metropolitan (underground) railway in London. No one can fail to be struck by its brightness and steadiness, and the finest print can be read anywhere in these cars. It is also absolutely impossible for a train to take fire from it. Any shock that would break the lamps would instantly extinguish the light, as it is one of the peculiarities of gas that every burner within the influence of such a shock is put out instantaneously. Also it could not again become ignited, because the pipes being broken the small amount of gas in each car would dissipate itself in the atmosphere within less than half a minute. And as the reservoirs are on the top of the car, the gas will ascend in case of accident.—*Providence Press.*

A New Railroad Policy in Philadelphia.

The annexed editorial paragraph from the Philadelphia North American marks a new departure with the journals of that city on the railroad question—as they have hitherto either advocated the plan or silently acquiesced in it, of repressing all efforts made by the trunk lines to enter that city. The editor says:

"Philadelphia is so largely indebted to the Pennsylvania Railroad Company for what it has done on behalf of the city, that those obligations ought always to be remembered with respect and esteem. But now that the company has acquired such immense interests in New York and Baltimore, it is the dictate of reason and common sense that the city should take care of her own commercial interests by obtaining as many trunk-line tributaries as possible. In doing this the city will be merely imitating the example set by the company itself. We have abundance of capital to secure such tributaries and competing lines, and we should lose no time in making that capital tell effectually."

The Virginia and Kentucky and the Richmond and Southwestern Railroad Companies have been consolidated under the name of the Richmond and Louisville Railroad Company, Gen. J. L. Meigs of Boston is president, and W. H. Curtis secretary. The directors are: Franklin E. Gregory, of Boston; Wm. E. Peery, of Tazewell, county, Va.; Gen. G. C. Wharton, of New River, Va.; John P. Poe, of Baltimore; T. A. Lambert, of Washington, D. C.; and Charles Payson, of New York. Gen. G. C. Wharton is chief engineer of the road. The office of the company is at Alexandria, Va.

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AT the annual meeting of the AMERICAN RAILROAD JOURNAL CO., held at the office of the Company, No. 284 Pearl street, New York, February 8, the following officers were elected:

GEO. F. SWAIN, *President.*
S. PROCTOR THAYER, *Vice-President.*
EDW. A. WRIGHT, *Treasurer,*
CHAS. T. VALENTINE, *Secretary.*

New York, Saturday, February 18, 1882.

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NATIONAL BANKS.

IT is not the design of this article to treat of National banks in their entirety, but to draw attention to two features of almost absolute safety. The first relates to stockholders. Of the $530,000,000 invested in National bank stock, but $17,000,000 has ever been lost to stockholders, or 3½ per cent of the whole amount invested. This is a showing for investors of money which comes so near promising absolute safety that it seems almost unpardonable when a hue and cry is started against the banks because of the defalcation of some officer. There is no other line of investment outside of United States bonds that can make such a claim. The other feature relates to the people at large who have to handle the currency issued by the banks. There was a time when currency was an unknown quantity. A person could go into a bank and find a number of clerks engaged in assorting bank-notes, so that they might find their way back to their respective States, and be returned to the several banks of issue.

A bank-note issued on Wall street was worth a hundred cents on a dollar in New York City, but the same note carried West depreciated in value the further West it went, the discount being based upon the number of days it would take to get it back to Wall street, and the general reputation of the bank issuing it. When a bank failed, even the most respectable, it became a question of doubt how many cents on a dollar the innocent holder of its currency would receive. This system of banking brought in its train numerous evils. There were banks formed which made paper money largely in excess of their ability to redeem, and flooded the market with what was termed "wild-cat currency."

To-day, however, with our present system of National banks we have a showing exactly the reverse of what was seen in State bank days. We have a currency, no matter by what National bank issued, or in what State, that is worth one hundred cents on the dollar in every State, county, city, town, village, and hamlet wherever currency is received. This is not all. The failing of a National bank does not depreciate its currency. On the contrary, we have the somewhat strange condition of affairs that when a National bank fails its circulation commands a premium. The limit to the amount of National currency issued makes it impossible to start new banks until some of those already in existence are retired. When any bank from any cause is retired there are always capitalists enough standing ready to offer a premium for its circulation, in order to start a new bank. This sometimes makes the currency of a failed bank worth one hundred and three cent on the dollar, when as a solvent bank it was worth only face value.

The officers of State banks who are now officers of National banks must be singularly impressed when they remember how they used to allow a week's interest to some broker to circulate their notes, while now the notes of a failed National bank command a premium. While our currency is in this present condition there can be no doubt as its absolute safety. It then well becomes our legislators to let it alone. It cannot be improved. It cannot be changed without loosening to a greater or lesser degree this absolute safety. By all means, let the people stand up and demand that no tinkering be done with the currency, as the present absolute safety is far more desirable than any fancy theories of self-seeking politicians.

SENATOR BOYD'S RAILROAD BILL.

THE railroad bill introduced into the New York legislature a few days ago by Senator Boyd, who was elected by the help of the anti-monopolists in the sixth district, is the most important piece of legislation that will be considered by that body during this session. There can be no question with regard to the desirability of a railroad commission for the Empire State, but there are gross objections to the bill referred to in its present form. The bill is taken from the statutes of Georgia and is far more sweeping in its terms than the Massachusetts railroad law, which has been taken as a model by several States.

It provides for the appointment by the governor of these railroad commissioners, who shall hold office for six years, the terms being arranged so that a vacancy shall occur every two years, and charges them with the execution of the act. The commission is to be located at Albany, to have a secretary and attorney, and to make an annual report to the Legislature. One half of its expenses are to be paid by the State and one half by the railroad companies. No person holding or owning stock in a railroad is to serve as commissioner or in any capacity under the commission, and an acceptance of a free pass by a commissioner is made a misdemeanor.

The powers of the commission are very broad, and their authority is limited only by the decisions of the Supreme Court at Albany on appeal. Section 8 of the bill, provides that "all freight tariffs shall be made uniform." Uniform in what respect? Are through and local rates to be the same or are rates to be the same between competing and non-competing points? The commissioners are to be the sole judges of what "uniform freight tariffs" mean. But if freight tariffs are to be made uniform, why should not passenger fares be made uniform also?

Section 9 empowers the commission to make reasonable maximum rates for freight and passengers, based on the cost of service. This maximum rate shall in no case exceed ten per cent over and above the actual cost of such service, and in no case shall any rebate or bonus be allowed, directly or indirectly.

Here again the term "cost of service" is fixed wholly by the board of commissioners, and the maximum rate is never to exceed ten per cent above the "actual cost of such service." If rates are to be based upon cost of service then it will be difficult if not impossible to have freight tariffs "uniform." If the rule is adopted that freight service shall be charged at the average cost of the entire road per mile run for freight business, then freight tariffs will vary with different roads. If mileage and interest of investment be taken into account the discrepancy will be still greater.

Again, the commissioners may publish, from time to time, freight schedules, and *all contracts for the carriage of freight not in conformity with such schedules shall be void.* In order to arrange these schedules the commissioners have power to examine the books of the various railroads, to administer oaths, and to call for persons and papers upon which to base their tariff schedules for freight and passengers. A fine of not more than five thousand dollars or imprisonment is the penalty for disobedience.

We imagine that Mr. Boyd would have a very arduous task in enforcing the section of his bill which declares that no contracts for the carriage of freight which are not sanctioned by his commissioners shall be valid. If he is able to satisfy himself that such a provision does not interfere with the vested rights of railroads as secured to them by their charters, we beg to call his attention to that section of the constitution of the United States which declares that no law shall be passed that shall impair the "obligation of contracts."

He does not need a lawyer to tell him that he State of New York cannot pass a law that shall affect a contract made in that State, —between a man in New York City, for instance, and a man in Chicago or New Orleans. A freight shipper in Chicago who makes a contract for the carriage of freight with a citizen of New York cannot be disturbed as to his contract by a law made in New York State; although his contract is made payable in New York City. That provision in Mr. Boyd's proposed bill may do for Georgia, but it never would receive the sanction of the Court of Appeals even if adopted by the New York Legislature.

The bill concludes by authorizing the commission to enforce its rules and orders by attachment, fine and imprisonment, and by the most extraordinary provision that no injunction shall be made by any court in the State which shall have the effect of hindering or obstructing or delaying the operation or effect of such rules or orders as the commission may make, unless such injunction or restraining order is founded upon judgment of a court upon appeal declaring such order unlawful and invalid.

In other words, no matter how unjust or absurd rules or orders of the commission may be, no *court in the State* can interfere with such rules or orders, until the Supreme Court at Albany upon appeal shall have declared such order invalid.

Comment upon this section would seem to be unnecessary. The writer of this article is personally interested in a suit at law in which he has been waiting patiently for more than two years for a decision from a justice of this same Supreme Court at Albany.

We have no fear that the Legislature of New York, if it succeeds in doing any business this session, will pass this bill in its original draft. We say again, the subject is the most important that will be considered by the New York or any State legislature this winter, and it should receive the fullest and freest discussion. Such legislation is greatly needed in New York State especially. Space forbids us from the further consideration of the matter at present, but we would respectfully call the attention of Senator Boyd, if he is not pledged to the advocacy of extreme measures, to the admirable railroad act of the State of Massachusetts, which statute has stood the test of experience and has proved of great value to people and railroads alike.

Columbus, Chicago and Indiana Central Railway.

At an adjourned meeting of the bondholders of the Columbus, Chicago and Indiana Central Railway Company, held in this city on the 11th inst., the plan of reorganization proposed at a meeting held on the 9th inst. between a committee of their number and the Pennsylvania Railroad Company and the Pittsburg, Cincinnati and St. Louis Railway Company was ratified by a vote of $8,761,000 to $134,000. The agreement goes into effect by the foreclosing of the consolidated mortgage of the Columbus, Chicago and Indiana Central Railway Company, and the selling of the property covered by it, which is to be bought in. The purchaser is to form a new corporation, with a capital of $10,000,000 common stock and $20,000,000 preferred stock, the dividends on the latter, it is claimed, to be 6 per cent per annum, payable semi-annually in preference to dividends on the common stock, and to be cumulative. The new company shall issue first mortgage bonds for $22,000,000, payable at the end of fifty years, with interest at 5 per cent. Of these bonds $5,500,000 is to be reserved for underlying sectional bonds that may come due. Bonds to the amount of $12,878,000 par value shall be issued in exchange for old bonds and receipts, and the remaining $3,622,000 of such bonds shall be used by the new company to raise money for improvements. Two million four hundred thousand dollars shall be paid by the Pennsylvania Railroad Company and the Pittsburg, Cincinnati and St. Louis Railway Company to the new corporation, when organized, in satisfaction of all claims held against them by the Columbus, Chicago and Indiana Central Railway Company. The holder of each bond issued by the Columbus, Chicago and Indiana Central Railway Company shall be paid $150 in cash and $400 in preferred stock of the new company, bearing 5 per cent interest. The Pennsylvania Railroad Co. shall convert the second mortgage bonds of the Columbus, Chicago and Indiana Central Railway Company into income bonds, as directed by the United States Circuit Court, and the holder of every income bond coming into this scheme shall surrender to the committee of the bondholders of the Columbus, Chicago and Indiana Central Railway Company all income bonds held by him, and pay the committee 10 per cent in cash of the par value thereof. In return for this he shall receive $1,250 in preferred stock and $250 in common stock of the new company for each income bond delivered, and the holders of stock in the Columbus, Chicago and Indiana Central Railway Company shall surrender to the committee all stock held by them and pay 5 per cent in cash on the par value of said stock and shall receive therefore stock in the new company for one half of the amount of their old stock. All money to be paid in cash and all stocks and bonds surrendered to be given this committee to enable them to carry out the plan of reorganization.

PERSONAL.

Augustus Schell has been elected president, and James Tillinghast, vice-president, of the New York Central Sleeping-Car Company.

John Wood has been appointed traveling agent of the Detroit, Lansing and Northern Railroad Company, vice W. W. Heafford, resigned.

Brevet Major-General Meigs, Quartermaster-General, and Brigadier-General Latham W. Brown, Paymaster-General, have been placed upon the retired list.

J. E. P. Abbott has been re-elected president, and Charles R. Colwell secretary and treasurer, of the May's Landing and Egg Harbor City Railroad Company.

Charles O. Scull has been appointed chief assistant general passenger agent, and Frank Vandusen, chief clerk of the Pennsylvania Company's lines west of Pittsburg.

Thomas C. Keefer, of Ottawa, Canada, was elected one of the directors of the American Society of Civil Engineers at the recent annual meeting in New York. He is the first Canadian who has been thus honored by the Society.

The directors of the Kentucky Central Railroad Company, have elected the following officers: M. E. Ingalls, president; Gen. John Echols, vice-president; C. H. Bronson, secretary and treasurer; J. D. Ellison, general manager.

William H. Hayes has succeeded the late George Law as the president of the Eighth and Ninth avenue horse railroad companies. Mr. H. B. Wilson, who has been for twenty-eight years connected with the Eighth avenue Road, remains as its superintendent and general manager.

The Mayor of Baltimore has nominated and the City Council confirmed the following directors on the part of the city in the Baltimore and Ohio Railroad Company; John Gill, J. Kettlewell Ober, George R. Barry, Henry McShane, Joseph Friedenwald, John H. Holthaus, and Michael Coakley.

David Jones, a well-known civil engineer, died at his residence near Titusville, Penn., on the 6th inst. Mr. Jones came to this country from England at the instance of James McHenry, to engage in the construction of branch lines for the Atlantic and Great Western railroad.

The stockholders of the St. Joseph County division of the Toledo and South Haven Narrow-Gauge railroad, have elected John F. Wall, president; E. D. Thomas, treasurer, and John A. McKinlay, secretary. It is expected that this road in time will be completed from South Haven to Toledo.

Miss Belle Braden, who has recently been re-elected treasurer of the Waynesburg and Washington Railroad, in Pennsylvania, for a second term, is probably the only lady in the United States, who is a railroad officer. She is also paymaster, and makes regular trips over the road in the pay car.

The list of sworn brokers in the city of London contains a number of the aristocracy, including a duke's younger son, Lord Walter

Campbell, and also the following: The Hon. Albert Petre, the Hon. Edward and Henry Bourke, Sir Maurice Duff-Gordon, the Hon. Kenelm Pleydell-Bouverie, the Hon. Richard Strutt, and Sir Hector Maclean Hay.

N. E. Chapman, for seventeen years master mechanic of the Cleveland and Pittsburg railroad has resigned his position, to take effect February 25. He will accept the position of master mechanic of the Baltimore and Ohio railroad, from Washington to Chicago, with headquarters at Baltimore. In this new position he will have charge of 6,000 miles of railroad, and the rolling-mills, steamboats, etc. belonging to the company will be under his supervision.

The officers of the Shenandoah Valley Railroad Company, recently elected, are: F. J. Kimball, Philadelphia, president; U. L. Boyce, Boyceville, Va., vice-president; W. G. Macdonald, Philadelphia, treasurer; G. R. W. Armes, Philadelphia, secretary; W. H. Travers, Charlestown, Va., general counsel; W. W. Coe, Lexington, Va., chief engineer; J. H. Sands, Hagerstown, Md., superintendent; C. P. Hatch, Hagerstown, Md., general freight and passenger agent; J. W. Coxe, Hagerstown, Md., auditor and general ticket agent.

ORGANIZATION.

The officers of the Providence and Worcester Railroad Company, elected on the 10th inst., are: President, George Leete; treasurer, John R. Balch; superintendent, William E. Chamberlain.

The stockholders of the Canada Iron and Manufacturing Company of Montreal have elected the following board of directors: Henry Bulmer, president, R. W. Sheperd, vice president, Robert Anderson, George A. Drummond, John Ogilvie, and the Hon. Thomas Ryan; secretary and treasurer, Philip S. Ross.

The directors of the Boston and Albany Railroad Company, elected on the 8th inst., are: George O. Crocker, of New Bedford, Moses Kimball of Boston, Henry Colt of Pittsfield, Edward B. Gillett of Westfield, John Cummings of Woburn, Charles S. Sargeant of Brookline, William Bliss of Springfield, James A. Rumrill of Springfietd.

Henry S. Eckert has been elected president, Jas. Lord sec'y and treas., and Geo. B. Eckert, A. Wilhelm, Thos. Darlington and H. V. L. Meiggs directors of the Penn. Belt and Nut Works. The manufacture will be carried on in the old Planing Mill, on South Third st., Reading, until suitable new buildings are erected. The capital of the company has been fixed at $150,000.

At a meeting of the directors of the Halifax and Cape Breton Coal and Raiway Company, held on the 8th inst., the old board of directors were reelected as follows: Sir Hugh Allan, president; Hon. John Hamilton, vice president; Hon. J. J. C. Abbott, Andrew Allan, Capt. T. D. Milburne, Harry Abbott and H. Montague Allan.

The stockholders of the Kingston and Pembroke Railway Co., at their annual meeting in Kingston, Ca., on the 8th inst., elected the following directors: R. P. Flower, J. D. Flower, H. H. Porter, J. Munson, C. F. Gildersleeve, B. A. Kirkpatrick, W. N. Nickle, B. W. Folger and J. Swift. At a meeting of directors later C. F. Gildersleeve was re-elected president and J. D. Flower, vice president,

The following gentlemen have been elected directors of the Louisville, Evansville and St. Louis Railway Co. for the ensuing year: John Goldthwait, James H. Wilson, Henry D. Hyde, Jonas H. French, Wm. J. Hartchart, J. Payne and Frank B. White, of Boston; St. John Beyle and Bennet H. Young, of Louisville, Ky.; Edward Cummings, of Covington, Ky.; Bluford Wilson, of Springfield, Ill.; Wm. Heilman and Wm. F. Nesbit, of Evansville, Ind.

The Stove Manufacturers' Association of the United States met at Cincinnati on the 8th inst., and elected the following officers: President, W. H. Whitehead, Chicago; vice presidents, Giles F. Filley, St. Louis; S. R. Burton, Cincinnati; treasurer, Uriah Hill, New York; secretary, W. H. Lord, Chicago; managers; R. P. Meyers, Cleveland; A. Bradley of Pittsburg; John S. Perry, Albany, N. Y.; Wm. Obenroth, New York, and John McGee, Boston. There were about 80 members present.

At the annual meeting of the stockholders of the Indianapolis Belt Railroad Company, held on the 10th inst., the directors chosen were W. R. McKeen, E. F. Claypool, Horace Scott, D. W. Minshall, M. A. Downing, John F. Miller, John Thomas and R. S. McKee. The only change was McKee, vice C. C. Gale, who has disposed of his interest and was, therefore, ineligible. W. R. McKeen was continued president and E. F. Claypool secretary.

The directors of the Louisville, New Albany and Chicago Railroad Company, elected on the 10th inst., are: John J. Astor, Robert Lenox Kennedy, Jamuel Sloan, R. G. Rolston, E. H. Green, William Whitewright, J. A. Gargiulo and H. Victor Newcomb, of New York; E. D. Standiford, R. S. Veech, Isaac Caldwell and Robert R. Hitt, Louisville, and Henry Crawford, of Chicago. The new members of the board are Messrs. Gargiulo, Hitt and Crawford, who take the places of Henry F. Vail, deceased, and F. DeFuniak and W. C. De Pauw.

The Madison Square Bank has been organized under the State laws, and will be opened for business in West Twenty-third street as soon as suitable quarters are secured. Mr. W. Wetmore Cryder will be the president, and among the directors will be Lawrence Turnure, R. P. Lounsbery, C. C. Baldwin, Effingham Townsend, Charles Delmonico, Charles L. Perkins, G. G. Haven, Wm. B. Dinsmore, Charles Curtiss and George M. Fuller. The capital stock is $200,000, and among the subscribers are Mayor Grace and David Dows.

At the annual meeting of the stockholders of the Scioto Valley Railroad Company, held in Columbus, Ohio, on the 9th inst., the following board of directors was elected: William Adams, H. K. McKarg, E. F. Winslow, Horace Porter, New York; Marcuss Boggs, Chillicothe; George Davis, Portsmouth; William W. Franklin, George Skinner, Joseph Robinson, Columbus. At a subsequent meeting of the directors the following officers were chosen: William Adams president, W. W. Franklin, vice president; George Skinner, superintendent; Joseph Robinson, assistant superintendent and treasurer; James P. Curry, secretary.

The annual election of the American Institute on the 10th inst. resulted as follows: For president—Nathan C. Ely; for trustees—Charles H. Clayton, James Delamater, Edward Schell, William H. Schermerhorn; for managers—Alexander M. Eagleson, George Whitefield, Abraham Lent, William H. Gedney, Charles F. Jardine, Albro Howell, Aug. Wetmore, Jr., J. Allen, John J. Tucker, John Trumbull Smith, Edwin R. McCarty, Benjamin R. Western, Peter W. Mead, Aaron L. Northrop, John H. Walker; for auditors—William A. Camp James G. Powers (for the unexpired term of Seymour A. Bunce, deceased); for inspectors of election—Benton H. Martin Joseph E. Dunham, Thomas D. Briggs.

CONSTRUCTION.

The Canada Atlantic Railway engineers commenced the location of the line from Valley field to Rouse's Point on the 7th inst.

The contract for Emory's Bar and the Port Moody section of the Canada Pacific Railway has been awarded to A. R. Onderdonk.

From Panama, Feb. 14th, we learn that the section of railroad from Corinto to Chinandega, Nicaragua, has been finished, and within three months the road will have been extended to Leon.

The Missouri Pacific Railway of Nebraska is completed to Sheridan, the centre of Nemaha county, in that State, and trains to Atchison are running. The force constructing the road has been doubled, and it is intended to finish to Omaha by April 1.

The West Chester (Penn.) *Local News* hears that so much of the New York and Lancaster Railroad which is to run between the Falls of French Creek and Phœnixville will be located and the ground broken before the "trees begin to leaf" in the spring.

The Cabinet Ministers who accompanied Mr. James Sullivan over the Pascuaro division of the Mexican National Railway, 270 miles from the city of Mexico, recommend the completion of the work. The government has authorized the opening to traffic of forty miles of the road from Laredo southward.

The Philadelphia and Reading Railroad is now on the opposite side of the Susquehanna River from the thriving borough of Watsontown, and it is generally understcod that the new management will construct a bridge across the river, thus competing with the Northern Central for the trade hitherto almost exclusively controlled by that road.

The route of the projected New York, Pittsburg and Chicago Railroad is from Jersey City, on the Central Railroad of New Jersey, to Tamanend, 130 miles west of New York, thence through Pennsylvania to Wampum, on the Beaver River, to which point the road is already built, upon which cars will be running by April 1. A branch runs from Wampum to Pittsburg. From Wampum west the road runs to New Lis-

bon, thence to Waynesburg and Sparta, Stark county, and on through Tuscarawas, Holmes, Knox, Richland and Marion counties to Marion, O., where it will join the Chicago and Atlantic Road. The latter road runs from Marion to Chicago.

It is stated that should the North Shore Railroad of Long Island be abandoned a number of New York merchants who live along the lines propose to buy a controlling interest in it and build a new road from Flushing to the East River. A ferry will be established which will connect with New York City at or near James slip.

THE line of the new branch of the Central Railroad of New Jersey from Port Oram to Nolan's Point on Lake Hopatcong, has been run out and partly staked for the cross sections. Work upon it will begin in a few days, and it is expected that the branch will be completed at the opening of navigation. The branch will connect the Ogden Mine Railroad with the main line.

THE Pensacola and Atlantic Railroad, in Florida, was organized less than nine months ago, and has now six miles railed and running out from Pensacola and seventy miles graded. The whole road will be finished in December next. This road, it is claimed, will save 400 miles travel from New Orleans to Jacksonville and the same distance from all Gulf ports to the Atlantic.

THE Long Island Railroad Company will shortly commence the laying of a double track on the Atlantic Avenue Division between Woodhaven and Jamaica, and in the spring begin the running of rapid transit trains from Flatbush avenue, Brooklyn, through to Jamaica. The company are now having a route surveyed for the extension of the Locust Valley branch through the villages of Oyster Bay and Cold Spring for the extension of the road to Huntington.

THE surveys for the beach branch of the Eastern Railroad from Merrimack River to Portsmouth are being pushed forward in the hope of completing the road for the pleasure season.

THE Philadelphia and Reading Railroad Company are reported to have made arrangements for extending their road from Shamokin to Danville, Penn., a distance of 17 miles. By this route the company will ship coal direct from the Shamokin and Schuylkill regions to all points. The route from Danville will be by the Catawissa to Williamsport and Jersey Shore and other branches of the New York Central. The new line will reduce the distance between Shamokin and Williamsport some 50 miles.

THE Mexican Government directors report on the present condition of the works of the Mexican National Construction Company as follows: Toluca Division—Track laid and ready for operation, 18 kilometres; grading, including track laid, 73 kilometres; Maravatio Division—Grading concluded, 42 kilometres; tunnel excavation, 254 lineal feet. Morelia Division—Grading concluded eastward, 58 kilometres; grading concluded westward, 20 kilometres. This needs only track-laying, two bridges and twenty-six culverts. Zacatecas Division—Track laid, 20 kilometres; grading finished, 12 kilometres. Colima Division—Grading finished, 31 kilometres. Laredo Division—Track laid and in operation, 40 kilometres. Most of the employees in the company's telegraph offices, they say, are Mexicans. They report from 12,000 to 15,000 men at work on he lines, which, they think, will be finished by the time fixed in the laws and concessions under which construction is going forward.

THE Southern Maryland Railroad has been graded as far as Esperanza, opposite Solomon's Island, a distance of 50 miles. The iron has been laid from Brandywine to Mechanicsville, St. Mary's county, a distance of 20 miles.

PRELIMINARY surveys are now being made of the Tucson and Gulf of California Railroad in the interest of the Southern Pacific road. The distance from Tucson to Lobos is about 175 miles, and the route is skirted on both sides by rich mining districts.

GENERAL superintendent Towne of the Central Pacific Railway says that the company intends to proceed in the spring with construction on the route it has surveyed from Corinne, Utah, to the Missouri River. The company will complete the line between San Francisco and New Orleans by August.

The Council of Ministers of Madrid, Spain, has finally approved the plan for offering to public competition about 600 miles of the proposed Central Cuban Railway. Six months after the close of the contract the railway will get a State subsidy of $2,300 per kilometre.

DURING the year 1881 ten miles of the Kingston and Pembroke Railway north of the Mississippi river were completed and the grading of three additional miles well advanced. It is the intention to have trains running to Clyde, 17 miles beyond the Mississippi by July 1. A survey of the whole line to the junction with the Canada Pacific Railway at Renfrew is being vigorously prosecuted. The receipts of the road for 1881 were $76,326; expenditure on running account, $60,689.

THE Mexican Central Railroad has been completed to Queretaro, 150 miles north of the city of Mexico. Government engineers are now out examining the new division, which was to have been opened to traffic on the 15th inst. The first installment—$250,000—of the subvention certificates has been delivered to the company, and $1,000,000 more will be handed over shortly. Hereafter six per cent of the duties at all ports will be paid with the certificates.

INCORPORATION.

THE Rochester and Ontario Belt Railroad Company filed on the 2d inst. maps of the proposed new road and articles of incorporation with the Clerk of Monroe county. The company has a capital of $1,000,000 in shares of $100 each. The road is to be fifty miles long from the Erie terminus in Rochester to Lake Ontario, winding round the city. It is designed to afford facilities for the existing and projected lines and to transport coal and other freight to the port of Charlotte, and also for passenger business. The directors are Henry A. Taylor, Donald McNaughton, and Mortimer Wilkie, of Rochester, N. Y.; Adolf M. Klemm, of New York; Jos. C. Tone, of Rochester; Christopher Meyer, Henry F. Shoemaker, John Rheinlander Dillon, Jesse R. Grant, New York; John E. Coale, of Rutherford Park, N. J.; Francis A. Bassler, of New York; Alvah W. Burlingame and Frederick A. Wilkie, of Brooklyn.

THE Bodie and Benton Commercial Railway Company has been incorporated for the purpose of constructing a narrow-gauge railroad from the south end of Mono Lake to a point connecting with the Carson and Colorado Railroad near Benton, and for erecting and operating saw-mills and doing a general lumber and wood business. The capital stock is $2,000,000, divided into 200,000 shares of $10 each. R. N. Graves, A. J. Ralston, H. M. Yerington, Thomas Menzies, William Willis, J. B. Low and W. S. Wood are directors. Eighty thousand dollars have been subscribed, and William Willis has been elected treasurer. The principal place of business is in San Francisco.

THE Indianapolis, Eel River and Southwestern Railroad Company has been incorporated. The capital stock is $2,000,000, and the road is to run from Indianapolis, Ind., southwest through the counties of Marion, Hendricks, Morgan, Putnam, Clay, Owen, Greene, Sullivan and Knox to Vincennes, 115 miles. The company reserves the right to construct branches to adjacent coal fields. The officers are: Powhattan D. Smith, Urbana, Ill., president; Allan Heavenridge, Stitesville, Ind., vice-president; John J. Huffman, Poland, Ind., treasurer; Homer W. Ayres, Urbana, Ill., secretary; William Daggy, Greencastle, Ind., assistant secretary.

ARTICLES of incorporation of the Nebraska Central Railroad Company have been filed in the office of the Secretary of State of Nebraska, the object being the construction of a railroad from a point on the south line of the State of Nebraska, opposite the terminus of the Missouri Pacific Railroad, at Talmage, Republican county, Kan., and from thence in a northerly direction to the city of Niobrara, Knox county, Neb., passing through the counties of Nickols, Clay, Hamilton, Merrick, Nance, Boone, Antelope and Knox, with an estimated length of 200 miles. The capital stock is placed at $300,000 and is divided into shares of $100 each. The incorporators are: D. W. Montgomery, Thomas Fiches, J. Van Valen, J. Ritterbush, G. D. Fullmer, E. L. Johnson, M. C. Long, C. W. Gulick and F. P. Tibbetts.

A CHARTER was issued at Harrisburg, Penn., on the 8th inst. for the Pittsburg and Monongahela Valley Railroad Company. The road will be of standard gauge, and will extend from the mouth of Saw Mill Run to Finleyville, in Washington county, a distance of 15 miles. The capital stock is $150,000. The directors are: M. D. Hays, president; H. T. Morris, Josiah Reamer, James R. Redman, T. N. Miller, W. R. Stoughton, T. F. Best, Pittsburgh. B. L. Crawford, Remington; Norman May, Alleghany. The road, which is to be pushed forward rapidly to completion, will, besides opening up rich coal fields, enable the Castle Shannon and Keeling coal to be loaded directly at the mines, instead of first having to pass

over an inclined plane, and that those mines will be placed in direct communication with the lakes. The road will be one of the links of the new lines to the coke regions.

THE Mauch Chunk *Democrat* says that the Virginia Coal and Iron Company, for the development of mineral lands in Virginia, has been incorporated with a capital of $1,500,000. Hon. John Leisenring, of Mauch Chunk, Penn., is the president.

THE Bismarck, Mouse River, Turtle Mountain and Manitoba Railroad Company, with a capital of $2,000,000, organized on the 13th inst. by electing Hon. E. A. Williams president and W. H. Jewell vice-president. The length of the road will be 180 miles. Work will be begun in April.

ACCORDING to the report of the Secretary of Texas, prepared for transmission to the Legislature, we learn that during the year 1881 twenty-seven railway companies, with an aggregate capital stock of $109,000,000, filed charters, and, with but three or four exceptions, it is certain that these railroads will be built.

A BILL was introduced into the Virginia Senate on the 10th inst. to incorporate the Alleghany Extension Railroad Company; the object being to authorize the construction of a railroad from any point beyond Lynchburg, Va., on the line of the Richmond and Alleghany Railroad, to the West Virginia line, and to consolidate with any other railroad which would form a connecting line with the Richmond and Alleghany Railroad.

THE Oley Valley and Lehigh Railroad Company has been chartered with a capital of $600,000. The object is construct a railroad 24 miles in length, from Birdsboro, Penn., to Seisholtzville, which will give, by connection with the Wilmington and Northern Railroad, a direct line from Wilmington, Del., to Catasauqua. Seisholtzville is a small village in the northeastern corner of Berks county. The name, "Seisholtz," is Pennsylvania Dutch for "sweet wood."

WALTER S. DRAY, Samuel Rivers, W. H. Campbell, J. H. Havighorst, Jr., and Judge Lyman Lacey, of Havana, Ill., Daniel W. Riner, of Mason City, Ill., and Norval Dixon, of Holden, Ill., have been authorized by the Secretary of State of Illinois to organize the McLean, Havana and Quincy Railroad Company with a capital of $1,000,000. The principal office will be at Havana. The purpose of the company is to construct a railroad from Leroy, McLean county, terminating at Quincy, Ill., with a branch from Bloomington to connect with the main line between Leroy and Havana.

THE Walker Horseshoe Co., of Baltimore, Md., has been incorporated with a capital of $200,000. The directors are: Saml. G. B. Cook, Wm. G. Atkinson, Oliver C. Zell, Clinton P. Paine and Edgar G. Miller, of Baltimore, and Jas. T. Walker, of Troy, N. Y. The officers are Saml. G. B. Cook, president; Wm. G. Atkinson, vice president; Oliver C. Zell, treasurer; Clinton P. Paine, secretary pro tem., and Jas. T. Walker, general superintendent. The Walker forged horseshoe used to be manufactured at Troy, N. Y., in connection with the Albany and Rensselaer Iron and Steel Co., and is well known throughout the country. The company having purchased the patent from Mr. Walker, the patentee, he has been prevailed upon to assume the superintendency of the works. The process of manufacture is different from that of any other make, while the product is said to be better adapted to the requirements of horseshoers and the trade than any shoe hitherto offered. It has a well proportioned web, a good thick heel, a clean crease of proper width and depth, and the front shoes are well concaved. The nail holes are punched through at proper angles, and are free from burs. The outside edges are smooth, free from bulges and rounded to prevent interference. In addition, their smooth finish, freedom from fins, scale or oil render them pleasing to the eye and clean to handle. The company will employ about 150 hands.

A CERTIFICATE of incorporation of the St. Louis, Harrisburg and Ohio River Railway Company was filed with the Secretary of State of Illinois on the 9th inst., by Asberry Wadell, J. M. Mitchell, Robert Mick, W. M. Cheyely, L. Lavender, J. F. Taylor, D. Herrod, C. O. Lockwood, J. A. Larned, E. P. Schlater and S. H. Lamon, with a capital of $700,000. The road is to be built from Harrisburg, Saline county, to Mineral City, Hardin county, with a lateral branch from the junction of the St. Louis and Southeastern and Ohio and Mississippi Railroads in Gallatin county to a point within fifteen miles of Mineral City.

CONSOLIDATION.

ARTICLES consolidating the three Indiana, Illinois and Iowa railroad companies into the Indiana, Illinois and Iowa Railroad Company, with a capital of $14,000,000, were filed with the Secretary of State of Illinois on the 8th inst. The new board of directors is composed of George H. Holt, Adam W. Speis, Albert S. Comstock, Alfred Sully, Samuel Merrill, Joel D. Harvey and Edwin Walker. These roads lately passed under the control of the Chicago, Milwaukee and St. Paul Railway Company.

THE Zanesville and Southeastern and the Bellaire and Southwestern Railroad companies have been consolidated under the name of the Bellaire, Zanesville and Cincinnati Railroad Company. It is already completed from Bellaire to Woodsfield, Monroe county, and is under contract from Woodsfield to Caldwell, in Noble county. The stockholders on this end of the road will build from here to Caldwell, for which a great proportion of the money has already been subscribed.

THE Ohio Central and the Atlantic and Northwestern Railroad companies have been consolidated under the name of the Ohio Central Railroad Company. The directors are: William H. Barnum, Connecticut; Calvin S. Brice, Lima, Ohio; Dan P. Eells, Cleveland; Francis O. French, and Samuel Shethar, New York; Thomas Ewing, Lancaster; Joseph H. Gray, Boston; Joseph S. Miller, Wheeling; George I. Seney, Brooklyn; Samuel F. Thomas, Columbus; Charles E. Worthman and Henry C. Parson, Richmond. The capital stock will be $35,000,000. A continuous line will be formed from Toledo to the east line of West Virginia.

Coiled Wire Belting.

THE Perpetual Tension Propelling Belt Company, 328 and 330 Seventh avenue, report a large and increasing demand for their coiled wire belts, which for some time past have attracted a great deal of attention from practical men especially interested in the important subject of improvements in the transmission of power. The belts, sash cord and patent door springs manufactured by the company, who are the sole manufacturers of Gears' patent coiled wire belts, were awarded "Medals of Excellence" at the recent American Institute Fair. The striking peculiarities of these belts, of which, over 300,000 are now in use, are their not being affected by water, oil or temperature, their remarkable utilization of power, their durability and their maintenance of a perpetual tension, from which their name arises. The manner in which these results are obtained are stated by the manufacturers as follows:

First.—To correct a wrong impression and answer a very common question, we say we do not create power.

Second—But that we do utilize a third higher degree of the power expended is certain, from the fact that our belts have better adhesion than other belts, which is accounted for by reason of that part of the coil presented next to the pulley being partially or wholly closed, and in coming in contact with a large semicircle frictional surface; and also by reason of the construction of the coil, and its being slightly stretched when in use, by which a perpetual tension is obtained and maintained, thus preventing the loss occasioned by the slipping of belts.

Third—That we accomplish more with a given power, than heretofore, is true, from the fact that our belts continually rotate at right angles to their line of motion, thus moving through the natural atmosphere as a ball from a rifled barrel passes through the air with increased force over that of one projected from a smooth bore; and because, though it may be as tight or even tighter when at rest than ordinary belts, when in motion is flexible and yielding, and compensates for varying resistance, thus turning mandrels in their bearings with less friction; and also for the reason that the drawing part of this belt becomes extended, while passing round the pulleys, until it passes a certain point, then it contracts, paying back, as it were, the power expended in extending it, which is not the case with other belts. The weight of this belt assists it maintaining momentum and like the balance wheel is beneficial in practice though somewhat antagonistic to theory.

Fourth—This belt is more durable than other belts, because it is made of a material very much harder than that which belts are usually made of, and because it is worn evenly by reason of its rotating at right angles to the line of its motion; and also because the peculiar construction admits of its more readily forming itself to the pulleys, especially when moving rapidly while passing around the same. The wearing and strain on the wire, by reason of its construction, in forming itself by the circumference of the pulleys, being coiled, is other than that of bending a piece of wire, or a rope formed of wire.

New York Stock Exchange.

(Thursday's quotations follow money article.)

Closing Prices for the week ending Feb. 15.

	Th.9.	F.10.	Sat.11.	M.13.	Tu.14.	W.15.
Adams Express	.....	.....	148	.....	.....	.....
Albany and Susq	.....	.....	.....	.....	.....	.....
1st mortgage	128	.....	.....	.....	.....	.....
2d mortgage	.....	.....	.....	.....	.....	.....
American Express	92¼	93¾	93	92	92	92
Atlantic & Pac. Tel.	.....	.....	.....	.....	.....	.....
Burl., C. R. & Nor	.....	85	.....	.....	.....	.....
1st mortgage 5s	100	.....	.....	.....	.....	99⅛
Canada Southern	53	52¾	53	52⅛	51¾	49½
1st mortgage guar	94¾	95	94¾	.....	94¾	94
Central of N. Jersey	96½	96½	96¼	95⅛	93⅞	92⅜
1st mort. 1890	.....	115¾	.....	.....	.....	.....
7s, consol. ass	113¾	.....	115	.....	114½	.....
7s, convertible ass	.....	.....	.....	.....	.....	.....
7s, Income	.....	.....	.....	.....	.....	.....
Adjustment	.....	.....	107½	107	107	106¾
Central Pacific	91½	91¾	91¼	91	90¼	89¾
6s, gold	.....	114	.....	114¾	.....	114
1st M. (San Joaq)	.....	.....	110	.....	109	.....
1st M. (Cal. & Or.)	133	.....	.....	.....	.....	.....
Land grant 6s	105¾	.....	.....	.....	.....	.....
Chesapeake & Ohio	24¾	24¼	24⅛	24¼	23⅝	22⅛
1st, series B	81¾	.....	82	82¼	82	.....
Chicago and Alton	135	135½	135½	.....	138	128½
Preferred	.....	.....	.....	.....	.....	.....
1st mortgage	.....	.....	.....	.....	.....	.....
Sinking Fund	.....	.....	.....	.....	.....	.....
Chi,, Bur. & Quincy	135⅞	135½	135⅛	135¾	135⅛	134
7s, Consol. 1903	.....	.....	.....	126¾	.....	.....
Chi., Mil. & St. Paul	109⅞	109¾	109¼	108⅞	108⅝	107⅝
Preferred	121⅞	.....	122¼	121⅞	.....	.....
1st mortgage, 8s	.....	.....	.....	.....	.....	.....
2d mort., 7 3-10s	.....	.....	.....	.....	.....	.....
7s, gold	.....	.....	.....	.....	.....	.....
1st M. (La. C. div)	.....	.....	.....	.....	.....	.....
1st M. I. & M. div.)	.....	.....	.....	.....	.....	.....
1st.M. (I. & D. ext.)	.....	.....	.....	.....	116¾	116¼
1st M. (H.&D. div.)	.....	.....	.....	.....	114	114
1st M.(C. & M.div.)	.....	.....	.....	.....	.....	118
Consolidated S. F.	.....	.....	121	121	.....	.....
Chi. & Northwestern	135¼	134¾	133⅞	133¾	133¾	133¼
Preferred	144	144⅛	143½	142½	142	142
1st mortgage	.....	.....	.....	.....	.....	.....
Sinking Fund 6s	.....	.....	.....	.....	.....	.....
Consolidated 7s	.....	.....	.....	.....	.....	.....
Consol. Gold bo'ds	126	.....	.....	.....	.....	125
Do. reg	.....	.....	.....	.....	.....	.....
Chi., R. Isl. & Pac.	133½	133	132¾	132¼	132½	132
6s, 1917, c	.....	.....	.....	.....	.....	126
Clev.,Col.,Cin.&Ind.	80½	.....	.....	79¾	78½	77⅞
1st mortgage	.....	.....	.....	.....	.....	.....
Clev. & Pittsburg gr.	.....	.....	.....	.....	.....	.....
7s, Consolidated	.....	.....	.....	.....	.....	.....
4th mortgage	.....	.....	.....	.....	.....	.....
Col.,Chi.,& Ind. Cent.	18¾	14½	11¼	10	9½	10
1st mortgage	.....	.....	.....	.....	130	130
2d mortgage	.....	.....	.....	.....	.....	.....
Del. & Hud Canal.	108¾	108¼	108¼	108⅛	108	107¼
Reg. 7s, 1891	.....	.....	.....	.....	.....	.....
Reg. 7s, 1884	.....	.....	.....	.....	.....	.....
7s, 1894	.....	.....	.....	.....	.....	.....
Del.,Lack.& Western	127½	126¾	126⅞	125⅞	125⅞	125½
2d mortgage 7s	.....	.....	.....	.....	.....	.....
7s, Consol. 1907	.....	.....	.....	.....	.....	.....
Erie Railway	.....	.....	.....	.....	.....	.....
1st mortgage	.....	.....	.....	.....	.....	.....
2d mort. 5s, ext	.....	.....	.....	.....	.....	.....
3d mortgage	.....	.....	.....	.....	.....	.....
4th mort. 5s, ext	.....	.....	.....	.....	.....	.....
5th mortgage	.....	.....	.....	.....	.....	.....
7s, Consol. gold	130¼	.....	130¼	.....	.....	.....
Great West. 1st mort	.....	.....	.....	.....	.....	107½
2d mortgage	.....	.....	.....	.....	105	.....
Hannibal & St. Jo	97	96½	96¾	95¾	95¼	94¼
Preferred	109¼	108	107⅞	106½	106¾	105¾
8s, Convertible	.....	.....	110	.....	.....	108½
Houston & Tex. Cen	.....	82	81	.....	.....	.....
1st mortgage	.....	.....	.....	.....	.....	.....
2d mortgage	.....	.....	.....	.....	.....	.....
Illinois Central	136¼	136¾	135¾	133¼x	132¾	131¾
LakeShore&MichSo	111⅝	111¼	111⅛	111⅜	111½	110¾
Consol. 7s	.....	130	.....	.....	.....	.....
Consol. 7s, reg	.....	.....	.....	.....	.....	.....
2d Consolidated	126	126½	.....	.....	.....	.....
Leh. & W. B. 7s, Con	.....	.....	.....	.....	.....	.....
Long Dock bonds	.....	.....	.....	.....	.....	.....
Louisville & Nash.	93¾	91¾	90	89¾	88½	87⅝
7s, Consolidated	.....	.....	.....	122	.....	.....
Manhattan	55⅝	58	59	59	57¾	56
1st pref	.....	95¾	.....	.....	96	97
Met. Elevated	90	90	90	89¾	90	.....
1st mortgage	100¾	100¾	100¾	100¾	100½	100½
Michigan Central	86¾	86¾	86¾	86⅝	86¾	85¾
7s, 1902	126	126	.....	.....	125	.....
Morris & Essex	122	122½	.....	121¾	.....	120½
1st mortgage	.....	134	.....	.....	.....	.....
2d mortgage	.....	.....	.....	.....	.....	.....
7s of 1871	.....	.....	.....	.....	.....	.....
7s, Convertible	.....	.....	.....	.....	.....	.....
7s, Consolidated	.....	.....	.....	.....	.....	.....
N.Y. Cen. & Hud. R.	131⅛	130⅞	130⅝	130¼	130¾	130
6s, S. F. 1883	.....	.....	.....	.....	103½	103½
6s, S. F., 1887	.....	.....	.....	.....	.....	.....
1st mortgage	134	134	133¾	.....	.....	.....
1st mortgage, reg	.....	.....	.....	.....	.....	.....
N. Y. Elevated	.....	.....	.....	.....	108	108
1st mortgage	.....	.....	.....	.....	116¼	115½
N. Y. & Harlem	.....	.....	.....	.....	.....	.....
Preferred	.....	.....	.....	.....	.....	.....
1st mortgage	.....	.....	.....	.....	.....	.....
1st mortgage, reg	.....	.....	.....	.....	.....	.....
N. Y., Lake Erie & W	39⅞	39¾	39⅝	39½	39⅜	38⅞
Preferred	79½	79	78½	76½	77	75⅝
2d Consolidated	99¼	98¼	98⅝	98⅝	99	98¼
New 2d 5s fund	.....	.....	95¼	.....	.....	.....
N.Y.,N.Hav'n&Hart	.....	.....	170	.....	.....	.....
North Mo. 1st mort	.....	.....	.....	.....	.....	.....
Northern Pacific	.....	35	35½	35¼	34⅞	33½
Preferred	73¾	73⅞	73¾	73⅞	73⅝	72⅝
Ohio & Mississippi	33⅞	34¼	33⅞	33¾	31½	31¾
Preferred	.....	.....	.....	100	.....	.....
2d mortgage	.....	.....	.....	.....	.....	.....
Consolidated 7s	.....	.....	.....	.....	.....	.....
Consol. S. Fund	.....	.....	.....	.....	118½	.....
Pacific Mail S. S. Co	44⅜	43⅞	43½	43¼	42⅝	41⅜
Pacific R. R. of Mo	.....	.....	.....	.....	.....	.....
1st mortgage	.....	.....	.....	.....	106½	106
2d mortgage	.....	.....	.....	.....	.....	111
Panama	.....	.....	.....	180	.....	.....
Phila. & Reading	63¾	53	63	62½	62¾	61½
Pitts,Ft.W.&Chi.gtd	.....	.....	134	.....	.....	.....
1st mortgage	.....	.....	.....	137	.....	.....
2d mortgage	.....	.....	.....	.....	.....	.....
3d mortgage	.....	.....	.....	.....	.....	.....
Pullman Palace Car	140¼	140	138½	137	136½	135
Quicksil'r Min'g Co	.....	13	.....	.....	12¾	.....
Preferred	.....	.....	.....	.....	.....	60
St. Louis & San Fran	43	42½	.....	42	41	39½
Preferred	58	60	59	.....	57	56
1st Preferred	.....	.....	95	94	95½	91
St. L., Alt'n & T. H.	.....	.....	.....	.....	.....	32
Preferred	.....	.....	.....	.....	83	.....
1st mortgage	.....	.....	.....	.....	.....	.....
2d mort. pref	.....	.....	.....	.....	.....	105
Income bonds	.....	.....	.....	.....	.....	.....
St. L., Iron Mt. & S	.....	.....	.....	.....	.....	.....
1st mortgage	.....	.....	.....	.....	.....	.....
2d mortgage	.....	.....	.....	109⅛	.....	.....
Toledo and Wabash	.....	.....	.....	.....	.....	.....
1st mortgage	.....	.....	.....	.....	.....	.....
2d mortgage	.....	.....	.....	106	.....	106½
7s, Consolidated	.....	.....	.....	.....	.....	102
St. Louis Division	.....	.....	.....	.....	.....	.....
Union Pacific	119	118⅜	118⅝	117⅜	117¼	117
1st mortgage	116¼	.....	116⅜	117	117½	.....
Land Grant 7s	.....	.....	115	.....	.....	.....
Sinking Fund 8s	122½	122½	.....	.....	.....	.....
United States Ex	.....	.....	76¾	75¼	75	76
Wabash, St. L.& Pac	36⅞	36¼	36¼	36	34⅜	31½
Preferred	67⅜	66¾	66½	61	61½	58⅜
New mort. 7s	.....	103	.....	.....	.....	.....
Wells-Fargo Ex	.....	.....	126	128	126½	.....
Western Pacific b'ds	.....	.....	110	110½	.....	.....
Western Union Tel.	81⅞	81½	81¾	81½	80⅜	80
7s., S. Fconv., 1900	.....	.....	.....	118	.....	.....
FEDERAL STOCKS :—						
U. S. 4s, 1907, reg	.....	.....	.....	.....	.....	.....
U. S. 4s, 1907, coup	.....	.....	118½	118½	118	117⅞
U. S. 4½s, 1891, reg	.....	.....	.....	.....	113⅝	113½
U. S. 4½s, 1891, coup	.....	.....	111⅞	.....	.....	.....
U. S. 5s, 1881, reg	.....	.....	.....	.....	.....	.....
U. S. 5s, cont'd at3½	.....	.....	.....	102¼	102¼	102¼
U. S. 6s cont'd at3½	.....	.....	.....	.....	.....	.....
Dt. of Col. 3-65s, reg	.....	.....	.....	.....	.....	.....
Dt. of Col.3-65s,coup	.....	.....	.....	.....	.....	.....

Boston Stock Exchange.

Prices for the Week Ending Feb. 15.

	Th.9.	F. 10.	Sat.11.	M.13.	Tu.14.	W. 15.
Atch.,Top.&San.Fe.	87½	87¼	86¾	85½	85¾	84⅞
1st mortgage	.....	.....	.....	119	118	.....
2d mortgage	.....	.....	.....	.....	.....	.....
Land Grant 7s	.....	.....	.....	.....	.....	115
Boston & Albany	.....	168¾	167½	167½	167¾	.....
7s reg	.....	.....	.....	.....	.....	.....
Boston and Lowell	.....	.....	.....	103	103	.....
Boston & Maine	.....	.....	.....	.....	.....	145¾
Boston& Providence	.....	.....	.....	.....	.....	.....
Bos'n,Hart.& Erie7s	61½	58¼	57¼	56½	66¼	54½
Burl.& Mo.R.L.G.7s	.....	.....	.....	.....	.....	.....
Burl.& Mo.R.in Neb	.....	.....	.....	.....	.....	.....
6s, exempt	.....	.....	.....	.....	.....	.....
4s	.....	.....	.....	87	.....	.....
Chi.,Burl. & Quincy	135½	135¾	135½	135¾	135¼	.....
7s	.....	.....	.....	.....	.....	.....
Cin.,Sand&Clev($50)	26	.....	.....	25¾	25¾	24½
Concord ($50)	100	.....	100¼	.....	.....	.....
Connecticut River	.....	.....	165	.....	.....	.....
Eastern	34	33¾	33½	.....	34¼	33½
New 4½ Bonds	.....	108⅞	108¾	108⅞	108⅞	109
Fitchburg	.....	.....	135½	135	135	135
N.Y & New England	55	54	53¼	51	62	51
7s	116⅞	.....	.....	117	116¾	116⅞
Northern N. H	.....	.....	108	.....	.....	.....
Norwich&Worcester	.....	.....	.....	.....	.....	.....
Ogden & Lake Cham	.....	.....	.....	.....	.....	.....
Preferred	.....	.....	.....	.....	.....	.....
Old Colony	125	.....	126	126	125¼	126
Ph.,Wil.&Balt.($50)	64	.....	.....	.....	.....	.....
Portl'd,Saco & Ports	.....	.....	.....	.....	.....	113½
Pueblo & Ark Val	.....	.....	.....	.....	.....	.....
7s	115	.....	.....	.....	.....	.....
Pullman Palace Car	141	139½	.....	.....	137	.....
Union Pacific	119½	119½	119	118¾	117¾	117
6s	115	.....	.....	.....	.....	.....
Land Grant 7s	.....	.....	112¾	.....	.....	.....
Sinking Fund 8s	.....	.....	.....	.....	.....	.....
Vermont & Canada	.....	.....	.....	.....	.....	.....
Vermont & Mass	.....	.....	.....	.....	.....	.....
Worcester & Nashua	.....	59	.....	.....	.....	.....
Cambridge (Horse)	.....	.....	.....	.....	120	.....
Metropolitan(Horse)	76¼	76½	.....	.....	.....	74¾
Middlesex (Horse)	.....	.....	.....	.....	.....	.....
Cal.&Hecla Min'gCo	230	229	.....	231	230	230
Quincy	40	.....	.....	41	40½	40

Philadelphia Stock Exchange.

Closing Prices for the Week Ending Feb. 14.

	W. 8.	Th.9.	F.10.	Sat.11.	M13.	Tu.14.
Allegh'y Val. 7 3-10s	.....	.....	.....	.....	.....	121
7s, Income	.....	.....	55	.....	.....	.....
Camd'n & Am. 6s, '83	.....	.....	.....	.....	.....	.....
6s, 1889	.....	.....	.....	.....	.....	.....
Mort. 6s, 1889	.....	.....	.....	.....	114	.....
Camden & Atlantic	.....	.....	.....	.....	.....	.....
Preferred	.....	.....	.....	.....	40	.....
1st mortgage	.....	.....	.....	.....	.....	.....
2d mortgage	.....	.....	.....	.....	.....	.....
Catawissa	.....	.....	17⅞	18	.....	.....
Preferred	55	.....	.....	.....	.....	.....
7s, new	.....	.....	.....	.....	.....	.....
Del. & Bound Brook	.....	.....	130	.....	.....	.....
7s	.....	.....	.....	.....	.....	.....
Elmira&Williamsp't	.....	.....	.....	.....	.....	.....
Preferred	.....	.....	.....	.....	.....	.....
Hunt. & B. Top Mt.	14	13¾	.....	.....	.....	.....
Preferred	27¾	27½	27½	27	.....	.....
2d mortgage	.....	.....	.....	.....	.....	.....
Lehigh Navigation	43½	43¾	43½	44	43¾	43¼
6s, 1884	.....	105¼	.....	.....	.....	.....
Gold Loan	.....	.....	111¼	.....	.....	112
Railroad Loan	.....	117	.....	.....	.....	.....
Conv. Gold Loan	.....	.....	.....	.....	.....	.....
Consol. Mort, 7s	.....	.....	.....	116¾	.....	.....
Lehigh Valley	62½	62	62	62	62	.....
1st mort. 6s, coup	.....	.....	.....	122½	123¼	.....
1st mort. 6s, reg	122	.....	122¼	122	.....	.....
2d mort. 7s	.....	.....	.....	.....	.....	.....
Consol mort. 6s	.....	.....	.....	.....	122	.....
Consol.mtg.6s,reg	121	.....	.....	.....	.....	.....
Little Schuylkill	.....	58	57	.....	.....	57
Minehill&Sch.Hav'n	.....	.....	.....	.....	.....	.....
North Pennsylvania	64	.....	64	.....	.....	64
1st mortgage 6s	106	.....	.....	.....	.....	.....
2d mortgage 7s	.....	.....	.....	.....	119	.....
Genl. mtg.7s,coup	.....	.....	.....	.....	.....	.....
Genl. mtg. 7s, reg	.....	.....	123	.....	.....	.....
Northern Central	50½	.....	50	.....	50	50¾
5s	.....	.....	.....	97	97¼	97½
Northern Pacific	34½	34⅝	35¼	35⅛	35½	34⅞
Preferred	73	73⅞	73⅞	74	73⅝	73⅝
Pennsylvania R. R.	61¼	61½	61⅜	61¼	61⅛	61
1st mortgage	.....	.....	.....	.....	.....	.....
Gen'l mort	.....	.....	.....	.....	.....	.....
Gen'l mort reg	.....	.....	.....	.....	.....	.....
Consol. mort. 6s	.....	.....	.....	.....	.....	.....
Consol. mort. reg	118	.....	.....	.....	.....	.....
Pa.State 6s 2d series	.....	.....	.....	.....	.....	.....
do 3d series	.....	.....	.....	.....	.....	.....
do 5s, new	116	.....	.....	117	.....	116¼
do 3s,	.....	.....	.....	.....	.....	.....
Phila. & Reading	31⅝	31⅞	31⅝	31½	31⅜	31⅛
1st mortgage 6s	.....	.....	.....	119½	.....	.....
7s of 1893	121	.....	.....	120¼	.....	.....
7s, new convert	.....	.....	.....	.....	75	.....
Consol. mort. 7s	125	120	.....	.....	.....	.....
Consol. mort. reg	.....	125	.....	.....	.....	.....
Gen'l mort. 6s	99⅞	.....	96⅞	96¾	97⅛	96¾
Philadelphia & Erie	16	17	17	17	17	16
1st mortgage 5s	.....	.....	.....	.....	.....	.....
2d mortgage 7s	.....	.....	114	.....	.....	.....
Pittsb.,Cin.&St.L.7s	.....	.....	.....	.....	.....	.....
Pitts.,Titusv.&Buff.	18¾	18¾	18¾	.....	18⅝	18⅛
7s	.....	.....	95	.....	.....	95½
Schuylkill Navi't'n	.....	.....	.....	.....	.....	.....
Preferred	13	.....	13	.....	13	12⅞
6s, 1872	.....	.....	.....	.....	.....	.....
6s, 1882	93	.....	93	93	.....	93
United Co. of N. J.	186¼	186¾	.....	186¼	186½	186¾
Hestonville, (Horse)	.....	.....	.....	.....	.....	.....
Chestnut&Wal.(do)	.....	.....	.....	.....	.....	.....
Green & Coates(do)	.....	.....	.....	.....	.....	.....

Baltimore Stock Exchange.

Closing Prices for the Week Ending Feb. 14.

	W. 8.	Th. 9.	F. 10.	Sat. 11.	M. 13.	Tu. 14.
Baltimore & Ohio..	.....	.....	.....	.....	.....	.....
6s, 1880.....	.....	.....	.....	.....	.....	.....
6s, 1885.....	.....	.....	.....	.....	.....	.....
Central Ohio ($50)..	.....	.....	.....	.....	.....	.....
1st mortgage.....	.....	110½	.....	.....	110½	.....
Marietta & Cincin'ti	.....	.....	.....	.....	.....	.....
1st mortgage, 7s..	.....	125½	125½	125¼	125	.....
2d mortgage, 7s..	105½	106	105¼	.....	105½	105
3d mortgage, 8s..	58¼	58½	58	.....	57	56½
Northern Cen. ($50)	.....	.....	.....	.....	.....	50¼
2d mort., 6s 1885..	.....	.....	.....	.....	.....	105½
3d mort., 6s, 1900.	.....	.....	.....	.....	.....	.....
6s, 1900, gold.....	.....	.....	.....	.....	.....	114
6s, 1904, gold.....	.....	.....	.....	112	.....	.....
Orange & Alex. 1st.	.....	.....	.....	.....	.....	.....
2d mortgage, 6s...	.....	.....	.....	.....	.....	.....
3d mortgage, 8s...	.....	.....	.....	.....	.....	.....
4th mortgage, 8s..	.....	.....	.....	.....	.....	.....
O., Alex. & Manas's 7s	.....	.....	.....	.....	.....	.....
Pitts. & Connellsv. 7s	.....	.....	.....	.....	121	121
Virginia 6s, Consol.	62¼	61¾	61¾	61	62	61
Consol. coupons..	63½	.....	64½	63½	.....	.....
10-40 bonds.....	.....	40	40	39	.....	.....
Def'd Certificates.	.....	.....	15½	.....	15	.....
Western Maryland..	.....	.....	.....	.....	.....	.....
1st M., end. by Balt	.....	.....	.....	.....	.....	.....
2d M., do .	.....	.....	.....	.....	.....	.....
3d M., do .	.....	.....	.....	.....	.....	.....
1st M., unendors'd	.....	.....	.....	.....	.....	.....
2d M., end. WashCo	.....	.....	.....	.....	.....	.....
2d M., preferred..	.....	.....	.....	105¼	.....	105½
City Passenger R R.	41	.....	.....	.....	41	.....

London Stock Exchange.

	Closing Prices			
	Jan. 13.		Jan. 20.	
Baltimore & Ohio (sterling)	114	116	114	116
Do. Adjustment Bonds	104	109	104	109
Do. Income Bonds	104	107	104	107
Det., G'd Haven & Mil. Equip bds	112	114	112	114
Do. Con. M. 5p.c., till '83 aft'r 6p.c	110	112	110	112
Illinois Central $100 shares	135½	136½	138½	139½
Lehigh Valley Cons. mortgage	115	119	115	119
Louisville & Nashville mort 6s	105	107	105	107
Do. Sink. Fund bds (S. & N. Ala)	102	104	102	104
Do. capital stock $100 shares.	97	99	99	101
N. Y. Cent. & Hud. R. mt. bds.	134	137	134	137
Do. $100 shares	136¾	137½	137½	138½
Do mort. bonds (stg.)	123	125	120	122
N. Y., Lake Erie & West., $100 shs	42¼	42¾	42¾	43⅛
Do. 6 p. c. pref. $100 shares ..	87	89	84	86
Do. 1st Con. Mort. bds (Erie)	131	133	131	133
Do. do. Funded Coupon bds.	127	129	127	129
Do. 2d Consol Mort. bonds	101	103	101	103
Do. do. Funded Coupon bds..	97	100	97	100
Do. Gold Income bonds.....	93	95	93	95
N. Y., Pa. & Ohio 1st mort. bonds.	47	48	47	48
Do. Prior Lien bds (sterling)	104	108	104	108
Pennsylvania, $50 shares.....	63	64	63½	64⅛
Do. Con. Sink Fund Mort....	116	118	116	118
Philadelphia & Reading $50 shs	33¼	33¾	30¾	31¼
General Consol Mortgage.....	116	118	116	118
Do. Improvement Mortgage..	103	105	103	105
Do. Gen. Mtg. '74, ex-def'd coup.	99	101	100	102
Do. Scrip for the 6 def. ½ coup.	92	97	92	97
Pittsb., Ft. W. & Chi. Eq. bds....	105	109	105	109
St. L. Bridge 1st mort. gold b'd.	126	128	126	128
Do. 1st pref. stock.....	102	104	102	104
Union Pa. Land Grant 1st. mtg.	115	119	115	119
Wabash, St. L. & P. $100 shs.....	36	38	37	39
Do. $100 pref. shares.....	79	71	70⅛	71½
Do. gen. mort. bonds.....	91	93	91	93

AMERICAN RAILROAD JOURNAL.

Financial and Commercial Review.

THURSDAY EVENING, Feb. 16, 1882.

THE quotation for call loans during the day, with stocks and collaterals, was 5@6 per cent, and on United States bonds 3@3½ per cent. Prime mercantile paper was 5@6 per cent. At the close the rate for call loans to the stockholders fell to 3 per cent.

The posted rates for prime bankers' Sterling were 4.85@90½; the actual rates were 4.84@¼ and 4.89¼@¾, with cable transfers 4.90¾@4.91, and prime commercial bills 4.82½@⅝. The actual rates for Continental bills are as follows: francs, 5.13⅛@5.13¾ and 5.18⅛@¾; marks, 94⅝@¾ and 95⅝@¾, and guilders, 40⅛@40¾.

The details of the plan of reorganization of the Marietta and Cincinnati Railroad Company, as finally adopted, are given in the weekly circular of Messrs. John A. Hambleton & Co., of Baltimore. The principal remains as before published, the only changes being in the aggregating of some of the totals. The first mortgage bonds of the new or consolidated company will amount to $7,185,000 at 4½ per cent guaranteed interest, except for $1,250,000, which is to go into six per cent bonds for the stock of the Cincinnati and Baltimore Railway Company. The total of the new second mortgage is $3,040,000; total third mortgage, $2,270,000. Total first income bonds, $3,410,000; second incomes, $4,000,000. Holders of bonds on depositing them will be assessed to meet reorganization expenses. First preferred stock gets the same class of security in the new company, and for a $2.50 assessment per share will receive first incomes. Second preferred is similarly dealt with on an assessment of $1 50. Common stock goes into new common, and for $1 assessment receives equivalent in first incomes. For unpaid fourth mortgage coupons and all other claims of the Baltimore and Ohio Railroad Company, amounting to $6,038,000, it receives one-half in preferred and one-half common stock. The Farmers' Loan and Trust Company of New York will act as trustees under this plan.

The annual report of the directors of the Philadelphia and Erie Railroad Company shows that the total revenue for the year 1881 was, $3,454,309.05, the operating expenses $2,430,060.30, and the net earnings, $1,024,248.75, from which extraordinary operating expenses for construction of tracks, sidings, shops, &c., amounting to $135,278.49, are deducted, making the actual net earnings $888,970.26. To the latter sum is added net receipts from rents, $4,835.18, making a total net revenue of $893,805.44. From this are deducted charges for maintaining the organization, interest on equipment, and drawbacks to the Alleghany Valley Railroad, amounting to $211,055.53, leaving a balance of $682,749.91. The interest paid on the funding debt was $1,077,995, leaving a deficit for the year of $395,245.09. The report states that although the tonage increased from 2,810,466 tons in 1879 to 5,277,056 tons in 1881, or almost 90 per cent, the gross earnings for the same period have increased only 18 per cent, owing to the steady reduction in rates.

The net earnings of the Indianapolis Belt Railroad Company for the past year, as reported by the secretary, were in round numbers $140,000, of which $80,000 came from the stockyards. There is no floating debt, a bonded debt of $1,000,000, surplus $75,000, besides 5 per cent semi-annual dividends. The actual cash expended in construction, $1,056,000. Among the improvements ordered was a $50,000 pork-house, to be leased out, and the extension of the Belt Company to the Wabash, St. Louis and Pacific Railway.

The Massachusetts State Auditor reports that the cost to that State of the Southern Vermont Railroad to December 31, 1881, was $417,500, and that it has received from it in rents, $235,139, leaving the net cost at $182,361. Of the income $224,806 has been placed to the credit of the Troy and Greenfield Railroad loan and $10,332 to the credit of the sinking fund of that loan.

A financial exhibit was presented by the Mayor to the City Council of Charleston, S. C., on the 14th inst. showing a reduction of the total municipal debt in the last ten years from $5,250,000 to $4,250,000, and a reduction of the annual interest from $315,000 to $185,000.

The formal transfer of the Jersey Shore, Pine Creek and Buffalo Railroad from the control of the Philadelphia and Reading Railroad Company to that of the New York Central and Hudson River Railroad Company took place on the 9th inst.

A mortgage for $15,000,000 was filed on the 13th inst., by a representative of the New York, Chicago and St. Louis Railroad Co., with the Recorder of each county through which that that road runs. The bonds, which bear 6 per cent interest, are payable December 1, 1921. Both principal and interest are payable in gold coin. This is the first debt of the company that has been recorded—all the money hitherto required for right of way, grading and construction having been supplied by the stockholders. The proceeds of the above mortgage are to be applied towards obtaining farther terminal facilities, constructing depots, and supplying the road with the necessary equipment,

At a meeting of the stockholders of the Petersburg Railroad Company held at Petersburg, Va., on the 6th inst., the exchange of old second mortgage 8 per cent bonds of the company, amounting to about $490,000, for new issue 6 per cent bonds was perfected on satisfactory terms.

The only obligations of the State of Illinois now outstanding are about $20,000 of bonds, which have been called in but have not yet been presented for payment. The money is in the Treasury to pay them whenever they may be presented, and in the meantime they have ceased to draw interest.

At the annual meeting of the stockholders of the Boston and Albany Railroad Company on the 8th inst., it was voted to amend the by-laws so that transfer books shall be closed 30 instead of 15 days before the declaration of a dividend.

The Secretary of the Treasury issued on the 8th inst., the 108th call for the redemption of bonds. The call is for $20,000,000 of continued sixes, the principal and accrued interest of which will be paid on the 8th of April next, after which date interest will cease. The bonds are designated as follows: registered bonds of the acts of July 17 and August 5, 1861, continued during the pleasure of the Government under the term of Circular No. 42, April 11, 1881: to bear interest at the rate of three and one-half per centum per annum from July 1, 1881, $50, Nos. 1,951 to 2,150, both inclusive; $100, Nos. 13,701 to 14,700, both inclusive; $500, Nos. 10,001 to 10,700, both inclusive; $1,000, Nos. 49,901 to 51,600, both inclusive; $5,000, Nos. 16,151 to 16,850, both inclusive; $10,000, Nos. 32,551 to 34,950, both inclusive. Total, $20,000,000. Many of the bonds originally included in the above numbers have been transferred and cancelled, leaving outstanding the amount above stated.

The gross earnings of the Buffalo, Pittsburg and Western Railroad Company for the year

1881, were $598,968.43, the expenses $354,275.67, and the net earnings $244,692.76; to which are added "credit to the balance of interest account received in cash balance of reserve fund, the difference between values of securities received under the merger and cost of the Titusville and Oil Creek railroads, from which are deducted interest on bonds of the Union and Titusville, Warner and Franklin, Oil Creek, Buffalo, Chautauqua Lake and Pittsburg, and premiums on conversions of bonds, giving balance to the credit of profit and loss at the end of the year of $29,632.17."

The taxpayers of Smithtown, Long Island, have decided that the bonds given by the town to assist the Long Island Railroad Company to build their road through the town were made in good faith, and should be paid in full, unless some arrangement can be made by which the interest, which is now seven per cent, can be reduced.

The stockholders of the Danbury and Norwalk Railroad Company have voted unanimously to accept the amendment to their charter authorizing the extension of the road to the Sound; also to accept the resolution passed at the present session of the Legislature authorizing the issue of $100,000 of bonds for the purpose of paying for, in part, the cost of such extension. The President of the road was authorized to sign the mortgage to secure such bonds.

In the case of the Hannibal and St. Joseph Railroad Co. vs. the State of Missouri, in which application was made for an injunction restraining the Governor from selling the road for alleged default in the payment of interest on certain bonds, Justice Miller, of St. Louis, decided in favor of the State, but advised both parties to get together and settle the matter amicably.

The Supreme Court of Tennessee has decided the recent act of the Legislature to settle the State debt at par and three per cent interest to be constitutional—holding that the Legislature had no power to make the coupons on said bonds receivable for taxes for 99 years. Application has been made to have the funding proceed with ordinary coupons.

Ground was broken on the 15th inst. at Mojave, on that section of the Atlantic and Pacific Railroad to be built by the Southern Pacific Company, from Mojave to Needles, on the Colorado River.

The closing quotations on Thursday were: Adams Express, 145@147; American Express, 90@92; Chicago, Burlington and Quincy, 133¾@134½; Canada Southern, 50⅛@50½; Chicago and Northwestern, 133½@133¾; do. pref., 142½@143; Chicago and Alton, 128½@129; Central of New Jersey, 92@92½; Central Pacific, 90⅛@90⅜; Chicago, Milwaukee and St. Paul, 108@108¼; do. pref., —@122½; Columbus, Chicago and Indiana Central, 10⅜@10½; Delaware and Hudson Canal, 106¾@107; Delaware, Lackawanna and Western, 125⅛@125¼; Hannibal and St. Joseph, 93¾@94; do. pref., 90@—; Illinois Central, 132@133; Lake Erie and Western, 29¼@29½; Lake Shore and Michigan Southern, 111@111⅝; Metropolitan Elevated, 86½@88½; Manhattan Elevated, 57@57¼; do. 1st pref., 94@95⅛; Michigan Central, 85⅜@85⅞; New York Elevated, 105@107½; New York, Lake Erie and Western, 39@39⅛; do. pref., 76@76½; New York Central and Hudson River, 130½@130¾; Northern Pacific, 34@34⅛; do. pref., 73@73⅛; Ohio and Mississippi, 31¾@32; Pacific Mail, 41½@41¾; Texas and Pacific, 43½@43⅝; Union Pacific, 117½@117¾; United States Express, 75@76; Western Union Telegraph, 80⅛@80¼; Wabash, St. Louis and Pacific, 32⅜@32½; do. pref., 59½@59⅝; Wells-Fargo Express, 123@129.

The following quotations of sales of railway and other securities, for the week, are in addition to those given elsewhere in our columns:

New York.—Atchison, Colorado and Pacific 1st, 97; Belleville and Southern Illinois 1st, 123; Boston and New York Air Line pref., 68⅛; Chicago and Northwestern S. F. 5s, 101¼; Cairo and Fulton 1st, 107½; Chesapeake and Ohio 1st pref., 33½; do. 2d pref., 23; do. cur. int., 50; Chicago, St. Paul, Minneapolis and Omaha, 34¼; do. pref., 100; do. consol., 100¼, Cedar Falls and Minn., 16; Columbia and Greenville pref., 93; do. 1st, 105; Central Iowa 34½; Chicago, St. Louis and New Orleans, 81; Columbus, Chicago and Indiana Central Inc., 57; do. 1st Trust Co. certif. ass. sup., 119; Chicago, Milwaukee and St. Paul Chicago and Pacific div., 1st, 107; do. S. M. div. 1st, 103½; Chicago, Burlington and Quincy 8s, 103½; Cleveland and Toledo S. F., 107½; Chicago and Milwaukee 1st, 119; Duluth and Sioux City, 79; Denver and Rio Grande 67⅜; do. 1st, 113; do. 1st consol., 103½; East Tennessee, Virginia and Georgia, 13½; do. pref., 21¾; do. inc., 54; do. 1st, 115; do. 5s, 77; Evansville, Hendersou and Nashville 1st, 102½; Evansville and Terre Haute 1st, 96; Green Bay, Winona and St. Peter 8; do. 1st, 90½; Galveston, Harrisburg and San Antonio 2d, 109; Gulf, Colorado and Santa Ee 1st, 106¼; Hudson River R. R. 2d S. F., 110½; Houston and Texas Central 1st, Western div., 107¼; Hannibal and Central Mo. 1st, 108; Hannibal and St. Joseph 6s, consol., 109½; Indiana, Bloomington and Western, 41; do. 1st, 89; Indianapolis, Decatur and Springfield 1st, 104; International coup. 6s, 90; Kansas Pacific 1st consol., 102⅞; do. 6s, Denver div. ass., 108½; Keoknk and Des Moines 1st, 105⅜; Lafayette, Bloomington and Muncie 1st, 106; Louisville and Nashville Gen'l mort., 6s, 96; do. 2d, 103; Long Island, 51; Lake Erie and Western, 30; do. inc., 51; Louisville, New Albany and Chicago, 70⅛; do. 1st, 102; do. consol., 123; Lehigh and Wilkesbarre Inc., 90⅛; Manhattan Beach, 29; Marietta and Cincinnati 1st pref., 13½; do. 2d pref., 7; Mobile and Ohio, 28; do. 1st debeh., 92; do. 1st, 112⅛; Missouri, Kansas and Texas, 32⅜; do. consol., 103¾; do. 2d, 67; do. gen'l mort. 6s, 78; Missouri Pacific, 101⅛; do. 1st consol. 101; do. 3d, 112; Memphis and Charleston, 67¼; Milwaukee, Lake Shore and Western, 46; do. inc., 76; Minneapolis and St. Louis 1st, 115; do. 1st, Iowa Ext., 111½; Michigan Central 5s, 97; Metropolitan Elevated 2d, 90½; Michigan Southern S. F., 108; Northern Pacific 1st, 97; New York, Penn. and Ohio inc., 42½; Nashville, Chattanooga and St. Louis, 74; do. 1st, 115¼; New York, Ontario and Western, 25; Norfolk and Western pref., 54½; do. Gen'l mort., 103; New Jersey R. R. and Transp. Co., 185; New Orleans Pacific 1st, 91; New York City and Northern Gen'l mort., 80; Ohio Central, 18½; do. inc., 38¾; do. 1st, 90¾; Oregon Railway and Nav., 134; do. 1st, 107; Oregon Transp., 69½; Ohio Southern, 18; do. 1st, 90; Peoria, Decatur and Evansville, 29¾; do. inc., 41¾; Rochester and Pittsburg, 29¾; do. inc., 41¾; Richmond and Allegany, 29½; do. 1st, 93; Richmond and Danville, 222; do. W. P., 261½; do. 6s, 106½; Rome, Watertown and Ogdensburg, 20; do. consol. 91; St. St. Louis, Alton and Terre Haute dividend bonds, 50½; St. Louis and San Francisco 2d, Class B, 89¾; do. C, 88; Scioto Valley 1st, 102; St. Paul and Duluth, 26; do. pref., 71; St. Paul, Minneapolis and Manitoba, 106; do. 1st, 109; do. 2d, 105½; do. 1st, Dakota Ext., 106; St. Louis, Iron Mountain and Southern, Arkansas Branch 1st, 108; do. Cairo, Arkansas and Texas 1st, 108¾; Southern Pacific of California 1st, 104¼; St. Paul and Sioux City 1st, 112½; Toledo Delphos and Burlington, 10½; do. inc., 20; Texas and Pacific, 43¼; do. inc. L. G., 64; do. 1st, 108½; do. Rio Grande div. 1st, 80; Toledo, Peoria and Western 1st, 111; Utah Southern Gen'l mort. 7s, 106½; Wabash, St. Louis and Pacific Gen'l mort. 6s, 85½; do. do. Chicago div. 1s, 86; do. Iowa div. 1st, 92; Winona and St. Peter 1st, 109¼; Arkansas 6s, fund.. 32; Alabama, Class A, 80¾; do. C, 85; Missouri 6s, 1888, 109½; do. 6s, H. & St. J. issue, 102; Louisiana consol. 7s, 66½; Tennessee 6s, old, 53; do. new, 53; Virginia 6s, def., 14; Am. Dist. Tel., 47; Colorado Coal and Iron, 41; do. 6s, 86; Consol. Coal, 31; Maryland Coal, 18½; New Central Coal, 17; Sutro Tunnel, ¾; Caribou, 2; Central, 1⅛; Little Pittsburg, 1⅞; Robinson, 2⅜; Standard, 17.

Philadelphia.—Am. S. S. Co. 6s, 107½; Belvidere Delaware 3d, 105; Central Transportation, 36; Huntingdon and Broad Top Mt. consol. 5s, 89; Morris Canal pref., 169; Nesquehoning Valley, 57½; New Orleans Pacific 6s, 91¼; Philadelphia and Reading scrip, 84; Philadelphia City 6s, old, 1883, 101½; do. 1889, 112; do. 1890, 113½; do. 1892, 114½; do. 6s, new, 1889, 119; do. 1895, 126; do. 1898, 126; do. 1902, 130; do. 4s, 112; Philadelphia, Germantown and Norristown, 106½; Pennsylvania Co. 4½s, 98; Susquehanna Canal pref. 6s, 75; Steubenville and Indiana 9s, A. & O., 104; St. Paul and Duluth pref., 70; Sunbury, Hazleton and Wilkesbarre 1st, 5s, 95; Texas and Pacific 1st, 107; West Jersey and Atlantic 6s, 111½. The latest quotations are: City 6s, 118@118; do. free of tax, 125@130; do. 4s, new, 102@113; Pennsylvania State 6s, 3d series, 100¼@101; do. 5s, new loan, 116¼@117; do. 4s, old, 110@112; do. 4s, new, 114@114½; Philadelphia and Reading R. R., 31@31⅛; do. consol. mort. 7s, reg., 125@—; do. mort. 6s, 119@120; do. gen'l mort. 6s, coupon, 96½@96¾; do. 7s, 1893, 120@120½; do. new, conv., 74@76; United New Jersey R. R. and Canal, 185½@186⅞; Buffalo, Pittsburg and Western, 18⅜@18½; Pittsburg, Titusville and Buffalo 7s, 94¾@96; Camden and Amboy mort. 6s, 1889, 113½@114¼; Pennsylvania R. R., 61@61½; do. general mort. 6s, coupon, 123½@124½; do. reg., 122½@123½; do. consol. mort. 6s, reg., 117½@118; Little Schuylkill R. R. 57@57½; Morris Canal, 65@69; do. pref., 166¾@169; Schuylkill Navigation, 5½@6; do. pref., 12½@13; do. 6s, 1882, 92@94; do. 1872,

107@108 ; Elmira and Williamsport pref., 58 @65 ; do. 6s, 115@—; do. 5s, 99@100; Lehigh Coal and Navigation, 43⅛@43⅜ ; do. 6s, 1884, 105@105½ ; do. R. R. loan, 116@118 ; do. Gold Loan, 111¾@112½ ; do. consol. 7s, 116½@117 ; Northern Pacific, 34¾@35½ ; do. pref., 73½@ 73⅝ ; North Pennsylvania, 63½@64¼ ; do. 6s, 105½@106½; do. 7s, 119@120; do. General mort. 7s, reg., 121@123 ; Philadelphia and Erie, 15⅞ @16½ ; do. 7s, 114@115 ; do. 5s, 105@106 ; Minehill, 61½@62 ; Catawissa, 17½@18½ ; do. pref., 54½@55½ ; do. new pref., 53@54½ ; do. 7s, 1900, 116½@— ; Lehigh Valley 62@62¼ ; do. 6s, coupon, 123¼@123¾ ; do. reg., 123@123½ ; do. 2d mort. 7s, 134@— ; do. consol. mort. 121½@122½; Fifth and Sixth streets (horse), 149 @150; Second and Third, 111@115; Thirteenth and Fifteenth, 75@80 ; Spruce and Pine, 45 @50 ; Green and Coates, 80@85; Chestnut and Walnut, 90@94 ; Germantown, 60@70; Union, 110@115 ; West Philadelphia, 107@109 ; People's 13@13¼ ; Continental, 100@103.

Baltimore.—Atlantic Coal, 1.05 ; Atlanta and Charlotte, 1st, 109½, do. inc., 98 ; Baltimore City 6s, 1890, 116 ; do. 6s, 1886, 107½ ; do. 6s, 1900, 128½ ; do. 5s, 1916, 121⅝ ; do. 5s, 1894, 114 ; do. 5s, 1900, 128 ; Baltimore and Ohio 2d pref., 121 ; Columbia and Greenville, 1st, 103¾ ; do. 2d, 93 ; Charlotte, Columbia and Augusta, 74¾ ; Maryland Defense 6s, 103½ ; North Carolina consol, 4s, 81 ; Ohio and Mississippi, Springfield div. 1st, 121¾ ; Parkersburg branch, 8 ; Richmond and Danville, gold bonds, 105¾ ; Richmond, York River and Chesapeake, 100 ; Virginia Midland, old 140 ; do. pref., 150 ; do. 1st mort., 115 ; do. 2d mort., 111 ; do. 5th mort., 98½ ; Virginia Black scrip, 33 ; do. Peelers, 39 ; do. Peelers coupons, 37½. The latest quotations are : Atlanta and Charlotte, 1st, 109⅛@109½ ; Baltimore and Ohio, 195@ 200 ; Baltimore City 6s, 1890, 116@116½ ; do. 1900,—128¾ ; 5s, 1884, 114@115½ ; do. 5s, 1916, 121½@122 ; Columbia and Greenville 1st, 103⅜ @ 03¾; Marietta and Cincinnati 1st, mort., 124¾@126 ; do. 2d, 105@105½ ; do. 3d, 56⅜ @56⅝ ; Northern Central 50@50¾ ; do. 6s, 1885, 105½@106 ; do. 6s, 1900, gold, 114@114¼ ; do. 6s, 1904, gold, 111½@112 ; do. 5s, 1926, 96¾ @97¼ ; Ohio and Mississippi, Springfield div., 1st, 121½@121¾ ; Pittsburg and Cornellsville, 7s, 120@121½ ; Virginia Midland 5th mort., 95⅛ @98 ; Virginia consols. 60⅝@61 ; do. 10.40s, 40@40½.

Boston.—Atlantic and Pacific 6s, inc., 25; Atchison, Topeka and Sante Fe, mort., 5s, 95 ; Boston Land, 7⅞ ; Boston Water Power, 5¾ ; Burlington and Missouri River in Nebraska 6s, non-exempt, 103 ; Chicago, Burlington and Quincy 5s, 1901, 102 ; do. 4s, Denver ext. 83½ ; Connecticut and Passumpsic Rivers R. R., 92 ; Cheshire R. R., 58 ; Connotton Valley, 7s, 17¾ ; do. 7s, 87 ; do. 7s, Straitsville div., 75 ; Central of Iowa, 34½ ; Detroit, Lansing and Northern pref., 112½ ; Flint and Pere Marquette, pref., 94; Iowa Falls and Sioux City, 82; Kansas City, Fort Scott and Gulf, 7s, 111½ ; Kansas City, Lawrence and Southern 5s, 105 ; Kansas City, St. Joseph and Council Bluffs 7s, 115½ ; Little Rock and Fort Smith, 59¾; do. 7s, 111 ; Louisiana and Missouri River, 13½ ; Marquette, Houghton and Ontonagon, 60 ; Massachusetts Central, 19; do. 6s, 92½; Maine Central, 42 ; Manchester and Lawrence, 166½; Mexican Central 7s, 80 ; do. blocks, new, 92; New York and New England 6s, 106⅞; New Mexico and Southern Pacific 7s, 113 ; Rutland, 3¾ ; do. pref., 24¾; Sonora, 23; do. 1st 7s, 85; Summit Branch, 13; Toledo, Delphos and Burlington, 5⅞ ; do. inc. 16; do. 6s, 52; do. 6s, Dayton dis., 15¾; S. E. div. 6s, 64¾; do. inc. 6s, 14¼; Union Stock Yard Co., 165; Wisconsin Central, 17; Allouez Mining Co., 2⅞; Atlantic, 13½; Brunswick Antimony, 14; Copper Harbor, 4½; Franklin, 11; Harshaw, 3¼; Huron, 2; National, 2⅛; Osceola, 32; Phœnix, 3½; Pewabic, 13¾; Ridge, 50c.; Silver Islet, 20½; Sullivan, 2⅛.

Cincinnati Iron Market.

OFFICE OF E. L. HARPER & CO.
Cincinnati, Feb. 14, 1882.

A STEADY even tone has characterized the market with a fair amount of business and no material alteration in value.

We quote as follows :

	No.		Mos.
FOUNDRY.			
Hanging Rock Charcoal	1 29	50@30 75	4
Strong Neutral Coke	1 27	00@28 00	4
American Scotch	1 26	50@27 50	4
GREY FORGE.			
Neutral Coke	25	50@26 50	4
Cold Short	24	00@25 00	4
CAR WHEEL AND MALLEABLE.			
Hanging Rock Cold Blast	36	00@38 00	4
" Warm Blast	30	00@32 00	4
Lake Superior 1 and 2	32	00@33 00	4
Lake Superior 3 to 6	34	00@36 00	4
Southern Car Wheel	36	00@40 00	4

Coal Mines in China.

THE opening of coal mines in China has been undertaken in two distinct places, one at Keelung, in the Island of Formosa, and the other at Kaiping, near Tientsin, in North China. The first, which is purely a Government affair, was undertaken in 1876, with the assistance of an English mining engineer, supported by a staff of eight or ten foreign workmen. The ordinary mining engines and apparatus in use at home are employed. Until recently, at all events, this has not been a great commercial success. Much complaint was at first made by the engineer of the difficulty in getting the consent of the superintending native officials to extra expenditure or alteration, even when he considered it imperative, but under a change of management things seem to work more smoothly. The want of a convenient place of embarkation is also a great drawback, and there has been at times a difficulty in getting native hewers in sufficient numbers to work the openings owing to the great mortality hat often prevailed. The output has, however, increased from 14,000 tons in 1878 to nearly 30,000 for the first six months of the current year, and with one or two more shafts it might be increased to 500 tons a day. The coal is of fairly good quality, and sells, taking large and small together, at $2.50 a ton, the cost of working being put down at $1.34 a ton. —*London Times.*

ITS chu chu to go ahead, and chu chu to back-'er.

MIKE, up on beingtold to leave his dirty hands in the basin, replied: "An phfat should I lave me hands in the basin fur: phat would I do without me hands ?"

The Coal Trade.

THE leading coal carrying companies make the following reports of their tonnage for the week ending February 4, and for the year to same date, compared with their respective amounts carried to the same time last year:

	Week.	1882.	1881.
Reading Railroad	145,610	1,361,336	1,103,148
Schuylkill Canal	.....	27,655	.....
Lehigh Valley	102,759	1,033,828	820,454
Delaware, Lackawanna and Western	73,891	342,976	311,151
Shamokin	19,173	86,959	88,441
Central R. R. of New Jersey	41,061	313,618	276,438
United R. R. of New Jersey	31,820	139,874	129,077
Pennsylvania Coal	17,759	83,561	81,337
Delaware and Hudson Canal	74,129	283,636	267,024
Huntingdon and Broad Top Mountain	12,647	58,521	42,074
Penn. and New York	23,472	261,160	205,334
Clearfield, Pa.	42,796	227,798	155,386

The total tonnage of anthracite coal from all the regions for the week ending February 4, as reported by the several carrying companies, amounted to 468,137 tons, against 403,994 tons in the corresponding week last year, an increase of 64,143 tons. The total amount of anthracite mined for the year is 2,124,943 tons, against 1,969,024 tons for the same period last year, an increase of 155,919 tons. The quantity of bituminous coal sent to market for the week amounted to 89,705 tons, against 59,068 tons in corresponding week last year, an increase of 30,637 tons. The total amount of bituminous mined for the year is 396,015 tons, against 295,096 tons for the corresponding period last year, an increase of 100,919 tons. The total tonnage of all kinds of coal for the week is 557,842 tons, against 463,062 tons in corresponding week last year, an increase of 94,780 tons, and the total tonnage for the coal year is 2,520,958 tons, against 2,264,120 tons to same date last year, an increase of 256,838 tons. The quantity of coal and coke carried over the Pennsylvania Railroad for the week ending February 4 was 206,480 tons, of which 154,154 tons were coal and 52,326 tons coke. The total tonnage for the year thus far has been 1,017,051 tons, of which 727,204 tons were coal and 289,847 tons coke. These figures embrace all the coal and coke carried over the road east and west. The shipments of bituminous coal from the mines of the Cumberland coal region during the week ended February 4 were 40,394 tons, and for the year to that date 191,083 tons an increase of 66,838 tons as compared with the corresponding period of 1881. The coal was carried to tidewater as follows : Baltimore and Ohio Railroad—week, 33,599 tons ; year, 156,865 tons ; increase compared with 1881, 49,449 tons. There were no shipments by canal. Pennsylvania Railroad—week, 6,632 tons ; year, 33,342 tons ; increase compared with 1881, 16,514 tons. The Reading Railroad shipment for last week, ending February 11, was 92,000 tons, of which 8,780 tons were sent to and 11,600 tons shipped from Port Richmond, and 12,750 tons sent to and 16,203 tons shipped from Elizabethport.—*Phil. Ledger, Feb.* 13.

AN old lady traveling in a car with her maid and her poodle was singing the latter's praise very loudly : "It's such a sweet creature—worth a world of human beings to me!" The cabby charged a treble fare. "No, no!" expostulated the old lady. "there is only myself and my maid." "And the dog, Ma'am. I've acted very fair, an' only set it down as ekal to one human."

Statement of the Public Debt of the United States, February 1, 1882,

DEBT BEARING INTEREST.

	Amount Outstanding.	Accrued Interest.
6 per cent loan, 1861-'81, continued at 3½ per ct.	$81,624,200 00	$238,070 58
6 per cent loan 1863-'81 continued at 3½ per ct	47,855,700 00	139,579 12
5 per cent funded loan of 1881	401,503,900 00	3,513,145 47
4½ per cent funded loan of 1891	250,000,000 00	1,875,000 00
4 per cent funded loan of 1907	738,788,750 00	2,462,629 00
4 per cent refunding certificates	559,100 00	1,863 67
3 per cent navy pension fund	14,000,000 00	35,000 00
Aggregate of debt bearing interest	$1,534,331,600 00	$8,265,287 84
Interest due and unpaid		1,953,060 31

DEBT ON WHICH INTEREST HAS CEASED SINCE MATURITY.

	Amount Outstanding.	Interest due & unpaid.
4 to 6 per cent. old debt, 1837.	$57,665 00	$64,174 81
5 per cent. Mexican indemnity stock, 1846	1,104 91	85 74
6 per cent. bonds, 1847	1,250 00	22 00
6 per cent. bounty land scrip, 1847	3,275 00	213 06
5 per cent. Texas indemnity bonds, 1850	20,000 00	2,945 00
5 per cent. bonds, of 1858	8,000 00	....
5 per cent. bonds, of 1860	10,000 00	600 00
6 per cent. 5-20 bonds, 1862, called	370,700 00	8,439 82
6 per cent. 5-20 bonds, June, 1864, called	58,650 00	170 95
6 per cent. 5-20 bonds, 1865, called	76,750 00	18,895 79
5 per cent. 10-40 bonds, 1864, called	472,400 00	110,073 76
6 per cent. Consol. bonds, 1865, called	407,800 00	15,650 92
6 per cent. Consol. bonds, 1867, called	1,097,550 00	204,112 15
per cent. Consol. bonds, 1868, called	298,950 00	23,759 12
6 per cent. loan, Feb. 8, 1861, matured Dec. 31, 1880	100,000 00	5,430 00
per cent. funded loan 1881, called	2,742,200 00	70,653 12
Oregon War Debt, March 2, 1881, matured July 1, 1881.	129,150 00	6,202 50
6 per cent loan of July 17 and Aug. 5, 1861, matured June 30, 1881	914,850 00	35,077 50
6 per cent loan of July 17 and Aug., 5 1861, continued at 3½ per cent, matured Dec. 24, 1881, and Jan. 29, 1882, called	6,316,150 00	29,530 06
6 per cent. loan of March 3, 1863, matured June 30, 1881.	268,650 00	7,093 50
1-10 to 6 per cent. Treasury notes, prior to 1846	82,525 35	2,668 06
1-10 to 6 per cent. Treasury notes, 1846	6,000 00	206 00
6 per ct. Treasury notes, 1847.	950 00	57 00
3 to 6 per cent. Treasury notes, 1857	1,700 00	99 00
6 per ct. Treasury notes, 1861.	3,000 00	364 50
7 3-10 per cent. 3 years' Treasury notes, 1861	16,300 00	1,104 43
5 per cent. 1 year notes, 1863.	43,085 00	2,166 35
5 per cent. 2 year notes, 1863.	34,200 00	1,729 80
6 per ct. compound interest notes, 1863-64	224,290 00	45,779 89
7 3-10 per cent. 3 years' Treasury notes, 1864-65	140,900 00	4,752 92
6per cent. certificates of indebtedness, 1862-63	4,000 00	253 48
4 to 6 per cent. temporary loan, 1864	2,960 00	244 19
per cent. certificates, called.	5,000 00	394 31
Aggregated of debt on which Interest has ceased since maturity	$13,920,005 26	$662,949 73

DEBT BEARING NO INTEREST.

Demand notes, 1861-62	$59,890 00	
Legal tender notes, 1862-63	346,681,016 00	
Certificates of Deposit	11,400,000 00	
Coin certificates, 1863	5,188,120 00	
Silver certificates, 1878	68,999,670 00	
Unclaimed interest		7,256 51
Fractional currency, 1862, 1863 and 1864 $15,445,427 67		
Less amount estimated as lost or destroyed, act of June, 21, 1879 8,375,934 00		
	7 069,493 67	
Aggregate of debt bearing no interest	$439,398,189 67	$7,256 51

RECAPITULATION.

	Amount Outstanding.	Interest.
Debt bearing interest in coin, viz:		
Bonds at 6 per cent., continued at 3½ per cent.	$129,479,900 00	
Bonds at 5 per cent, continued at 3½ per cent.	401,503,900 00	
Bonds at 4½ per cent.	250,000,000 00	
Bonds at 4 per cent.	738,788,700 00	
Refunding certificates	579,100 00	
Navy pension fund, 3 p.c	14,000,000 00	
	$1,534,331,600 00	$10,218,348 15
Debt on which interest has ceased since maturity.	13,920,005 26	662,949 73
Debt bearing no int., viz:		
Old demand and legal-tender notes	$346,740,906 00	
Certificates of deposit	11,400,000 00	
Coin & silver certificates.	74,187,790 00	
Fractional currency	7,069,493 67	
	$439,398,189 67	
Unclaimed interest		7,256 51
	$1,987,649,794 93	$10,888,554 39
Total debt, principal and interest to date, including interest due and unpaid	$1,998,538,349 32	

AMOUNT IN TREASURY.

Interest due and unpaid	$1,953,060 31
Debt on which interest has ceased	13,920,005 26
Interest thereon	662,949 73
Gold and silver certificates	74,187,790 00
U. S. notes held for redemption of certificates of deposit	11,400,000 00
Cash balance available February 1, 1882.	143,901,663 29
	$246,025,468.59
Debt, less am't in Treas'y Feb. 1, 1882	$1,765,491,717 09
Debt, less am't in Treasury Feb. 1, 1882	1,752,512,880 73
Decrease of debt during the month	$12 978,836 36
Decrease of debt since June 30, 1881	$88,085,931 25

BONDS ISSUED TO THE PACIFIC RAILROAD COMPANIES, INTEREST PAYABLE IN LAWFUL MONEY.

	Amount Outstanding.	Accrued Interests not paid.
Central Pacific bonds, 1862-64	$25,885,120 00	$129,425 60
Kansas Pacific bonds, 1862-64	6,303,000 00	31,515 00
Union Pacific bonds, 1862-64	27,236,512 00	136,182 56
Cent. Branch Union Pacific bonds, 1862-64	1,600,000 00	8,000 00
West'n Pacific Bonds, 1862.64	1,970,560 00	9,852 80
Sioux City & Pacific bonds, 1862-64	1,628,320 00	8,141 60
Totals	$64,623,512 00	$325,117 56

Interest paid by the United States, $53,405,977 38; interest repaid by transportation of mails, &c., $14,804,-021,94; interest repaid by cash payments: 5 per cent. net earnings, $655,198.87; balance of interest paid by United States, $37,946,756.57.

The foregoing is a correct statement of the public debt, as appears from the books and Treasurer's returns in the Department at the close of business, January 31, 1882.

CHARLES J. FOLGER,
Secretary of the Treasury.

CORRESPONDENCE.

[We pay no attention to communications unless the name and address of the writer is given, though the same will not be published if so requested. Names and addresses of correspondents will not be given to inquirers.]

Box 277, Worcester, Mass., Feb. 10, 1882.

Editor AMERICAN RAILROAD JOURNAL.

DEAR SIR:—

Can you tell me where we could probably find one or two second-hand narrow-gauge railroad cars, in good order?

Your early reply will oblige

Yours etc.,

GEO. E. HAPGOOD.

Treas. W. & S. R. R. Co.

A Street Car Which Carries Its Own Track.

A STREET car which carries its own track has been introduced into Chicago, by a company which claims to have a capital of $1,000,000, and whose object is to build 1,000 of these cars and place them upon the streets of that city. The car as described by the Chicago *Times*, is of the ordinary kind, and is mounted in the middle upon a truck which sits on four wheels, each about one foot in diameter. These wheels run around the inside of two steel tiers, each ten feet in diameter, and which rest upon the ground, and are held only to the car by a set of wheel-clamps. The car is designed to hold 50 people, and the owners claim that the more it carries the easier it runs. It will be stopped in the usual manner, and two horses will be required to pull it. The owners say they intend putting the cars upon the principal streets of the city, and placing the cash fare at 4 cents and selling 30 rides for $1.

Legal Notes.

PLEDGED RAILROAD STOCKS.

THE pledgee of stocks, in the absence of a specific agreement to the contrary, is entitled to transfer the stock into his own name. When so transferred the particular shares become indistinguishable from the great mass of other stock, and the pledger has no right to demand the return of any particular certificates. It is enough if the pledgee have at all times shares sufficient in number to answer the pledger's demand upon repayment of the loan.

Bill in equity filed in December, 1880, by W. W. Hubbell against Drexel & Co., to compel the transfer to the plaintiff of 1702 shares of Pennsylvania Railroad stock.

The portion of the decision which is of general interest is as follows:

"The allegation that the defendants procured a transfer of part of the stock to themselves, on the books of the company, immediately on receiving the certificates from him, is immaterial. It was plainly their right to do so. If he desired to avoid this he should have contracted accordingly. When thus transferred it was unnecessary and impossible to distinguish between these shares and others held by the defendants. It is of no consequence, therefore, that in selling stock they may have disposed of these particular shares. They at all times had in hand an amount greatly in excess of the shares received from the plaintiff, and were therefore constantly prepared to keep their contract with him. A share of stock is without "ear marks," and cannot therefore be distinguished, as has just been said, from others of the same corporation and issue. The certificates, bearing dates and numbers, are but evidence of title. On payment of his debt the plaintiff would have been entitled to a return of the number of shares which the defendants had received—nothing more. Such was the effect of his contract: Nourse v. Prime, 4 Johns. Ch. Rep. 490; Allen v. Dykers, 3 Hill, 593; Gilpin v. Howell, 5 Barr, 41."

Hubbell vs. Drexel et al, U. S. Circuit Court, Pa.—*Legal Intelligencer.*

AN improved car coupling has been patented by Mr. John Cochran, Jr., of Milwood, Mo. The car coupling is constructed with wide bumper heads, with two pair of links, a pair of pins, slotted sliding bars, connected with a pin of each pair, and pivoted lifting bars connected with the slotted sliding bars and swinging trip blocks, whereby the bars will be coupled automatically as they are run together.

Lights on Railroad Trains.

THE cause of the sudden conflagration on the Hudson River train at Spuyten Duyvil a few weeks ago has never been satisfactorily explained. We were told simultaneously with the news of the horror that the "stove" was the fatal factor in the disaster which brought a horrible death to so many unfortunate persons. This theory was so plausible that it was accepted almost without question. A more rigid inquiry into the circumstances surrounding the calamity leads to the suspicion that the kerosene lamp played a more important part in the catastrophe than has yet been given to the public. The instantaneousness of the flames cannot be accounted for on the stove theory, and there is only too much reason to suppose that the deathly oil reservoirs overhead were more fatal than the small furnaces below. The stove and the oil lamp on all our railroad lines are the products of the meanest kind of parsimony. On thousands of miles of the European railroads a safe and simple plan of railroad illumination is in use. The only reason why it has not been adopted here is that it would probably cost more money at the outset than the present wretched contrivances. It is, of course, idle to look for a reform so long as congresses and legislatures are elected and owned by the railroad corporations.—*N. Y. Herald.*

Wooden vs. Iron Beams.

SEVERAL novel features in building have been introduced in the construction of an eight story business house now in course of erection in this city by Mr. Vernon K. Stevenson. The tide of opinion in the fire department and among insurance companies having lately turned against iron beams, the owner has placed on his floors thick wooden beams one foot from centre to centre and filled the interstices with cement, thus forming a solid floor two feet in thickness, which he claims will resist the penetration of fire for several days, whereas, he says, "the iron beams would bend with the heat and fall out and the building cave in." The stairs are of slate; the walls three feet in thickness. The whole of the building is finished in cherry and California redwood, which has very much the appearance of mahogany. This attempt to utilize native instead of foreign wood seems to have succeeded very well.

Naptha as Fuel in Locomotives.

SOME experiments have been made of late, says the *Journal* of the London Society of Arts, by the administration of the Tsarkoe Selo Railway Company for burning naptha as fuel in locomotive engines. A tray of cast-iron is fitted in the ordinary fire-box of the engine over the bars, and above this tray is fixed a grating of wrought-iron pipes placed crosswise and perforated with a number of holes in the lower side. By means of a larger pipe these pipes communicate with a cylinder of tin in the tender of the locomotive. This cylinder is divided into two unequal compartments, one containing naptha and the other water. The flow of these liquids from the two compartments, into the funnel end of the pipe leading to the hollow grating in the fire-box is regulated by a valve. The water acts as a pulverizer, and separates the steam of naptha, bringing in this way a larger quantity of air in contact with the fuel, and so, it is said, causing more rapid combustion and increased heating power. The engine experimented upon gave excellent results, and the railway company have applied to the Government for authority to use this system of heating on train lines. The use of naptha in some parts of Russia will be more economical than either cool or wood.

The Excelsior Life Saving Car Coupling.

IMPROVEMENT in railroad cars during the past 20 years has been made in most every part with the exception of the Coupling, but recently inventors have given some attention to this portion of the car. The latest and best we have seen is "The Excelsior," which seems to us to be just the thing, and is another advance in the all important matter of improvement.



The old method of dropping a pin or bolt through two overlapping loops of iron, and which has caused many a hand, arm or body to pay the terrible tribute by being crushed, and the old process of uncoupling by "slacking up" is now entirely eradicated by The Excelsior. The action of the Coupling is automatic and in order to separate them it is only necessary to turn a rod running along the platform to the outside car, to which is attached a chain connected with the pin, or if on the top of the car the brakeman has only to turn a similar rod. The pin is constructed with a rudder or flange forming a quarter circle, which also forms a cover to the box, and precluding any possibility of dust, dirt or ice getting in the box or the coupling getting out of order, thus making it sure and certain in its workings. This coupling can be used on any car or any coupling box. It was patented in the U. S., Aug. 9, '81, and patents have been secured in the principal countries of Europe. It is now being tested on one of the principal roads and others will soon follow.

The Company is composed of gentleman of character and ability and will carry the work through successfully. The officers of the Company are as follows: James F. Wenman, President; Jordan L. Mott, Vice-President; Edward P. Barker, Secretary; James D. Fish, Treasurer; J. Hamilton Hunt, Gen'l Superintendent; Edward G. Hilton, Gen'l Manager.

Commerce of New York.

THE foreign imports at New York for the month of January were :—

	1880.	1881.	1882.
Ent. for cons.....	$20,094,865	$15,361.813	$22,225,385
Do. for warehousing	7,283,376	5,740,490	7,259,561
Free goods.....	12,643,875	10,259,629	10,276,143
Specie and bullion..	875,038	4,723,427	374,584
Total ent. at port....	$40,897,154	$36,085,359	$40,135,673
Withdrawn from warehouse.....	7,087,326	7,852,224	7,676,385

The foreign imports at New York for seven months ending January 31, were :

	1880.	1881.	1882.
Ent. for cons.....	$111,345,914	$117,044,725	$142,307,921
Do. warehouse....	42,581,638	51,198,571	45,029,925
Free goods.....	73,579,994	73,294,615	78,410,405
Specie and bullion.	79,618,209	75,317,963	26,662,882
Total ent. at port..	$307,125,755	$316,855,874	$292,411,133
Withdrawn from warehouse	43,457,614	60,763,735	56,993,579

The receipts for customs at New York were:

	1880.	1881.	1882.
July	9,329,895 17	13,360,394 37	14,186,452 05
Aug.....	10,562,138 82	14,492,361 87	23,323,511 57
Sep.....	11,790,902 26	12,856,636 10	19,711,063 96
Oct.....	10,952,554 48	10,574,333 53	30,980,174 12
Nov.....	8,460,050 08	9,079,082 36	44,153,630 18
Dec.....	8,175,540 13	9,230,734 57	97,510,972 74
Jan.....	11,960,677 78	10,572,559 15	13,387,515 96
Total...	$71,231,758 72	$80,166,101 95	$88,470,994 11

The exports from New York to foreign ports for the month of January, were :

	1880.	1881.	1882.
Dom. produce.....	$24,668,691	$28,526,320	$26,964,780
For. free goods.....	370,357	1,308,767	424,582
Do. dutiable.....	377,518	429,832	459,372
Specie and bullion...	819,919	1,034,514	1,270,441
Total exports.....	$26,236,485	$31,299,433	$29,119,175
Do. exclusive of specie.....	25,416.566	30,264,919	27,848,734

The exports from New York to foreign ports for seven months ending January 31, were :

	1880.	1881.	1882.
Dom. produce.....	$219,454,103	$244,202,820	$207,868,970
For. free goods.....	1,083,434	3,419,280	3,732,679
Do, dutiable.....	2,639,615	3,482,169	3,383,944
Specie and bullion.	4,152,985	5,683,915	7,541,490
Total exports.....	$227,330,137	$256,788,184	$222,527,083
Do. exclusive of specie.....	223,177,152	251,104,269	214,985,593

AT a meeting of the American Association o Window Glass Manufacturers lately in Washington, the product of the past year was reported to have been nearly 2,250,000 boxes, valued at about $6,000,000. The demand for consumption has taken the entire product.

New York, Jan. 30, 1882.

THE THIRTY-NINTH SEMI-ANNUAL CASH DIVIdend of the ILLINOIS CENTRAL RAILROAD COMPANY, being three and a half (3½) per cent on its capital stock, will be paid by the undersigned March 1, 1882, to shareholders as registered at the close of business on the 11th of February, after which and until the 4th day of March the transfer-books will be closed.

L. V. F. RANDOLPH, Treasurer.

PATENTS.

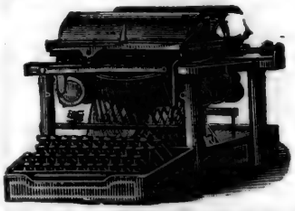
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Ten new 4ft. 8½in. or 5ft. Gauge Locomotives, June, July, and August delivery.
Two new Ladder Tank Locomotives, 3ft. Gauge, 10 tons, May and June delivery.
Second-hand Standard Gauge Locomotives and Passenger Cars, immediate delivery,
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New Passenger and Combination Cars, ft. Gauge, delivery 30 days.
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OFFICE: NO. 119 BROADWAY.

FIFTY-SEVENTH SEMI-ANNUAL STATEMENT,

Showing Condition of the Company on the 1st day of

JANUARY, 1882.

CASH CAPITAL	$3,000,000 00
Reserve for Unpaid Premiums	1,943,733 00
Reserve for Unpaid Losses	245,595 36
Net Surplus	1,806,180 90
CASH ASSETS	$6,995,509 26

Summary of Assets

Held in the United States available for the PAYMENT of LOSSES by FIRE, and for the protection of Policy Holders of FIRE INSURANCE.

Cash in Banks	$ 130,172 31
Bonds and Mortgages, being first lien on Real Estate [worth $3,600,750]	1,555,858 00
United States Stocks [market value]	4,079,500 00
Bank and Railroad Stocks and Bonds [market value]	664,625 00
State and Municipal Bonds [market value]	121,750 00
Loans on Stocks, payable on demand [market value of Collaterals, $341,507.50]	229,750 00
Interest due on 1st January, 1882	85,819 19
Premiums uncollected and in hands of Agents	80,635 08
Real Estate	47,399 68
Total	$6,995,509 26

J. H. WASHBURN, *Secretary.*
T. B. GREENE, } *Ass't Sec's.*
W. H. BIGELOW, }

CHAS. J. MARTIN, *President.*
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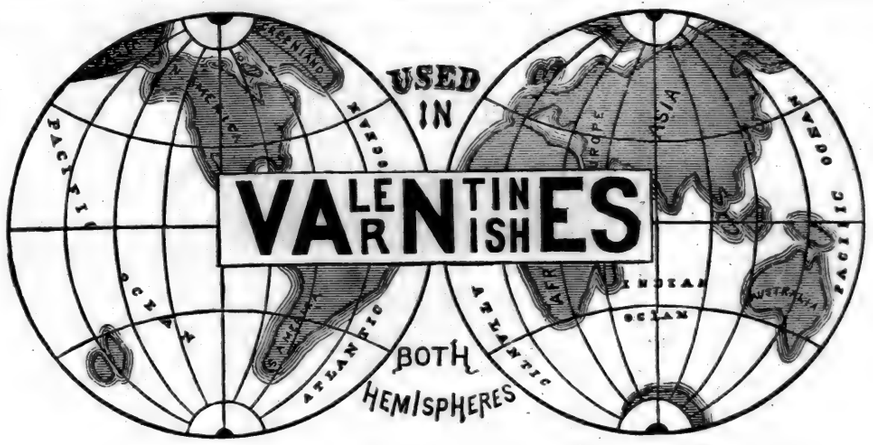
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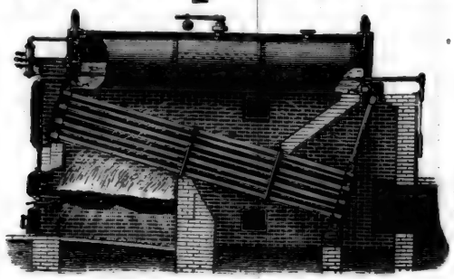
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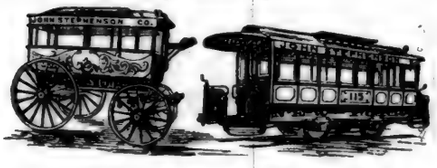
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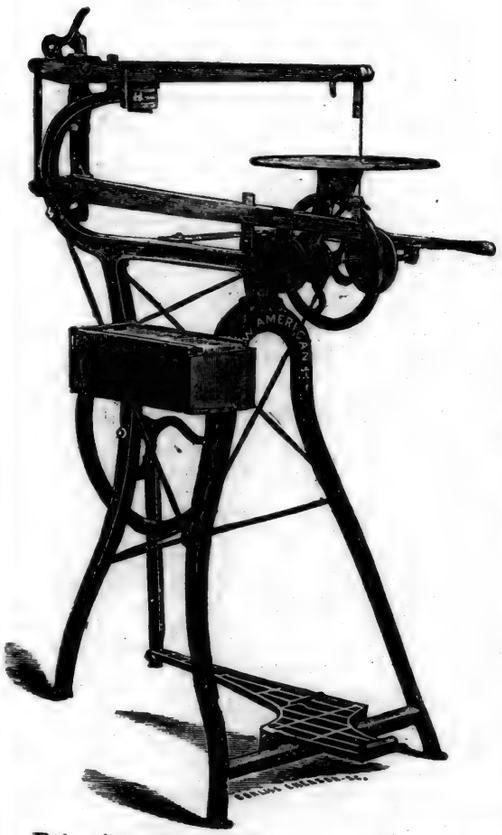
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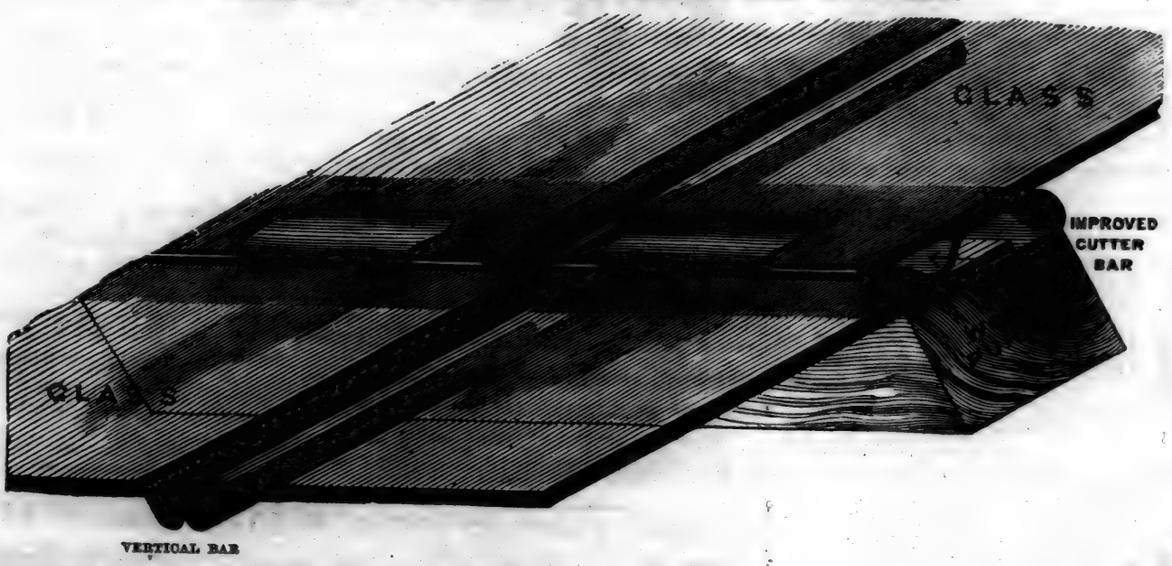
The principles of this method are the insertion of the glass in metal bars attached to the wood or iron work, and so arranged that the drip from condensation is carried off from the interior of the light by ingeniously contrived channels. Expansion and contraction are also provided for, and the great feature is the fact that all filling with either putty, felt, cement or solder is dispensed with, thus rendering the roof or skylight comparatively indestructible, and involving light expense in repair and maintenance. The work is rapidly and economically constructed, and as more light, greater durability and large saving in expense are obtained, the system is rapidly being adopted by numerous leading railways, manufacturers, etc., among which are the N. Y. C. & H. R. R. R.—the Buffalo depot having been glazed with this method—the N. Y., Pa. & Ohio R. R., Cleveland car shops, Flint and Pere Marquette R. R., etc., etc.; and the Yale Lock Manufacturing Co., Renfrew Manufacturing Co., Adams, Mass., Wm. Skinner & Son, Holyoke, Mass., Hamilton Web Co., Hamilton, R. I., The American Zylonite Co., Adams, Mass., and others.

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About Railroad Monarchs.

IN the London *Times* of the 31st we have a piece of characteristic writing, in the leading article, upon what the editor calls the railway monarchs of America—the Vanderbilts, Goulds, Garrets, Gowens, etc. The object seems to be to bring home to the British public that though the United States is a Republican country, its people to-day are dominated by a power which is imperial both as regards the territory and capital which it controls, with a corresponding influence as regards political importance. We quote:—

No potentate has ever wielded a chairman's sceptre here endowed with anything like the amplitude and splendor of the royal prerogatives which appertain to railway presidents in the United States. A representative character is always seen to belong to the rulers at English Railway Boards. They are not only elected, but elective. In the United States, a railway president, when once chosen, governs by a sort of right divine. At all events, he exacts passive obedience. Each administers his section of territory with absolute power. He signs treaties by which neighboring sovereigns bind themselves not to trespass. When they transgress what he construes to have been stipulated he retaliates. These illustrious personages do not court political honors. No chief of the State or party caucus would venture an invitation to them to accept office, which would be sure to be declined. They go about modestly among their fellow citizens as if they were ordinary men. Their names are seldom heard in Europe, unless they have yachting tastes or covet a famous picture. Yet they have one hand always on the throat of America and another on that of Europe. They decide at what price Europe shall eat and for what wages the vast American West shall plough. Fortunately, they have not soared to the sublime misanthropy of a Roman Cæsar; or, with their fingers at the common neck of both hemispheres, they might in a caprice doom the world to starve.

These meditations appear to have been inspired by an intuitive apprehension that the railroad war, which has now been brought to a conclusion, would be followed by another combination, which will deprive foreign consumers of food products of the low rates of transportation which were secured to them by the natural law of competition. The apprehension no doubt was created by the foreshadowing in London of the treaty of peace which was concluded in Commissioner Fink's office last week, the first effect of which was to advance the rates for east-bound freights. To this extent, no doubt, it was a decree "at what price shall Europe eat, and for what wages the vast American West shall plough." The "Thunderer" must not suppose, however, that the power thus exercised by the railway monarchs, tremendous as it is, is either hopelessly beyond restraint, or, in the nature of things, likely to be perpetual. For the time being, it occupies the attitude (always a perilous one) of an *imperium in imperio*. This is a position which necessarily places it on the defensive in a country where the people themselves, in theory at least, are supreme. Just in proportion as the American public comprehend precisely what that position implies with reference not only to commerce and trade in all their ramifications, but also to their political system, will be the popular demand for such legislative restraints as will restore the safe equilibrium between the railway sovereigns and the sovereign people. There are many manifestations of that demand even now, and he must be a very blind or a very deaf man that cannot see nor hear them. Under the combination system, which shuts out competition, this feeling bids fair to grow more and more intense. Hence, vast as the power of the railway monarch is, we have no apprehension that, difficult as it may be to manage with due regard to all the interests at stake, it will ever become wholly beyond control, if that is its disposition. In a thousand ways it has been and may still continue to be a power for good, as an instrument of national devolopment; and if in many ways it is also a power for evil, we think our transatlantic friends may be assured the common sense of the American people, in any event, will see to it that while the latter is judiciously restrained, the former shall neither be causelessly discouraged nor rendered inoperative by measures which may be devised in only panic or fear.—*Montreal Witness.*

Wonders of Simple Tools.

A COMPLICATED engine, like the common wood-worker, the printing-press, a compound lathe, or various forms of spinning and weaving machines, is really one of the most wonderful things in the world; most of such contrivances are the product of the combined thought, study, experience and ingenuity of generations and ages; yet some of the simplest tools, either in their construction or use, represent a degree of ingenuity and manual skill which is astonishing.

A common file is one of the simplest of tools to look at, and to a careless view one of the easiest to make. Files have been in use from the beginning, and rank with the hatchet and hammer in simplicity and usefulness. From the time the naked savage smoothed his arrow head with a bit of sharp gritted stone, and the handle of his club with a piece of dried fish skin, to these days of finely finished work, the race of man has employed some form of file to accomplish mechanical results. Yet the making of the hardened steel file which is now so universal requires a delicacy of touch and exactness of movement that is wonderful.

The diagonal cuts upon the sides of a common "three-cornered" file appear to the eye to be absolutely regular, uniform in their relative distance and alike in depth; the keenest vision is unable to detect any irregularity, and their cutting seems to be the work of the most delicate and accurate machine. A close scrutiny also shows that the cuts grow finer, closer and shallower by almost imperceptible degrees of variation as they approach the tapering point.

Upon the smaller files of the regular sizes there are more than two hundred of these parallel cuts to the inch, and in some of delicate make for special purposes, this degree of fineness is greatly exceeded.

Yet this wondrously delicate and accurate work is done, not by the aid of machines with minute micrometer screws and gauges, but with a simple hammer and chisel in the workman's hand. The advance of the chisel upon the blank at each cut of the two hundred and fiftieth part of an inch, neither more nor less, is regulated simply by the unaided sense of touch. The weight of the blow, also diminishing or increasing at each stroke by a fraction of an ounce as the cutting approaches or recedes from the point, is regulated solely by the judgment of the workman. All this is done without pause or hesitation to correct or readjust and with a rapidity which shows itself in the cheapness of the finished file.

File cutting is rendered still more delicate and difficult by the varying hardness of the same bit of steel at different points in its surface, which would cause blows of equal force to make cuts of varying depth and width. This unequal hardness must be perceived as the cutting progresses and allowance must be made for it all through the operation.

Doubtless all this seems easy enough to the practiced file cutter, and he does his work without even thinking of these difficulties. Yet the education of hand, nerve and brain to such a perfection of movement is certainly a most wonderful illustration of perfection attained in the use of tools. For more than one hundred

years efforts have been made to cut files by machinery with only partial and moderate success, the process, simple as it appears, being too delicate for less perfect instruments than the human hand and brain.

Analysis of Iron.

In the hearing before the Mechanical Engineer yesterday, Prof. George Hays, the analytical chemist and expert of Alleghany, testified that he had from time to time made analyses of pieces of iron taken from the engines which he tested. Six specimens were examined. He tried them to detect the more deleterious foreign substances. Those discovered were silicon, phosphorous and sulphur.

One sample tested showed 3.007 parts of silicon; 7.081 of phosphorus, and 0.175 per cent of sulphur. Another sample showed 3.08 of silicon; 6.38 of phosphorus. The third sample showed 3.2 of silicon; 7.719 of phosphorus. The fourth sample, silicon, 3.932; phosphorus, 6.86. Fifth sample, silicon, 2.65; phosphorus, 5.29. Sixth sample, silicon, 2.93; phosphorus, 6.39. There was an average of 0.75 per cent of sulphur in each sample tested. Sulphur has a tendency to make cold iron brittle and short. It gives a cracking tendency to it. When the iron is hot silicon will cause it to crack on being strained or struck. Thus it is brittle when either hot or cold. There is no pure iron, but good iron should not contain more than 1 per cent of silicon, 0.1 per cent phosphorus, and of sulphur must not contain more than 0.02 per cent.

Phosphorus and sulphur are different in their agency, one injuring when hot, the other when cold. They are never neutral to each other, and in no condition or under no circumstances are they harmless, but, on the contrary, are exceedingly deleterious. Sulphur, when present in large quantities, will make iron liable to crack even when the casting is cooling. The fuel has an effect upon the iron, and when either silicon or sulphur is present in it, they will impregnate the iron to an extent in proportion as they obtain in the fuel. If there was more sulphur and sulphuric acid the result would be a large presence of sulphur in the product. Charcoal is the best fuel obtainable at the present time. There are ways to make more than 1 per cent of silicon, 0.1 per cent phosphorus, and of sulphur must not contain iron whereby much deleterious substance can be avoided.

Telegraphing to and from a Moving Train.

The Santa Barbara (Cal.) *Press* says that a patent was issued on the 27th of September last to a resident of that town for a method of telegraphing from a moving railroad car. The invention enables each freight or passenger train to have its own telegraph office. Two wires are required instead of one, and these are suspended directly over the track and above the moving train. They are parallel and about eighteen inches apart. One wire is connected with a battery at the station from which the train starts, and the other with a battery at the terminal station. They are so suspended that by a somewhat ingenious arrangement light-running wheels can run along them from one end of the road to the other. The wheels are insulated from each other, but are connected with wires that pass down the roof of the car to the operating instrument, and through it complete to the circuit. As the car moves the wheels are drawn along on the wires just above it, and a constant current of electricity is maintained between the initial and terminal stations through the moving car.

Without attempting to enumerate the advantages of the invention, some of the more obvious may be mentioned. All train reports and all orders from train dispatchers will be communicated directly to the conductor and engineer while the train is in motion. Passengers can receive and transmit messages at any moment during their journey without any of the inconveniences now experienced. Directors and distinguished parties traveling in their own private cars will find it especially convenient to have a telegraph office constantly at hand. But the one great value of the invention, after all, will be its preservation of life and property by preventing collisions.

Trunk Line Commission Hearings.

At a meeting of the new Trunk-Line Commission recently held in this city it was decided that the following days should be fixed for the hearing of commercial bodies desiring to submit to the commission their views upon the adjustment of rates to the seaboard cities: Those of New York will be heard on March 6 and the rest of that week at New York; those of Philadelphia, in Philadelphia, March 13 and the rest of that week, and those of Baltimore, March 20 and the rest of that week at Baltimore. If the hearing of these bodies requires extra time, it will be given. The arranging of places for the hearings was left to the commissioner of the trunk lines. The commission will hear bodies in any other seaboard city and in the West, if they signify to Commissioner Fink in New York their desire to be heard before March 20.

Accidents from "Frogs."

"It is surprising," says the report of the Railroad Commissioner of Michigan for 1881, "that in view of the number of lives that are crushed out every year, by employes being caught in frogs, that some device has not been adopted to render them less dangerous; They are the very jaws of death. An employe once caught within their embrace, as a train is moving upon him, has little hope of escape. The last legislature passed a bill upon this subject, requiring railroad companies to block the points of danger, which, upon a full investigation, was deemed impracticable, and it failed to become a law. It would seem that some method could be adopted to prevent the foot being caught which would be practicable, and not interfere with the full use of the switch. I do most earnestly urge upon the railroad companies the attempt at least to devise some such system. Humanity demands it. It will not do to say that employes should not go between cars when they are in motion for the purpose of coupling, and therefore no remedy should be devised. The accident does not always occur in coupling, and although in coupling, the cars to be connected may be standing still, the cars moving toward them may come with such motion as to cause the brakeman to be caught in the frog. The stick which is adopted by some roads does not remedy the evil, for frequently the difficulty in coupling is such that there is no other way than to pass between the cars. There is no question but that the frog in its present condition without some guard is barbarous. I hope some action will be taken to remedy it. If the railroad companies will not, the legislature should."

Sierra Nevada and Consolidated Imperial Mining Company.

A statement was recently made that $93,000 of the $100,000 levied by the Sierra Nevada Mining Company on the 29th Dec., and which became delinquent at the office Feb. 1, had been paid, leaving only $7,000 to go into the delinquent list. This is a good showing for any mine at any time. It is particularly good at this time, and is especially noteworthy in the case of the Sierra Nevada Mining Company, which has made such frequent and heavy drafts on the patience and purses of stockholders during the past three or four years. During the four years ending May 1, 1881, this company levied twenty assessments aggregating $2,750,000. Since then, including the pending assessment, it has levied four more, each one being $100,000, making twenty-four since May 1, 1877, the whole aggregating $3,150,000, all of which has been paid out for labor and other expenses, together with the value of the bullion produced during the interval. It must have cost nearly $5,000,000 to have kept the Sierra Nevada Mine in operation during the past five years. All the assessments levied in these days are not paid so promptly. An illustration of this is found in the Consolidated Imperial. This company levied an assessment of 10 cents per share on the 4th of January. There are 500,000 shares in the capital stock, which is the largest number of any mine on the Comstock Lode, except the California and Consolidated Virginia. This assessment became delinquent at the office yesterday, and the delinquent list is published in a morning paper, filling nearly five of the long columns of that paper. This shows great delay in the payment of the assessment, if not absolute refusal on the part of very many of the stockholders. In fact, there is not much encouragement to pay up. The stock has been selling of late, in a limited way, at 5 cents per share. After the assessment became delinquent there was one sale recorded at 15 cents, but yesterday the assessment-paid stock was sold for 10 cents, or just the price of the assessment. Unless there is some change for the better very soon, it is feared that a large portion of the stock will be forfeited to the company for non-payment of the assessment.—*San Francisco Bulletin.*

A lady, stepping into a railway car, said to her little son, "Aren't you going to kiss your mother before you go?" The little rogue couldn't wait, and called out, "Conductor, won't you kiss mother for me?"

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AT the annual meeting of the AMERICAN RAILROAD JOURNAL CO., held at the office of the Company, No. 284 Pearl street, New York, February 8, the following officers were elected:

GEO. F. SWAIN, *President.*
S. PROCTOR THAYER, *Vice-President.*
EDW. A. WRIGHT, *Treasurer.*
CHAS. T. VALENTINE, *Secretary.*

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THE MONEY MARKET.

IT is easy for a child to look at a cloud no bigger than a man's hand as it begins to form in the sky. There is a certain sense of pleasure in watching the lightning's play, and hearing the low rumblings of the thunder when the cloud is far removed. But when the cloud in its onward march comes so near as to roof the head, and darkness covers the spot as with a pall, and the lightnings flash into the eye, and the thunders roar angrily into the ear, and the rain falls in torrents as if to deluge, then the child with a sharp cry of terror flies for safety to mother's arms. When next the child at play sees the little speck, he will not wait for the storm cloud to gather over him, but will run for refuge until the storm is over and the sun shines again. Men are but children of a larger growth, and yet, as men, do not always manifest the corresponding proportion of wisdom shown by children. There are men in the business world who many years ago watched the little speck no larger than a man's hand in the money market; and, beguiled by the fascination, kept from under cover until the storm burst upon them in all its fury, and when they reached cover it was with wet and soiled garments. Some of these men have displayed the commendable wisdom of childhood, and whenever they have seen the small cloud arise, have hastily placed themselves in a position of safety. There are other men, however—and these last are in the great majority—who never profit by experience, but each recurring storm finds them exposed, and in consequence they are broken by the blast, and in being broken break and pull down others.

It is well at this time, when apparently we are in no immediate danger, to utter the warning cry that the speck no larger than a man's hand has already appeared in the sky.

A number of specks floating in the sky will be attracted toward one another and form the cloud. A number of clouds in the sky will be attracted to one another, and, forming a pall, will cover the earth, hiding from human sight all above and beyond.

The principle that can be applied in one department is never found to be out of place or in opposition to any principle in some other department. Principles always run in parallel lines and never cross one another. Now the speck in the money market which has been gathering to itself other specks, which, when enough are added will form a cloud, is the abundance of currency experienced last summer. This abundance made consequently low rates, and parties whose credit would pass could not resist the temptation to borrow for the sake of making a lucky venture. We therefore have a feature in the money market to-day which is ominous of evil. The money not needed in regular business channels last summer found an outlet in speculation. Some of it went into the grain speculation out West and has not been withdrawn. Some parties who had not more to send after that they had already placed have been obliged to suspend or fail, and the outlook is that other failures must follow.

This grain speculation does not stand alone, though given the first prominence because occupying public attention at the present time. There is another speculation the hidden history of which has not yet been written. We have reference to the speculation in mining stocks. As we look over the list reported in the daily papers we notice a large majority which do not pay dividends. People buy them in the hope that a bonanza may be their portion. The number of shares sold precludes the possibility that the purchasers have paid for them with their own money. The truth is almost self-evident that much borrowed money has entered into these purchases and the lenders are holding the stock as security. The time must come when these loans must be paid, and the borrower, unable to realize on his stock, will be unable to pay; and the lender, selling out the stock to satisfy his claim, will learn that his securities are no more valuable than paper sold at so many cents per pound. When this takes place the market for business notes will be disturbed. It is safe to state that a large per cent of the business notes regularly bought and sold are but renewals. Here is a firm doing a business requiring a million dollars, having but a few hundred thousand dollars capital of their own. They place on the market their six months' notes to the amount of five hundred thousand dollars in monthly installments of a hundred thousand dollars each. At the end of the fifth month they have the whole amount placed. During the sixth month they issue another hundred thousand dollars worth to take up the hundred thousand falling due; and so on, month by month. They never reduce this floating indebtedness, content to pay the market rate for discount and the one-fourth per cent commission to the brokers. Tighten the money market by a break in a grain speculation, or a falling out of the bottom of stocks held as securities, and these merchants are going to find it hard work to replace their old notes with new ones. The lenders need the money themselves. The speck no bigger than a man's hand was the low rate of interest last summer because of the abundance of money, and it has already attracted to itself the other specks of grain speculation, gambling in mining stocks, and an undue expansion of business on borrowed money. How many more specks are necessary in order to make a cloud, no man can foretell. The wise man, however, will see these and get under cover while he is safe.

THE NEW TRUNK-LINE COMMISSION.

THE railroad war that has raged for the past seven months seems to be settled at last. Under the new arrangement both tonnage and money receipts are pooled and divided by a commission chosen by the great trunk lines. With this commission each road deposits a fixed sum of money as a penalty to be forfeited in case of the violation of the agreement. A new feature is the power given to the commission to give judgment against an offending member of this voluntary association and a modification of the clearing-house system, by which the due proportion of the business will be given to each road, may be expected. An effort will also be made to cut off the numerous freight agencies, by which competition has been ruinously stimulated.

The commission as selected by Albert Fink, the so-called commissioner of the railroad trunk lines, is beyond praise. Probably no private citizen of the United States ever had to make appointments of such importance; and although it may seem strange that he should let the Empire State go unrepresented, the wisdom of his choice, cannot be questioned.

The men appointed are Judge T. M. Cooley, of Michigan, the well-known authority on constitutional law, ex-Senator Thurman, of Ohio, and Elihu B. Washburne, of Illinois. This commission, which takes a presidential candidate from each political party, would seem to be able to settle all disputes between railroad companies.

The appointment of this commission might be instanced as example of the inadequateness of our whole judicial system, when interests of such magnitude are frightened at the "law's delays" and establish their own tribunal. When a Justice of the Supreme Court of the United States who has been physically unable to sit upon the bench for two years past insists upon being pensioned before he will resign, although the court is several years behind with its cases, then it chooses those who can afford it to make courts of their own. The appointment of the commission is a far more creditable exhibition, considered as an indication of the capacity of our people for self-government. When great corporations representing enormous aggregates of capital voluntarily entrust the settlement of their disputes to a tribunal of their own choice the spectacle is an impressive one.

Although the new commission will compare favorably with our Supreme Court at Washington, its jurisdiction is practically confined to matters in dispute between railroads themselves. It does not take cognizance of a multitude of important questions arising between private citizens and railroad corporations. Through rates are to be considered; but is there no tribunal to inquire why "human life is so cheap" upon railroads? As long as it is cheaper to hire new brakemen to replace those killed than to adopt new appliances, there are some railroads that will take little or no precautions until compelled to do so. State railroad commissioners, with reasonable, not oppressive, authority are needed in every State in the Union, and the sooner such boards are created in States without them the better it will be for railroads and citizens alike.

It is worth while, in this connection, to examine the relation which has existed during the past seven months between cost of transportation from the interior to the seaboard and the price of provisions at Eastern ports. According to the theory of the anti-monopolists this reduction of freights ought to have been of great advantage to producer and consumer. But the trade returns of the country show that our sales of breadstuffs and other great staples have greatly fallen off during this period of low freight rates. During the first three months of 1881 the domestic export increased over that of the previous year, during the summer it was nearly stationary, but in the last four months of the year it fell off $61,000,000, so that the comparison of our international commerce with 1880 stands as follows:—

	1881.	1880.
Exports	$883,514,129	$889,683,422
Imports	670,117,903	696,807,176
Balance	$163,396,222	$192,876,246

Short crops have had something to do with this decline in exports, and wild speculation a great deal more, but the fact remains that the cost of transportation is not the sole factor but one of many elements to be reckoned in controlling the foreign market, and the price even at eastern ports.

ATLANTIC AND PACIFIC RAILROAD.

THE Atlantic and Pacific Railroad Company was organized under an act of Congress passed in 1866 to construct a road from the southwest corner of Missouri to the Pacific Ocean, along the 35th parallel of latitude. Authority was given to the Southern Pacific Railroad to build the San Francisco end in California, the meeting point being designated at the Colorado River. The Southern Pacific was a California corporation; and the Southwest Pacific, a Missouri corporation, was expected to form the St. Louis connection so that it provided for a line between St. Louis and San Francisco composed of three links, the central one over the Territories being a United States corporation. The Atlantic and Pacific was consolidated with the Missouri company, and after leasing the Missouri Pacific seems to have gotten into trouble, so that the Missouri end of the line was sold out and re-organized. About this time the Atchison, Topeka and Santa Fe, a Kansas corporation with abundant ambition and designs in California and Mexico, seems to have entertained the idea of strangling the Atlantic and Pacific as a competitor and diverting it from its original purpose so as to become a mere feeder and extension of its own line from the Rio Grande into San Francisco. A very curious agreement was entered into between the Kansas company and the Missouri companies to divide the ownership of the Atlantic and Pacific evenly between them, the precise consideration for which is not apparent. One feature of the transaction is noticeable: it was stipulated that the Atlantic and Pacific west of its intersection with the Santa Fe road near Albuquerque should be completed at once as far as the Pacific Ocean, at the joint expense of the two companies, and that it should be worked under a traffic agreement for thirty years; at the same time making the building of the portion east of Albuquerque conditional upon the consent of both companies. This was, in effect, tying up the longer eastern portion of the road so as to allow the business of the western portion, including the overland traffic, to be diverted to its rival; and in practice it resulted in taking away the greater part of the benefit from the St. Louis end of the line, although it was equally sustaining the obligations of construction.

Some suspicion of the inequity of this trade seems to have dawned upon the St. Louis owners, but to all their appeals and protestations the Santa Fe company turned a deaf ear, or pointed to the terms of the agreement. In this dilemma the large stockholders offered to the owners of the Santa Fe to either buy out or sell out the other half of the Atlantic and Pacific, as harmony was no longer possible. The Santa Fe people, whose headquarters is in Boston, would do neither—nothing would satisfy them but the pound of flesh bargained for—expecting doubtless to make better terms.

The St. Louis company, whose headquarters is in New York, do not seem to have been shut up to this alternative: for though they could not dispose of their half interest in the Atlantic and Pacific to outsiders, they could sell the controlling interest in their own road—the St. Louis and San Francisco. Messrs. Gould and Huntington became the purchasers, and the Boston parties were taken by surprise. The Boston papers announce—and we see the St. Louis journals echo without reflection the statement—that the terms of the agreement made some years since will be carried out. This, we venture to say, is extremely improbable, so far as concerns the extension between Albuquerque and San Francisco. It is doubtless true that the southern branch to Ft. Smith, Ark., will be completed and the right to continue on down to Texas procured, but not to connect with the Texas Central, as was originally contemplated. We hear it stated that Mr. Huntington will demand that the contracts of the company he now in part directs shall be modified so as to conform to the requirements of the acts of Congress, to justice, and to good sense. The Southern Pacific will complete the line from near Tehachapa Pass to the Colorado River, some 300 miles, and will insist that the Atlantic and Pacific shall, after meeting there, stop. This is all the law calls for, and it would be a great waste of money to parallel 650 miles of the Southern Pacific for no other purpose than to carry out this designing scheme of the Santa Fe company. There are too many great corporations concerned in seeing the balance of power kept undisturbed to permit this to be done; and ti is safe to predict that the Boston party will

find some terms for settlement, as they have all to lose and nothing to gain by protracted litigation.

THE CENTRAL RAILROAD OF NEW JERSEY.

AN interesting contest is pending for the control of the Central Railroad of New Jersey, in which several larger concerns are participants. Among the persons may be mentioned Mr. Gowen, of the Philadelphia and Reading, Mr. Garrett, of the Baltimore and Ohio, Mr. Vanderbilt, of the New York Central and Hudson River, Mr. Roberts, of the Pennsylvania, Mr. Gould, of the Wabash, St. Louis and Pacific, Messrs. Taylor and Sloan, of the Delaware, Lackawanna and Western, and the party behind the receiver, who are, in a sense, in possession, and which consists of Messrs. F. S. Lathrop, J. T. Johnston, F. T. Frelinghuysen, J. S. Kennedy, and a few others. The situation is as interesting to the railroad strategist as to the public. The Central Railroad of New Jersey as it stands to-day is not much of itself, nor of great extent even with its branches and controlled lines, but its position is one of great importance. Although it is essentially only a coal road between New York Bay and the anthracite regions, with a more or less valuable local suburban travel in addition, it enjoys absolutely the finest water front of any of the great roads centering in New York. Besides this it forms part of a short line not much used to Philadelphia; also of a line not at all used to the Southwest via Allentown and Harrisburg; also of a line but little used to the Northwest via Elmira and Buffalo, and what is and must be the best line to the Jersey shore summer resorts, of which Long Branch is chief. In a word, the Central of New Jersey, by its terminal on New York Bay, by its stem end lying across the State of New Jersey along the line separating the mountainous from the flat part, and by its extension into the coal-fields, is in an admirable position to become the trunk-line of a great system of inland transportation, if it is not to become absorbed in some other and stronger system. The struggle promises to become intense; and as the forces are so powerful and evenly balanced that no one can overcome all the rest, it may result in a continuance of the deadlock and harmless neutrality, much like the position of Holland or Belgium among their colossal European neighbors.

Before glancing at the several things which may happen in future, it may be well to turn and see what has been done, or rather failed to be done, in the past. Never was there a property of the size and capabilities which suffered so much from incompetent and feeble management. To go no further back than to the close of the war, when it had acquired its grant of riparian rights on the Jersey shore of the Hudson, there have been several things which ought to have been done which were not done, and some done which should have been omitted. The following, among many, may be noticed. At that time the Lehigh Valley railroad formed the coal-field connection; instead of consolidation with that road, of which the late Mr. Packer was owner, his overtures were rejected, and the result has been a duplication of the Lehigh Valley north of Easton, the two roads lying side by side on the opposite bank of a narrow stream. As might have been anticipated Mr. Packer met this move with a duplication of the Central line south of Easton, the freight tracks being laid via Bound Brook to Amboy, the Pennsylvania being used for New York business. Similarly the Delaware and Lackawanna then used the Central for its New York traffic, which was large. Here, again, offers for consolidation were refused, and another great coal company driven to a lease of the Morris and Essex, and the construction of a low grade road to Hoboken. Both of these great interests might have been united with the Central. Instead of being repulsed they should have been foreseen and promoted by its mangers, if the officers can be so called.

Still later, when the Pennsylvania took in the Camden and Amboy system at a rental of ten per cent upon the capital, and allowance for betterments, thus depriving the Allentown line of through traffic (short line) instead of securing the then feeble line between Allentown, Reading and Harrisburg, and prolonging them to Hagerstown or Pittsburg, the Central directors allowed these lines to go into the hands of the Philadelphia and Reading. Again, when the Philadelphia parties controlling the North Pennsylvania, proposed to use it as part of a line to New York, by building the Bound Brook connection, instead of seizing that link, or uniting the whole three interests, they manifested indifference, and the line was built by Philadelphians and ultimately passed under the control of the Reading Company. What wonder that President Gowen desired to either possess this New Jersey connection or have it pass into the hands of those who knew how to put it to some appropriate use!

Within two years President Garrett of the Baltimore and Ohio Railroad, finding an independent entrance to New York a necessity, abandoned the Pennsylvania route and started a through line over the Central and Reading Bound Brook route. All through this contest the officers of the Central have acted as if they feared the Pennsylvania, and dared not enter into any alliance which might provoke it, although it was at the same time opposing them at many points, and notably their attempt to build a bridge across to Jersey City. In short, Mr. Garrett was not supported, and to this may be in part attributed his subsequent loss of the Philadelphia, Wilmington and Baltimore line, which the Central and Baltimore and Ohio together could have paralleled if they could not buy.

Nor was the administration of its local affairs any improvement on that of its foreign relations. Its 500 acres of unrivalled terminal were allowed to lie comparatively unused when dock privileges were scarce and high; with ample room its terminal structures are shabby old sheds, while its alignment is open to great improvement so as to render its operation more safe, speedy and efficient. For example, by the easy construction of a cheap line across the salt meadows between Elizabeth and the head of Newark Bay a more direct through route for its passengers might have been had, having Newark as one of its stations, and thus have delivered back blows at its rivals. Whether it was supineness, stupidity, or the presence in its board of persons who were also officers of, and under obligations to, the Pennsylvania need not be discussed: the Central's career has been one of lost opportunities and failures. Nevertheless its magnificent water front remains, and something might yet be done for the property with a change of managers. Some of the lost ground never can be regained: let us see what remains now to do.

First of all we set down the proposition, at one time formed, of making the Central the New York approach of the Wabash and Pacific system, as a barren one, which might as well be abandoned. The Wabash points towards Buffalo, and Mr. Gould has as much interest in the Lackawanna extension to the latter point as he has in the Central, if his ownership in either at a particular moment should mean anything. Mr. Garrett wants the Central as a part of his Baltimore and Ohio system, for which it has many attractions, but he requires the consent of the Reading to the portion between Bound Brook and Philadelphia, or between Allentown and Hagerstown, which neither Mr. Gould nor Mr. Vanderbilt will favor. This, then, may be dismissed also, at present, as too many adverse interests oppose. Mr. Garrett having to build half the distance between Philadelphia and New York, may as well build across New Jersey also, and in arriving at the Hudson will find the Lehigh Valley Company with a shore privilege almost equal to that he now covets. As to the Reading designs, it is quite clear that the two systems touch and compete at several points; there is no great disparity in their financial conditions, and they can be worked together. The Lehigh Valley, however, intervenes and ought for obvious reasons to be included in any new combination.

A confederation of these three properties, on terms of equity, would present a formidable front, and ought to be attempted in order to avoid serious complications. The extension of the Lehigh Valley beyond Elmira affords the New York Central the connection it desires to the coal regions and Philadelphia. The Harrisburg and Hagerstown branch would suffice at present for the Baltimore and Ohio purposes. A southern prolongation from Wilmington to Baltimore, under the same auspices, would complete the circle of defences. It is doubtful if the present incumbents have either the sagacity or nerve to bring this about, and it remains to be seen whether they can be dislodged from their position where they can prevent others from doing the good they are unable or unwilling themselves to undertake. Mr. Gould, Mr. Keene, Mr. Garrett, or Mr. Gowen might do something with the property, but the old set evidently are equal to nothing but inertia.

"I HAVE heard," said Gus De Smith to Mose Schumburg, "that the fellow who stole your money and ran off with it has been killed in Colorado. He has certainly gone to Hades. You had ought to be glad." "I would pe much more glad ven I got my money pack," responded Mose; "it don't do me no good ven dot tam rascal goes to dot blace, ven I have to pay his traveling expenses outen my own pocket."

PERSONAL.

J. WHITMORE has been appointed traffic manager of the Fitchburg Railroad.

C. H. PARKER, editor of the New Orleans *Picayune*, has been elected secretary of the National Cotton Exchange.

JAMES G. PORTER, superintendent of the Woodstock, Vt., Railroad, has been elected treasurer, vice F. W. Clarke, deceased, and Charles M. Marsh clerk, in place of L. O. Greene, resigned.

THE officers of the Peabody Institute, Baltimore, elected on the 13th inst., are: President, Charles J. M. Eaton; vice-president, George W. Brown; treasurer, Enoch Pratt; secretary, Geo. P. Tiffany.

HON. JOHN CESSNA has been elected president of the Bedford and Bridgeport Railroad Co., and J. N. DuBarry president of the Mifflin and Center County Railroad Co., both branches of the Pennsylvania Railroad.

C. S. COONE, Jr., general ticket agent for the Ohio and Mississippi Railroad, was killed on that railroad on the 17th inst. near North Vernon, Kentucky. He put his head out of the window and it was struck by a bridge.

CHARLES W. STEVENS, formerly of San Francisco, died on the 14th inst. at 165 East Twenty-seventh street, New York, where he had been living for the past four months with his family. Mr. Stevens was a civil engineer and master mechanic. He built the first locomotive run in California, and superintended the building of the first railroad in Oregon.

HON. Abram S. Hewitt made a short, pithy speech in the House of Representatives at Washington on Saturday, last, in which he said in substance: "There are two dollars by law in this country—a gold dollar and a silver dollar, the latter worth only 87½ per cent as much as the dollar which is current in the markets of the world. Commerce, wiser than Congress, rejects the inferior dollar, and the consequence is that the dishonest, cheating dollars continue to pile up in the treasury. There is only one standard of value—the gold dollar—and the present silver dollar is fiat money in its worst shape."

CONSTRUCTION.

THE Montreal and Sorel Railway is being rapidly pushed forward, and it is expected that it will be completed by the opening of navigation.

THE Mexican government having accepted an additional section of the Mexican Central Railway, that line was opened for public business to the city of Queretaro on the 18th inst.

THE last rail of the second track through the Hoosac Tunnel was laid a few days ago. There is some ballasting and other work to be done yet, and the new track will not be used for a few weeks.

TRAINS on the Port Huron and Northwestern Railway commenced running regularly between East Saginaw and Port Huron on the 14th inst. Iron on the Saginaw, Tuscola and Huron Railroad reached Sebewaing on the 18th.

THE connections on the Newark and Delaware City Railroad for the Pennsylvania Railroad Company's short cut between Baltimore and the Peninsula were made on the 18th inst., and trains will begin running in a few days.

GROUND was broken on the 20th inst. near Kiamins, Del., for the Baltimore and Ohio Railroad Company's new line to Philadelphia. This is done in compliance with the Delaware charter, which requires the work to be commenced before the first of March.

WORK on the Lake George Branch of the Delaware and Hudson Railroad is being pushed forward, and it is expected that the road will be in operation by June 1. The Saratoga special train which, during the summer, leaves Troy at 8 A. M., will run through to Lake George.

JOHN A. DALRYMPLE, chief engineer of the proposed Iron Valley and Pennsylvania Line Railroad, has prepared a report of his survey of the experimental line. It extends from the southern boundary line of Pennsylvania, at the intersection of Big Sandy Creek, to a point on the Baltimore and Ohio main line near the mouth of Raccoon creek, a distance of about forty miles. It passes through a region rich in coal, iron, fire-clay and timber, and through large and thriving agricultural sections. This line seems to be a small undertaking in this day of great enterprises, yet its projectors claim that it forms a link in what is known as the West Virginia Central Railroad, designed to connect with the Kentucky and Great Eastern Railroad, chartered by the State of Kentucky.

ORGANIZATION.

THE directors of the Richelieu and Ontario Navigation Company, elected at Montreal on the 11th inst., are: Alex. Buntin, Alex. Murray, Victor Hudon, Adolph Desjardines, R. Cowans, J. B. Renaud and L. A. Senecal.

THE officers of the Schuylkill Navigation Company, elected on the 14th inst., are: President, Frederick Fraley; Managers, John N. Hutchinson, Charles W. Wharton, George Brooke, Charles Bauer, Michael Ward, Thomas R. Patton; Treasurer and Secretary, Richard Wilkins.

THE managers of the Philadelphia and Erie Railroad Company, elected on the 19th inst., are: J. N. Du Barry, Wistar Morris, Strickland Kneass, Samuel Gustine Thompson, John P. Wetherill, N. Parker Shortridge, Henry M. Phillips, Henry D. Welsh, William J. Howard and William L. Elkins.

AT a meeting of the directors of the Atlantic and Pacific Railroad Company in Boston on the 10th inst., to ratify and confirm the financial plan for the extension of the road, B. P. Cheney, Levi C. Wade and Alden Speare were chosen directors for the Atchison interest, in place of Messrs. Coolidge, Wilbur and Lord.

THE stockholders of the Cincinnati and Baltimore Railway Company met in Cincinnati on the 15th inst. and elected the following directors: W. T. McClintock, Robert Garrett, John Waddle, W. W. Peabody, R. A. Holden, George Hoadley and B. S. Cunningham. The board organized by the election of W. T. McClintock, President; C. F. Low, Secretary; and W. E. Jones, Registrar.

AT the annual meeting of the stockholders of the Sixth Avenue Railroad Company, held on the 14th inst., the following ticket, containing the names of the directors for last year, was elected: Richard Mortimer, G. W. Burnham, Frederic De Peyster, Jonathan Thorne, T. R. Butler, Abram R. Van Nest, Henry Demarest, William Bryce, William Y. Mortimer, Albert W. Green, Theodore E. Macy, Abijah Curtiss and Charles G. Landon.

THE directors of the Marietta and Cincinnati Railroad Company, elected at a meeting of the stockholders held in Cincinnati on the 15th inst., are: John Waddle, Robert Garrett, Henry C. Smith, Wm. T. Burns, W. W. Scarborough, J. D. Lehmer, R. M. Bishop, George Hoadley, W. F. McClintock, Wm. Waddle, W. B. Loomis, Theodore Cook, W. W. Peabody. The directors organized and elected John Waddle President, C. F. Low Secretary, and Wm. E. Jones Registrar.

AT a meeting of the stockholders of the Memphis and Little Rock Railroad Company, held at Little Rock, Ark., on the 15th inst., the following board of directors was elected: Jay Gould, F. A. Marquand, Charles Essex, E. K. Sibley and D. C. Brown. The board then elected the following officers: F. A. Marquand, President; E. K. Sibley, General Manager; Thomas Essex, Land Agent; A. H. Calef, Treasurer; and M. A. Goodwin, Secretary and Assistant Treasurer.

AT the annual meeting of the Indianapolis and St. Louis Railway Company, held at Indianapolis, Ind., on the 15th inst., the following directors were elected: J. H. Devereux, S. Burke and E. B. Thomas, of Cleveland; J. N. McCullough and T. L. Messler, of Pittsburg, and Geo. B. Roberts, of Philadelphia. The directors organized as follows: J. H. Devereux, President; Edward King, Secretary and Treasurer; Russell Elliott, Auditor; C. C. Gale, General Superintendent.

AT the annual meeting of the Old Dominion Steamship Company, held at the Company's office in this city on the 13th inst., C. P. Huntington, President of the Chesapeake and Ohio Railway Company, Geo. F. Tyler, President of the Norfolk and Western, and John M. Robinson, President of the Seaboard and Roanoke, Raleigh and Gaston and Raleigh and Augusta railroads, were elected directors in the place of three resigned. Isaac Bell, M. L. McCready, John Bodine, Charles P. Fischer, Charles D. Stockney and E. D. Hitchens were also elected directors. Mr. N. L. McCready was then elected President; Isaac Bell, Vice-President; W. H. Stanford, Secretary, and W. L. Guillanson, Assistant Secretary. This Company recently came under the control of the Chesapeake and Ohio system.

THE stockholders of the following companies controlled by the Pennsylvania Railroad Co. met on the 14th inst., and elected officers as follows: Pennsylvania Coal Company—President, Isaac J. Wistar; Directors, G. B. Roberts, Isaac J. Wistar, A. J. Cassatt, Strickland Kneass, Wistar Morris, Alexander Biddle, M. Hall Stanton, Samuel M. Felton, Simon Gratz, Edmund Smith, William J. Howard, John P. Green. Summit Branch Railroad—Directors,

George B. Roberts; A. J. Cassatt, Edmund Smith, Strickland Kneas, J. N. DuBarry, N. Parker Shortridge, John P. Green, Wistar Morris, James W. Johnson, Edwin P. Worster, Isaac J. Wistar. Susquehanna Coal Company —President, George B. Roberts; Vice-President, Isaac J. Wistar; Directors, George B. Roberts, Isaac J. Wistar, John P. Green, A. J. Cassatt, Strickland Kneass, Wistar Morris, N. P. Shortridge, J. N. DuBarry, Edmund Smith. The same officers as those chosen for the Susquehanna Company were elected to serve for the year for the Lykens Valley Coal Company and the Mineral Railroad and Mining Company.

THE annual meetings of the stockholders of the Philadelphia and Trenton, the Columbia and Port Deposit, and the Western Pennsylvania railroad companies—all controlled by the Pennsylvania Railroad Company—were held in Philadelphia on the 15th inst., and the following officers and directors elected: Philadelphia and Trenton Railroad — President, Strickland Kneass; Secretary, James R. McClure; Directors, G. M. Dorrance, G. B. Roberts, Strickland Kneass, Wistar Morris, Alexander Biddle, Henry M. Phillips, N. P. Shortridge, J. N. DuBarry, J. V. Wetherill, A. M. Fox, Edmund Smith and Henry D. Welsh. Columbia and Port Deposit Railroad—President, Strickland Kneass; Directors, Jacob Tome, G. B. Roberts, Edmund Smith, Alexander Biddle, Wistar Morris, N. P. Shortridge, J. N. DuBarry, H. M. Phillips, A. J. Cassatt, W. J. Howard, Henry D. Welsh and J. P. Wetherill; Secretary and Treasurer, James R. McClure. Western Pennsylvania Railroad—President, J. N. DuBarry; Directors, Strickland Kneass, Wistar Morris, G. B. Roberts, Edmund Smith; Secretary Albert Hewson; Treasurer, Tabor Ashton.

Underground Telegraph Wires.

THE full sum of $5,000 required to lay and test the underground telegraph wires on the plan of Charles L. Gore has been subscribed, and the work will be begun at once. Subscriptions to the first fifty shares were limited to two and a half shares from any one person, or the whole amount could have been obtained from one of the electric light companies and from the Mutual District Messenger Company. The original subscribers, who risk their money in thoroughly testing the scheme, will be entitled for every share to forty shares of the stock of the company which will be formed as soon as the test is made, if it is successful. Among those who have thus subscribed are Henry W. Pope, of the Mutual; Robert Brown, of the Metropolitan Telephone and Telegraph Company; George Scott, the electrician; ex-Judge Freeman J. Fithian; County Auditor Daniel Jackson; Adolph Hallgarten and E. W. Saportas, bankers; United States Marshall Henry E. Knox, David Richmond, N. G. Miller, J. N. Winslow and H. C. Valentine. The patent in this case was not obtained until after a serious contest lasting over a year, the application of Mr. Gore being opposed on the ground that the material used by him as an insulator had long been used as an indispensable article to suspended wires. But the patent was finally granted on the ground that this was the first use of material as an insulator. On this plan the ordinary copper wire used for telegraphic purposes is made into a cable of any desired thickness, and each wire is effectually separated from the others by being run through glass beads arranged so closely together that the sag of the wires will not bring them into contact. They can be inclosed in a ordinary lead pipe, and laid with or without other cover or protection. The expense is not over $30 per mile, while the cheapest submerged or underground cable has cost $130 per mile. An inch lead pipe will contain a cable of 45 wires; a two-inch pipe, 110 wires; and so on in proportionately increasing ratio. Permission will be asked of the Police and Fire commissioners to lay the test wire by the side of the one they are now testing between their respective headquarters.

The Petroleum Market.

THE twenty oil producing districts enumerated in *Stowell's Petroleum Reporter*, just received, show for January a total production of 2,353,551 barrels, a daily average of very nearly 76,000. The total stock approaches 27,000,000 of barrels. The number of producing wells is over 18,000, with 200 new rigs building. The producing fields of Bradford report a decrease in the daily average of 5,000 barrels, and of Alleghany an increase of 1,300. The aggregate sales and resales at Pittsburgh, Oil City and Bradford for the month of January were over fifty-one millions of barrels, of which the share of the Pittsburgh Exchange was over twelve millions. As regards the outlook, the paper referred to says:

"The Bradford and Richburg fields are now defined beyond any reasonable doubt by a cordon of 'dry holes.' All the present drilling in outlying localities, notwithstanding it has been very extensive, has entirely failed to indicate any new field in the producing horizon within the line of the known fields. Operations continue to be active, but with all the activity in drilling, and with all the appliances of pumping and torpedoing, the figures for the month of January compared with those of December show the significant decline in the daily production of four thousand and seventy-nine barrels.

"The Richburg field exhibits all those characteristics of impoverishment of rock and uncertainty of yield which we attributed to it several months ago, and on this account its decline may be expected to be much more rapid than is that of the Bradford field.

"From all this condition which at present exists in the region, we are of the opinion that the long-expected decline has at last set in, and (always, of course, unless a new field is discovered) the production must from this time continue to decline, in spite of the unrestricted energy of his restless producers to enlarge it.

"The busy season of the year has been closed and we may reasonably look for diminished foreign demand for some months to come. The export for last year has been so far in excess of its predecessors that we can hardly look for an increased demand for the present year. Then, too, our stock of crude oil has grown so large as at times to be rather burdensome. It will, therefore, be seen that there is considerable margin for a decline in the production, without materially affecting the price."

The Coal Trade.

THE leading coal-carrying companies make the following reports of their tonnage for the week ending February 11, and for the year to same date, compared with their respective amounts carried to the same time last year:

	Week.	1882.	1881.
Reading Railroad	92,731	1,454,068	1,246,441,
Schuylkill Canal	.....	27,655	.....
Lehigh Valley	58,997	1,092,825	933,366
Delaware, Lackawanna and Western	63,691	406,668	412,532
Shamokin	16,881	103,840	108,688
Central R. R. of New Jersey	37,783	371,401	370,166
United R. R. of New Jersey	22,822	162,697	165,010
Pennsylvania Coal	13,897	97,458	103,926
Delaware and Hudson Canal	43,006	326,642	344,921
Huntingdon and Broad Top Mountain	12,742	70,839	49,856
Penn. and New York	27,742	288,903	231,744
Clearfield, Pa.	40,601	268,399	191,894

The total tonnage of anthracite coal from all the regions for the week ending February 11, as reported by the several carrying companies, amounted to 323,383 tons, against 533,943 tons in the corresponding week last year, a decrease of 210,560 tons. The total amount of anthracite mined for the year is 2,447,000 tons, against 2,504,635 tons for the same period last year, a decrease of 57,635 tons. The quantity of bituminous coal sent to market for the week amounted to 88,651 tons, against 70,430 tons in corresponding week last year, an increase of 18,221 tons. The total amount of bituminous mined for the year is 484,666 tons, against 365,526 tons for the corresponding period last year, an increase of 119,140 tons. The total tonnage of all kinds of coal for the week is 412,034 tons, against 604,373 tons in corresponding week last year, a decrease of 192,339 tons; and the total tonnage for the coal year is 2,931,666 tons, against 2,870,161 tons to same date last year, an increase of 61,505 tons. The quantity of coal and coke carried over the Pennsylvania Railroad for the week ending February 11 was 198,374 tons, of which 138,276 tons were coal and 60,098 tons coke. The total tonnage for the year thus far has been 1,215,425 tons, of which 865,480 tons were coal and 349,944 tons coke. These figures embrace all the coal and coke carried over the road east and west. The shipments of bituminous coal from the mines of the Cumberland coal region during the week ended February 11 were 41,064 tons, and for the year to that date 232,146 tons, an increase of 88,207 tons as compared with the corresponding period of 1881. The coal was carried to tidewater as follows: Baltimore and Ohio Railroad—week, 34,072 tons; year, 190,937 tons; increase compared with 1881, 67,220 tons. There were no shipments by canal. Pennsylvania Railroad—week, 6,772 tons; year, 40,114 tons; increase compared with 1881, 19,891 tons. The Reading Railroad shipment for the week, ending February 18, was 116,000 tons, of which 13,000 tons were sent to and 13,500 tons shipped from Port Richmond, and 13,270 tons sent to and 14,000 tons shipped from Elizabethport.—*Phil. Ledger, Feb.* 16.

New York Stock Exchange.

(Thursday's quotations follow money article.)

Closing Prices for the week ending Feb. 22.

	Th.16.	F.17.	Sat.18	M.20.	Tu.21.	W.22.
Adams Express	.....	.....	145	.....	.....	.....
Albany and Susq	.....	130	.....	130¾	.....	.....
1st mortgage	.....	.....	.....	.....	.....	.....
2d mortgage	.....	.....	.....	.....	.....	.....
American Express	91	.....	90	90	.....	.....
Atlantic & Pac. Tel.	.....	.....	.....	.....	.....	.....
Burl., C. R. & Nor	.....	.....	.....	.....	.....	.....
1st mortgage 5s	99¾	.....	100	.....	99¾	.....
Canada Southern	50⅛	50¾	51	48⅝	47¼	.....
1st mortgage guar	94	.....	....	94	93	.....
Central of N. Jersey	92⅛	92⅝	95¼	95⅛	93¾	.....
1st mort. 1890	115	.....	.....	.....	.....	.....
7s, consol. ass	.....	.....	.....	.....	.....	.....
7s, convertible ass.	.....	.....	.....	.....	.....	.....
7s, Income	.....	.....	.....	.....	.....	.....
Adjustment	107	106	105	104	105½	.....
Central Pacific	90⅜	90¾	91½	90¾	90	.....
6s, gold	.....	.....	.....	.....	113⅞	.....
1st M. (San Joaq)	.....	.....	.....	.....	.....	.....
1st M. (Cal. & Or.)	.....	.....	.....	.....	.....	.....
Land grant 6s	.....	.....	.....	.....	.....	.....
Chesapeake & Ohio	22⅝	.....	23¼	.....	22½	.....
1st, series B	80⅞	81	80½	81	80¾	.....
Chicago and Alton	128½	129¼	129	130	129½	.....
Preferred	.....	.....	.....	.....	.....	.....
1st mortgage	.....	.....	.....	.....	.....	.....
Sinking Fund	.....	.....	.....	.....	.....	.....
Chi,, Bur. & Quincy	133½	134	135¼	133¾	133¼	.....
7s, Consol. 1903	.....	126½	.....	.....	.....	.....
Chi., Mil. & St. Paul	108¾	108⅞	109¾	108⅝	107½	.....
Preferred	.....	.....	122	122	122½	.....
1st mortgage, 8s	.....	132½	.....	.....	134	.....
2d mort., 7 3-10s	.....	.....	.....	.....	.....	.....
7s, gold	.....	.....	.....	125½	.....	.....
1st M. (La. C. div)	118	117	.....	.....	117	.....
1st M. I. & M. div.)	.....	.....	.....	.....	.....	.....
1st M. (I. & D. ext.)	.....	116	.....	115½	.....	.....
1st M. (H.&D. div.)	.....	....	115⅞	.....	.....	.....
1st M.(C. & M.div.)	.. ..	.....	...	.....	.....	.....
Consolidated S. F.	.....	120	120	.....	121	.....
Chi. & Northwestern	133¾	134	134¼	133⅝	131⅝	.....
Preferred	142¾	142½	142⅛	.....	140	.....
1st mortgage	.....	...	.....	.....	.....	.....
Sinking Fund 6s	.....	.....	.....	.....	.....	.....
Consolidated 7s	.....	.....	.....	.....	125	.....
Consol. Gold bo'ds	.....	124¼	.....	.....	.....	.....
Do. reg	.....	.....	.....	.....	.....	.....
Chi., R. Isl. & Pac.	131½	.....	132¼	132½	131¾	.....
6s, 1917, c	126	.....	126	126¾	126¼	.....
Clev.,Col.,Cin.&Ind.	79⅛	77½	.....	....	78	.....
1st mortgage	125	.....	.....	.....	.....	.....
Clev. & Pittsburg gr.	.....	.....	.....	132	.....	.....
7s, Consolidated	.....	.....	.....	125½	.....	.....
4th mortgage	.....	.....	.....	.....	.....	.....
Col.,Chi.,& Ind. Cent.	10⅝	11	11⅛	11	10	.....
1st mortgage	130	.....	.....	.....	.....	.....
2d mortgage	.....	.....	.....	.....	.....	.....
Del. & Hud Canal.	107	107	109	108⅜	108⅛	.....
Reg. 7s, 1891	115	115	.....	.....	.....	.....
Reg. 7s, 1884	.....	105½	.....	.....	.....	.....
7s, 1894	....	.....	.....	.....	119	....
Del.,Lack.& Western	125¼	124⅞	125⅝	124⅜	123⅜	.....
2d mortgage 7s	.....	.....	.....	.....	.....	.....
7s, Consol. 1907	.....	130	.....	.....	.....	.....
Erie Railway	.....	.....	.....	.....	.....	.....
1st mortgage	.....	.....	.....	.....	.....	.....
2d mort. 5s, ext	.....	.....	.....	.....	.....	.....
3d mortgage	.....	.....	.....	.....	.....	.....
4th mort. 5s, ext.	108	108	.....	.....	.....	.....
5th mortgage	.....	.....	.....	.....	.....	.....
7s, Consol. gold	130	....	.....	.....	.....	.....
Great West. 1st mort	108	.....	108⅝	...	.....	.....
2d mortgage	.....	103½	104	104	100	.....
Hannibal & St. Jo	91	94	93¾	93½	92¾	.....
Preferred	93	99	99¾	99⅞	97	.....
8s, Convertible	.....	.....	...	.....	...	.....
Houston & Tex. Cen	.....	.....	.....	78	75	.....
1st mortgage	.....	.....	.....	.....	.....	.....
2d mortgage	.....	.....	.....	.....	.....	.....
Illinois Central	131⅞	134	135⅝	134	132⅞	.....
LakeShore&MichSo	111½	111	111⅛	110	110¼	.....
Consol. 7s	.....	.....	.....	.....	.....	.....
Consol. 7s, reg	.....	.....	.....	.....	.....	.....
2d Consolidated	.....	125½	.....	.....	.....	.....
Leh. & W. B. 7s, Con	.....	.....	.....	.....	.....	.....
Long Dock bonds	.....	.....	.....	.....	.....	.....
Louisville & Nash.	86½	86¼	86⅝	80⅜	72⅛	.....
7s, Consolidated	.....	.....	121¼	.....	.....	.....
Manhattan	57	57	56⅜	56⅛	55¼	.....
1st pref	.....	.....	.....	94	94	.....
Met. Elevated	86	87	87	87½	85¾	.....
1st mortgage	100¾	100⅛	100⅜	100¾	100⅛	.....
Michigan Central	86	85¾	86¼	88⅛	81¾	.....
7s, 1902	.....	125¼	.....	.....	.....	.....
Morris & Essex	.....	.....	.....	122	122¼	.....
1st mortgage	.....	.....	.....	.....	.....	.....
2d mortgage	...	.....	.....	.....	.....	.....
7s of 1871	....	123	.....	.....	.....	.....
7s, Convertible	...	.....	.....	.....	.....	.....
7s, Consolidated	.....	.....	.....	.....	.....	.....
N.Y. Cen. & Hud. R.	130¾	130¾	131¼	130¼	129⅛	.....
6s, S. F. 1883	103	...	.....	.....	.....	.....
6s, S. F., 1887	.....	.....	.....	.....	.....	.....
1st mortgage	.....	.....	.....	.....	.....	.....
1st mortgage, reg.	.....	.....	.....	.....	.....	.....
N. Y. Elevated	107	.....	.....	.....	105	.....
1st mortgage	.....	.....	.....	.....	.....	.....
N. Y. & Harlem	.....	.....	.....	.....	.....	.....
Preferred	.....	.....	.....	.....	.....	.....
1st mortgage	.....	.....	.....	.....	.....	.....
1st mortgage, reg	.....	.....	.....	.....	.....	.....
N. Y., Lake Erie & W	39½	39⅛	39¼	38¾	37⅜	.....
Preferred	76	77	.....	76	74½	.....
2d Consolidated	98⅛	98¾	98¼	98	96	.....
New 2d 5s fund	.....	.....	.....	.....	94	.....
N.Y.,N.Hav'n&Hart	171	168	169¼	.....	170	.....
North Mo. 1st mort	.....	.....	.....	.....	119⅞	.....
Northern Pacific	34	34⅜	34⅜	34⅛	34	.....
Preferred	73	73½	73¾	72⅝	72½	.....
Ohio & Mississippi	31⅞	32	.....	32	30¼	.....
Preferred	.....	.....	.....	.....	.....	.....
2d mortgage	.....	.....	.....	.....	.....	.....
Consolidated 7s	118	.....	.....	.....	.....	.....
Consol. S. Fund	.....	.....	.....	.....	.....	.....
Pacific Mail S. S. Co	41⅝	42½	43⅛	42⅛	41	.....
Pacific R. R. of Mo.	.....	.....	.....	.....	.....	.....
1st mortgage	.....	106½	.....	106	.....	.....
2d mortgage	.....	.....	110½	.....	.....	.....
Panama	.....	.....	.....	.....	.....	.....
Phila. & Reading	61¼	51¼	61⅛	58½	57¼	.....
Pitts,Ft.W.&Chi.gtd	.....	.....	.....	.....	.....	.....
1st mortgage	.....	.....	.....	.....	.....	.....
2d mortgage	.....	.....	.....	.....	.....	.....
3d mortgage	.....	.....	132½	.....	.....	.....
Pullman Palace Car	134	136	134⅞	127	.....	.....
Quicksil'r Min'g Co	12⅝	13	.....	.....	12½	.....
Preferred	.....	.....	60	.....	.....	.....
St. Louis & San Fran	39	38½	37⅝	38⅛	38	.....
Preferred	54⅝	53¾	.....	53⅞	.....	.....
1st Preferred	90	90	89½	86	84	.....
St. L., Alt'n & T. H.	33	....	.....	32	31	.....
Preferred	82½	.....	84	.....	78	.....
1st mortgage	.....	.....	.....	.....	.....	.....
2d mort. pref	.....	.....	.....	.....	105½	.....
Income bonds	.....	.....	.....	.....	.....	.....
St. L., Iron Mt. & S	.....	.....	.....	.....	.....	.....
1st mortgage	.....	.....	.....	115	.....	.....
2d mortgage	108	107½	107	.....	.....	.....
Toledo and Wabash	.....	.....	.....	.....	.....	.....
1st mortgage	....	.....	110	.....	.....	.....
2d mortgage	.....	.....	.....	.....	.....	.....
7s, Consolidated	.....	.....	.....	.....	100	.....
St. Louis Division	108	.....	.....	.....	.....	.....
Union Pacific	117½	117⅞	118	117	116½	.....
1st mortgage	.....	116½	116½	116¼	115	.....
Land Grant 7s	.....	116	116¾	.....	115¼	.....
Sinking Fund 8s	.....	.....	.....	.....	.....	.....
United States Ex	76	.....	.....	74	75¼	.....
Wabash, St. L.& Pac	32¾	32	32½	31¼	28½	.....
Preferred	59⅝	59¾	60½	58¼	55	.....
New mort. 7s	.....	.....	.....	.....	.....	.....
Wells-Fargo Ex	.....	.....	126	128	....	.....
Western Pacific b'ds	.....	....	109⅝	.....	.....	.....
Western Union Tel.	80⅛	79¾	79¾	79⅝	78⅝	.....
7s, S. Fconv., 1900	.....	.....	.....	118	118	.....
FEDERAL STOCKS:—						
U. S. 4s, 1907, reg	117⅞	.....	.....	118	117¾	.....
U. S. 4s, 1907, coup.	117⅞	117⅞	.....	118	.....	.....
U. S. 4½s, 1891, reg.	113¾	.....	.....	113½	113⅝	.....
U. S. 4½s, 1891, coup	.....	.....	.....	.....	.....	.....
U. S. 5s, 1881, reg	.....	.....	.....	.....	.....	.....
U. S. 5s, cont'd at3½	101⅞	101⅞	.....	.....	101⅜	.....
U. S. 6s cont'd at3½	.....	.....	.....	.....	.....	.....
Dt. of Col. 3-65s, reg	.....	.....	.....	.....	.....	.....
Dt. of Col.3-65s,coup	.....	106¾	.....	.....	.....	.....

Boston Stock Exchange.

Prices for the Week Ending Feb. 21.

	Th.16	F.17.	Sat.18.	M.20.	Tu.21.	W. 22.
Atch.,Top.&San.Fe.	84½	35¼	85	84¾	84½	.....
1st mortgage	.....	....	118	.....	118	.....
2d mortgage	.....	.....	.....	.....	.....	.....
Land Grant 7s	.....	.....	.....	115	114⅞	.....
Boston & Albany	.....	.....	.....	167	.....	.....
7s reg	.....	.....	.....	.....	127	.....
Boston and Lowell	.....	101	100	100¼	.....	.....
Boston & Maine	.....	.....	146	146	.....	.....
Boston& Providence	.....	.....	.....	.....	166	.....
Bos'n,Hart.& Erie7s	54¾	56¼	56¾	55¼	55¼	.....
Burl.& Mo.R.L.G.7s	.....	.....	.....	.....	.....	.....
Burl.& Mo.R.in Neb	.....	.....	.....	.....	.....	.....
6s, exempt	.....	.....	.....	.....	.....	.....
4s	.....	.....	.....	.....	.....	.....
Chi.,Burl. & Quincy	134½	134	136¾	134	133	.....
7s	.....	.....	.....	.....	.....	.....
Cin.,Sand&Clev($50)	24½	.....	....	25½	23¾	.....
Concord ($50)	.....	.....	.....	.....	.....	.....
Connecticut River	.....	.....	.....	.....	.....	.....
Eastern	33	34¼	35	33½	34½	.....
New 4½ Bonds	109	.....	.....	109	108¾	.....
Fitchburg	135	.....	135½	135	.....	.....
N.Y. & New England	51½	51⅝	53	52⅜	51	.....
7s	116¾	.....	116½	.....	116½	.....
Northern N. H.	109	.....	.....	107	.....	.....
Norwich&Worcester	.....	.....	.....	....	155	....
Ogden & Lake Cham	34	.....	.....	.....	.....	.....
Preferred	.....	.....	.....	.....	.....	.....
Old Colony	125⅛	126	125¾	126	125	.....
Ph.,Wil.&Balt.($50)	.....	.....	.....	.....	.....	.....
Portl'd,Saco & Ports	.....	.....	.....	.....	.....	.....
Pueblo & Ark Val	.....	.....	.....	.....	.....	.....
7s	.....	.....	.....	.....	114¾	.....
Pullman Palace Car	136	135	.....	.....	.....	.....
Union Pacific	...	.....	.....	118	116⅜	.....
6s	.....	115½	.....	.....	114½	.....
Land Grant 7s	.....	.....	.....	.....	.....	.....
Sinking Fund 8s	.....	.....	.....	.....	.....	.....
Vermont & Canada	.....	.....	.....	.....	.....	.....
Vermont & Mass	.....	.....	.....	.....	.....	.....
Worcester & Nashua	59	.....	.....	.....	.....	.....
Cambridge (Horse)	.....	120	.....	120	.....	.....
Metropolitan(Horse)	.....	.....	.....	76	.....	.....
Middlesex (Horse)	.....	.....	.....	.....	.....	.....
Cal.&Hecla Min'gCo	.....	231	231	231½	232¾	.....
Quincy	41¼	42½	43	43	43	.....

Philadelphia Stock Exchange.

Closing Prices for the Week Ending Feb. 21.

	W.15.	Th.16.	F.17.	Sat.18.	M.20	Tu.21
Allegh'y Val. 7 3-10s	.....	.....	121	.....	.....	.....
7s, Income	55½	.....	.....	.....	55	55½
Buff., Pitts & West.	18¾	18	17¾	.....	17¾	16
Camd'n & Am. 6s, '83	.....	.....	.....	.....	.....	.....
6s, 1889	.....	108	.....	.....	.....	.....
Mort. 6s, 1889	.....	114	.....	.....	114	.....
Camden & Atlantic	.....	.....	.....	.....	35	.....
Preferred	.....	.....	.....	.....	39½	.....
1st mortgage	.....	.....	.....	118¾	.....	.....
2d mortgage	.....	.....	.....	.....	.....	.....
Catawissa	.....	.....	.....	17	17	.....
Preferred	.....	.....	.....	55	.....	55
7s, new	.....	.....	.....	.....	.....	.....
Del. & Bound Brook	.....	.....	.....	.....	.....	.....
7s	.....	.....	.....	.....	.....	125½
Elmira&Williamsp't	.....	.....	.....	.....	.....	.....
Preferred	.....	.....	.....	.....	.....	.....
Hunt. & B. Top Mt.	...	.....	.....	13	14	.....
Preferred	.....	.....	.....	27	.....	26¾
2d mortgage	.....	.....	.....	.....	.....	.....
Lehigh Navigation	43¾	42¾	43¼	43¾	43¼	43¼
6s, 1884	.....	.....	105½	.....	.....	105½
Gold Loan	111½	.....	.....	.....	.....	.....
Railroad Loan	.....	...	....	.....	.....	.....
Conv. Gold Loan	.....	.....	.....	.....	.....	.....
Consol. Mort, 7s	116¾	116½	.....	.....	.....	116¾
Lehigh Valley	62½	62½	62¼	62¼	.....	.....
1st mort. 6s, coup	.....	123½	122½	.....	.....	.....
1st mort. 6s, reg	.....	.....	.....	.....	.....	.....
2d mort. 7s	.....	.....	.....	.....	.....	.....
Consol mort. 6s	.....	.....	.....	.....	.....	.....
Consol.mtg.6s,reg	.....	.....	.....	.....	.....	.....
Little Schuylkill	.....	57	.....	.....	.....	.....
Minehill&Sch.Hav'n	.....	62	62	.....	.....	.....
North Pennsylvania	.....	.....	.....	.....	.....	.....
1st mortgage 6s	.....	.....	.....	.....	.....	.....
2d mortgage 7s	.....	.....	.....	.....	.....	.....
Genl. mtg.7s,coup	.....	.....	.....	.....	.....	.....
Genl. mtg. 7s, reg	.....	.....	.....	.....	.....	.....
Northern Central	50¼	50	50	50¼	50½	50⅝
5s	.....	.....	.....	.....	97¼	.....
Northern Pacific	35⅜	34⅜	34¼	34½	34	34
Preferred	72⅜	73	73	73¾	72¾	72⅛
Pennsylvania R. R.	60⅜	60⅞	60⅞	61⅛	60¾	60¼
1st mortgage	.....	.....	.....	.....	.....	.....
Gen'l mort	.....	.....	.....	.....	.....	.....
Gen'l mort reg	.....	.....	.....	.....	.....	.....
Consol. mort. 6s	.....	.....	.....	.....	118	.....
Consol. mort. reg	.....	.....	.....	.....	.....	...
Pa.State 6s 2d series	.....	.....	.....	.....	.....	.....
do 3d series	.....	.....	.....	.....	.....	.....
do 5s, new	.....	.....	.....	.....	.....	.....
do 3s	.....	.....	.....	.....	.....	.....
Phila. & Reading	30¾	30¾	30½	30⅝	29½	28⅝
1st mortgage 6s	.....	.....	.....	.....	.....	.....
7s of 1893	.....	.....	.....	.....	.....	.....
7s, new convert	.....	.....	.....	.....	.....	73
Consol. mort. 7s	.....	.....	.....	.....	.....	.....
Consol. mort. reg	.....	.....	.....	.....	.....	.....
Gen'l mort. 6s	.....	96¾	95	96¼	96	95
Philadelphia & Erie	.....	.....	15½	.....	15½	.....
1st mortgage 5s	.....	.....	.....	.....	.....	.....
2d mortgage 7s	114	114	114	.....	.....	.....
Pittsb.,Cin.&St.L.7s	.....	.....	.....	.....	120	.....
Pitts.,Tit.&Buff. 7s,	.....	.....	.....	94	.....	.....
Schuylkill Navi't'n	.....	.....	.....	.....	12½	.....
Preferred	13	.....	12¾	.....	.....	12½
6s, 1872	.....	107	107	.....	.....	.....
6s, 1882	.....	.....	.....	.....	.....	.....
United Co. of N. J.	186¾	186½	186	.....	.....	.....
Hestonville, (Horse)	17	....	....	....	.....	.....
Chestnut&Wal.(do)	.....	.....	.....	90	.....	.....
Green & Coates (do)	.....	.....	.....	.....	.....	.....

Baltimore Stock Exchange.

Closing Prices for the Week Ending Feb. 21.

	W. 15.	Th. 16.	F. 17.	Sat. 19.	M. 20.	Tu. 21
Baltimore & Ohio..	195	195	....	.....	.....	.....
6s, 1880.....	.....	.....	.....	.....	.....	.....
6s, 1885.....	.....	107¼	.....	.....	.....	.....
Central Ohio ($50)..	.....	.....	.....	44	.....	.....
1st mortgage.....	.....	.....	110	.....	110½	.....
Marietta & Cincin'ti	.....	.....	.....	.....	.....	.....
1st mortgage, 7s..	.....	.....	125	.....	.....	125
2d mortgage, 7s..	104⅜	104¾	105	105¼	.....	105
3d mortgage, 8s..	56¾	55¾	57½	57¾	58	56½
Northern Cen. ($50)	.....	50	.....	50¼	50¾	57
2d mort., 6s 1885..	105½	.....	.....	.....	.....	106
3d mort., 6s, 1900.	.....	.....	.....	.....	.....	.....
6s, 1900, gold.....	.....	....	114	114	.....	.....
6s, 1904, gold.....	.....	.....	.....	.....	.....	.....
Orange & Alex. 1st.	.....	....	.....	.....	.....	.....
2d mortgage, 6s...	.....	.....	.....	.....	.....	.....
3d mortgage, 8s...	.....	.....	.....	.....	.....	.....
4th mortgage, 8s..	.....	.....	.....	.....	.....	.....
O.,Alex.&Manas's 7s	.....	.....	.....	.....	.....	.....
Pitts.& Connellsv.7s	.....	.....	.....	122	.....	.....
Virginia 6s, Consol.	.....	63	62	61¼	61½	61½
Consol. coupons..	.....	.....	63	63½	.....	.....
10-40 bonds.....	40	.....	.....	.....	....	40
Def'd Certificates.	.....	.....	.....	.....	.....	.....
Western Maryland..	.....	.....	.....	14¾	.....	.....
1st M.,end. by Balt	.....	.....	.....	.....	.....	.....
2d M., do .	.....	.....	116	.....	.....	120
3d M., do .	.....	.....	.....	128	.....	.....
1st M.,unendors'd	.....	.....	.....	.....	.....	.....
2d M.,end.WashCo	.....	.....	.....	.....	.....	.....
2d M., preferred..	.....	.....	.....	.....	.....	.....
City Passenger R R.	....	41½	.....	.....	.....	.....

London Stock Exchange.

	Closing Prices — Jan. 27		Feb. 3.	
Baltimore & Ohio (sterling).....	114	116	114	117
Central of N. J,, $100 shares....	93	98	93	99
Do. consol. mort.....	114	116	115	116
Do. Adjustment Bonds.....	104	109	104	108
Do. Income Bonds.....	104	107	104	107
Det.,G'd Haven & Mil. Equip bds	112	114	112	114
Do.Con.M.5p.c.,till'83aft'r6p.c	110	112	110	112
Illinois Central $100 shares.....	136½	137½	138	140
Lehigh Valley Cons. mortgage..	115	119	115	119
Louisville & Nashville mort 6s.	105	107	105	107
Do. Sink. Fund bds (S.&N.Ala)	102	104	102	104
Do. capital stock $100 shares.	97	99	97	99
N. Y. Cent. & Hud. R. mt. bds..	134	137	134	137
Do. $100 shares.....	133½	134½	133½	134½
Do mort. bonds (stg.).....	120	122	119	121
N.Y.,Lake Erie & West.,$100 shs	40¾	41¼	40¾	41½
Do. 6 p. c. pref. $100 shares ..	82	84	80	82
Do. 1st Con. Mort. bds (Erie) .	131	13[illegible]	131	133
Do. do. Funded Coupon bds.	127	129	127	129
Do. 2d Consol Mort. bonds...	101	103	100½	101½
Do. do. Funded Coupon bds..	97	100	97	100
Do. Gold Income bonds.....	93	95	93	95
N.Y.,Pa.& Ohio 1st mort. bonds.	45½	46¾	44½	45½
Do. Prior Lien bds (sterling)..	104	108	104	108
Pennsylvania, $50 shares.....	62	63	62½	63½
Do. Con. Sink Fund Mort....	117	120	116	118
Philadelphia & Reading $50 shs	32¼	32¾	32	32½
General Consol Mortgage.....	116	118	115	117
Do. Improvement Mortgage..	103	105	102	104
Do.Gen.Mtg.'74,ex-def'd coup.	100	102	100	102
Do. Scrip for the 6 def. ½ coup.	94	98	93	97
Pittsb., Ft. W. & Chi. Eq. bds....	105	109	105	109
St. L. Bridge 1st mort. gold b'd.	126	128	126	128
Do. 1st pref. stock.....	95	98	95	98
Union Pa. Land Grant 1st. mtg.	117	119	118	118
Wabash, St. L. & P. $100 shs.....	36	37	36¼	37½
Do. $100 pref. shares.....	68⅜	69¾	68½	69½
Do. gen. mort. bonds.....	91	93	87	89

AMERICAN RAILROAD JOURNAL.

Financial and Commercial Review.

THURSDAY EVENING, Feb. 23, 1882.

IN the money market this morning 5@6 per cent was the quotation for call loans on stocks, and 2½@3½ per cent on United States bonds. In the afternoon the stock brokers paid as high ⅛ of 1 per cent per day commission for loans in addition to 6 per cent.

One of the prime drawers of sterling this morning marked posted rates up to 4.86½@4.90½. All the other prime drawers had as their posted rates 4.85½@90 ; the actual rates were 4.84¾@4.85¼ and 4.89½@¾, with cable transfers 4.90¼@¾, and prime commercial bills 4.83@¼. At the close the actual rates for prime bankers' Sterling were 4.84¾@4.85 and 4.89¼@4.89½. The actual rates for Continental bills are as follows : francs, 5.13¾@5.13⅜ and 5.18¾@5.20 ; marks, 94½@⅝ and 95½@⅝, and guilders, 40 @40⅝.

The Virginia Debt Refunding bill, which recently passed the General Assembly of that State, has received the signature of the Governor, and is now a law. According to this bill the State of Virginia acknowledges two-thirds of the debt, and declares that West Virginia is responsible for the other one-third. It is understood that the holders of the bonds in question intend to contest in the courts the validity of this mode of settlement of the State debt, and that, with that end in view, Wm. L. Royall, formerly of Richmond and now of this city, has been employed by the English bondholders to institute the necessary legal proceedings.

The recent act of the Legislature of Tennesee to settle the debt of that State at par and three per cent interest—the coupons receivable for taxes for 99 years—having been declared invalid and unconstitutional by the Supreme Court, application was made by counsel for the funding board soliciting the Court to so modify the decree as to permit the issue of bonds without the tax coupon feature. This motion the Court also declined to allow. The case is thus finally disposed of, and the funding of the State debt cannot be accomplished except by further Legislative action.

At a special meeting of the stockholders of the National Car Company, held at St. Albans, Vt., on the 16th inst., it was unanimously voted to issue $1,000,000 of new stock and $800,000 of 6 per cent 10-year bonds. The stock and bonds are to be issued to stockholders of the record of March 15, pro rata, at $75 per share for stock, (par value $100,) and the bonds at par, but both to be taken if either. The proceeds are to be used in building 2,000 new 34-foot 20-ton cars, which are needed by the new Canadian combinations forming a line to Ottawa, Georgian Bay, and the West, and also in erecting car-shops for the company, the location of the car-shops to be determined hereafter.

The American District Telegraph Company has notified the Stock Exchange of its intention to increase its capital stock from $2,000,000 to $3,000,000 and to change the par value of the stock from $25 to $100.

According to the report of Joseph Nimmo, Jr., Chief of the Bureau of Statistics at Washington, the total values of the exports of domestic breadstuffs for the month of January, 1882, were $11,928,992, against $14,929,406 for the month of January, 1881; and for the seven months ending January 31, 1882, $124,072,907, against $168,509,508 for the corresponding period of the previous fiscal year. The total values of the exports of domestic provisions, tallow and dairy products for the month of January, 1882, were $13,199,531, and for the month of January, 1881, $15,218,282. The total values of the exports of provisions and tallow for the three months ended January 31, 1882, were $31,984,298, and for the same period in 1881, $38,551,058. The total value of the exports of dairy products during the nine months ended January 31, 1882, were $16,334,511, and during the same period in 1881, $21,108,156.

Albany (N. Y.) county bonds, payable in 1899 and bearing four per cent interest, were recently sold to the amount of $50,000, and brought 6⅛ per cent premium for $10,000 worth, and 6¼ per cent premium for the remaining $40,000. Ulster county five per cent funding bonds, to the amount of $100,000, were also sold for 111½@112½; and $25,000 of Kingston city funding bonds, bearing four per cent interest, 104⅛@104⅝.

Twenty-three deeds were filed with the county clerk of Erie county, at Buffalo, N. Y., on the 17th inst., conveying property valued at nearly $160,000 to the New York, West Shore and Buffalo Railroad Company.

The report of the Northern Central Railway Company, prepared for presentation to the stockholders at their annual meeting held this day in Baltimore, shows that the revenue from the main line and leased and controlled roads for the year ending December 31, 1881, amounted to $5,443,700. The operating expenses were $3,787,445.91, leaving the net earnings $1,656,254.09, a decrease of $138,864.75 as compared with 1880. After deducting interest, rentals and surplus from the operation of the Elmira, Chemung and Canandaigua division, paid to the Pennsylvania Railroad Company, the amount carried to the credit of profit and loss, including the balance of the same account the previous year, was $305,696.75. The tonnage of the main line increased 271,352 tons.

The foreign exports from Philadelphia during January were valued at $3,094,375, an increase of $807,787 over the total for the previous January.

The deed of the Richmond and Danville Railroad Company to the Central Trust Company of New York, conveying all its property to secure debenture bonds, issued to pay subscriptions to the Terminal Company's stock has been recorded in the clerk's office of the Chancery Court at Richmond, Va. It is for $4,000,000, and the tax thereon was $4,000.

The Supreme Court of Tennessee has denied the motion of the State Funding Board, asking it to modify the injunction so as to permit the issue of bonds without the tax coupon feature. This ends the matter, and funding cannot be accomplished except through the passage of another bill by the Legislature.

According to the report of George M. Dallis Master, the cash receipts of the Philadelphia and Reading Railroad Company for November, 1881 (including the balance from October, of $591,583.83), were $3,453,666.06, and the expenditures $2,776,538.89, leaving a balance of $677,127.17. For the month of December, the receipts of the Railroad Company (including the above balance from November) were $3,614,343.27, and the expenditures $3,138,469.55, leaving a balance of $475,873.72. The deferred income bond account showed a balance at the close of each month of $277,568.68. The total receipts of the Coal and Iron Co. for the month of November (including the balance of $99,798.31 from October) were $1,530,580.86, and the expenditures $1,514,534.60, leaving a balance of $16,046.26. For the month of December the receipts of the Coal and Iron Co. (including the above balance from November)

were $1,603,319.22, and the expenditures $1,565,368.19, leaving a balance of $37,951.03.

From the report of the managers of the Lehigh Coal and Navigation Co., for the year ending December 31, 1881, prepared for presentation at the annual meeting of the stockholders to be held on the 28th inst., we learn that the total receipts from all sources were $1,875,592.08, the disbursements $1,261,668.61, and the net earnings $613,923.47; less a sinking fund of 10 cents per ton on 648,148 tons of coal, $64,814.80, and depreciation on coal improvements, $65,332.85—leaving a surplus for the year of $483,775.82, which added to balance to credit of dividend fund December 31, 1880, $194,236.38, giving a total of $678,012.20; from which deduct dividend of $1 per share on 206,567 shares, paid Dec. 3, 1881, leaves the balance to credit of dividend fund December 31, 188 , $471,445.20. From this balance must be deducted whatever shall be paid to the State under the four-mill tax law for the years 1879, 1880 and 1881. The amount for which the company is held to be liable is $81,284.14, but it expects to be relieved from the payment of a considerable part of this sum. Comparing the receipts of the company for the year 1881 with those of the year 1880, shows an increase of $265,915.56, to which add $25,995.95, decrease in fixed charges, making the gain in net revenue $291,911.51. In resuming the payment of dividends, the Board deemed it wise to retain a strong reserve of net earnings, under the conviction that this policy, together with a gradually increasing stock basis, and steady reduction of the debt of the company, would establish the stock upon a secure foundation of productive value. The floating debt of the company, less cash assets, is about $700,000, against which the company holds $746,000 of its consolidated 7 per cent bonds, $306,000 Delaware Division Canal Company bonds, and 18,901 shares of its own stock.

The closing quotations on Thursday were : Adams Express, 140@145; American Express, 90@91 ; Chicago, Burlington and Quincy, 131¾@131½ ; Canada Southern, 46@46½; Chicago and Northwestern, 129⅜@129⅝;do. pref., 138¾@139; Chicago and Alton, 128½@129½; Central of New Jersey, 92½@92⅞; Central Pacific, 87¾@88; Chicago, Milwaukee and St. Paul, 107@107¼ ; do. pref., —@122; Columbus, Chicago and Indiana Central, 10@10¼ ; Delaware and Hudson Canal, 107⅞@108¼ ; Delaware, Lackawanna and Western, 122⅝@123⅞ ; Hannibal and St. Joseph, 91½@92; do. pref., 93½@95½; Illinois Central, 132@132½; Lake Erie and Western, 27½@28½ ; Lake Shore and Mich. Southern, 108½@108⅝; Metropolitan Elevated, 85¼@85½ ; Manhattan Elevated, 52¼@53 ; do. Mich. Cent., 80@80¼; New York Elevated, 103½@105½; N. Y. Lake Erie and Western, 35¾@35⅞ ; do. pref., —@73 ¼; New York Central and Hudson River, 128¾@129 ; Northern Pacific, 31⅛@31½ ; do. pref., 68½@68¾ ; Ohio and Mississippi, 28⅞@29⅛; Pacific Mail, 39⅝@39⅞ Texas and Pacific, 37¼@37⅝ ; Union Pacific, 112½@112¾ ; United States Express, 73@75; Western Union Telegraph, 77¾@77⅞; Wabash, St. Louis and Pacific , 28@28¼ ; do. pref., 55¼@55½ ; Wells-Fargo Express, 124@126.

The following quotations of sales of railway and other securities, for the week, are in addition to those given elsewhere in our columns:

New York.—Atchison, Colorado and Pacific 1st, 95 ; Boston and New York Air Line pref., 68 ; Boston, Hartford and Erie 1st, 55; Chicago, Burlington and Quincy 8s, 103¾ ; Chicago and Northwestern 5s, S. F. 101; do. ext., 107 ; Chicago and Milwaukee 1st, 119 ; Chicago, St. Louis and New Orleans, 74 ; Chesapeake and Ohio 1st pref., 32½; do. 2d pref., 42½ ; do. cur. int., 47 ; do. pur. money fund., 114 ; do. 1st, Series A, 102 ; Chicago, St. Paul, Minneapolis and Omaha, 33⅜; do. pref., 99⅝ ; do. consol., 100, Charlotte, Col. and Aug., 69 ; Cedar Falls and Minn., 17½ ; Central Iowa 33¾ ; Columbia and Greenville pref., 90 ; Cairo and Fulton 1st, 106½ ; Columbus, Chicago and Indiana Central Inc., 55½ ; do. 1st mort. Trust Co. certif. ass. sup., 119 ; Chicago, Milwaukee and St. Paul, La C. and Dav. div., 94 ; do. S. M. div., 103½ ; do. Chicago and Pacific W. div., 1st, 108½ ; Cin., nati, Indianap., St. Louis and Chicago 1st, 105½ ; Chicago, St. Paul and Minneapolis 1st, 111½ ; Denver and Rio Grande 61⅞; do. 1st, 113½; do. 1st consol., 101½ ; Dubuque and Sioux City, 83 ; East Tennessee, Virginia and Georgia, 12 ; do. pref., 20⅜ ; do. 1st, 115¼ ; do. 5s, 76½ ; do. inc., 53½ ; Gulf, Colorado and Santa Fe 1st, 107 ; Green Bay, Winona and St. Peter, 12 ; do. 1st, 92 ; Houston and Texas Central 1st, Waco and Northwestern div., 111 ; do. Western div., 107 ; Hudson River 2d S. F., 111 ; Indiana, Bloomington and Western, 40 ; do. 1st, 90 ; Indianapolis, Decatur and Springfield pref., 40 ; do. 1st, 104 ; Illinois and Southern Iowa 1st, 119 ; Kansas Pacific 1st consol., 102¾ ; do. 6s, Denver div. ass., 108 ; Lehigh and Wilkesbarre consol. ass., 106 ; do Inc., 92 ; Long Island, 51½ ; do. 1st, 115 ; Lake Erie and Western, 29½ ; do. inc., 50¾ ; Louisville, New Albany and Chicago, 71½ ; Louisville and Nashville Gen'l mort., 6s, 96⅛ ; Lafayette, Bloomington and Muncie 1st, 103 ; Michigan Central 8s, 104 ; do. Equip. 5s, 104 ; Manhattan Beach, 30 ; Marietta and Cincinnati 2d pref., 8 ; Missouri, Kansas and Texas, 30⅞ ; do. gen'l mort. 6s, 80 ; do. 7s, consol., 103 ; do. 2d, 66 ; Missouri Pacific, 97⅛ ; do. 3d, 110¾ ; Memphis and Charleston, 55½ ; Milwaukee, Lake Shore and Western, 45½ ; do. 1st, 100 ; Mobile and Ohio, 28 ; do. 1st deben., 91 ; do. 2d deben., 60 ; do. 1st., 112 ; Metropolitan Elevated 2d, 91 ; Minneapolis and St. Louis 1st, Iowa Ext., 112 ; Nashville, Chattanooga and St. Louis, 70¾ ; do. 6s, 115 ; New York, Ontario and Western, 24¼ ; Norfolk and Western pref., 47 ; do. Gen'l mort., 102½ ; Northern Pacific 1st, 97 ; New Orleans Pacific 1st, 87 ; New York, Central subscription 6s, 102¾ ; Oregon Railway and Nav., 134 ; do. 1st, 106¾ ; Ohio Central, 19¼ ; do. inc., 38½ ; do. 1st, 96 ; Oregon Transp., 69 ; Ohio and Mississippi, Springfield div. 1st, 121 ; Ohio Southern inc., 40; Peoria, Decatur and Evansville, 27½ ; do. inc., 70 ; Rochester and Pittsburg, 29¼ ; do. inc., 40 ; Richmond and Allegany, 25¾ ; do. 1st, 90 ; Richmond and Danville, 219½ ; do. W. P., 254½ ; do. 1st, 106 ; Rome, Watertown and Ogdensburg, 20 ; St. Louis, Kansas City and Northern, Omaha div. 1st, 112 ; St. Paul, Minneapolis and Manitoba, 109⅞ ; do. 2d, 105½ ; St. Paul and Sioux City 1st, 112 ; St. Louis, Iron Mountain and Southern, 5s, 80 ; do. Cairo, Arkansas and Texas 1st, 106½ ; Southern Pacific of California 1st, 104⅛ ; Toledo Delphos and Burlington, 15 ; Texas and Pacific, 40⅞ ; do. inc. L. G., 63½ ; do. Rio Grande div. 1st, 80½ ; Toledo, Peoria and Western 1st, 111 ; Wabash, St. Louis and Pacific Gen'l mort. 6s, 83 ; do. do. Chicago div., 85 ; Arkansas 7s, L. R., P., B. and N. O., 26 ; Alabama, Class A, 81½ ; Louisiana 7s, consol., 66 ; Missouri 6s, 1888, 111 ; Tennessee 6s, old, 51 ; do. new, 50 ; South Carolina 1st, 99½ ; Am. Dist. Tel., 50 ; Canton Co., 64 ; Sutro Tunnel, ⅜ ; Colorado Coal and Iron, 41½ ; do. 6s, 85¾ ; Consol. Coal, 31 ; New Central Coal, 17 ; Central Mining, 1⅛ ; Excelsior, 1½ : Homestake, 19 ; Ontario, 35 ; Standard, 16½.

Philadelphia.—Am. S. S. Co. 6s, 107 ; Central Transportation, 35½ ; Chesapeake and Delaware Canal 6s, 89 ; Catawissa new pref., 54 ; Huntingdon and Broad Top Mt. consol. 5s, 88½ ; Nesquehoning Valley, 57 ; New Orleans Pacific 6s, 90 ; Philadelphia and Reading scrip, 81 ; do. consol. mort. 6s, gold, 113 ; Philadelphia, Wilmington and Baltimore 4s, 95 ; Pennsylvania Co. 4½s, 98 ; Schuylkill Nav. 6s, 1895, 68 ; St. Paul and Duluth pref., 72 ; Texas and Pacific consol. mort. 6s, 97 ; do. Rio Grande div. 6s, 80 ; Warren and Franklin 7s, 111¼ ; West Chester and Philadelphia 7s, 119. The latest quotations are : City 6s, 108@118 ; do. free of tax, 125@132 ; do. 4s, new, 102@113 ; Pennsylvania State 6s, 3d series, 100@101 ; do. 5s, new loan. 116@117 ; do. 4s, old, 110@112 ; do. 4s, new, 114@114½; Philadelphia and Reading R. R., 28½@28⅝ ; do. consol. mort. 7s, reg., 125@126½ ; do. mort. 6s, 117@120 ; do. gen'l mort. 6s, coupon, 94½@95½; do. 7s, 1893, 120@120½ ; do. new, conv., 72⅝@73½ ; United New Jersey R. R. and Canal, 186½@186¾ ; Buffalo, Pittsburg and Western, 15⅞@16 ; Pittsburg, Titusville and Buffalo 7s, 93@94 ; Camden and Amboy mort. 6s, 1889, 113½@114 ; Pennsylvania R. R., 60½@60⅝ ; do. general mort. 6s, coupon, 123½@124¾ ; do. reg., 123½@124½ ; do. consol. mort. 6s, reg., 117½@118½ ; Little Schuylkill R. R. 56¾@57½ ; Morris Canal, 65@69 ; do. pref., 166¾@169 ; Schuylkill Navigation, 5½@6 ; do. pref., 12½@13 ; do. 6s, 1882, 91@93 ; do. 1872, 107@108 ; Elmira and Williamsport pref., 58@65 ; do. 6s, 115@— ; do. 5s, 95@100 ; Lehigh Coal and Navigation, 42⅞@43⅛ ; do. 6s, 1884, 105½@106½ ; do. R. R. loan, 116@118 ; do. Gold Loan, 111½@112 ; do. consol. 7s, 116½@117½ ; Northern Pacific, 33⅞@34 ; do. pref., 72@72¼ ; North Pennsylvania, 63@65 ; do. 6s, 105@106½ ; do. 7s, 119@120 ; do. General mort. 7s, reg., 121@123½ ; Philadelphia and Erie, 14@17 ; do. 7s, 114@115 ; do. 5s, 105@106 ; Minehill, 62⅛@62½ ; Catawissa, 16@17½ ; do. pref., 54@55½ ; do. new pref., 54@54½ ; do. 7s, 1900, 116½@— ; Lehigh Valley 62@62⅛ ; do. 6s, coupon, 123@123½ ; do. reg., 123@123½ ; do. 2d mort. 7s, 134@— ; do. consol. mort. 120½@122 ; Fifth and Sixth streets (horse), 149½@150 ; Second and Third, 109@115 ; Thirteenth and Fifteenth, 75@78 ; Spruce and Pine, 45@50 ; Green and Coates, 70@80 ; Chestnut and Walnut, 90@91 ; Germantown, 60@75 ; Union, 110@115 ; West Philadelphia, 100@110 ; People's 14@15 ; Continental, 100@102.

Baltimore.—Atlanta and Charlotte, 78½; do. 1st, 109½; Baltimore City 6s, 1890, 116½; do. 5s, 1894, 114½; do. 5s, 1916, 121½; Canton 6s, gold,

102; Columbia and Greenville, 1st, 104¼; Northern Central 5s, 95½; Norfolk and Western pref., 55⅛; Ohio and Mississippi, Springfield div. 121; Richmond and Alleghany, 26½; Virginia and Tennessee 8s, 125; Virginia Midland, old, 130; do. 1st pref., 145; do. inc., 85; 1st mort., 113; do. 2d mort., 111; do. 4th mort., 55; do 5th mort., 55; Virginia Peelers, 38⅜; do. coupons, 37.

Boston.—Atlantic and Pacific 6s, 92; do. 6s, inc., 22½; Boston Land, 7¾; Boston, Clinton Fitchburg and New Bedford, 49; Chicago, Milwaukee and St. Paul, Dubuque div. 6s, 102; Connotton Valley, 15⅞; do. 7s, 81; do. Straitsville div. 7s, 70; Chicago, Burlington and Quincy 4s, Denver div. ext., 83½; Cincinnati, Sandusky and Cleveland 7s, 103½; Connecticut and Passumpsic Rivers R. R., 92; Flint and Pere Marquette, 23; do. pref., 94; Fort Scott and Gulf Branch 7s, 109; Iowa Falls and Sioux City, 80; Kansas City, Fort Scott and Gulf, 120; Kansas City, St. Joseph and Council Bluffs 7s, 115; Louisiana and Missouri River, 13; Little Rock and Fort Smith, 57; do. 7s, 110½; Marquette, Houghton and Ontonagon, 6s, 102½; Massachusetts Central, 18¾; Mexican Central 7s, 76; do. blocks, new, 88; Manchester and Lawrence, 166; Northern Pacific 6s, 96⅜; New York and New England 6s, 106¾; Ogdensburg and Lake Champlain consol 6s, 98; Rutland, 3½; do. pref., 24; do. 6s, 100½; Summit Branch, 12; Sonora, R. R. 25; do. 7s, 84; Toledo, Delphos and Burlington, 7⅛; do. inc. 15½; do. S. E. div., inc., 18½; Wisconsin Central, 17; Atlantic Mining, 13½; Allouez, 3; Brunswick Antimony, 14; Catalpa, 55c.; Franklin, 11¼; Harshaw, 3; Huron, 2½; Napa consol, Quicksilver, 6½; National, 2⅛; Osceola, 30; Pewabic, 12½; Phœnix, 3½; Ridge, 50c.; Silver Islet, 18; Sullivan, 2.

Business of the Suez Canal.

The year 1881 was the most prosperous that the Suez Canal Company has yet seen—the receipts having been 51,080,355f., which is 11,239,866f. in excess of the receipts for the year 1880. The number of English vessels that passed through the canal was 2,256. France had 109 ships, Holland 70, Austria 65, Italy 51, Spain 46, Germany 40, Egypt 11, Turkey 11, Norway 10 and China 4. Ten years ago the amount of coal supplied at Port Said was 126,600 tons; last year it was 506,000 tons, or four times as much; and while the British proportion of the tonnage in 1871 was 64 per cent of the total, last year it was 82. Of share prices some equally interesting figures are printed. With a nominal value of 500f. they had fallen, in 1863, to 220f. In 1869, the year the canal was opened, they rose to 663f.; in 1880 they had reached 715f. and before the year closed had touched 1,327f. They advanced to 1,700f. in June of the following year, and between that month and January last went rapidly on to the highest point they ever reached—3,500f., to fall, ere the middle of the month came on, to 2,100f. Last year the dividend paid on these shares was 9 per cent; for the present year it will probably be 12, so that 2,100f., a point to which the shares were forced in a time of panic, even with dividends of 12 per cent, would still be far higher than the actual value of the shares.

How Skulls and Backbones are Built.

A lecture was recently delivered at Hollins Hall, Baltimore, by Prof. H. Newell Martin, of the biological department of the Johns Hopkins University, for the benefit of the employes of the Baltimore and Ohio Railroad Company, under the title of "How Skulls and Backbones are Built." He compared a train of passenger cars, with the locomotive carrying its passengers, to the skeleton of the body, carrying through the world the various important organs—the brain, stomach, eyes, &c. The locomotive represents the muscles, and the cars the skeleton. The more important the organ, the more carefully is it protected. The skull, protecting the brain, is the hardest part, and he said he had no doubt of the statement he had read in a newspaper of a woman falling sixty feet into a well and not being killed, because she fell on her head. He gave a clear description of the formation of the skull, of different bones dovetailed and interlocked, comparing it to the dome of some grand mosque. He showed by projections on the screen various animals, crabs, terrapins—which he called favorite Maryland animals—the American eagle and others, illustrating his remarks on the skull and the backbone. Prof. Martin was listened to with appreciation by the audience, who were instructed as well as entertained. Among those in attendance were President and Mrs. Garrett, Samuel Spencer, third vice-president of the company; Andrew Anderson, assistant to the president; John W. Davis, assistant to the first vice-president; A. J. Fairbank, general agent; A. B. Crane, private secretary to Mr. Garrett; Col. J. Spear Nicholas, J. Howard McHenry; A. J. Cromwell, assistant master of machinery; Mr. Baldwin, foreman; Mr. Hoskins; E. E. Sheldon, secretary of the Railroad Branch of the Young Men's Christian Association; Prof. Sewell, of Johns Hopkins, and Messrs. Graham and Matthews, of the city council. President Garrett presented the lecturer at the opening and congratulated him at the close.

Railroads of Maine.

During the year 1881 five new railroad corporations were organized in the State of Maine, viz., the Old Orchard Junction Railroad, which runs along the beach a distance of 2½ miles; the Bangor and Katahdin Iron Works Railroad, to extend from the Bangor and Piscataquis Railroad in the town of Milo, to the Katahdin Iron Works, 19 miles; the Aroostook River Railroad, from Caribou to Presque Isle village, 12½ miles; the Bridgton and Saco River Railroad, from Bridgton Centre to a point on the line of the Portland and Ogdensburg in the town of Hiram, 15½ miles; the Lewiston and Auburn Horse Railroad, through certain streets in those cities, a distance of track of about five miles. The report of the Railroad Commissioners, from which the above was obtained, says that the General Railroad Law, in its practical workings, has been found defective in several respects. For instance, it says, the Bangor and Katahdin Iron Works Railroad was first organized for a narrow-gauge road; subsequently the company decided to build to the standard gauge, but it was found there was no legal way to make the change except by commencing anew and organizing a second time, which was done. The law should be amended so as to provide for such cases as this. "We might indicate other amendments," say the Commissioners, "but as there will be no regular session of the Legislature until 1883, we defer for the present from doing so." The Commissioners state that the roads are all in satisfactory condition. The total mileage is 1181.4.

The Almighty Dollar.

"Brother Smith, what does this mean?"

"What does what mean?"

"Bringing a nigger to this church."

"It is my own church."

"Your own? Is that any reason why you should insult the whole congregation?"

"But he is intelligent and well educated."

"Who cares for that. He is a nigger."

"But he is a friend of mine."

"What of that! Must you, therefore, insult the whole congregation?"

"But he is a Christian, and belongs to the same denomination?"

"What do I care for that? Let him go and worship with his fellow-niggers."

"But he is worth $5,000,000," said the merchant."

"Worth what?"

"Five million dollars."

"Worth $5,000,000! Brother Smith, introduce me."

It is a curious fact that one of the hardest things for a public man to do is to die just at the right time. This matter of opportune death is very greatly neglected by a large number of persons who do not seem to know that it is just as necessary to choose a proper time to die—i. e., when one's popularity is at its height—as it is to choose the time in which to be born. When, for instance, a merchant has toiled successfully, neglecting every holiday, refusing all kinds of recreation, making himself a perfect slave to his ambition to acquire a fortune, and so far neglecting the education of his sons that they find it utterly impossible to get on without spending vast sums of money, while at the same time they are conscious of a constitutional inability to make any for themselves; we say that when a merchant has made just enough to supply the wants of his children without having any balance for himself, it seems to be entirely in accordance with the imperative demands of American society that he shall indulge the "inspiration of removal." When, again, a politician has used the somewhat doubtful machinery of his party to win a prominent position and the slender profits which generally attach to such a position in this country, and a sudden change of administration makes it necessary for him to earn an honest living—a hard contingency, for which neither nature nor inclination have in any degree fitted him—it would seem perfectly natural for him to step down and out. But men cling to life as tenaciously as a barnacle to a ship. They are quietly laid aside, as much laid aside as though they occupied their compartment in the family vault, but still they persist in asserting that they are alive. They are not as honest as Chesterfield and his friend in their old age. Chesterfield said: "The fact is, Tyrawley and I have been dead these two years, but we don't choose to have it known."

Statement of the Public Debt of the United States, February 1, 1882.

DEBT BEARING INTEREST.

	Amount Outstanding.	Accrued Interest.
6 per cent loan, 1861-'81, continued at 3½ per ct.	$81,624,200 00	$238,070 58
6 per cent loan 1863-'81 continued at 3½ per ct	47,855,700 00	139,579 12
5 per cent funded loan of 1881	401,503,900 00	3,513,145 47
4½ per cent funded loan of 1891	250,000,000 00	1,875,000 00
4 per cent funded loan of 1907	738,788,750 00	2,462,629 00
4 per cent refunding certificates	559,100 00	1,863 67
3 per cent navy pension fund	14,000,000 00	35,000 00
Aggregate of debt bearing interest	$1,534,331,600 00	$8,265,287 84
Interest due and unpaid		1,953,060 31

DEBT ON WHICH INTEREST HAS CEASED SINCE MATURITY

	Amount Outstanding.	Interest due & unpaid.
4 to 6 per cent. old debt, 1837.	$57,665 00	$64,174 81
5 per cent. Mexican indemnity stock, 1846	1,104 91	85 74
6 per cent. bonds, 1847	1,250 00	22 00
6 per cent. bounty land scrip, 1847	3,275 00	213 06
5 per cent. Texas indemnity bonds, 1850	20,000 00	2,945 00
5 per cent. bonds, of 1858	8,000 00	
5 per cent. bonds, of 1860	10,000 00	600 00
6 per cent. 5-20 bonds, 1862, called	370,700 00	8,439 82
6 per cent. 5-20 bonds, June, 1864, called	58,650 00	170 95
6 per cent. 5-20 bonds, 1865, called	76,750 00	18,895 79
5 per cent. 10-40 bonds, 1864, called	472,400 00	110,073 76
6 per cent. Consol. bonds, 1865, called	407,800 00	15,650 92
6 per cent. Consol. bonds, 1867, called	1,097,550 00	204,112 15
per cent. Consol. bonds, 1868, called	298,950 00	23,759 12
6 per cent. loan, Feb. 8, 1861, matured Dec. 31, 1880	100,000 00	5,430 00
per cent. funded loan 1881, called	2,742,200 00	70,653 12
Oregon War Debt, March 2, 1881, matured July 1, 1881.	129,150 00	6,202 50
6 per cent loan of July 17 and Aug. 5, 1861, matured June 30, 1881	914,850 00	35,077 50
6 per cent loan of July 17 and Aug., 5 1861, continued at 3½ per cent, matured Dec. 24, 1881, and Jan. 29, 1882, called	6,316,150 00	29,530 06
6 per cent. loan of March 3, 1863, matured June 30, 1881.	268,650 00	7,093 50
1-10 to 6 per cent. Treasury notes, prior to 1846	82,525 35	2,668 06
1-10 to 6 per cent. Treasury notes, 1846	6,000 00	206 00
6 per ct. Treasury notes, 1847.	950 00	57 00
3 to 6 per cent. Treasury notes, 1857	1,700 00	99 00
6 per ct. Treasury notes, 1861.	3,000 00	364 50
7 3-10 per cent. 3 years' Treasury notes, 1861	16,300 00	1,104 43
5 per cent. 1 year notes, 1863	43,085 00	2,166 35
5 per cent. 2 year notes, 1863.	34,200 00	1,729 80
6 per ct. compound interest notes, 1863-64	224,290 00	45,779 89
7 3-10 per cent. 3 years' Treasury notes, 1864-65	140,900 00	4,752 92
6per cent. certificates of indebtedness, 1862-63	4,000 00	253 48
4 to 6 per cent. temporary loan, 1864	2,960 00	244 19
per cent. certificates, called.	5,000 00	394 31
Aggregated of debt on which Interest has ceased since maturity	$13,920,005 26	$662,949 73

DEBT BEARING NO INTEREST.

Demand notes, 1861-62		$59,890 00	
Legal tender notes, 1862-63		346,681,016 00	
Certificates of Deposit		11,400,000 00	
Coin certificates, 1863		5,188,120 00	
Silver certificates, 1878		68,999,670 00	
Unclaimed interest			7,256 51
Fractional currency, 1862, 1863 and 1864	$15,445,427 67		
Less amount estimated as lost or destroyed, act of June, 21, 1879	8,375,934 00		
		7 069,493 67	
Aggregate of debt bearing no interest		$439,398,189 67	$7,256 51

RECAPITULATION.

	Amount Outstanding.	Interest.
Debt bearing interest in coin, viz:		
Bonds at 6 per cent., continued at 3½ per cent.	$129,479,900 00	
Bonds at 5 per cent, continued at 3½ per cent.	401,503,900 00	
Bonds at 4½ per cent	250,000,000 00	
Bonds at 4 per cent.	738,788,700 00	
Refunding certificates	579,100 00	
Navy pension fund, 3 p.c	14,000,000 00	
	$1,534,331,600 00	$10,218,348 15
Debt on which interest has ceased since maturity.	13,920,005 26	662,949 73
Debt bearing no int., viz:		
Old demand and legal-tender notes	$346,740,906 00	
Certificates of deposit	11,400,000 00	
Coin & silver certificates.	74,187,790 00	
Fractional currency	7,069,493 67	
	$439,398,189 67	
Unclaimed interest		7,256 51
	$1,987,649,794 93	$10,888,554 39
Total debt, principal and interest to date, including interest due and unpaid	$1,998,538,349 32	

AMOUNT IN TREASURY.

Interest due and unpaid	$1,953,060 31
Debt on which interest has ceased	13,920,005 26
Interest thereon	662,949 73
Gold and silver certificates	74,187,790 00
U. S. notes held for redemption of certificates of deposit	11,400,000 00
Cash balance available February 1, 1882.	143,901,663 29
	$246,025,468.59
Debt, less am't in Treas'y Feb. 1, 1882	$1,765,491,717 09
Debt, less am't in Treasury Feb. 1, 1882	1,752,512,880 73
Decrease of debt during the month	$12 978,836 36
Decrease of debt since June 30, 1881	$88,085,931 25

BONDS ISSUED TO THE PACIFIC RAILROAD COMPANIES, INTEREST PAYABLE IN LAWFUL MONEY.

	Amount Outstanding.	Accrued Interests not paid.
Central Pacific bonds, 1862-64	$25,885,120 00	$129,425 60
Kansas Pacific bonds, 1862-64	6,303,000 00	31,515 00
Union Pacific bonds, 1862-64	27,236,512 00	136,182 56
Cent. Branch Union Pacific bonds, 1862-64	1,600,000 00	8,000 00
West'n Pacific Bonds, 1862.64	1,970,560 00	9,852 80
Sioux City & Pacific bonds, 1862-64	1,628,320 00	8,141 60
Totals	$64,623,512 00	$325,117 56

Interest paid by the United States, $53,405,977 38; interest repaid by transportation of mails, &c., $14,804,-021,94; interest repaid by cash payments: 5 per cent. net earnings, $655,198.87; balance of interest paid by United States, $37,946,756.57.

The foregoing is a correct statement of the public debt, as appears from the books and Treasurer's returns in the Department at the close of business, January 31, 1882.

CHARLES J. FOLGER,
Secretary of the Treasury.

Montreal and Sorel Railway.

THE completion of this road has been considerably delayed notwithstanding the determined efforts of the company to have the road in running order at the opening of navigation. Some of the owners of the land through which the line has been laid out, caused considerable delay, as well as the contractors, who one after another suspended operations after working for some time. The company have finally settled the difficulty by taking the completion of the road into their own hands, and with this object in view a renewed effort has been made during the past few days to put the work through without further delay. A new station is in course of erection at Longueuil, and another is to be commenced at St. Lambert next week, where an engine house is already approaching completion. The coal which was purchased by this company last fall when it was cheap, and stored at St. Lambert, is being sought for by manufacturers now that the price has gone up to nearly double the amount that was paid for it. The company decline to sell as they will require it all, now that their rolling-stock is in motion again conveying lumber and other railway supplies to given points along the line, but they have loaned some on advantageous terms.—*Montreal Witness.*

Mississippi Railroad Commission.

MISSISSIPPI is the last State to come to the front with a railway regulation law, a bill having passed the Legislature establishing a railroad commission composed of three members appointed by the Governor and holding office for six years. This commission is empowered to fix a maximum schedule of rates for freight and passengers on all railways within the State. It also compels the railways to make improvements deemed necessary by the commissioners for the convenience and security of the public. It can investigate the books and papers of all railways, can examine all railway agents and employes, and a fine not exceeding $5,000 and imprisonment not exceeding six months are imposed on any railway employe who violates the provisions of the act or refuses to obey the orders of the commission. In fact the commissioners are clothed with inquisitorial powers almost without limit; and the act is condemned by the Vicksburg *Herald*, which has an idea that the raging desire of some for positions as commissioners "is greater than the desire of the people for a railroad commission."

Railways, etc. in British Columbia.

A CORRESPONDENT of the *Montreal Witness*, writing from New Westminster, British Columbia, says:

"Having been in this country from February 1859 to August 1866, and now again for nearly two years, I can speak comparatively, and may say that the summers seem to give more rain than formerly and the winters more frost—at least in New Westminster. Still, we have, upon the whole, a good, healthy, invigorating climate. Our people generally thrive well. Materially the country is progressing. The lumbering, farming and fishing industries are being pushed forward, while coal mining is a very flourishing enterprise. Gold mining has declined somewhat, but still pays well in certain localities. The progress of railway construction on the Onderdonk contract gives a fixed standard for labor and fixed prices for produce. In more respects than one railways are levellers. Should the western link of the railway from Emory to Coal Harbor be placed under contract within the present or next year, our farmers will be greatly benefited by having at hand a ready market for certain kinds of produce for some years to come at any rate. There is some probability of the railway from Nanaimo to Esquimalt, known as the Island Railway, being built in a few years. This would benefit the islanders very much. Victoria, Nanaimo and New Westminster are now substantial towns, each backed up by farming district of some importance."

"Mother," remarked a Duluth girl, "I think Harry must be going to propose to me." "Why so, my daughter?" queried the old lady, laying down her spectacles, while her face beamed like a moon on its fourteenth night. "Well, he asked me this evening if I wasn't tired living with such a menagerie as you and dad."

North Carolina Manufactures.

The energy and shrewdness of the people of North Carolina are evidenced in the great number of small mills that have been built since the war. More than eighty cotton factories, great and small, are now running, all of which, with a solitary exception, are owned by small shareholders living in their immediate neighborhood. In other words, the profits of the cotton patchers are invested in mills, that the planter may make additional gains by converting his staple into yarn. Without an exception these mills have prospered, and many new ones are now building. For these the many rivers flowing from the mountains to the sea furnish an unlimited supply of water-power. Among the textiles exhibited by North Carolina at Atlanta were some fine blankets made in Surry county. These mills find a home market for their entire production, and have never been fully able to supply the demand. Their wool is brought to their doors by the farmers of the county, but they have not sufficient capital to take all that is offered. The fleeces are from Merinos and Southdowns, both of which breeds of sheep do well everywhere in the State.

A Characteristic of American Life.

In the summer of 1836 a barefooted boy was on his way to Honesdale, Pa., walking the towpath of the Delaware and Hudson Canal. When four miles from Port Jervis, and still forty miles from his destination, he was overtaken by a canal-boat. He was asked to jump aboard the boat and ride, which he did. On the boat was a Scotch family, just landed in America, who were on their way to the Pennsylvania coal fields. One of its members was a boy the same age of the young pedestrian, eleven years. A strong friendship grew up between the two boys by the time they reached Honesdale. The Scotch family went on to Carbondale, the center of the Lackawanna coal field. The boy who had been given the ride in the boat obtained employment on the canal. His friend, the Scotch boy, worked in the mines for a short time as mule boy. Both he and the former barefoot boy rose in the Company's service. The Scotch boy of forty-six years ago is Thomas Dickson, President of the Delaware and Hudson Canal Company. His friend, the other boy, is Col. F. Young, General Manager of the Company, and President of its Albany and Susquehanna Railroad system.—*Sun.*

Canadian Pacific Railway.

The Governor-General of Canada, in his speech at the recent opening of the Dominion Parliament, said that the work of construction on that portion of the Canadian Pacific Railway between Prince Arthur's Landing and Winnipeg is being pressed to completion, and it is confidently expected that in July next railway communication will be established between those places. The section between Rat Portage and Winnipeg, one hundred and thirty-five miles in length, has been completed and transferred under the terms of the contract to the Canadian Pacific Railway Company, by whom it is now operated. Considerable progress has been made on the eastern section, commencing at Callander Station, and the vigorous prosecution of the work on that portion of the line during the present year provided for. In British Columbia the work upon the section between Savonas Ferry and Emory's Bar is being carried on with every prospect of its completion within the time specified in the contract, and the line from the latter place to Port Moody, which was carefully located during the past season, is being placed under contract, with a view to its completion at the same date as the section from Savonas Ferry to Emory's Bar. Upon the sections to be constructed by the railway company the work has been most energetically carried forward. During the past summer the road has been graded for the distance of two hundred and eighteen miles, and of this one hundred and sixty-one miles are open for traffic. The company have in addition graded eighty-nine miles of branch lines.

American Cars in England.

It is really becoming a serious question whether public safety will not render it necessary for us to adopt the long American railroad carriages. Now that the facility of committing theft or murder upon isolated passengers has been brought home to the criminal classes, railroad crimes seem to be on the increase. Every one who gets into an empty carriage does so at the risk of a man following him and cutting his throat. The appliances for stopping the train in case of assault are absolutely useless, unless the criminal be an utter fool, for he could easily plan his attack in a manner to hinder his victim from touching the signal. A murderer might in nine cases out of ten escape by jumping out of the carriage when the train is slacking speed. If Lefroy had done this, I doubt whether Mr. Gold's murderer would ever have been discovered. Only a few days ago I was in a railway carriage; opposite me was a gentleman, and the other seats were untenanted. We sat watching each other the whole way. I thought my *vis-a-vis* had a bad countenance; and he, I suppose, thought the same of me. Whenever he felt in his pocket for his handkerchief, I made ready to throttle him.—*London Truth.*

Mortgaged Stock.

A decision of great importance to business men and of interest to the general public was recently rendered at Louisville, Ky., by Chancellor Edwards, who wrote a long and carefully prepared opinion sustaining his view. The suit, as stated by the "Louisville Courier Journal," was brought by Samuel Spalding against E. H. Payne and E. P. Fontaine. Fontaine owned a large majority of the stock of the Louisville Transfer Company, and executed a mortgage to Spalding, his father-in-law, on 180 shares, to secure a debt of $4,200. The mortgage was recorded, but no transfer of the stock was made on the books of the corporation to Spalding, and Fontaine retained the certificates in his possession. Afterward Fontaine sold the stock to Payne, who had no knowledge of the mortgage. Payne took the certificates and had the stock transferred to him on the Company's books. When Spalding discovered this transaction he brought his suit to have the sale of the stock set aside and his lien on the 180 shares enforced. A demurrer was filed to the petition, and the Judge sustained it, holding that Payne, who was an innocent purchaser, was not affected by the previous mortgage. The Chancellor alluded to the fact that a vast deal of the business now transacted with banks is done by the depositing of stocks and bonds as collateral, and if every time a man went to a bank with securities of this kind the bank officers had to stop until they made an examination of his title such transactions would be retarded and business stopped.

How much a man is like old shoes!
For instance, both a soul may lose:
Both have been tanned, both are made tight
By cobblers. Both get left and right;
Both need a mate to be complete,
And both are made to go on feet.
They both need healing; oft are sold,
And both in time turn all to mold.
With shoes the last is first; with men
The first shall be the last; and when
The shoes wear out they're mended new,
And when men wear out they're men dead, too.
They both are trod upon, and both
Will tread on others, nothing loath,
Both have their ties, and both incline;
When polished, in the world to shine;
And both peg out—and would you choose
To be a man or be his shoes?

Stamping Out Old Zach.—The five-cent stamp which is in common use for ocean postage bears at present the effigy of President Zachary Taylor. It is a good portrait of a sturdy patriot, whose memory is dear to the American people. Now it is announced that the Postmaster-General proposes to abolish this effigy and substitute one of President Garfield. Of course it is appropriate to seek opportunities for official honors to President Garfield's memory; but why take occasion to pay such honors at another hero's expense? Why stamp out "Old Zach"? The Postmaster-General's obliteration of President Taylor's effigy strikes us as a hasty act of bad taste, and we do not believe that any friend of President Garfield deliberately approves it.

In excavating for the new Produce Exchange building in this city many relics have been unearthed which, it is thought, have been buried ever since the demolition of old Fort George on Bowling Green. Recently a six-pound solid shot, with the old English broad arrow cast in it, in a good state of preservation, was dug up on the Beaver street side, and also a twelve-pound solid shot, badly corroded. Both were exhibited in the Produce Exchange. A small keg, with about a shovelful of English half-pennies, bearing dates from 1738 to 1745 inclusive, was also found. The coins are in a good state of preservation.

An acquaintance from the country, having visited some friends, and being about to depart, presented a little boy—one of the family—with half a dollar, in the presence of his mother. "Please, is it a good one?" asked the little fellow. "Of course it is," replied the gentleman, surprised. "Why do you ask?" "Because I'd rather have a bad one, and then they'll let me keep it. If I get any good money it goes into the bank, and I never get it again."

New York, Jan. 30, 1882.

THE THIRTY-NINTH SEMI-ANNUAL CASH DIVIdend of the ILLINOIS CENTRAL RAILROAD COMPANY, being three and a half (3½) per cent on its capital stock, will be paid by the undersigned March 1, 1882, to shareholders as registered at the close of business on the 11th of February, after which and until the 4th day of March the transfer-books will be closed.

L. V. F. RANDOLPH Treasurer.

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Two new Ladder Tank Locomotives, 3ft. Gauge, 10 tons, May and June delivery.
Second-hand Standard Gauge Locomotives and Passenger Cars, immediate delivery,
New Box, Flat, and Gondola Cars, 4ft. 8½in. and 3ft. Gauge, for immediate delivery.
New Passenger and Combination Cars, ft. Gauge, delivery 30 days.
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FIFTY-SEVENTH SEMI-ANNUAL STATEMENT,

Showing Condition of the Company on the 1st day of

JANUARY, 1882.

CASH CAPITAL	$3,000,000 00
Reserve for Unpaid Premiums	1,943,733 00
Reserve for Unpaid Losses	245,595 36
Net Surplus	1,806,180 90
CASH ASSETS	$6,995,509 26

Summary of Assets

Held in the United States available for the PAYMENT of LOSSES by FIRE, and for the protection of Policy Holders of FIRE INSURANCE.

Cash in Banks	$ 130,172 31
Bonds and Mortgages, being first lien on Real Estate [worth $3,600,750]	1,555,858 00
United States Stocks [market value]	4,079,500 00
Bank and Railroad Stocks and Bonds [market value]	664,625 00
State and Municipal Bonds [market value]	121,750 00
Loans on Stocks, payable on demand [market value of Collaterals, $341,507.50]	229,750 00
Interest due on 1st January, 1882	85,819 19
Premiums uncollected and in hands of Agents	80,635 08
Real Estate	47,399 68
Total	$6,995,509 26

J. H. WASHBURN, *Secretary.*

T. B. GREENE, W. H. BIGELOW, } *Ass't Sec's.*

CHAS. J. MARTIN, *President.*

A. F. WILMARTH, *Vice-Pres't.*

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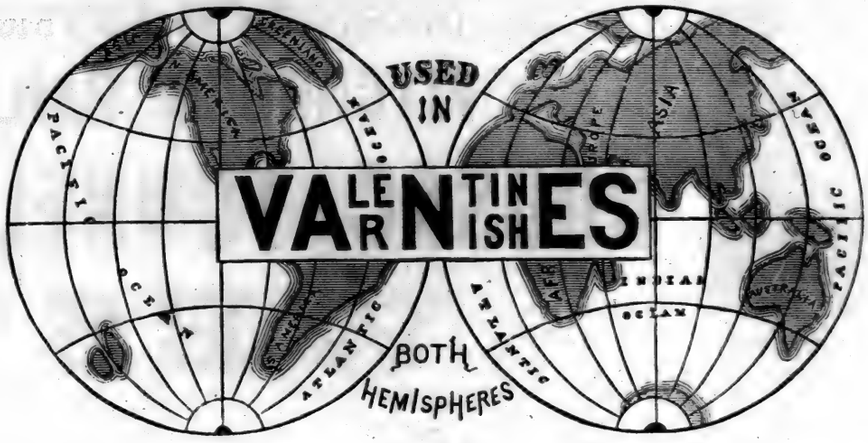
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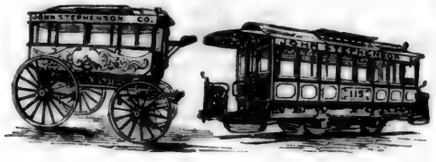
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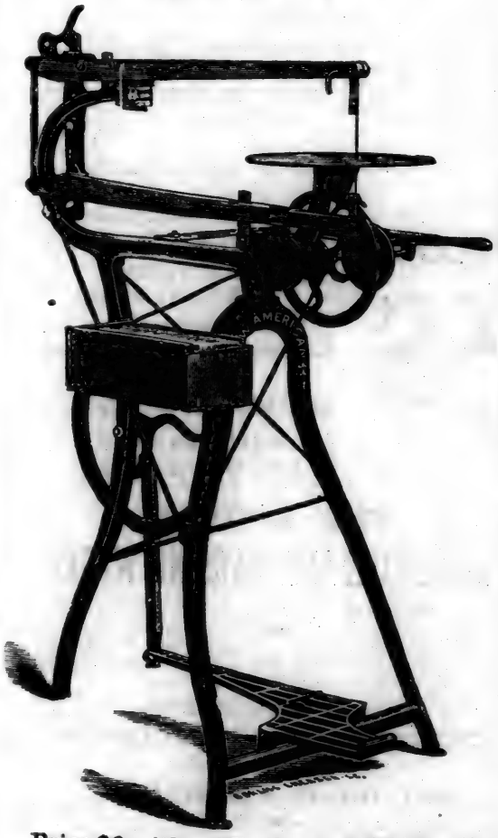
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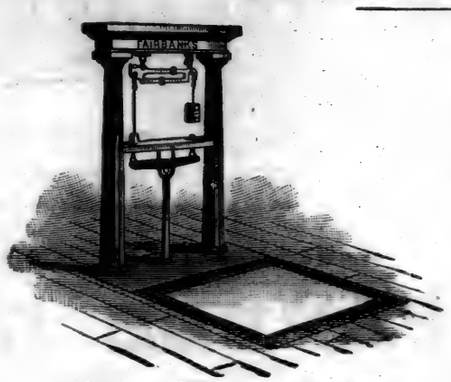
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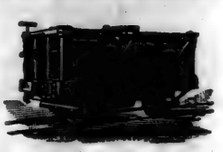
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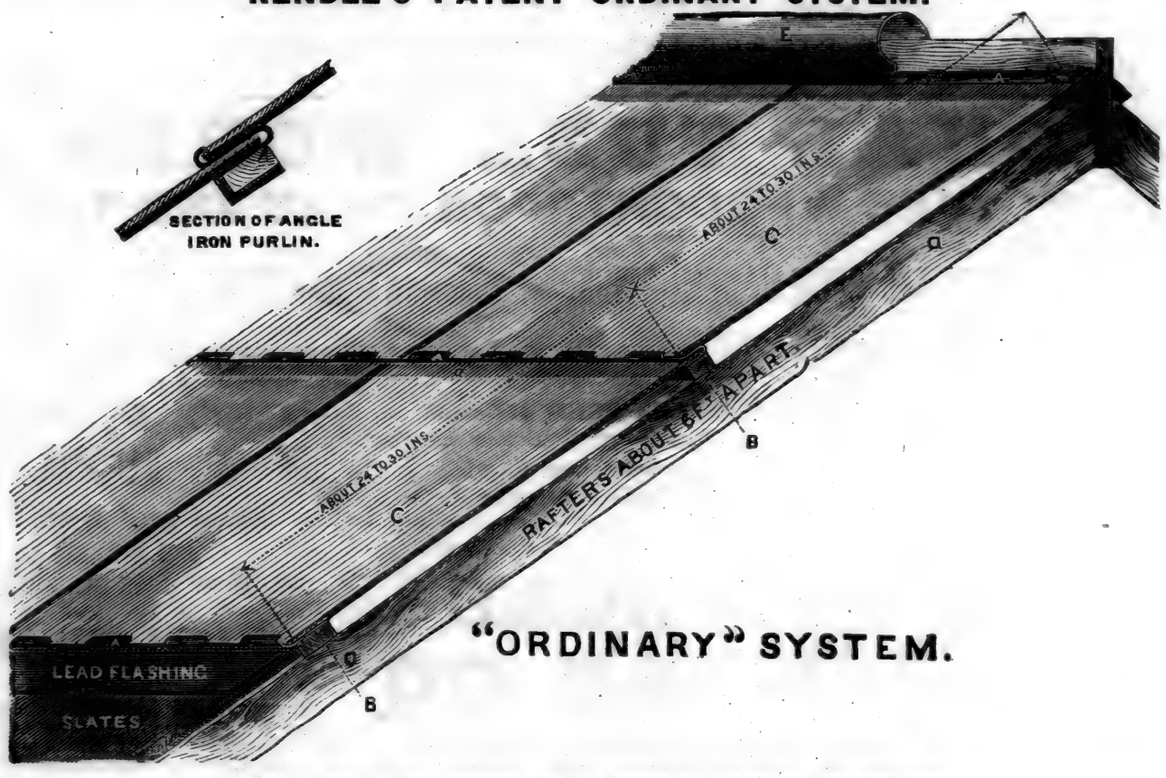
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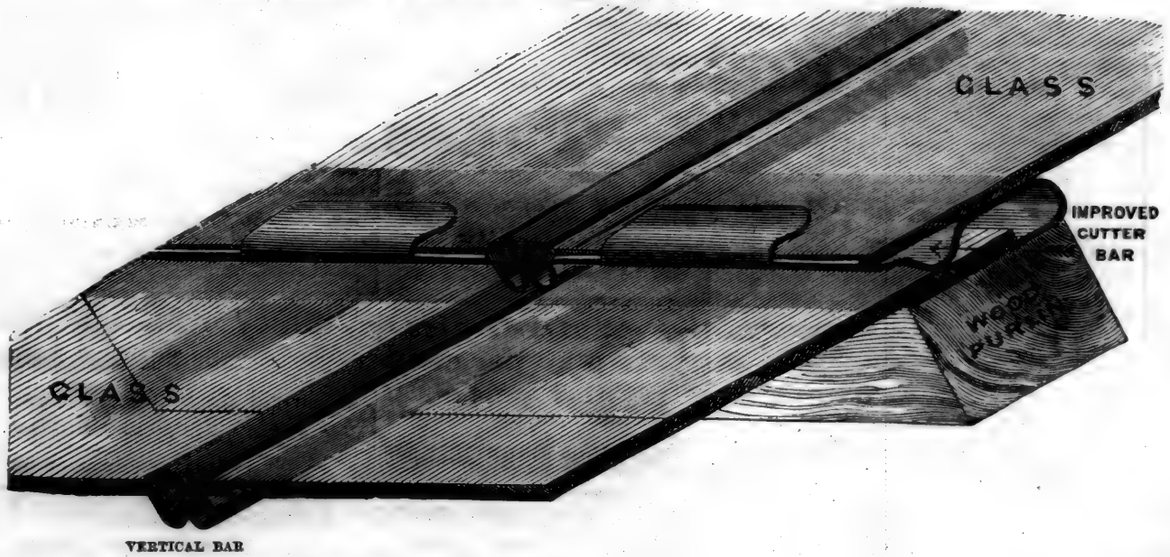
The accompanying cuts show the "Ordinary" and "Combination" systems; further information regarding which may be obtained by addressing the patentee.

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AMERICAN Railroad Journal.

ESTABLISHED 1831.

Steam Navigation, Commerce, Finance, Banking, Machinery, Mining, Manufactures.

SECOND QUARTO SERIES.—VOL. XXXVIII., No. 9.] NEW YORK, MARCH 4, 1882. [WHOLE No. 2,393.—VOL. LV.

The Hoosac Tunnel.

FROM N. H. EGLESTON'S STORY OF THE HOOSAC TUNNEL IN THE *Atlantic Monthly*.

THE Hoosac Tunnel, with all the delays, mistakes, and disappointments connected with it, is a grand achievement. It is one of the great works of our time. Begun, in its conception, as part of a canal, its completion marks the triumph of the railway, and the great change of inland transportation from the water to the land. Begun with the purpose to make it a part of a canal which, in connection with the Erie Canal, then in process of construction, should form a great line of communication and transport between the new West and the Atlantic markets and manufactories, the tunnel has hardly been completed and brought into use when the question is under debate whether the great Erie Canal itself shall not be abandoned, as no longer able to compete with the railway. Already twenty passenger and as many freight trains pass through the tunnel daily. Every morning through this gateway of the Green Mountains roll the cars whose wheels the evening but one before began their revolution at St. Louis, beside the Father of Waters. More than three hundred cars daily carry their burden through this new avenue of transit. Following, to a great extent, the line of the natural water-courses on the route, the easy grades thus secured cheapen the cost of transportation from California and Dakota, from the corn-fields of Illinois and the wheat-fields of Minnesota, to Massachusetts Bay; and a cent less of freight on each bushel of grain or barrel of flour means millions of dollars saved to the consumers of bread in New and in Old England.

If for nothing else the tunnel would be worthy of notice as a triumph of engineering. Some may think that it was only a question of Patrick with his drill and plenty of gunpowder and time; and that to go through a mountain is no more than to go through a hill, or a short rock cutting, except that the process is lengthened with the distance. But "time is money." It would take fifty years to go through the Hoosac Mountain, beginning at any point on one side, and burrowing to the other. We could not wait for that. No one, not even a state government, would put capital into a work the end of which was to be reached only after half a century. So the tunnel must be begun at more than one point. Here at once is involved a nice problem of engineering. Working simultaneously from opposite sides of the mountain, it is no longer Patrick burrowing through by whatever zigzag course he may chance to take, but these tunnelings from opposite sides must be so directed that they shall finally meet, and fall into an accurate line of adjustment. How shall this be done? As any one can see, who gives the matter a moment's thought, a slight deviation from the mathematical line required would cause the two arms of the tunnel to miss each other. The width of the tunnel is twenty-four feet. It is only necessary, therefore, for the approaching excavations to swerve from their true place at the point of expected junction by anything more than half that measure, or twelve feet, in order to slip by each other, and go farther and farther asunder, instead of coming together. Who will measure and set the angle which shall determine the momentous difference in such a case between success and failure? The tunnel is to be nearly five miles long. Each channel from the opposite sides of the mountain will therefore be nearly two miles and a half in length. The problem, then, is to run two lines of excavation through a mountain, with no visible point in front to aim at, as the engineer has in the open field, and yet to have them so nearly coincident in direction for a distance of twelve thousand feet each that they will not miss each other, but form one continuous whole. No Creedmoor rifle needs to be aimed so nicely in order to hit the bull's-eye. No allowance for wind to swerve, or the power of gravitation to draw down the ball from its proper course, render the marksman's problem so difficult of solution as the engineer's in this case. An error in the sighting of his instrument amounting literally to a hair's-breadth would send the arms of his excavation wide asunder into the bowels of the dark rock, leaving his tunnel no tunnel at all, but only a worm's track in the mountain. But the problem in this instance was still further complicated. To hasten the completion of the tunnel by providing additional faces on which the workmen could operate, as well as for the purpose of ventilation, it was determined, as we have seen, to sink a shaft from the top of the mountain to the level of the tunnel, midway between the two ends. Two factors were thus at once added to the problem: first, to fix so accurately the point on the mountain at which to begin the downward excavation that when, after working by faith for four years, the estimated time necessary, the miners should have reached the requisite depth, they would be in exact line of the projected and partly completed tunnel; and, secondly, from that pit in the depths of the mountain, to be able to aim their course in either direction so correctly as to be sure of meeting the company of miners approaching them from both extremes of the tunnel. In short, here were four tunnels to be made at the base of the mountain at one and the same time, and another from the summit perpendicular to them, and all to be exactly in the same plane, on penalty of the failure of the entire enterprise.

It was a difficult problem. But it was solved most triumphantly. When the headings from the central shaft and from the eastern portal came together, as come together they did, their alignments swerved from each other by the almost infinitesimal space of five-sixteenths of an inch! It was an unparalleled feat of engineering. With the best engineering talent of Europe the opposite arms of the Mont Cenis Tunnel had a divergence of more than half a yard. The office and worth of science were admirably illustrated in the case of the Hoosac. It was science applied to science which built this great thoroughfare of traffic and travel. Its lines and proportions were all ascertained and laid down by scientific calculation. Patrick could pound the drill and light the fuse that would explode the charges of powder; but without scientific engineering to lay his path for him and mark every drill hole, Patrick would have wandered in the depths of the mountain till doomsday, with his powder and drills, and no practicable tunnel would have been the result.

And yet, after all, there is little to be seen of this great work. The passing traveler by the railway, looking from the rear of the train, as it glides into or out of the tunnel, witnesses nearly all that a more protracted visit would enable him to behold. The description we have here given will really afford one more knowledge of this great work of art than he will be likely to gain by a personal inspection. Going to it, he will at the most see only the archway at either end, and the masses of shapeless rock which have been excavated and used in part as an embankment for the railway approaches. He will come to the portal expecting, probably, to look through to the opposite entrance—at least to see a ray of light from that point; or, if he has been told there is an ascending grade from either end, which would preclude such a sight, he will still expect to look along the symmetrical archway of

stone to such a distance within as will give him some impression of the magnitude of the work here wrought. But if ever such a sight were to be had, it must have been before the tunnel was completed and brought into use. And what, after all, is an opening only twenty feet in diameter in a mountain that towers above it to the height of seventeen hundred feet, and is almost five miles from side to side? How could we expect the light to stream through such a knitting-needle kind of hole? But whatever may once have been possible, now that scores of trains are daily passing through the tunnel the original dimness has become blank darkness. A cloud of smoke pervades it through its whole length, wafted backward and forward to some extent by the occasional winds, or creeping slowly out at one portal or the other; but each passing train adds enough to keep the entire tunnel charged so that practically no one can see more than a few yards or rods, at the most, within the great cavern. No artificial light, not even the headlights of the locomotives, can penetrate the darkness for any considerable distance. The engineer sees nothing, but feels his way, by faith and simple push of steam, through the five miles of solemn gloom. If there is any occasion for stopping him on his way through the thick darkness, which may almost literally be felt, the men who constantly patrol the huge cavern to see that nothing obstructs the passage do not think of signaling the approaching train in the common way, by means of a red lantern. That would be useless. They carry with them powerful torpedoes, which, whenever there is occasion, they fasten to the rails by means of screws. The wheels of the locomotive, striking these, produce a loud explosion, and this is the tunnel signal to the engineer to stop his train.

Discrimination and Equal Terms.

ABRIDGED FROM ADVANCE SHEETS OF THE THIRTEENTH ANNUAL REPORT OF THE MASSACHUSETTS RAILROAD COMMISSIONERS.

DURING the railroad year no complaint has been made of refusal of equal rates, or of any kind of discrimination, except in one case, where express trains were directed to be stopped at a flag station at the request of two parties only. Upon a suggestion that this was an error, orders were at once given that all persons should have the right to stop trains at this point.

No law of this State requires an equal rate per mile for fares or freights. And it is fortunate that there is no such statute; for it would prevent the trying of an experiment which is of great interest, and which promises to be of great service. This is the scheme of very low suburban fares, equal for all stations within a certain distance from Boston, which has been inaugurated by the New York and New England Railroad. This company charges five cents for every passage to or from points not more than five miles from their Boston station. In this way the benefits proposed by so-called "workingmen's trains" are secured in a more liberal and more convenient way. Such fares will, in some cases, render it economical as well as pleasant for passengers to go out at noon, and return after dining with their family. They apply, also, to all the members of a family, as well as to its head. The Fitchburg Railroad Company has made a somewhat similar arrangement, and other railroad companies are expected to follow.

It is gratifying to know that the experiment on the New York and New England road has been thus far completely successful.

It seems proper to allude to a decision of the Supreme Court, which corrects a very general misapprehension as to the law of this State in regard to discrimination and inequality of rates. Since 1867 it has been believed by lawyers and railroad men, and by the public generally, that railroad companies were bound to give equal rates to all customers; i. e., the same rate for the same service; having regard, of course, to the quantity of freight carried at one time. It has been supposed that a preference by which one dealer was favored above another, or above others, was illegal. And the reason for the supposed legislation was held to be, that this was not only just, but, on the whole, that it was the best policy. And it was thought, that, although in some isolated case it might seem advantageous for a railroad company to prefer some person or corporation in order to build up a great business, or to introduce a new one, yet it was deemed to be unsafe to intrust such a power to a corporation. It was considered as a stretch of legislation to delegate to a railroad company authority to create a monopoly such as might result from the exercise of such a power.

So generally did this idea prevail that in many States—indeed, in most except Massachusetts—this doctrine was held to be established by the common law, without the need of legislation.

In Massachusetts a different doctrine prevailed. And while the granting of *reasonable* rates was held to be the duty of all common carriers, including railroad companies, it was decided that such companies might give different rates to their customers, making them lower for some shippers than for others. This doctrine was laid down in the case of *Fitchburg Railroad Company* v. *Gage*, 12 Gray, 393, which decided that "a railroad corporation is not obliged, as a common carrier, to transport goods and merchandise for all persons at the same rates."

The difference between this rule and that of other States will be seen by the following extracts from the opinions of two well-known jurists; and such extracts might be multiplied almost indefinitely:—

"A toll is granted. But a toll implies uniformity of compensation for equality of service. It is for the sole benefit of the corporation, and not to enable the corporation to give discriminating advantages."—APPLETON, C. J., *New England Express Company* v. *Maine Central Railrond Company*, 57 Maine, 188–196.

"No special privileges should be granted to one man, or set of men, and denied to others. The special stipulations inserted in charters, for the purpose of securing these rights, are placed there in abundance of caution, and affirm nothing more than the common right to equal justice which exists independent of such provisions. The supposed necessity for such provisions in charters granted in this country and in England proves nothing more than that the law-makers in both countries were aware of the difficulty in holding large corporations to those common obligations of justice which individuals feel bound to acknowledge without legislative enactment."—C. J. TWISS, 24 Penn. 378.

In 1867 an attempt was apparently made to change the law of Massachusetts, and make it conform to that of other States, by passing chapter 339, requiring "equal" as well as reasonable terms, etc., "for all persons and companies." But, as it now appears, by an unfortunate choice of language, the Legislature reenacted the doctrines of *Fitchburg Railroad Company* v. *Gage*, instead of repealing them.

In *Spofford* v. *Boston & Maine Railroad*, 128 Mass. 326, the plaintiff, a student who had paid the regular price of a season-ticket for three months, showed that other students of like age had been allowed, at the discretion of the president, to buy such tickets at half price. And it was held that there was not a violation of law, and that no action could be maintained. In giving the decision, Justice Soule says:—

"The provisions of section 138 are re-enacted from the Statute of 1867, chapter 339, previously to which statute there was no legislative enactment of the sort. In the year 1859, it was decided by this Court, in *Fitchburg Railroad* v. *Gage*, 12 Gray, 393, that the common law requires of carriers equal justice to all; that 'the equality which is to be observed in relation to the public, and to every individual, consists in the restricted right to charge, in each particular case of service, a reasonable compensation, and no more. If the carrier confines himself to this, no wrong can be done, and no cause afforded for complaint. If, for special reasons in isolated cases, the carrier sees fit to stipulate for the carriage of goods or merchandise of any class for a certain time, or in certain quantities, for less compensation than what is the usual, necessary, and reasonable rate, he may undoubtedly do so without thereby entitling all other persons and parties to the same advantage and relief.' The Court, referring to the right of the corporation to establish rates of toll on passengers and merchandise, said: 'This right, however, is very fully and reasonably subjected to legislative supervision and control,—a provision which may be believed to be sufficient to guard the large conceded power against all injustice or abuse. And in view of this large and unqualified, and therefore adequate supervision, the right of railroad corporations to exact compensation for services rendered may be considered as conforming substantially to the rule of the common law.' The Statute of 1867, chapter 339, re-enacted in the Statute of 1874, chapter 372, section 138, was passed after this Court had thus defined the meaning of the words 'equal justice' as applied to the dealings of carriers with their customers. The similar language, 'reasonable and equal terms,' used in the statute, is to be interpreted in the light of this definition, especially as it appears, from a comparison of different parts of the statute, that the words cannot have been used in a strict literal sense."

This language is more worthy of remark because, as the judge says, the case might have been decided under the peculiar provisions of section 135, excepting from the general provisions of the Act certain trains to be designated to carry passengers at reduced rates. But the Court very naturally preferred to base the decision upon the general provisions of the statute.

It would seem clear, then, that the legal profession, and all others, have been in error in believing that uniformity of compensation for equality of service was the law of common carriers in Massachusetts, and that it is lawful for railroad managers, for reasons satisfactory to themselves, to give lower than ordinary rates to one shipper than to another. The law still requires that rates should be "reasonable;" but if any attempt were made to enforce it, the difference between the indefinite requirement of reasonableness and the fixed and definite rule of equality would make the exaction of penalties exceedingly difficult.

Whether it is desirable to change the law so as to absolutely require equal compensation for like service, or whether the fixing of freight and passenger rates can best be left, as other matters are, to the interest of the companies, influenced by public opinion, and subject to the inspection and public criticism of this Board, is a question for the wisdom of the Legislature. It has seemed to be our duty to lay before it the decision by which the Supreme Court has corrected an almost universal misunderstanding of the law.

AMERICAN Railroad Journal. ESTABLISHED 1832.

PUBLISHED WEEKLY BY THE
AMERICAN RAILROAD JOURNAL CO.,
284 Pearl St., cor. Beekman, New York.

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Mr. FREDERIC ALGAR, Nos. 11 and 12 Clements Lane, Lombard Street, London, E. C., England, is the authorized European Agent for the JOURNAL.

AT the annual meeting of the AMERICAN RAILROAD JOURNAL CO., held at the office of the Company, No. 284 Pearl street, New York, February 8, the following officers were elected:

GEO. F. SWAIN, *President.*
S. PROCTOR THAYER, *Vice-President.*
EDW. A. WRIGHT, *Treasurer.*
CHAS. T. VALENTINE, *Secretary.*

New York, Saturday, March 4, 1882.

Entered at the Post Office at New York City as Second-Class Mail Matter.

LAND, TRADE, LABOR AND CANNED GOODS.

FAILING to create much interest at home in his plans for regulating railroads and things, Mr. F. B. THURBER turns his attention to the enlightenment of our British cousins on sundry matters pertaining to land, trade, labor, and canned goods, and with his somewhat fanciful pen and able scissors has pointed out to the unsuspecting statesmen on the other side of the Atlantic some of the breakers ahead upon which their affairs are going to smash if they don't look out and insist right off upon the principles of anti-monopoly being pushed over here, where their capital is invested. The article in question appears in the current number of the *Nineteenth Century*, is entitled "Breakers Ahead," and purports to be a careful review of the land, trade, and labor questions from an American standpoint.

The first division of the article, that relating to land, is calculated to strike terror alike to the British land-owner and farmer. The fanciful pen places the responsibility for much of the seriousness connected with the present aspects of the land question upon steam, poetically saying that "steam lifted the cheap and fertile acres of the United States and set them down alongside those of the British farmer; nay, it did better than that, for it left the land where the sun and rain come in the proper season, and where, as expressed by Jerrold, the soil is so fertile that if 'tickled with a spade it will laugh in a harvest,' and it placed the harvest in competition with that of the less favored isles of Britain." The pen goes on to speak of electricity and steam, and the effect of their work on the British landlord and tenant, either the one or the other of whom, it says, "must go." And then the able and discerning scissors, with an eye ever open to business, takes up the strain and brings to notice another terror creator in the form of canned goods, which it is claimed are destined to further annihilate agricultural pursuits on the other side of the water. When it is remembered that Mr. THURBER is conspicuously identified with one of the most noted canning establishments, or houses dealing in canned goods, in this country, the richness of the joke perpetrated on the English publisher of the staid review, by the modest introduction into the article of the following puff of the grocer's wares, taken from a notice of canned goods in an American trade paper, can be appreciated. The able and business-like scissors elucidate as follows:—

"Our manufacturers are learning more and more, not only how well the cereals, fruits, and vegetables but all the varieties of fowl, game, fish, and meats which here abound, but which are perishable, may be preserved in the most perfect manner, and kept fresh and ready for daily use, when the period of summer has passed. As an indication of the importance of the canning business, it is estimated that in 1880 $40,000,000 capital was engaged in it in the eastern and middle States alone; and of the single article of tomatoes 36,771,600 cans, worth at the factories $3,381,370, were put up."

From the fact that the export demand for these productions is increasing, the British land-owner is informed by the canner and exporter that England will have to meet competition even in vegetables and fruits, and must maintain her greatness by commerce. In this way the importance of aiding in regulating transportation over here is impressed upon the cousins over the water, and their attention is directed to discriminations alleged to be practiced by American railroad managers in such a way as to make the rich richer and the poor poorer, etc., etc. The familiar reference to the monopoly of the Standard Oil Company is made, accompanied by the usual comments thereupon. But we have failed to notice any allusions to the growth of monopolies or attempts to create them in the grocery trade. Of course this portion of the article has no special interest to American readers, who understand the facts and who plainly see the animus which inspires most of the harangues of the alleged anti-monopolists.

The third and last division of the article refers to labor, and has some general statements of interest in regard to the effect of increased machinery upon labor, and to the relations of capital to labor, as existing here and in England. Several citations from various authorities are aptly made, notably among them being one from an American commercial paper descriptive of the remarkable possibilities of a box-making and packing machine, said to be of great value in the grocers' business. It was evidently the aim of the writer of the article in question to write suggestively rather than thoroughly, as he says, and the aim seems to be in the main well accomplished.

National Railroad Commission.

AT the regular monthly dinner of the Boston Merchants' Association, held in Boston on the 25th ult., the chief feature of the evening was an address by Charles Francis Adams, Jr., on the subject of "The National Railroad Commission." In the course of his remarks he said:—

"Robert Stephenson said as long ago as 1856, in regard to railroad legislation and railroad commissions: 'What we want is a tribunal upon these subjects competent to judge and willing to devote its attention to railway subjects only. We do not impute to Parliament that it is dishonest, but we impute that it is incompetent. Neither its practical experience, nor its time, nor its system of procedure are adapted for railway legislation. * * * What we ask is knowledge. Give us,' we say, 'a tribunal competent to form a sound opinion. Commit to that tribunal with any restrictions you think necessary the whole of the great questions appertaining to our system. Let it protect private interests apart from railways; delegate to it the power of enforcing such regulations and restrictions as may be thought needful to secure the rights of private persons or of the public; devolve on it the duty of consolidating, if possible, the railway laws, and of making such amendments therein as the public interests and the property now depending on the system may require; give it full delegated power over us in any way you please; all we ask is that it shall be a tribunal that is impartial, and that is thoroughly informed; and, if impartiality and intelligence are secured, we do not fear for the result.'

"These words truly express the situation twenty-five years ago, and they truly express it now. In them lies the only possible solution of that railroad problem of which so much has been said.

"It is because I did not go to Washington to appear before the Committee of Commerce that I am here this evening before you. I have a little measure of my own to propose—a very little one, though it has cost me a good many years to prepare it. My measure is based on

Robert Stephenson's recommendation of twenty-five years ago, and it at least has the merit of being short and simple. It consists of four sections, and four only, and it is, I believe, unique in railroad legislation." Mr. Adams then read it. It provides for a Board of three Commissioners of Interstate Commerce as a Bureau of the Interior Department, appointed by the President for five years. They shall exercise a supervision over that portion of the business of all railroads which passes from one State or Territory to another or to any foreign country; limited to questions of commerce between the States, and the methods of operating roads as affecting such commerce.

They shall investigate all complaints which may be forwarded to it of discrimination in the charges made for its services, and shall have power to summon witnesses. They shall procure the data necessary to the gradual enactment of an intelligent system of national legislation regulating interstate railroad commerce. "I will select a board. I should say that Judge Cooley, of Michigan, was well qualified to be the legal member and at the head of the Commission. Among practical railroad men I could suggest several for the second place. One immediately occurs to me as peculiarly qualified; I refer to Robert Harris, now General Manager of the Erie. Last, a statistician and economist in Francis A. Walker, the recent chief of the Census Bureau."

INCORPORATION.

A RAILROAD has been chartered to run from Laredo up the Rio Grande to Eagle Pass. Among the directors are John Pratt and Theo. H. Friend, of New York.

CERTIFICATES of incorporation were filed with the Secretary of State of Ohio, on the 23d ult., of the Marietta Mineral Railway Company, with a capital of $300,000; and of the Cleveland, Delphos and Western Telegraph Company, with a capital of $50,000.

A CERTIFICATE of incorporation was filed in the office of the Secretary of State at Albany, N. Y., on the 28th ult. of the Saratoga, Mount McGregor and Lake George Railroad Company, to continue one hundred years, to run from Saratoga to Caldwell, a distance of twenty-five miles; capital stock; $600,000.

THE Columbus and Eastern Railroad Company, with a capital of $1,000,000, and the Chesapeake, Columbus and Michigan Railway Company, with a capital of $50,000, have filed certificates of incorporation in the office of the Secretary of State at Columbus, Ohio. The termini of the latter road are Columbus, and a point on the State line between Ohio and Indiana, in the county of Van Wert. The incorporators are W. W. Franklin, George Skinner, Joseph Robinson, Chas O. Hunter and Julius Griggs.

A BILL granting a charter to the West Virginia and Virginia Railroad Co. has passed both houses of the Virginia Legislature and received the Governor's signature. Referring to the above, the Alexandria *Gazette* says: A railroad connection between Alexandria and the West Virginia coal-fields is now assured, even though the proposed extension of the Loudoun and Hampshire Railroad proves a failure. A road one hundred and ten miles long will connect the richest discovered coke mines in the country with the Midland Railroad at Strasburg, and effect a saving of forty odd miles in the route to the nearest shipping port.

ARTICLES of incorporation of the Louisville, Charleston and Peoria Railroad Company were filed with the Secretary of State of Illinois on the 24th ult. The incorporators and first board of directors are: Louis Monroe, O. B. Ficklin, A. J. Fryer, John Van Meter, J. W. Neal, W. B. Galbreath, A. C. Barquer and J. K. Raidin, of Charleston, Ill., and Jerry Ashler, John Gambol, Wm. Lindsay, G. W. Cooper, W. T. Deashmutt, S. A. Fasig, Newton Tibbs, D. W. Tibbs and T. M. Lallee, of Martinsville, Ill., and A. G. Cowden, of Melrose, Ill. The capital stock of the company is $2,000,000, and the principal office is at Charleston. Ill. The object of the company is to construct a railroad from Louisville, Ky., to Peoria, Ill., passing through the counties of Crawford, Clark, Coles, Douglas, Moultree, Pratt, Macon, Dewitt, McLean, Logan and Tazewell and Peoria, Illinois.

ORGANIZATION.

A CITY passenger railway company was organized at Altoona, Penn., on the 18th ult. The amount of stock necessary to build and equip the road was subscribed, and operations will be commenced at an early day.

THE directors of the Lehigh and Wilkesbarre Coal Co. (controlled by the Central Railroad Company of New Jersey) elected on the 23d ult., are; F. S. Lathrop, G. G. Haven, John Kean, F. A. Potts, Charles Parrish, John S. Barnes and W. H. Tillinghast.

THE grantees of the Dover (N. H.) Horse Railroad Company organized on the 24th ult. with the following officers: President, Mayor Charles M. Murphy; treasurer, Harrison Haley; clerk, Thomas J. Smith. Enough money has already been pledged to make the building of the road assured.

AT the annual meeting of the New Castle and Lawrence Railroad Company, held at Pittsburg on the 24th ult., the following directors were elected: L. H. Meyer, Charles W. Cass and Charles Lanier, New York; J. N. McCullough and John B. Jackson, Pittsburg; A. U. Cunningham, New Castle, and John N. Hutchinson, Philadelphia.

AT the annual meeting of the stockholders of the Northern Central Railway Company, held in Baltimore on the 23d ult., all the old board of directors were re-elected except George B. Roberts, for whom A. J. Cassatt was substituted. At a subsequent meeting of the directors George B. Roberts was elected president. A. J. Cassatt vice-president, John S. Leib treasurer, and Stephen W. White secretary.

THE directors of the Ohio Central Railway Co. (consolidated with the Atlantic and Northwestern Railway Co. of West Virginia) elected on the 23d ult., are: George I. Seney, John T. Martin, of Brooklyn; Daniel Shethan, F. O. French, Nelson Robinson, of New York; D. P. Eels, of Cleveland; Charles Foster, Samuel Thomas, of Columbus; C. S. Brice, of Lima; Jos. S. Milles, of Wheeling; Thos. Ewing, of Lancaster.

AT the annual meeting of the stockholders of the Lehigh Coal and Navigation Co., held in Philadelphia on the 28th ult., the following board of managers was unanimously elected: Joseph S. Harris, president; Francis C. Yarnall, vice-president; Edward W. Clarke, Francis R. Cope, Fisher Hazard, Charles Parrish, Charles Wheeler, George Whitney, John Leisenring, James M. Wilcox, Edward Lewis, T. Charlton Henry, Samuel Dickson.

THE directors of the Camden and Atlantic Railroad Company, elected on the 23d ult., are: Charles D. Freeman, James B. Dayton, Enoch Doughty, Thomas H. Dudley, Samuel C. Cooper, Joshua R. Jones, Edmund E. Read, John B. Hay, J. Lowndes Newbold, Franklin Evans, William Worrell and Wm. T. Ladner. Subsequently Charles D. Freeman was elected president and D. M. Zimmerman secretary and treasurer.

THE stockholders of the Washington and Atlantic Railroad Company held a meeting in Baltimore on the 23d ult. and elected the following directors: F. J. Herron, W. W. Blunt, E. C. Hancock, Jerome Bradley, Joseph Villas, P. P. Robinson, and F. Hickman. The board of directors subsequently elected F. J. Herron president, and Jerome Bradley secretary and treasurer. This company has a bill before the State Legislature enlarging its powers. The road is chartered to run from the terminus of the Chesapeake and Ohio Canal at Georgetown to Annapolis; thence by steamers to the Eastern Shore, across the peninsula by rail to Lewes, Del., which is to be a coal port, and to connect with New York by steamer. The principal office is to be in Baltimore.

THE Standard Coal and Iron Company of the Hocking Valley region in Ohio, which recently completed its organization, has chosen the following directors: Samuel Thomas, Columbus, O.; W. D. Lee, Newark, O.; Charles Foster, Columbus, O.; John C. Larwell, Lowdonville, O.; Matthew Addy, Cincinnati; George Chapman, Joseph Vilas, S. B. Elkins and Walter P. Warren, of New York, James G. Blaine, Eugene Hale and Gen. James A. Hall, of Maine, and Oliver Ames, J. H. Brooks and George V. W. Dove, of Boston. The following are the officers: President, Gen. Samuel Thomas; first vice-president and general manager, W. D. Lee; second vice-president and treasurer, Oliver Ames; third vice-president, J. H. Brooks; assistant treasurer, Geo. Chapman. The consolidation companies include 30,000 acres of mineral lands. The capital stock of the consolidation is $25,000,000.

CONSTRUCTION.

THE construction of the electric railway between Weisbaden and Neroberg has been begun.

ENGINEERS are now locating a line for a railroad from Waynesburg, Pa., to Wheeling, West Virginia.

IT is quite probable that within a week ground will be broken on the line of the Junction Rail-

road, from the Monongahela to the Alleghany River.

A COMPANY is about to be formed in Canada to build a railway between Levis and Sorel to join the Intercolonial to the Montreal and Sorel railways.

A PROJECT is on foot to purchase the railroad running from Hempstead to Valley Stream, Long Island, and to lay a track from Norwood to Pearsall's.

THE Southern Maryland Railroad has been finished to some three miles below Charlotte Hall, nineteen miles from Brandywine, on the Pope's Creek Line.

THE Central Railroad of South Carolina, which runs from Lanes, on the Northeastern Railroad, to Sumter, on the Wilmington, Columbia and Augusta Railroad, was completed on the 22d ult.

THE New York and Boston Inland Railroad Company has secured the consent of the authorities for the location of its line from all the towns between the Connecticut State line and Brookline, Mass.

CONTRACTS have been given out for the Indian River extension of the Tropical Railroad from the junction of the Tropical, twelve miles south of Ocala, to Leesburg, Florida, which point will be reached by May 1.

WORK on the Lake George branch of the Delaware and Hudson Canal Railroad is being pushed and the road will be in operation by June 1. The Saratoga specials will then run through to Lake George.

THE Mexican Central Railway was completed on the 24th ult. to a point 104 miles from Paso del Norte. The Texas Pacific Railway Company is endeavoring to secure a Mexican grant to construct a bridge over the Rio Grande at El Paso to tap the Mexican Central at Paso del Norte.

IT is proposed to construct a horse railroad in Dover, N. H., to run from the Sawyer Woolen Mills to Garrison Hill, and with branches going up Washington and other diverging streets. It is expected that ultimately there will be a spur built from Franklin square to the railway stations.

A CONTRACT for building a gap of fifty miles of the Vicksburg, Shreveport and Texas Railroad, belonging to the Erlanger system, extending from Arcadia to Shreveport, was signed at Cincinnati on the 25th ult. by the contractors, Messrs. Rogers, Rexford and James, of New York and New Orleans. The road is to be completed by November 1, 1882.

THE Central Railroad Company of New Jersey is laying out a new route, which will open for travel a section of the State hitherto but little known. It runs from the Long Branch Division at Middletown, through Chapel Hill, to the Atlantic Highlands and down the west side of the Shrewsbury River to Long Branch. It passes directly behind the Navesink Highlands.

THE Newark and Delaware City Railroad will be ready for the running of trains about the 10th of March. It will only be necessary to build two stations, one at McWhorters, where the N. and D. C. crosses the Delaware road, and the other at Delaware City. The material for these stations is ready. One of the chief uses of the road in the beginning will be for making a short route for passengers from down the peninsula to Baltimore.

CONSOLIDATION.

THE lease of the Indianapolis, Decatur and Springfield Railway to the Indiana, Bloomington and Western Railway Company was unanimously ratified at a meeting of the stockholders held at Indianapolis on the 23d ult.

THE consolidation of the Toledo, Delphos and Burlington Railroad Co. with the Toledo, Cincinnati and St. Louis Railroad Co. was ratified at a meeting of the stockholders of both companies held at Toledo on the 23d ult. The consolidated road is to be known as the Toledo, Cincinnati and St. Louis Railway, and will form a narrow-gauge line between the cities named.

THE Connecticut Western Railroad, extending from Hartford, Conn., to Millerton, N. Y., about 68 miles, has purchased the Rhinebeck and Connecticut Railroad, extending from Rhinecliff, N. Y., to Boston Four Corners, about 35 miles in length. The Connecticut Western Railroad Company, by this purchase, secures important coal advantages, besides making important connections.

Duty on Steel Blooms.

ON the 21st day of September, 1881, Messrs. James Lees & Company received at the port of New York several hundred pieces of metal weighing in the aggregate about 160,720 pounds, averaging 392 pounds each, and said to be worth less than 7 cents per pound. They were called "steel blooms," and duty was accordingly fixed thereon by the Appraiser. The consignees appealed to the Secretary of the Treasury from the decision of the Appraiser and Collector of Customs. Judge Folger has rendered an elaborate opinion, in which he reviews the whole question and decides to adhere to former rulings of the departments on the subject in order to avoid reversing the decision of his predecessors—which is forbidden by statute. The Secretary states, however, that the action of the Appraiser's office was, in his opinion, erroneous, and that the appeal should be sustained. In reviewing the case, the Secretary says: "The word 'bloom' is a word of manufactures, commerce, and statutory law, and may be used, and I must conclude that when it is coupled with the word 'steel' it is used to carry from mind to mind the notion of steel in some stage of manipulation of it for the ultimate practical use of mankind. Now what is the notion thus conveyed? As I gather it from the assertions and concessions made in the argument before me, and from statements drawn from men engaged in the working of ores and metals, it is this. The first form of steel as it comes from the mold or jacket is that of a large lump or block, and it is then known and described as an ingot, which, being reseated, is divided into parts, which are put under pressure or the blows of hammers, whereby their structure is somewhat changed, in that they are compacted, lengthened in texture and strengthened. The idea of the material in that changed state is now conveyed when it is spoken of as a 'steel bloom.' So that it may be taken for the purpose of this decision that a 'steel bloom' is a piece of steel, not in its first state, but changed and improved therefrom, in the second of the processes, more or less continued, that are needful to bring the metal from what may be called its raw condition to one fit for immediate use for some purpose of mankind. The articles brought in by the appellants were 'steel blooms.' What duty should have been charged upon them? There is no mention of a 'steel bloom' in the tariff act. This, however, is not conclusive that there is not a rate of duty especially fixed by that act upon that article. It matters not by what name the article is brought in, if within the fair purview of that act it is there specifically pointed out; and though the law-maker may not have used the same name as the maker or importer of the article, if in the law the article is clearly included in any name as subject to a particular duty that duty will be charged upon it.

"The tariff act is concise in its mention of steel, and fixes duties in the particular and in the general. The particular duties needed to be here named are only these: First—'Steel in ingots, bars, coils, sheets, * * * valued at 7 cents per pound or less, 2¼ cents per pound.' * * * It is clear that the steel in this case was not in sheets or coils, and though the Assistant Appraiser has classified it as steel in bars, it was not contended in oral argument before me, that it is to be so held. I am informed also that the word 'bars' in the passage above quoted has been interpreted to mean the finer steel designed for the making of tools and nicer implements—that better kind of steel known as bar-steel—and it is suggested that that officer so classified rather by assimilation than as matter of fact. Moreover, the tariff act recognizes a difference between bar-steel and steel railway bars. There remains, then, only the term 'ingots' in the above quotation from the tariff act. And the stress of the oral argument before me was that steel in the form now designated as steel blooms is truly steel in ingots.

"Second—I find, too, in the tariff act that provision is made for 'steel in any form not otherwise provided for.' Now, the phrase 'in any form' is not to be restricted to shape and proportions, but is to be interpreted as having the meaning of 'any kind or description.' I have shown, I think, that steel blooms are not the same description of steel as ingots, and I might then inquire whether they would not fall within the last quoted clause. But as no one strenuously contends for that, and the decisions of this department have not gone that way, I will form no opinion. * * * Decisions were made upon the question directly presented to some of my predecessors, that the article fell under that clause. If it had been held that it did, the duty to be exacted would be lower than any that has been imposed. But it was held that it did not, and a higher duty than that prescribed by that clause was collected. For me now to reverse that holding, and to rule that this article fell under that clause, might be to make a reversing deci-

sion adverse to the Government, and I understand I am forbidden by statute to do that except in the way prescribed by the act of March 30, 1875."

The Secretary further says: "I am satisfied with my conclusion that the 'steel blooms' in this case are not classed as ingots or bars, * * * and that, therefore, the action at the Appraiser's office at the port of New York was mistaken, and that the appeal should be sustained. I am not so entirely clear as to what clause of the tariff act is controlling in the case. But as the action of the Department has for some time been to direct the duties to be fixed on 'steel blooms' at 45 per cent *ad valorem*, I may not, without reversing former decisions adversely to the Government, put them under any lower clause; and as the course of business has been in accordance therewith, and no amendment of the tariff act in contradiction of that action has been made, I will adhere thereto. Accordingly, the officials at New York will be directed to exact duties at that rate upon the goods of the appellants involved in this case. * * * To change the rule * * * laid down to accord with my view of the general subject would be to make a ruling adverse to the Government, from which I am precluded by positive provision of law, as above stated; that decision must still be followed as a guide by customs officers. It may not be easy to apply these rulings in the cases that now exist or that will arise so as to make them harmonize; but it is to be expected that the attention of Congress will be given to this subject, the sooner and the more earnestly from the evidence that is now given of the practical difficulties that have arisen in administering the law under varying conditions of fact."

The Meigs Elevated Railroad.

Lyceum Hall was crowded with an intelligent audience on Monday evening, who had assembled to listen to a description by Captain Joe V. Meigs of his invention of a vertical, or as it is called, a single track, railway system. Captain Meigs began by saying he was not a public speaker, but an inventor. He had asked the legislature to grant him the privilege of building a section of road according to his plan, and at the expense of himself and friends, and then he desired to refer it to a competent board of engineers, then conditionally to city governments, who under the bill which places the Meigs charter, if granted, under the provisions of the law relating to the location of horse-car tracks, which does not make it mandatory upon a city government to grant location, and even after the city governments have granted locations, they could cause the removal of the way where it was obnoxious, in the same manner as they can now cause the removal of horse-car tracks, with provisions for payment of damages where damages occur. He has been met by the worst forms of opposition.

There are three important considerations to be observed in regard to the construction of railways. First, the safety of the people; second, speed in operation; and third, cheap transportation. The rights of residents along the line should also be considered. First, it should not cut off the air, for it is an inestimable privilege to have fresh air; second, the railway should not obstruct light; and third, it should not contaminate the air; fourth, no drippings of water or oil should take place from the way or machinery.

According to the plan of Captain Meigs, posts are put in the ground below the frost line, and are laid in concrete. The first thing for an engineer to consider is the grade and curves. The Meigs line can be constructed in these respects better than any other. The posts are iron columns placed vertically. The girder is of iron, and has a box boom at top and bottom. The iron posts are to be placed forty-five feet apart, or as special emergencies may require. Every railway system is a girder system.

Captain Meigs gave a description of his plan of curves and an illustration of a train moving around a curve in a street 28 feet wide. The curve consists of a bent girder. The switch is so arranged that if left unlocked when the train is crossing, it locks itself. The railway is to be built sufficiently high to accommodate all teams at road crossings, and through farms in such a manner that the farmer can cultivate his land to the base of the posts. No tunnels, no turnouts, and very little ditching will be required. The track will not be affected by snow, rain or sleet. The expense of track repairing will be less by this system than by any other.

During the evening several stereopticon views were exhibited by Mr. James W. Black, which illustrated finely the explanations of Captain Meigs. The first one was comparative views of the single post way in the Bowery in New York and of the Meigs post way. There is a great advantage in the Meigs way, as the cars set much lower on the post than on the New York way, with the same height to permit passage of trains underneath. An illustration of a full-sized way, with a truck on it, was then shown. A view of a truck with the wheels off was given. Captain Meigs showed an experimental track with the trucks on it, and the result of the dropping off of the wheels, leaving the car on the way in perfect safety. If cars meet with a forcible concussion, resulting from a collision, they cannot be thrown from the track and the strains are kept through the bottoms of the cars so that telescoping cannot take place, and this does not depend upon the couplings themselves, but upon the peculiar system by which the trucks straddle the track four feet down, and are held upon it by the flanges of the wheels and the peculiar action of the truck wheels on the track.

A wooden model was exhibited, with the wheels so loose on the axle that they could be moved in any direction. The wheels would adjust themselves to the varying width of the track, and, at this point, Captain Meigs illustrated why his wheels were placed at an angle, showing conclusively they were rolling braces, that they received the strains of the superimposed weights directly through the centre lines of the wheels, bearing squarely on the axles, whether worn loose or tight fitting, and that was shown to be the case whether the passengers sat upon one side of the car or whether the load was equally distributed. A wooden way could be built at an expense of $24,000 and an iron way at an expense of $90,000 per mile, such as would carry sixty-four passengers in a car, being ten more than ordinarily carried. In New York they have been compelled to adopt a single post system to a certain extent, to wit, in a very wide street where long girders could not be well put. According to the New York way a great deal of room is required for curves. This is obviated by the Meigs' way. By the Meigs plan a concentration of strains is brought to bear over a central point.

The wheels of the car for the Meigs way are to be made of wood, plated with iron and with bronze tires—a bronze tire will not break. The Meigs way is simple and will stand more wear than any other system.

A system of brakes has been designed for this way by arranging that two wheels laid horizontally be brought to bear on the track. By this system, combined with ingeniously arranged couplings, the engineer can uncouple any cars he pleases, and the train is as free from danger as it is possible to make it in case of collisions.

A plan of a locomotive was shown, arranged expressly for the transportation of cars on this way, which can be governed with great ease by the engineer, who is to occupy a seat in the front part of the engine and communicate with the fireman by a speaking-tube. Captain Meigs stated that if he did not believe in his system he should not have devoted twenty years to perfecting it. It was the result of labor and cost. The expense of drawings for the last few months amounted to $10,000. Cheap fares and great rapidity of movement were the principal points which recommended the way to the public. He thought that trains could be run at such speed by his plan that one could travel from Boston to New York in two hours. Captain Meigs showed a plan of a door which could be opened out on either edge for the purposes of ventilation and to afford a means of easy egress from the car. Captain Meigs kept his audience intensely interested for nearly two hours and was frequently interrupted by enthusiastic applause.

The Delaware and Raritan Canal will be open for business March 6, being two weeks earlier than last year.

The Northern Central Railway Company have purchased of the Canton Company their Union railroad, extending from the Charles street depot to Canton, chiefly tunnel work, the price agreed upon being $2,100,000.

The Pennsylvania Railroad Company has lately given orders for 9,100 new freight cars for as early deliveries as can be made. To fill these contracts there will be required 72,800 car wheels and 36,400 axles, which, together, will require 48,000,000 pounds of manufactured iron to produce.

C. P. Huntington, vice-president of the Central Pacific Railroad Company, has closed a contract with Wm. Cramp & Sons, Philadelphia, for the construction of two iron steamships for the Company. These vessels are to be 350 feet long, 42 feet beam, 28 feet depth of hold and about 3,400 tons capacity. They are to be employed principally for coal transportation from the coal mines of the Company at Mount Carbon to San Francisco, and will be completed about Nov. 1, 1882.

Anthracite Coal Tonnage.

MR. JOHN H. JONES furnishes the following statement of anthracite coal tonnage for the months of January, 1882, compared with the same month in 1881 :

	Jan. 1882.	Jan. 1881.
Reading Railroad	408,367	392,158
Lehigh Valley Railroad	359,216	330,756
Central Railroad of New Jersey	264,291	236,814
Delaware, Lackawanna & Western	291,514	269,326
Delaware and Hudson Canal	222,400	187,073
Pennsylvania Railroad	165,992	155,742
Pennsylvania Coal Co.	96,185	70,835
New York, Lake Erie and Western Railroad	25,942	29,938
Total	1,833,910	1,672,642

The stock of coal on hand at tide-water shipping points, January 31, 1882, was 586,933 tons; on December 31, 1881, 497,024 tons ; increase, 89,909 tons.

The Coal Trade.

THE leading coal-carrying companies make the following reports of their tonnage for the week ending February 18, and for the year to same date, compared with their respective amounts carried to the same time last year:

	Week.	1882.	1881.
Reading Railroad	116,001	1,507,069	1,386,613
Schuylkill Canal	.....	27,655	.....
Lehigh Valley	99,009	1,191,834	1,059,023
Delaware, Lackawanna and Western	63,379	470,848	504,558
Shamokin	15,348	119,183	125,192
Central R. R. of New Jersey	60,543	431,945	461,466
United R. R. of New Jersey	25,624	188,233	198,699
Pennsylvania Coal	14,096	111,554	126,731
Delaware and Hudson Canal	46,717	373,360	426,892
Huntingdon and Broad Top Mountain	13,371	84,210	60,216
Penn. and New York	25,627	314,530	259,900
Clearfield, Pa	49,129	317,528	236,220

The total tonnage of anthracite coal from all the regions for the week ending February 18, as reported by the several carrying companies, amounted to 409,119 tons, against 541,754 tons in the corresponding week last year, a decrease of 132,635 tons. The total amount of anthracite mined for the year is 2,915,970 tons, against 3,060,463 tons for the same period last year, a decrease of 144,498 tons. The quantity of bituminous coal sent to market for the week amounted to 98,859 tons, against 87,103 tons in corresponding week last year, an increase of 11,756 tons. The total amount of bituminous mined for the year is 583,525 tons, against 452,629 tons for the corresponding period last year, an increase of 130,896 tons. The total tonnage of all kinds of coal for the week is 507,978 tons, against 628,857 tons in corresponding week last year, a decrease of 120,879 tons; and the total tonnage for the coal year is 3,409,495 tons, against 3,513,092 tons to same date last year, a decrease of 13,557 tons. The quantity of coal and coke carried over the Pennsylvania Railroad for the week ending February 18 was 214,191 tons, of which 152,175 tons were coal and 62,016 tons coke. The total tonnage for the year thus far has been 1,429,616 tons, of which 1,017,655 tons were coal and 411,961 tons coke. These figures embrace all the coal and coke carried over the road east and west. The shipments of bituminous coal from the mines of the Cumberland coal region during the portion of the year ended February 18 were 255,548.15 an increase of 95,164.08 tons ; for the week, 49,107.04 tons, an increase of 14,375.13, the comparison being made with the production for the same period last year. The companies heading the list in the total shipments for the year are the Consolidation Coal Company, 100,326.06 tons ; Georges Creek Coal and Iron Company, 37,794.15 tons, and New Central Coal Company, 31,991.10 tons. The Cumberland and Pennsylvania Railroad has shipped to date 228.780,08 tons, and the Georges Creek and Cumberland Railroad 26,768.07 tons. The Reading Railroad shipment for the week ending February 25, was 82,000 tons, of which 10,250 tons were sent to and 16,000 tons shipped from Port Richmond, and 8,350 tons sent to and 12,000 tons shipped from Elizabethport. —*Phil. Ledger, Feb.* 25.

The National Banks.

THE report of the Committee on Banking and Currency of the House of Representatives at Washington in favor of the bill for the extension of national bank charters goes somewhat into a history of the national banking system, reciting how the system was devised for the protection and support of the national government, and State banks compelled by discriminating taxation to organize under national authority. The immense advantages which inured to the government during the war and the years immediately succeeding are not of equal force to-day, but the committee say other and greater advantages have accrued from the system in the promotion of business transactions and the development of our trade and industries. The charters of 393 banks will terminate within the year ending February 25, 1883; 297 expiring on that day. The committee say if no provision is made for the extension of the charters, these banks must all go into liquidation, and this will compel the withdrawal of $69,160,980 of lawful money now in active circulation. Such a contraction of the currency the committee think would produce very disastrous results. There is a strong and determined element of opposition to the national banking system in both houses of Congress, which will resist very strenuously any extensions ot charters, but which, while able to delay the action, is not powerful enough to defeat the extension when a vote can be reached.

Mexican Railway Subsidies.

THE report of the Federal Treasurer for the fiscal year ending June 30, 1881, recently published, shows that the republic of Mexico paid the following cash subsidies under the terms of its various railway concessions for the mileage constructed during that period. For the purpose of comparison, similar payments made during the preceding year are added :—

Railway line :	1880-'81.	1879-'80.
Mexico to Vera Cruz	$560,000 00	$549,231 83
Mexico to the River Amacusac	533,616 39	272,957 80
San Luis and Tampico	20,061 62	18,145 97
Ometusco to Pachucha	148,264 69	62,751 13
Merida to Peto	69,660 00	12,000 00
Merida to Progreso	18,186 21	9,813 79
Celaya to Leon	124,546 70	159,795 05
Vera Cruz to Alvarado	60,000 00	32,000 00
Zacatecas to San Luis	19,774 36	22,960 00
San Martin to Panzacola	84,457 58	11,775 78
Tehaugan a Esperanza	.....	62,946 97
Matamoras to Izucar	61,000 00	.....
Tehuantepec	34,500 00	.....
Sonora	129,000 00	.....
Reyes to Irolo	20,000 00	.....
Puebla to San Marco	5,000 00	.....
Total sum paid 1880-'81	$1,887,979 55	.....
Total sum paid 1879-80	.....	$1,214,317 82

Philadelphia and Reading Companies.

The following is the comparative statement of the Philadelphia and Reading Railroad Company and the Philadelphia and Reading Coal and Iron Company for the month of January, 1882 and 1881 :—

	1882.	
GROSS RECEIPTS.	*Profit for mo.*	*Year to date.*
Railroad traffic	$561,665 92	$1,396,120 59
Canal traffic	£19,394 18	£28,060 84
Steam colliers	43,656 71	87,364 85
Richmond coal barges	£1,925 56	£810 40
Total Railroad Co	$584,002 89	$1,454,614 20
Reading Coal & Iron Co.	62,910 74	129,841 97
Total of all	$646,913 63	$1,584,456 17
TONNAGE & PASSENGERS.	*Month.*	*Year to date.*
Tons of coal on railroad	508,147.12	1,268,492.09
Tons of merchandise	593,091.05	1,180,013.02
Passengers carried	898,600.00	1,825,208.00
Coal transp by stm colliers	48,285.11	95,820.04
TONS OF COAL MINED.		
By Coal and Iron Company	240,432.15	624,372.03
By tenants	89,705.10	219,209.00
Total mined from lands owned and controlled by Co. and from leasehold estates	330,138.05	843,581.03

	1881.	
GROSS RECEIPTS.	*Profit for mo.*	*Year to date.*
Railroad traffic	$491,171 31	$1,002,826 40
Canal traffic	£11,044 56	£29,085 18
Steam colliers	17,775 21	44,847 70
Richmond coal barges	1,738 47	744 23
Total Railroad Co	$499,640 43	$1,019,333 15
Reading Coal & Iron Co.	55,129 29	75,893 22
Total of all	$555,769 72	$1,095,226 37
TONNAGE & PASSENGERS.	*Month.*	*Year to date.*
Tons of coal on railroad	494,097.13	1,012,328.16
Tons of merchandise	442,629.02	878,840.05
Passengers carried	754,799.00	1,506,115.00
Coal transp by stm colliers	36,285.09	78,275.14
TONS OF COAL MINED.		
By Coal and Iron Company	222,234.04	431,457.13
By tenants	96,942.03	209,013.10
Total mined from lands owned and controlled by Co. and from leasehold estates	319.176.07	640,471.03

Total of both companies for month of February, 1882 : Gross receipts, $2,451,466.30 ; gross expenses, $1,804,552.67—profit, $646,913.63.

THE four-track bridge of the Pennsylvania Railroad, across the Rahway River, at Rahway, the first of its class in the State, and almost the only one in the country, will be completed within a week. The work has been going on for many months. The third set of girders was completed yesterday, and the fourth will be thrown into position next Sunday, by which time three tracks will be in running order over the bridge. There are five heavy granite piers and abutments, and the bridge is of iron throughout, the wood-work having been thrown piece-meal into the river as, section by section, it was replaced by the iron. The whole structure is on the ground level, and so solid that passengers in trains would not notice they were on a bridge at all. It completes the straight four-track stretch from South Elizabeth to Houtenville, six and a half miles, and greatly lessens the chances of interference with express trains by freight trains running on the main tracks. All the buildings and the many telegraph poles have been removed from the line of the outer fourth tracks, and only a few days will be required for their completion.—*Newark (N. J.) Journal*, Feb. 21.

"PRINTING-PRESSES in Rocky Mountain towns are usually run by water power." The editorial departments are not. Not usually—or usually not.—*Norristown Herald.*

New York Stock Exchange.

(Thursday's quotations follow money article.)

Closing Prices for the week ending Mar. 1.

	Th.23.	F.24.	Sat.25.	M.27	Tu.28.	W.1.
Adams Express	.....	142½	.....	.....	.....	143
Albany and Susq.	.....	.....	.....	.....	.....	.....
1st mortgage	.....	.....	.....	.....	.....	.....
2d mortgage	.....	.....	.....	.....	.....	.....
American Express	90¾	90¾	97½	92	.....	.....
Atlantic & Pac. Tel.	.....	.....	.....	.....	.....	.....
Burl., C. R. & Nor.	80	.....	....	85	83	.....
1st mortgage 5s	99½	99½	100	.....	.....	.....
Canada Southern	46	48¼	49	48¾	48¼	47¾
1st mortgage guar	93½	.....	93¾	93¾	93¾	94
Central of N. Jersey	93	93¾	94¾	96	95	91⅞
1st mort. 1890	115	.....	.....	115½	.....	.....
7s, consol. ass	114	.....	.....	114	.....	.....
7s, convertible ass.	.....	.....	.....	.....	.....	112
7s, Income	.....	.....	.....	.....	101½	.....
Adjustment	106½	105	105¼	.....	.....	.....
Central Pacific	87¾	89½	89½	90½	89¾	89
6s, gold	113¼	113¼	113	.....	.....	.....
1st M. (San Joaq)	108	108½	.....	.....	.....	.....
1st M. (Cal. & Or.)	.....	.....	.....	.....	.....	104
Land grant 6s	.....	.....	.....	.....	.....	.....
Chesapeake & Ohio.	20	21½	21½	22	22¼	21
1st, series B	79¾	78¾	79	78¾	79	78½
Chicago and Alton.	128½	129½	129½	130	131	130½
Preferred	.....	.....	.....	.....	.....	.....
1st mortgage	.....	.....	.....	.....	.....	.....
Sinking Fund	.....	.....	.....	.....	.....	.....
Chi., Bur. & Quincy	131½	129¼	130	132½	131½	.....
7s, Consol. 1903	126½	.....	.....	125½	...	125¾
Chi., Mil. & St. Paul	107½	108¾	108¼	107¾	108¾	108¾
Prefered	.....	120	120¾	122	122½	.....
1st mortgage, 8s	.....	.....	.....	.....	.....	.....
2d mort., 7 3-10s	.....	.....	.....	.....	.....	.....
7s, gold	.....	.....	.....	.....	.....	.....
1st M. (La. C. div)	.....	.....	.....	.....	.....	.....
1st M. I. & M. div.)	.....	.....	.....	116	.....	.....
1st.M. (I. & D. ext.)	115½	.....	.....	.....	.....	.....
1st M. (H.&D. div.)	.....	.....	.....	.....	.....	.....
1st M.(C. & M.div.)	.. ..	.....	.....	.....	.....	.....
Consolidated S. F.	.....	.....	.....	119½	.....	119
Chi. & Northwestern	129½	131½	131¾	133	131	130¼
Preferred	139	140¾	141	142¾	142¼	142
1st mortgage	.....	107	.....	.....	.....	.....
Sinking Fund 6s	.....	.....	.....	108¾	.....	.....
Consolidated 7s	131	.....	.....	.....	....	131
Consol. Gold bo'ds	125	123	124	.....	.....	122
Do. reg	.....	.....	.....	.....	.....	.....
Chi., R. Isl. & Pac.	.....	130¾	131½	132¾	132¾	131½
6s, 1917, c	.....	126	.....	126½	.....	127½
Clev.,Col.,Cin.&Ind.	76½	76¾	76¾	78¾	79½	.....
1st mortgage	.....	.....	.....	124	.....	....
Clev. & Pittsburg gr.	.....	.....	.....	.....	.....	.....
7s, Consolidated	.....	.....	.....	.....	.....	.....
4th mortgage	.....	.....	.....	.....	.....	112
Col.,Chi.,& Ind. Cent.	9¾	10¼	11¼	11¼	11	11¼
1st mortgage	125	.....	.....	.....	.....	.....
2d mortgage	.....	.....	.....	.....	.....	.....
Del. & Hud Canal.	108	107	108	108	107½	106¾
Reg. 7s, 1891	.....	.....	.....	112¾	....	.....
Reg. 7s, 1884	.....	.....	.....	105¾	.....	.....
7s, 1894	118	.....	.....	.....	....	.....
Del.,Lack.& Western	122⅞	124½	124¾	125⅞	124¾	123½
2d mortgage 7s	.....	.....	.....	.....	.....	.....
7s, Consol. 1907	.....	.....	.....	.....	.....	.....
Erie Railway	.....	.....	.....	.....	.....	.....
1st mortgage	.....	.....	.....	.....	.....	.....
2d mort. 5s, ext.	.....	.....	.....	.....	.....	.....
3d mortgage	107¾	.....	.....	.....	.....	.....
4th mort. 5s, ext.	.....	.....	.....	.....	.....	108
5th mortgage	.....	.....	.....	.....	.....	.....
7s, Consol. gold	.....	.....	.....	130	....	.....
Great West. 1st mort	108	.....	.....	...	.....	.....
2d mortgage	.....	102	103	....	.....	.....
Hannibal & St. Jo.	91¾	91⅞	91¾	91¾	91¾	90
Preferred	96	96½	95	95	94¾	81
8s, Convertible	.....	....	...	.....	.....	.....
Houston & Tex. Cen	65½	67	68	71	67	67
1st mortgage	111½	111½	111	.....	.....	.....
2d mortgage	.....	.....	.....	.....	.....	.....
Illinois Central	132½	133¾	133½	134½	133½	133¾
LakeShore&MichSo	108½	111	112¾	116	114	114¾
Consol. 7s	.....	.....	.....	.....	.....	.....
Consol. 7s, reg	.....	.....	.....	.....	.....	.....
2d Consolidated	.....	.....	.....	.....	.....	.....
Leh. & W. B. 7s, Con	.....	.....	.....	.....	.....	.....
Long Dock bonds	.....	.....	.....	.....	.....	.....
Louisville & Nash.	72	73¼	76¾	79¾	75¾	75¾
7s, Consolidated	.....	.....	.....	.....	.....	.....
Manhattan	52	53¾	54¼	56	55¾	54¼
1st pref.	94¼	94	93	.....	.....	94¾
Met. Elevated	85	86	88	89½	87	.....
1st mortgage	..	.....	100¾	100½	.....	100¾
Michigan Central	80¼	82¼	82¼	83¾	81¾	81¼
7s, 1902	.....	.....	.....	.....	.....	.....
Morris & Essex	.....	.....	.....	.....	123	121
1st mortgage	.....	.....	.....	.....	.....	.....
2d mortgage	..	.....	.....	.....	.....	.....
7s of 1871	.....	.....	.....	.....	.....	.....
7s, Convertible	...	...	.....	.....	.....	.....
7s, Consolidated	.....	.....	.....	.....	.....	....
N.Y. Cen. & Hud. R.	129	130¾	131½	132⅞	131½	131
6s, S. F. 1883	.....	...	.....	.....	103¼	103¼
6s, S. F., 1887	....	...	.....	.....	.....	.....
1st mortgage	.....	.....	.....	132	.....	.....
1st mortgage, reg.	.....	.....	.....	.....	.....	.....
N. Y. Elevated	105	104	.....	.....	.....	105
1st mortgage	.....	.....	.....	.....	.....	.....
N. Y. & Harlem	.....	.....	.....	.....	.....	.....
Preferred	.....	.....	.....	.....	.....	.....
1st mortgage	.....	.....	.....	.....	.....	.....
1st mortgage, reg	.....	.....	.....	.....	.....	.....
N. Y., Lake Erie & W	35¾	37½	37¾	38¾	37¾	36¾
Preferred	73¼	74¾	75¾	76¾	76¾	76¼
2d Consolidated	95	96¼	96¾	98	96¾	97
New 2d 5s fund	93	.....	.....	94	.....	95
N.Y.,N.Hav'n&Hart	169	.....	.....	.....	.....	169
North Mo. 1st mort	120	.....	119¾	.....	119¾	.....
Northern Pacific	31¾	33¼	33	33¾	32¾	32
Preferred	68¾	71	70¾	72¾	71	70
Ohio & Mississippi.	29	30	30¾	31	31¼	30¾
Preferred	.....	95	.....	.....	.....	.....
2d mortgage	.....	.....	.....	.....	.....	.....
Consolidated 7s	.....	.....	.....	.....	.....	.....
Consol. S. Fund	.....	.....	.....	.....	118	.....
Pacific Mail S. S. Co	39¾	40⅞	41⅞	41¾	41	40¾
Pacific R. R. of Mo.	.....	.....	.....	.....	.....	.....
1st mortgage	.....	106	.....	.....	105¾	.....
2d mortgage	111¾	.....	.....	.....	111¼	.....
Panama	.....	.....	.....	.....	.....	.....
Phila. & Reading	56½	59¾	59	59¼	59¼	.....
Pitts,Ft.W.&Chi.gtd	.....	133½	134	134	135	.....
1st mortgage	.....	.....	.....	.....	.....	.....
2d mortgage	.....	.....	.....	.....	.....	.....
3d mortgage	.....	.....	.....	.....	.....	.....
Pullman Palace Car	122	125	127¼	127⅞	127	124¼
Quicksil'r Min'g Co	12	11¾	....	11¼	12½	.....
Preferred	59¾	.....	59	60	.....	60
St. Louis & San Fran	35¾	35	39¼	39½	.....	38¼
Preferred	47	47¾	51	52	.....	....
1st Preferred	80	82	.....	87	89¾	90
St. L., Alt'n & T. H.	.....	27	30	33	30¾	30½
Preferred	.. ..	.....	77¾	83	.....	.....
1st mortgage	.....	.....	.....	.....	.....	.....
2d mort. pref.	.....	105½	.....	.....	.....	.....
Income bonds	.....	....	.....	.....	.....	.....
St. L., Iron Mt. & S	.....	.....	.....	.....	.....	.....
1st mortgage	.....	114	115	.....	115	.....
2d mortgage	.....	107	.....	107½	.....	....
Toledo and Wabash.	.....	.....	.....	.....	.....	.....
1st mortgage	.....	.....	.....	.....	.....	.....
2d mortgage	.....	.....	.....	.....	.....	.....
7s, Consolidated	99½	.....	.....	.....	.....	101
St. Louis Division	.....	.....	.....	.....	.....	...
Union Pacific	112¾	114½	114⅝	115¾	114¾	113¾
1st mortgage	116½	.....	115½	.....	.....	115½
Land Grant 7s	.....	.....	.....	.....	.....	115½
Sinking Fund 8s	.....	.....	.....	.....	.....	.....
United States Ex	.....	73	.....	.....	.....	74
Wabash, St. L.& Pac	28	30¾	32½	33¾	32½	32½
Preferred	55¾	57½	57½	59¾	57¾	56½
New mort. 7s	.....	.....	.....	.....	.....	...
Wells-Fargo Ex	.....	125	.....	.....	126	.....
Western Pacific b'ds	.....	.....	.....	.....	.....	.....
Western Union Tel.	77¾	78⅝	78¾	80¾	79	78¾
7s., S. Fconv., 1900	.....	118	.....	.....	.....	.....
FEDERAL STOCKS:—						
U. S. 4s, 1907, reg	117⅞	117	117⅞	.....	.....	.....
U. S. 4s, 1907, coup.	117⅞	117⅞	118	118	.....	118
U. S. 4½s, 1891, reg.	113¾	.....	113¼	.....	.....	.....
U. S. 4½s, 1891, coup	.....	.....	.....	114½	.....	113¾
U. S. 5s, 1881, reg	.....	.....	.....	.....	.....	.....
U. S. 5s, cont'd at3½	101⅞	.....	102	102	102	102
U. S. 6s cont'd at3½	.....	.....	.....	.....	.....	.....
Dt. of Col. 3-65s, reg	.....	.....	.....	.....	.....	.....
Dt. of Col.3-65s,coup	.....	.....	106⅝	.....	.....	.....

Boston Stock Exchange.

Prices for the Week Ending Mar. 1.

	Th.23.	F. 24.	Sat.25.	M.27.	Tu.28.	W. 1.
Atch.,Top.&San.Fe.	82	82¼	85½	86¼	86¼	85¼
1st mortgage	.....	.....	.....	.....	.....	.....
2d mortgage	.....	.....	.....	.....	.....	.....
Land Grant 7s	.....	.....	114½	.....	.....	.....
Boston & Albany	167	165½	167½	.....	168	165½x
7s reg	.....	.....	.....	.....	.....	.....
Boston and Lowell.	.....	.....	.....	101	.....	101
Boston & Maine	.....	145	146	146	.....	145½
Boston& Providence	.....	.....	.....	.....	.....	51¾
Bos'n,Hart.& Erie7s	53	53	53¾	54¾	54¾	.....
Burl.& Mo.R.L.G.7s	.....	.....	.....	.....	.....	.....
Burl.& Mo.R.in Neb	.....	.....	.....	.....	.....	.....
6s, exempt	.....	.....	.....	.....	.....	112
4s	.....	.....	.....	.....	.....	.....
Chi.,Burl. & Quincy	129	129½	130⅞	132¾	132	131½
7s	.....	.....	.....	.....	.....	.....
Cin.,Sand&Clev($50)	23½	23¾	24¾	25¾	25	.....
Concord ($50)	....	.....	.....	.....	.....	.....
Connecticut River	.....	.....	.....	.....	.....	168
Eastern	33½	.....	.....	35	35	36
New 4½ Bonds	.....	108¾	.....	.....	.....	107¾
Fitchburg	135	135	.....	.....	.....	.....
N.Y. & New England	50	50	51¾	52	52	51
7s	.....	.....	.....	.....	.....	115½
Northern N. H.	109	.....	109	.....	.....	.....
Norwich&Worcester	.....	.....	.....	.....	.....	.....
Ogden & Lake Cham	36	36¼	.....	.....	.....	.....
Preferred	.....	.....	.....	.....	.....	.....
Old Colony	125½	125	125¾	126	126	126
Ph.,Wil.&Balt.($50)	.....	.....	.....	.....	.....	.....
Portl'd,Saco & Ports	.....	.....	.....	.....	.....	.....
Pueblo & Ark Val	.....	.....	.....	.....	.....	.....
7s	.....	.....	.....	.....	114	.....
Pullman Palace Car	...	. ..	.....	128	126	125
Union Pacific	113½	114	.....	116½	115½	.....
6s	.....	114¾	.....	.....	.....	.....
Land Grant 7s	.....	.....	.....	112¾	.. .	.....
Sinking Fund 8s	.....	.....	119	.....	.....	.....
Vermont & Canada	.....	.....	.....	.....	.....	.....
Vermont & Mass	.....	.....	.....	.....	.....	.....
Worcester & Nashua	.....	.....	.....	.....	58	.....
Cambridge (Horse)	.....	.....	.....	.....	.....	.....
Metropolitan(Horse)	.....	.....	.....	.....	.....	.....
Middlesex (Horse)	.....	.....	.....	.....	.....	.....
Cal.&Hecla Min'gCo	231	231	234½	234	235	.....
Quincy	42½	42	43	43½	44	45½

Philadelphia Stock Exchange.

Closing Prices for the Week Ending Feb. 28.

	W.22.	Th.23.	F.24.	Sat.25.	M.27	Tu.28.
Allegh'y Val. 7 3-10s	.....	.....	.....	.....	.....	.....
7s, Income	.....	.....	.....	.....	.....	55
Buff., Pitts & West.	.....	15	16	16¾	16¾	17¾
Camd'n & Am. 6s, '83	.....	.....	.....	101½	. ...	101½
6s, 1889	.....	.....	.....	.....	.....	.....
Mort. 6s, 1889	.....	.....	.....	.....	.....	.....
Camden & Atlantic	.....	.....	.....	.....	30	.....
Preferred	.....	.....	.....	.....	35	.....
1st mortgage	.....	.....	.....	.....	.....	.....
2d mortgage	.....	.....	.....	.....	.....	.....
Catawissa	.....	17	17¼	17¾	19¾	20¼
Preferred	.....	.....	.....	.....	....	55
7s, new	.....	.....	.....	.....	.....	.....
Del. & Bound Brook	.....	.....	.....	.....	.....	.....
7s	.....	.....	125½	.....	125½	.....
Elmira&Williamsp't	.....	.....	.....	.....	.....	.....
Preferred	.....	.....	.....	.....	.....	.....
Hunt. & B. Top Mt.	...	.....	.....	.....	.....	12¾
Preferred	.....	26½	26¾	.....	26¾	.....
2d mortgage	.....	.....	.....	.....	115	.....
Lehigh Navigation	.....	42¾	43	42¾	43	42¾
6s, 1884	.....	.....	.....	105½	105½	.....
Gold Loan	.....	.....	111¼	.....	112	.....
Railroad Loan	.....	.....	.....	.....	117	.....
Conv. Gold Loan	.....	.....	.....	.....	112½	.....
Consol. Mort, 7s	.....	.....	116¾	.....	116¾	.....
Lehigh Valley	.....	62	62¸	62	62	62½
1st mort. 6s, coup	.....	.....	.....	.....	.....	.....
1st mort. 6s, reg	.....	.....	.....	.....	.....	.....
2d mort. 7s	.....	.....	.....	.....	.....	.....
Consol mort. 6s	.....	.....	.....	.....	120½	.....
Consol.mtg.6s,reg	.....	.....	.....	120¾	.....	.....
Little Schuylkill	.....	.....	57	.....	....	57¼
Minehill&Sch.Hav'n	.....	62½	62½	.....	62½	62
North Pennsylvania	.....	.....	.....	.....	.....	.....
1st mortgage 6s	.....	.....	.....	106	106	.....
2d mortgage 7s	.....	.....	.....	.....	.....	.....
Genl. mtg.7s,coup	.....	.....	.....	.....	.....	.....
Genl. mtg. 7s, reg	.....	.....	.....	.....	.....	.....
Northern Central	.....	50	....	49¾	.....	.....
5s	.....	...	.....	97½	.....	.....
Northern Pacific	.....	31¼	33	32⅞	33½	32⅝
Preferred	.....	68½	71	70⅝	72¾	70⅞
Pennsylvania R. R.	.....	60⅛	60½	60¾	60¼	60¼
1st mortgage	.....	.....	.....	.....	.....	.....
Gen'l mort	.....	.....	.....	.....	124	.....
Gen'l mort reg	.....	.....	.....	.....	.....	.....
Consol. mort. 6s	.....	.....	117	.....	.....	.....
Consol. mort. reg	.....	.....	.....	.....	.....	...
Pa.State 6s 2d series	.....	.....	.....	.....	.....	.....
do 3d series	.....	.....	....	.....	.....	.....
do 5s, new	....	117	117	.....	.....	117¾
do 3s,	.....	.....	.....	.....	.....	.....
Phila. & Reading	.....	28½	29⅞	29½	29⅝	29⅝
1st mortgage 6s	.....	.....	.....	.....	.....	.....
7s of 1893	.....	.....	.....	.....	.....	.....
7s, new convert	.....	.....	.....	.....	75	75
Consol. mort. 7s	.....	.....	.....	124¾	124½	124½
Consol. mort. reg	.....	125	.....	127	.....	.....
Gen'l mort. 6s	.....	94	95	96	96	95¾
Philadelphia & Erie	.....	.....	15	15½	16	.....
1st mortgage 5s	.....	.....	.....	.....	.....	.....
2d mortgage 7s	.....	114	.....	.....	.....	.....
Pittsb.,Cin.&St.L.7s	.....	119¾	.....	.....	.....	.....
Pitts.,Tit.&Buff. 7s,	.....	92½	.....	.....	.....	.....
Schuylkill Navi't'n.	.. ..	...	.....	.....	.....	.....
Preferred	.....	12½	.....	.....	12½	.....
6s, 1872	.....	.....	.....	.....	.....	.....
6s, 1882	.....	.....	.....	. .	93	.....
United Co. of N. J.	.....	.....	185	.....	185	185
Hestonville, (Horse)	.....	....	....	....	.....	.....
Chestnut&Wal.(do)	.....	.....	.....	.....	.....	...
Green & Coates (do)	.....	.....	.....	...		...

Baltimore Stock Exchange.

Closing Prices for the Week Ending Feb. 28.

	W. 22.	Th. 23.	F. 24.	Sat. 25.	M. 27.	Tu. 28
Baltimore & Ohio..	.....	.....	.....	.....	.....	.....
6s, 1880.....	.....	.....	.....	.....	.....	.....
6s, 1885.....	.....	.....	.....	.....	107¼	107¼
Central Ohio ($50)..	.....	.....	.....	.....	.....	47
1st mortgage.....	.....	.....	109¾	.....	110½	.....
Marietta & Cincin'ti	.....	.....	.....	.....	.....	.....
1st mortgage, 7s..	.....	125	125	124	124	125
2d mortgage, 7s..	.....	103½	105	104¾	103¾	103½
3d mortgage, 8s..	.....	54	56¾	56½	55½	55
Northern Cen. ($50)	.....	49½	50½	.....	49¾	49⅞
2d mort., 6s 1885..	.....	.....	.....	.....	.....	.....
3d mort., 6s, 1900.	.....	.....	.....	.....	.....	.....
6s, 1900, gold.....	.....	114	114	.....	.....	.....
6s, 1904, gold.....	.....	112	.....	.....	112¼	.....
Orange & Alex. 1st.	.....	.....	.....	.....	.....	.....
2d mortgage, 6s...	.....	.....	.....	.....	.....	.....
3d mortgage, 8s...	.....	.....	.....	.....	.....	.....
4th mortgage, 8s..	.....	.....	.....	.....	.....	.....
O., Alex. & Manas's 7s	.....	.....	.....	.....	.....	.....
Pitts. & Connellsv. 7s	.....	.....	.....	.....	.....	.....
Virginia 6s, Consol.	60¾	60½	60¼	60¼	60¼	60½
Consol. coupons..	.....	61	.....	60	60	55½
10-40 bonds.....	....	.....	.....	39⅞	39½	.....
Def'd Certificates.	.....	.....	.....	.....	.....	14
Western Maryland..	.....	.....	14¾	.....	.....	.....
1st M., end. by Balt	.....	.....	.....	.....	.....	.....
2d M., do .	.....	.....	.....	.....	.....	.....
3d M., do .	.....	.....	.....	.....	.....	.....
1st M., unendors'd	.....	.....	.....	.....	.....	.....
2d M., end. WashCo	.....	.....	.....	.....	113	.....
2d M., preferred..	.....	.....	.....	.....	.....	.....
City Passenger R R.	....	.....	.....	.....	.....	.....

London Stock Exchange.

	Closing Prices Feb. 10.		Feb. 17.	
Baltimore & Ohio (sterling).....114	116	114	116
Central of N. J., $100 shares.... 93	98	93	98
Do. consol. mort.....115	117	115	117
Do. Adjustment Bonds.....104	109	104	109
Do. Income Bonds.....104	107	104	107
Det., G'd Haven & Mil. Equip bds112	114	112	114
Do. Con. M. 5p.c., till '83 aft'r 6p.c110	112	110	112
Illinois Central $100 shares.....138	140	134½	135½
Lehigh Valley Cons. mortgage..118	122	118	122
Louisville & Nashville mort 6s.104	106	97	100
Do. Sink. Fund bds (S. & N. Ala)102	104	97	100
Do. capital stock $100 shares. 95	97	87	89
N. Y. Cent. & Hud. R. mt. bds..134	137	134	137
Do. $100 shares.....133½	134½	133	134
Do mort. bonds (stg.).....119	121	118	120
N.Y., Lake Erie & West., $100 shs 40¼	41	39¾	40¼
Do. 6 p. c. pref. $100 shares .. 80	82	78	80
Do. 1st Con. Mort. bds (Erie) .131	133	128	130
Do. do. Funded Coupon bds.127	129	124	126
Do. 2d Consol Mort. bonds...100½	101½	99½	100¼
Do. do. Funded Coupon bds.. 97	100	97	100
Do. Gold Income bonds..... 88	92	88	92
N.Y., Pa. & Ohio 1st mort. bonds. 45½	46½	45	46
Do. Prior Lien bds (sterling)..104	108	104	108
Pennsylvania, $50 shares..... 62	63	61½	62¼
Do. Con. Sink Fund Mort....115	117	115	117
Philadelphia & Reading $50 shs 32½	33	31¼	31¾
General Consol Mortgage.....116	118	115	117
Do. Improvement Mortgage..102	104	102	104
Do. Gen. Mtg. '74, ex-def'd coup.100	102	97	99
Do. Scrip for the 6 def. ½ coup. 96	99	96	99
Pittsb., Ft. W. & Chi. Eq. bds....105	109	104	106
St. L. Bridge 1st mort. gold b'd.126	128	125	127
Do. 1st pref. stock..... 95	98	95	98
Union Pa. Land Grant 1st. mtg.116	118	116	118
Wabash, St. L. & P. $100 shs..... 36½	37½	32	34
Do. $100 pref. shares..... 68	69	61	62
Do. gen. mort. bonds..... 88	90	86	88

AMERICAN RAILROAD JOURNAL.

Financial and Commercial Review.

THURSDAY EVENING, March 2, 1882.

THE ruling rate for call loans on stocks this morning was 6 per cent, and on Governments 3@3½ per cent. In the afternoon and at the close the quotation was 6 per cent, plus 1-32 and 1-64 of 1 per cent a day.

The posted rates for prime bankers' sterling were 4.86@½ and 4.90½; the actual rates were 4.85½@¾, and 4.89¾@4.90, with cable transfers 4.91@½, and prime commercial bills 4.84@¼. The actual rates for Continental bills are as follows: francs, 5.13¼@¾ and 5.18¾@5.19⅜; marks, 94⅝@¾ and 95½@⅝, and guilders, 40⅛@40⅝.

The $2,500,000 "Prior Lien" bonds which the New York Lake Erie and Western Railroad Company have disposed of, and the proceeds of which are to be expended in building the double track west of Hornellsville, were, under the terms of the plan of reorganization, provided for, "to meet the expenses, payments and indebtedness of the receiver, and the reorganization expenses here and in London." They were made payable in thirty years from the date of the mortgage, and take precedence of the new second consolidated mortgage bonds.

A meeting of the stockholders of the Mexican National Construction Company of Palmer and Sullivan was held at Colorado Springs, Col., on the 23d ult., at which nineteen-twentieths of the stock was represented. By a unanimous vote the capital stock was increased $3,000,000. Nearly all the new stock was taken by the present stockholders. The amount thus secured will enable the company to complete, equip, and put in operation 729 miles of road. The completion of this mileage will entitle the company to a total of $5,400,000 in subsidies from the Mexican Government, payable in stipulated amounts as the different sections are completed. Of this mileage 302 miles are complete and in operation. The rails and rolling-stock are already provided for 729 miles. The grading is completed for 550 miles, and ties have been bought and delivered for 582 miles. It is expected that the 729 miles will be completed and in operation before the end of the year. The system for which concessions have been granted covers 2,962 miles. When the 729 miles are complete there will remain a distance of 475 miles to be covered in order to connect the City of Mexico with the United States.

At a meeting in Boston on the 24th ult., of the Atchison, Topeka and Santa Fe and the St. Louis and San Francisco Railroad companies with representatives of the Central and Southern Pacific Railroad companies a compromise was effected respecting the extension of the Atlantic and Pacific. The main points of the agreement are that the Atlantic and Pacific will call from the present subscriptions $4,000,000 cash to finish and equip its road to the Colorado River; also $1,500,000 cash to build the central division (of the Atlantic and Pacific) in the Indian Territory. The Atlantic and Pacific does not bind itself not to build to San Francisco, but should the Southern Pacific build east to the Colorado River, and if the Atlantic and Pacific joins that road there, it is agreed by the Southern Pacific that it will guarantee to pay to the Atlantic and Pacific 25 per cent of its gross earnings on through business, this to be applied to the payment of the interest on the Atlantic and Pacific bonds should the earnings of the latter company not be sufficient for that purpose. The bonds are also guaranteed in the same way, to the amount of 25 per cent by the St. Louis and San Francisco, also 25 per cent by the Atchison, Topeka and Santa Fe.

A deed has been recorded in York, Penn., transferring the Middle Division of the Peach Bottom Railway to trustees for the participating bondholders.

The Northern Central Railway Company took formal possession on the 1st inst. of the Union Railroad which it has previously acquired by purchase from the Canton Company. The Northern Central, the Baltimore and Potomac and the Philadelphia, Wilmington and Baltimore, of the Pennsylvania system, and the Western Maryland Railroad will all use the Union Railroad as heretofore.

The new legislation sought for by the stockholders of the Eastern (Mass.) Railroad Company desires such action to be taken as shall enable all the debt above $10,000,000 to be made a preferred stock, thus enabling the stock to secure dividends should the future earnings leave sufficient for that purpose after meeting interest and other fixed charges.

The gross earnings of the Philadelphia and Erie Railroad for the month of January, 1882, were $252,727.26, the expenses $166,485.06, and the net earnings $86,242.20—being an increase of $26,173 over the net earnings for the month of January, 1881.

The chief of the bureau of statistics reports that during the month of January there arrived in the customs districts of Baltimore, Boston, Detroit, Huron, Minnesota, New Orleans, New York, Passamaquoddy, Philadelphia and San Francisco 20,296 passengers, of whom 18,489 were immigrants, 1,357 citizens of the United States returned from abroad, and 450 aliens not intending to remain in the United States. Of this total number of immigrants there arrived from England and Wales 2,262, Ireland 745, Scotland 423, Austria 470, Belgium 48, Denmark 134, France 171, Germany 4,712, Hungary 1,034, Italy 1,537, Netherlands 57, Norway 113, Poland 169, Russia 893, Sweden 285, Switzerland 316, Dominion of Canada 3,632, China 1,350 and from all other countries 138.

The gross receipts of the Philadelphia and Reading Railroad and Coal and Iron Companies for the month of January were $2,451,466.30, and the gross expenses $1,804,552.67, leaving a profit for the month of $646,913.63, against $554,769.72 for the same month last year. The profit for the year to date is $1,584,456.17, against $1,095,226.37 for the same period last year.

The Treasury disbursements during the first part of this month will amount to about $33,000,000, and include the quarterly interest on the 4½ per cents due on the 1st, amounting to $2,800,000; pensions amounting to $10,000,000, due on the 4th; and the 107th call for $20,000,000 extended 6s, due on the 13th.

The Receivers of the Philadelphia and Reading Railroad Company will purchase on the 3d inst. the coupons and interest due 1st March on the Divisional Coal Land mortgage bonds from the Glenworth and the Hartman and Myers tracts of the Philadelphia and Reading Coal and Iron Company, at 5 per cent per annum.

The report of the Land Commissioner of the Illinois Central Railroad Company shows that during the year 1881 there were sold 24,244 acres of donated lands to 429 persons for $135,587, averaging to each purchaser 56.51 acres; average price per acre, $5.59. Donated town lots were sold to the amount of 1,143; purchased lands belonging to the department, forty acres, for $249; purchased lands belonging to

the operative department, thirty-one acres, $964; and purchased town lots for $693.50. The number of sales canceled was 148, for 5,944.71 acres. Deeds issued, 350, for 16,640.42 acres. The whole area of donated lands conveyed to date, 2,286,322 acres, leaving unconveyed 318,031 acres; total sales of donated lands, 2,367,422 acres, leaving unsold 226,852 acres.

The gross earnings of the Knox and Lincoln Railroad Company for the year 1881 were $129,231.99, the operating expenses, including renewals and repairs, $83,066.78, and the net earnings $46,165.21.

The total gross receipts of the Camden and Atlantic Railroad for the year 1881 were $512,880.05, the expenses $373,864.03, and the net earnings $139,016.02. The net surplus, after paying interest, taxes, etc., $45,178.83.

The first through car from San Francisco to New Orleans without breaking bulk reached that city on the 27th ult., via the Southern Pacific Railroad, having been fourteen and a half days en route. The freight rate was $1.42 per 100 pounds.

The Supreme Court of the United States at Washington has decided that registered bonds and stocks of one State may be constitutionally taxed in another. Whether State bonds are taxed or are expressly exempt from taxation at home, the fact in either case, the Court holds, does not prevent them from being taxed elsewhere, for the reason that no State can exempt property from taxation out of its own jurisdiction.

The total revenue of the Philadelphia and Erie Railroad for 1881 was $3,454,309.05, and the net earnings $1,023,248.72. After deducting the various charges and the interest paid on the funded debt, there is a deficit of $395,245. The tonnage increased 99 per cent, but owing to the cutting of rates the gross earnings only increased 18 per cent.

The Sibley Cotton Factory at Augusta, Ga., the cost of which with its machinery was over $500,000, went into regular operation on the 22d ult., giving employment to several hundred hands. It is one of the finest factories in the country, and its product will compare with the best.

The closing quotations on Thursday were: Adams Express, 140@144; American Express, 92@— ; Chicago, Burlington and Quincy, 131½@132 ; Canada Southern, 48@48½ ; Chicago and Northwestern, 131⅜@131¾; do. pref., 141½@142 ; Chicago and Alton, 130@130½ ; Central of New Jersey, 92⅞@93; Central Pacific, 89⅞@90; Chicago, Milwaukee and St. Paul, 109¼@109½ ; do. pref., 120½@121; Columbus, Chicago and Indiana Central, 11¼@11½ ; Delaware and Hudson Canal, 106⅝@106¾ ; Delaware, Lackawanna and Western, 124¼@124½ ; Hannibal and St. Joseph, 90@— ; do. pref., 82¼@— ; Illinois Central, 134@134½; Lake Erie and Western, 30¾@31¼ ; Lake Shore and Mich. Southern, 114⅜@114⅝; Metropolitan Elevated, 89½@90 ; Manhattan Elevated, 55@56 ; do. pref., 93@95; Michigan Central 82½@82⅝; New York Elevated, 105@108; New York, Lake Erie and Western, 37¾@37¼; New York Central and Hudson River, 131⅛@132½ ; Northern Pacific, 32@32½ ; do. pref., 70½@70¾ ; Pacific Mail, 41@41¼ ; Texas and Pacific, 41@41½ ; Union Pacific, 114⅜@114½ ; United States Express, 79@85; Western Union Telegraph, 79⅜@79¾; Wabash, St. Louis and Pacific, 34¼@34½ ; do. pref., 58⅜@58½ ; Wells-Fargo Express, 126@128.

The following quotations of sales of railway and other securities, for the week, are in addition to those given elsewhere in our columns:

New York.—Atlantic and Pacific inc., 33 ; Am. Dock and Imp. 5s, 99; Boston and New York Air Line pref., 67 ; Chesapeake and Ohio 1st pref., 31½; do. 2d pref., 24½ ; do. cur. int., 147 do. 1st, Series A, 102½ ; Chicago, St. Paul, Minneapolis and Omaha, 32; do. pref., 100 ; do. consol., 100; Columbia and Greenville pref., 90 ; Chicago, Louis and New Orleans, 74¼ ; Chicago, Milwaukee and St. Paul 1st, Chicago and Pacific W. div., 92⅞ ; do. S. M. div., 103¼ ; Chicago and Northwestern S. F. 5s, 101½ ; Cairo and Fulton 1st, 107½ ; Central Pacific, S. A., 103; Columbus, Chicago and Indiana Central 1st, Trust Co. certif. ass. sup., 111 ; do. inc., 56½ ; Chicago, Burlington and Quincy 8s, 103½; Central Iowa 1st, 111; Denver and Rio Grande, 62⅜ ; do. 1st, 112½; do. consol., 101½; Dubuque and Sioux City, 82; Denver, South Park and Pacific 1st, 101½; East Tennessee, Virginia and Georgia, 12 ; do. pref., 20½ ; do. inc., 52½ ; do. 5s, 75 ; Gulf, Colorado and Santa Fe 1st, 107; Houston and Texas Central 1st, Western div., 107¾ ; do. Gen'l mort., 98; Indiana, Bloomington and Western, 40; Indianapolis, Decatur and Springfield pref., 39 ; do. 1st, 103½; International and Gt. Northern 1st, 106 ; Keokuk and Des Moines, 15; Kansas Pacific 1st consol., 103; do. 6s, Denver div. ass., 107½ ; Lehigh and Wilkesbarre consol. ass., 105⅜; Louisville, New Albany and Chicago, 70 ; do. 1st, 102; Lake Erie and Western, 32 ; do. inc., 53 ; Long Island, 51; Louisville and Nashville Gen'l mort. 6s, 96½; do. Cecelian Branch, 108½; Lafayette, Bloomington and Muncie 1st, 102; Manhattan Beach, 31 ; Marietta and Cincinnati 1st pref., 12½ ; Mobile and Ohio, 27 ; do. 1st deben., 90; do. 1st., 113 ; Missouri, Kansas and Texas, 30⅛; do. consol., 102¾ ; do. 2d, 61 ; do. gen'l mort. 6s, 79¾; Missouri Pacific, 93⅜ ; do. 1st consol., 101¼; Memphis and Charleston, 62 ; Milwaukee, Lake Shore and Western, 46 ; do. 1st, 100 ; Minneapolis and St. Louis pref., 59; do. 1st, 114½; do. 1st, Iowa Ext., 112 ; Michigan Southern S. F., 108; Nashville, Chattanooga and St. Louis, 66½; do. 1st, 115 ; New York, Ontario and Western, 24¼ ; do. pref., 49½; Norfolk and Western, 24¼; do. pref., 49; New Orleans Pacific 1st, 87½; Northern Pacific 1st, 97 ; New York City and Northern Gen'l mort., 76¾; Ohio Central, 20 ; do. 1st, 97; do. 1st, Terminal Trust, 95½; do. inc., 39¼ ; Oregon Railway and Nav., 133½ ; do. 1st, 106½; Oregon Transp., 68 ; Ohio Southern, 15¼ ; Peoria, Decatur and Evansville, 29⅜; Rensselaer and Saratoga, 135; Rochester and Pittsburg, 31; do. inc., 42 ; do. 1st, 101; Richmond and Alleghany, 24½; do. 1st, 90 ; do. inc., 43; Richmond and Danville, 165 ; do. W. P., 186 ; St. Paul and Sioux City 1st, 112½; St. Louis, Kansas City and Northern, Omaha div., 109 ; St. Paul, Minneapolis and Manitoba, 109¾ ; do. 1st, 109 ; do. 2d, 106 ; St. Paul and Duluth, 28½ ; Southern Pacific of California 1st, 104 ; St. Louis and Iron Mountain 1st, Arkansas Br., 107; do. 5s, 80 ; do. Cairo, Arkansas and Texas, 106; South Carolina inc., 46; St. Louis and San Francisco 2d, Class C, 85¾ ; Texas and Pacific, 39½ ; do. inc. L. G., 65 ; do. Rio Grande div. 1st, 80½ ; Toledo Delphos and Burlington, 14½; do. inc., 24; Toledo, Peoria and Western 1st, 110 ; Wabash, St. Louis and Pacific Gen'l mort. 6s, 85 ; do. Chicago div., 85 ; do. Havana div., 95¾; Alabama, Class A, 82½ ; do. B, 101 ; Louisiana 7s, consol., 65; Missouri 6s, 1889-'90, 112½; do. 6s, 1888, 111½ ; do. 6s, 1887, 109; do. 1886, 107; Ohio 6s, 1886, 109; Tennessee 6s, old, 51 ; Virginia 6s, old, 37 ; Am. Dist. Tel., 48 ; Sutro Tunnel, ¾ ; Canton Co., 65 ; Colorado Coal and Iron, 42¾ ; do. 6s, 90; Consol. Coal, 30 ; Maryland Coal, 17; Central Mining, 1; Little Pittsburg, 1⅜; Robinson, 3⅝; Standard, 16½.

Philadelphia.—Catawissa new pref., 58 ; Connecting R. R. 6s, 118; Central Transportation, 35¾ ; Elmira and Williamsport 6s, 115; Lehigh Nav. deben. 6s, 100½; New Orleans Pacific 6s, 88½; Nesquehoning Valley, 57 ; Pennsylvania Canal 6s, 95; Philadelphia, Wilmington and Baltimore 4s, 95 ; Philadelphia City 4s, 112 ; People's Pass. R. W. 6s, 102; Philadelphia and Reading R. R. scrip, 81 ; do. deben. 6s, 60 ; Steubenville and Indiana 6s, J. & J., 103; St. Paul and Duluth, 28; Schuylkill Nav. 6s, 1895, 68; Texas and Pacific 1st, 106½; do. consol. mort. 6s, 97; do. Rio Grande div. 6s, 81; Union and Titusville 7s, 100. The latest quotations are: City 6s, 108@118 ; do. free of tax, 128@132 ; do. 4s, new, 108@113 ; Pennsylvania State 6s, 3d series, 100@101; do. 5s, new loan, 117@117½ ; do. 4s, old, 110@112 ; do. 4s, new, 114@114½; Philadelphia and Reading R. R., 29⅝@29¾ ; do. consol. mort. 7s, reg., 124¾@125 ; do. mort. 6s, 117@120 ; do. gen'l mort. 6s, coupon, 95@96½; do. 7s, 1893, 120@121½; do. new, conv., 74½@75½ ; United New Jersey R. R. and Canal, 185@186 ; Buffalo, Pittsburg and Western, 17⅝@17¾ ; Pittsburg, Titusville and Buffalo 7s, 92@94 ; Camden and Amboy mort. 6s, 1889, 113½@114 ; Pennsylvania R. R., 60½@60¾ ; do. general mort. 6s, coupon, 123½@124¼; do. reg., 123@124½; do. consol. mort. 6s, reg., 117@118; Little Schuylkill R. R., 57@57¾ ; Morris Canal, 65@69 ; do. pref., 160@169 ; Schuylkill Navigation, 5@6½ ; do. pref., 12½@13 ; do. 6s, 1882, 92½@93½ ; do. 1872, 107@108 ; Elmira and Williamsport pref., 58@65 ; do. 6s, 115@— ; do. 5s, 95@100 ; Lehigh Coal and Navigation, 42⅝@43 ; do. 6s, 1884, 105@106½; do. R. R. loan, 116@118 ; do. Gold Loan, 111@112 ; do. consol. 7s, 116¾@117½ ; Northern Pacific, 32⅝@32¾ ; do. pref., 70½@71; North Pennsylvania, 63@65 ; do. 6s, 105@106½ ; do. 7s, 119@120 ; do. General mort. 7s, reg., 120@123½ ; Philadelphia and Erie, 15@16½ ; do. 7s, 114@115 ; do. 5s, 105@106 ; Minehill, 62@62½ ; Catawissa, 19@20 ; do. pref., 54@55½ ; do. new pref., 54@54½ ; do. 7s, 1900, 116½@— ; Lehigh Valley 62@62½ ; do. 6s, coupon, 122½@123½ ; do. reg., 123@123½ ; do. 2d mort. 7s, 134@— ; do. consol. mort. 120½@123½; Fifth and Sixth streets (horse), 149@155 ; Second and Third, 109@115 ; Thirteenth and Fifteenth, 75@78 ; Spruce and Pine, 47@50 ; Green and Coates, 70@80 ; Chestnut and Walnut, 90@91 ; Germantown, 70@80 ; Union, 110@115 ; West Philadelphia, 107@110; People's 13@14½; Continental, 100@102.

Baltimore.—Atlanta and Charlotte, 76½; do. 1st, 109; Atlantic Coal, 1.05; Baltimore and Ohio 1st pref., 126½; Baltimore City 6s, 1902, 130; do. 6s, 1900, 128¾; do. 6s, 1890, 116½; do. 5s, 1916, 122; do. 5s, 1894, 114½; do. 4s, 1920, 112; Charlotte, Columbia and Augusta, 60½; Columbia and Greenville, 1st, 103; Citizens Pass. R. W., 14½; Canton Co. 6s, 102; Marietta and Cincinnati 1st sterling, 122½; Maryland Defense 6s, 103⅝; North Carolina 4s, 79½; Norfolk Water 8s, 131; Norfolk and Western pref., 52; Ohio and Mississippi, Springfield div. 1st, 120; Virginia Midland, inc., 85; Virginia and Tennessee 2d, 101; do. 8s, 125; Virginia Peelers, 35; do. coupons, 34; Virginia Black scrip, 34.

Boston.—Atlantic and Pacific 6s, 93; do. 6s, inc., 32½; Boston Water Power, 5⅞; Boston Land, 8½; Boston, Clinton, Fitchburg and New Bedford, 50; Burlington and Missouri River in Neb. 6s. non-exempt, 102; Connotton Valley, 9; do. 7s, 69; do. 7s, Straitsville div. 60; Chicago, Burlington and Quincy 4s, 102; do. 4s, old, 86½; do. 4s, Denver ext., 83¾; Central Iowa, 34; Chicago, Milwaukee and St. Paul, Dubuque div. 6s, 102; Connecticut and Passumpsic Rivers pref., 92; Detroit, Lansing and Northern pref., 112½; Flint and Pere Marquette, 23; do. pref., 94; Iowa Falls and Sioux City, 79; Kansas City, Fort Scott and Gulf pref., 7s, 121; Kansas City, St. Joseph and Council Bluffs 7s, 114¾; Kansas City, Lawrence and Southern 5s, 104; Little Rock and Fort Smith, 57; do. 7s, 110½; Louisiana and Missouri River, 16; Massachusetts, 18; do. 7s, 78½; do. block, new, 90; New Mexico and Southern Pacific 7s, 113; New York and New England 6s, 106; Old Colony 6s, 116½; Ogdensburg and Lake Champlain 6s, consol., 96; Omaha and Southwestern, 119; Rutland, pref., 23⅛; Sonora, 25; do. 7s, 85; do. block, 4, 10; Summit Branch, 12; Toledo, Delphos and Burlington, 7½; do. St. Louis div. 6s, 60; do. inc., 15½; do. Southeast div. 6s, 70; do. inc., 15½; Wisconsin Central, 17¾; do. 2d series,

45 ;Allouez Mining Co., 3; Atlantic, 14; Brunswick Antimony, 12½; Douglas, ½; Franklin, 11; Harshaw, 3⅛; Napa Quicksilver, 6½; Osceola, 32; Phœnix, 3; Pewabic, 12¼; Sullivan, 1⅝; Silver Islet, 18½.

A Tramp Trap.

It is a well known fact that freight cars are a great resort for tramps. These cars afford them traveling conveyance, sleeping apartments and everything which conduces to make the life of a tramp pleasant and comfortable. To hunt them out or to capture them while in these cars has been one of the great studies of railroad men. One of the most prominent citizens of Colorado Springs has invented what he calls a "tramp trap." It consists of an ordinary freight car in which is a movable bed resting on spiral springs, something like a spring mattress. To this bed is attached a clutch which acts on an elliptic spring connected with the doors. The movable bed is adjusted so as not to move until a required weight is upon it, say fifteen hundred pounds, the average weight of ten tramps. In this car are placed several boxes of crackers, baskets of wine, boxes of cheese, bundles of cigars, and the doors are left wide open. The articles are soon discovered by the tramps, and they begin to swarm around the car and to enter one by one. When the required weight is in the car the bottom suddenly flies up, throws out the clutch, and the doors close quick as a flash and fasten with a spring lock. The tramps are thus secured until the proper officers come along and kill them. We understand the inventor has made application for a patent, and the right to use the same will be placed at a very low figure.—*Western Insurance Review.*

Last year's record of railway casualties in this country, according to a contemporary, compared most unfavorably with the records of preceding years. So far as can be ascertained there were during 1881 a total of 1,458 accidents, causing loss of life in 414 cases, and more or less serious injury to 1,567 persons. One reason for the large number of casualties is given as the severity of the weather in the earlier part of 1881. Accidents resulting from collision numbered 536 as against 437 in 1880. Of this number 366 were what are known as "rear" collisions, and were due to the sudden increase in the large number of trains run on many of the roads. Derailments caused accidents in 857 cases. These were divided as follows: Broken rails in 85 cases, loose or spread rails in 29 cases, broken bridges or trestles in 44 cases, broken wheels in 58 cases, broken axles in 50 cases, misplaced switches in 85 cases, cattle on the track in 42 cases, accidental obstructions in 85 cases, and malicious obstruction in 13 cases. In 310 cases there was no explanation to be given for the cause of derailment. These derailment accidents, it is noted, caused the greatest amount of injury to the person, the record being 995 cases against 565 due to collision. The latter, however, were more fatal to life, and caused 209 deaths against the 190 which followed derailment accidents, It will be seen from the above list that the misplacement of switches, which ought to be a preventable occurrence if sufficient care and caution were exercised, caused exactly as many accidents as were due to the accidental breaking of track rails. This fact carries its own moral.

Pennsylvania Railroad.

The statement of the business of all lines of the Pennsylvania Railroad Company east of Pittsburg and Erie for January, 1882, as compared with the same month in 1881, shows

An increase in gross earnings of	$184,106
An increase in expenses of	316,701
A decrease in net earnings of	$132,595

All lines west of Pittsburg and Erie for the month of January, 1882, show a surplus over liabilities of $9,741, being a loss as compared with the same period in 1881 of $371,466.

The Difference.

Only a few more notes,
Only a finer tone;
And lo! the world bowed down
Before the angel's throne.

Only the same old thoughts
Clothed with a sweeter sound;
And lo! a poet's brow
With laurel leaves is crowned.

Only a finer ear,
Only a swifter skill;
And lo! the artist plays
On human hearts at will.

Only a tint or line,
Only a subtler grace;
And lo! the world goes mad
Over a woman's face.

Yet though so slight the cause
For which men call us great,
This shade the more or less
May fix an earthly fate.

For few may wield the power
Whose spells uplift or thrill;
The barrier fixed, yet fine,
We may not pass at will.

Grace S. Wells.

The Co-operative Banks and Trust Companies of Massachusetts.

The Savings Bank Commissioners in their annual report state that there are doing business in the Commonwealth eighteen co-operative associations, an increase of two during the fiscal year. The assets of all the associations have risen during the year from $372,462,-31 to $653,142.80, an increase of $280,680.49; which indicates a marked degree of prosperity. The last Legislature amended the general law relative to these associations in several of its sections, so as to make the investments more secure and the division of the profits more equitable. The number of shares now in force is 33,545; number of members, 6,065; number of borrowers, 731.

Concerning the loan and trust companies, of which there are six, the Commissioners say: "The trust departments of these institutions are of minor importance. Only three of them have opened such departments and in only one of them does there appear to be much interest exhibited by the management in extending this class of business. The business of these institutions is generally such as banks, bankers, or merchandise brokers ordinarily pursue. We respectfully renew the recommendation made in our last annual report, that a general law be enacted granting the same powers and privileges to each and all of them, and subjecting them to the same duties, liabilities and limitations."

Foreign Railways.

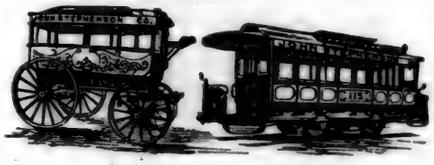
General Manager Newell, of the Lake Shore and Michigan Southern Railway Company, has returned from abroad, and to a reporter said, speaking of French railways, that each road terminal in Paris maintains its own passenger station, and some of these are larger and more costly than the largest passenger depots in this country. But his observations during this trip only confirmed the impressions gained during a former sojourn abroad, that in England railways and railroading are nearer to perfection than in any other country. The condition of the road-beds can hardly be improved. The government regulation insures the right enforcement of all rules designed to increase the efficiency of the service and guarantee greater safety and comfort to the traveling public. But the interference of the government is not carried to the extent of restricting the profits and directing the financial policy of the companies. The result is that some of the railway companies, while performing a service that is satisfactory to the people and the government, are liable to earn large enough revenues to yield a yearly profit of 8 per cent on the investment, which is more than double the usual rate of interest in England. Mr. Newell says it is customary to belittle the railway accommodations in England, but he frankly admits that "we of this country have much to learn about railroading before we can consistently ridicule the transportation facilities of England."

The formal opening of the Central Cross Town Passenger Railroad of Baltimore took place on the 27th ult., by a grand procession of all the cars of the line filled with invited guests.

The New York, Lake Erie and Western Railroad Company has decided to build a double track on its line west of Hornellsville; and as the road now has a double track from Jersey City to Hornellsville, the accomplishment of the present purpose of the company will make it a double track road for its entire length. The means have already been provided from the sale of the $2,500,000 prior lien bonds, which, under the reorganization, were reserved in the treasury for improvements.

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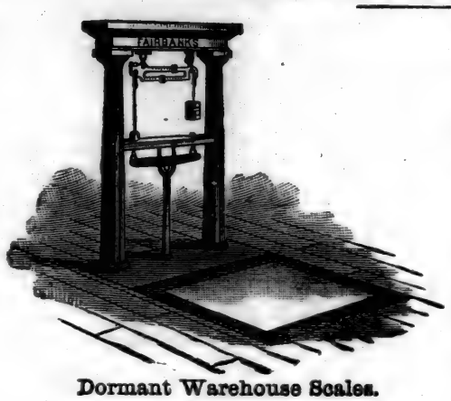


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SECOND QUARTO SERIES.—VOL. XXXVIII., No. 10.] NEW YORK, MARCH 11, 1882. [WHOLE No. 2,394.—VOL. LV.

Railroads and the Mail Service.

THE vast importance of the railway mail to every part of the country makes it every day more necessary that the railroads should be paid on some system just both to them and the Government, instead of the haphazard system imposed by the present law. This was passed in 1873. There was little railroad building for several years afterward, and the inconvenience of the law was not felt. During the last fiscal year, however, about 8,000 miles were added to the Railway Mail Service, and the present fiscal year the service is extending at the rate of 1,000 miles a month. The railroads are paid by weight. The mails are weighed at least once in four years for a period of thirty consecutive working days, and on the average thus discovered they are paid so much per mile per year. There is in addition what is known as the "special facility fund," consisting for the present fiscal year of $425,000, which the Postmaster-General is to eke out to railroads at his discretion in payment for fast mails. This is always exhausted before the year is up, and the result is a deficiency. But this bare statement of the facts shows how crude and necessarily unsatisfactory the present system is.

The public, which is conscious only of the smooth running of the mails, does not know how much of it is due to diplomacy in the Post Office Department in dealing with the railroads. There is a popular impression that the Government is a large customer of railroads, whereas their receipts from the Government last year were just two per cent of their total earnings—$12,000,000 out of $600,000,000. There is a popular impression that the Government has authority of some sort over the railroads in the matter of the mails. It has none, unless, perhaps, an implied power over some of the land grant roads of the West, railroads being State corporations only: The fear of public opinion makes the railroads willing to carry the mails under the present crude and inadequate system of compensation, and the officials of the Post Office Department say that the adoption of any such legislation as that recently proposed in the House of Representatives—deducting one-half of the pay unless the railroads should carry the mails on the fastest trains—would instantly disrupt the relations of the Department and the railroads. Second Assistant Postmaster-General Elmer has been giving much attention to the subject, and hopes to be able to frame a law for submission at the present session of Congress, which shall regulate the pay of railroads by the weight of the mails, the space they occupy and the speed at which they are carried.

The question of the revenue from the merchandise mail is closely connected with this. This mail is a convenience which the public would not do without, but the extent to which it is abused has aroused a strong sentiment in the Post Office Department in favor of some increase in the rates. As a single instance of this abuse, it may be said that thrifty dealers in the far West stock their stores in four-pound packages, practically making their fellow citizens pay their express charges. And when one of these dealers mails a four-pound package of boots, say to Denver, the Government must pay the railroads as much as for four pounds of letters. The Government loses money on every merchandise package it carries. If this mail were put on a business basis the service would be self-supporting.

The Baltimore and Ohio Railroad Fifty-one Years Ago.

A FRIEND of the Baltimore *Sun* at Clarksburg, W. Va., sends to the editor of that paper a clipping from the Washington *National Intelligencer* of October, 1831, giving a description of the Baltimore and Ohio Railroad by Mr. Gales, editor of the *Intelligencer*. The article makes curious reading as showing how impossible it is, even to a man of superior intelligence, to forecast the possibilities of a great invention. It seems that the editor of the *Intelligencer* made a trip to Ellicott's Mills in company with Dr. Gwynn, editor of the Baltimore *Gazette*, and George I. Brown, an officer of the railroad company, and in recounting his experience, confesses that "for celerity and transportation of persons the railroad possesses advantages over every other mode," though he is at the same time careful to warn the "general reader" that "as a great highway of commerce" the canal is beyond comparison. Mr. Gales says:

"We experienced in a very slight degree the jarring, which we have heard spoken of, in the motion of the cars. It will require, to be sure, care to guard against accidents. For ourselves, we met with no accident of any sort. One of the cows, indeed, which we overtook, strolling or grazing along the edge of the road, cast a suspicious glance towards it as the car rapidly passed her, which filled us with a momentary alarm lest she should attempt to cross our path. But, luckily, she forthwith took a direction from the road."

The Washington editor was unable to conceive that any rational mortal would wish to exceed a speed of thirteen miles an hour, especially at night. He says:

"We traveled in a large car drawn by one horse, carrying eight or ten persons, and capable, we suppose, of carrying thirty or forty. Indeed, the car was drawn with so much ease that we do not believe that had it been so loaded its progress would have been at all retarded by the additional weight of the load. In the distance between Baltimore and Ellicott's Mills the horse was changed once, going and coming. In going we did not accurately reckon the time, but in returning the whole distance of thirteen miles was performed in fifty-nine minutes—the limit to the speed being the capacity of the horse in trotting rather than the labor he was tasked to perform. The locomotive steam machine, in the train of which cars loaded with persons are occasionally drawn, as well as those loaded with the materials of commerce, is propelled at about the same rate, and might be propelled much more rapidly if it were desirable. But for our part we have no desire ever to be carried by any mode of conveyance more rapidly than at the rate of thirteen miles the hour. A much greater speed, we are satisfied, would be attended with considerable liability to accidents and with no little injury to the road. Even at that speed the greatest care and circumspection are necessary, and we do not think we should feel entirely safe, under any circumstances, in traveling on a railroad by night at anything like that speed."

As a Washingtonian Mr. Gales was interested in the canal, and therefore disposed to be skeptical about the new means of transportation. His regard for his entertainers leads him to say: "We have not expressed in higher terms than it merits our admiration of this stupendous undertaking of our neighbors. It is worthy of the public spirit of the Monumental City." But his doubts are great:

"Whether the railroad will be a profitable undertaking; whether, besides its first cost, the continual necessary expense of repairs and keeping it in proper order will not absorb too large a portion of its receipts, are questions we shall not undertake to consider. Nor shall we here institute a comparison, which might be deemed invidious, between canal and railroad transportation of the heavier and bulky articles of commerce with reference to economy, accommodation and general adaptation to the wants of the country. In this particular we will imitate the courtesy of our Baltimore friend when he visited our canal and would not allow himself to say anything disparaging of it."

Locomotives Used to Dock a Ship.

THE American ship Harvester, of Bath, Maine, Captain Allen, arrived at Philadelphia on the 4th inst., in tow of the tug Ridgeway from the Delaware Breakwater, forty-two days from Havre, with 600 tons of mud in ballast. At the time of arrival at the wharf there was a violent northwest wind and a strong ebb tide, and the assistance of seven steamtugs and of two locomotives belonging to the Reading Railroad was required to pull the ship up to the dock, several of the large hawsers breaking like cotton threads. The wind blew so hard that at one time it was feared the ship would pull the locomotives into the water. The Harvester has been chartered to load railroad iron

for New Tacoma, Washington Territory, consigned to the Northern Pacific Railroad.

Iron Ore in Minnesota.

Explorations which have been in course of prosecution during the past two years in northern Minnesota have established the fact that iron ore exists in that region of a very superior quality, which is free from sulphur, very low in phosphorus, and very high in metallic iron which is suitable for the manufacture of Bessemer steel, and which is in all respects equal to the best ore in Michigan. There remains now but one question to settle, and that is whether the quantity of this valuable ore is sufficient to justify the construction of a railroad from Duluth to the ore, a distance of about ninety miles. With a view to settle this important question a thorough and exhaustive examination will be made this season, in charge of experienced miners from the iron mines of Michigan; and the necessary implements and supplies for this purpose are now being sent forward. So far as the work has been done it gives flattering promise of a very large amount of a very superior quality, and that the parties engaged in the enterprise are confident that they have an abundance of it. This season's work will settle the question one way or the other beyond any doubt. The gentlemen engaged in the enterprise are men of abundant means and experience, and they can afford an outlay necessary to carry forward the enterprise if the results of the season's work shall, as they confidently anticipate, justify the large expenditure necessary for the purpose. If successful, it will have an important effect on the iron industries in Minnesota. It would lead to the erection of extensive furnaces for the production of pig-iron, probably at Duluth and its vicinity, and to the establishment of rolling-mills and other iron manufactories at St. Paul and Minneapolis.

Wire Cable Road.

Mr. Wm. H. Kemble, president of the Union Railway Company of Philadelphia, who has just returned from a trip to the West to view the practical operations of the road on State Street, Chicago, says:

"The superiority of the wire-cable road, such as we saw in Chicago for propelling street cars, is so great over that of any motor or other method that there is no comparison for it. For two days we gave the road and methods the closest attention, and rode over the entire route. The movements of the cars were steady, and the starting and stopping were so gradual as to be almost imperceptible. There was no jolt and jar at the start, and what is more, the cars can be stopped in one-half the space that is now required for one drawn by horses. The directors of the Union Company have decided unanimously that the system of cable railways shall be adopted on their road. W. B. Reaney, one of the best engineers in the country, has been devoting his entire attention for the past six weeks to the cable roads, and has gone to Chicago to study up some points in connection with the new road. When he finishes his labors and makes his drawings work will be begun. At first we intend to run a short road from Twenty-third street to the East Park. This will afford citizens the opportunity to view and test the methods, and also to permit of us making experiments and improvements before adopting the idea upon the whole line. When we have arrived at the point at which we deem perfection has been reached the wires will be extended down Columbia avenue to Seventh and to Franklin street, and eventually the horses will be displaced entirely. It is expected that the experimental line will be finished by July. There are a number of improvements which have suggested themselves to us by a thorough examination of the Chicago road, and we will have the best system that can be devised. We will be enabled to run faster and make better time than now. The cables can be so regulated as to give a speed of from four to six miles per hour in the crowded part of the city, and ten miles, or a greater speed if necessary, in the suburbs. The Chicago company runs two cars together all the time, and three in the mornings and evenings. The experimental trip over the road was made with a train of cars carrying 700 persons. Now, that is more people than a train of fourteen cars on the Pennsylvania Railroad takes out. These cars were all placed together, and the strain made severe for the purpose of testing the cables and the power of traction. It stood it well.

"The expense of this proposed improvement will be great, but it is no longer a question of cost that is to be considered. It is what is needed, and the day has passed for horses as motors. The people demand some better method of transportation, and this is the best thing that has yet been found."

A Wreck Car.

The Fitchburg Railroad Company are remodeling a passenger car into a wreck car for the comfort of their workman at wrecks. At one end of the car will be a cook room 12 feet long, which will be furnished with a sink, counter, table, case of drawers and a cooking-range with large oven. The remainder of the car will contain seats as an ordinary passenger car, covered with green plush. There will be tables hung on the side of the car, which will be dropped down between each pair of seats so that four workmen can sit and eat at each table. The car is 45 feet long, and its exterior is like an ordinary passenger car. It will be furnished with the Westinghouse brake and Miller platform. A block car will also be built to carry tools and appliances used at wrecks.

Rights of Express Companies.

In the U. S. Circuit Court, St. Louis, on the 23d ult., in the case of the Southern Express Company vs. the St. Louis, Iron Mountain and Southern, and the Memphis and Little Rock Railroad companies; and in the case of the Adams Express Company vs. the Missouri, Kansas and Texas, the Atchison, Topeka and Santa Fe and the Denver and Rio Grande Railroad companies, Associate Justice Miller, in pronouncing the opinion of the Court, holds:

First—That the express business is a necessity of commerce and a branch of the carrying trade distinct from the transportation of large masses of freight.

Second—That law, usage and necessity require that express packages be transmitted in charge of a messenger, and railroads cannot refuse transportation to such messenger with such packages.

Third—That a railroad company is liable only for negligence in the transportation of express matter.

Fourth—That the railroad companies have no right to open express packages.

Fifth—That it is the duty of every railroad company to provide suitable facilities for the transportation of express matter on equal terms to all who are actually and usually engaged in the express business, and to carry the express matter and the messenger at fair and reasonable rates of compensation; and where the parties concerned cannot agree upon what that is, it a question for the courts to decide.

Sixth—That the Court has power to compel the railroad companies to perform their duties in this respect, by making and enforeing proper orders and decrees for that purpose.

Seventh—That there is no doubt of the right of the Court to compel the performance of this service by the railroad companies, and to ascertain the reasonable compensation for the service rendered and compel its payment.

Eighth—That the Court can assume that the rates heretofore existing are *prima facie* reasonable and just, and can require the parties to conform to them, with the right of either to keep and present an account at stated intervals, and claim an addition or rebate, and where no such arrangement has existed the Court will devise some means of compensation to be paid as the business progresses, with the power of final revision.

Right of Newspapers to Discuss Public Affairs.

In the United States Circuit Court, Boston, on the 23d ult., Judge Lowell rendered a decision in the libel suit of Edward Crane vs. the Boston *Daily Advertiser*, overruling the plantiff's demurrer to the defendant's answer. The defendant's answer was in substance that Mr. Crane, being interested in securing control of the New York and New England Railroad, the effort of the plaintiff to obtain control of the railroad was a matter in which the public was interested and was a proper subject of discussion in the newspapers; and that the defendant, believing that such control would be a public misfortune and be a serious injury to the railroad and to the public, discussed plaintiff's plans and qualifications in good faith and without malice, and that they made only such statements and reflections as they believed on due inquiry and reasonable grounds to be true and just and warranted by plaintiff's acts. To this answer the plaintiff demurred and alleged that these recitals, if true, did not constitute a defense. Judge Lowell, in overruling the demurrer, and therefore holding the answer good, said: "The character of the plaintiff as a constructor and manager of railroads seems to me to be open to public discussion when he comes forward with so great and important a project affecting many interests besides the shareholders of one road, and that therefore the defendants or any other persons have qualified privilege which attaches to discussions of public affairs. The distinction is that when a railroad is to be built, or a company to build it is to be chartered, the question whether it shall be authorized is a public one. When the company is organized and the stock is issued anything which merely affects the value of the stock is private."

General Grant says that the most effectual way to have an objectionable law repealed is to have it rigidly enforced.

A certain Circuit Judge was always sure of meeting some cutting or sneering remark from a self-conceited lawyer when he came to a certain town in his rounds. This was repeated one day at dinner, when a gentleman present said: "Judge, why don't you squelch that fellow?" The Judge, dropping his knife and fork and placing his chin upon his hands and his elbows on the table remarked: "Up in our town a widow woman has a yaller dog that, whenever the moon shines, goes out upon the stoop and barks and barks away at it all night." Stopping short, he quickly resumed eating. After waiting sometime it was asked: "Well, Judge, what of the dog and the moon?" "Oh, the moon kept right on," he said.—*Troy Times.*

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AT the annual meeting of the AMERICAN RAILROAD JOURNAL CO., held at the office of the Company, No. 284 Pearl street, New York, February 8, the following officers were elected:—

GEO. F. SWAIN, *President.*
S. PROCTOR THAYER, *Vice-President.*
EDW. A. WRIGHT, *Treasurer.*
CHAS. T. VALENTINE, *Secretary.*

New York, Saturday, March 11, 1882.

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THE NORTH AND SOUTH TRUNK LINES.

A DISPOSITION to encourage North and South Trunk Lines is making itself apparent. Heretofore it has been supposed that the great commerce of the country moved and would move on the lines of latitude; now, however, there is a growing prominence given to the longitudinal routes. The Gulf of Mexico lies on our Southern extremity, and being a part of the Atlantic is equally open to navigation. New Orleans aspires to rival New York; and the Mississippi becomes the rival of the Northern lakes.

The land lines share in this rivalry. There are now seven prominent lines to the Gulf ports:

1st. Richmond and Danville.

2d. Norfolk and Western, or "Coles."

3d. Chesapeake and Ohio, or "Huntington's."

4th. Cincinnati Southern, or "Erlanger's."

5th. Louisville and Nashville.

6th. New Orleans, St. Louis, and Chicago, or "Illinois Central."

7th. St. Louis, Iron Mountain and Southern, and Texas and Pacific, or "Gould's."

All of these are more or less incomplete, the Illinois Central having an unbroken line from the Gulf to Chicago, but not (of its own) to St. Louis, Louisville, or points East.

The Louisville and Nashville has termini at Louisville, St. Louis and Cincinnati, and is trying to piece out to Chicago.

The Huntington lines have an entrance into Chicago, Louisville and Cincinnati, but not as yet into St. Louis or New Orleans.

The Erlanger lines, in like manner, reach Cincinnati, but not yet New Orleans or Louisville.

The Cole system is singularly lame, in reaching neither Gulf nor Ohio river terminus, but must depend upon its neighbors, or rivals, for access to either.

The Gould system reaches St. Louis and Chicago, but is not yet connected with New Orleans.

In fact it would seem as if each one of the systems had gotten hold of what its neighbors ought to have. This is the secret of the depression in Louisville and Nashville stock. Formerly it was a valuable property, but it is now threatened with competition at all points. Dr. Standiford, a former president of the Louisville and Nashville, is owner of the Louisville and Chicago line via Michigan City, and is now proposing to extend his route southwest to an intersection with the Erlanger and Huntington systems. Old differences are renewed and the contest is becoming warm.

It is charged on the one hand that the present officers of the Louisville and Nashville have been paying more attention to the stock market than to the administration of the road. This may prove more profitable for a single season than railroad management, but to do even this with advantage some regard must be had to traffic. So that the prospect before us is that there will be a keen struggle between the North and South Trunk lines for business, as there has been between the East and West lines. It is not improbable that the movement of travel in that direction may assume great proportions, as besides the domestic interchange of products of differing climes, it must be remembered that the Gulf of Mexico makes a deep indentation into the North American Continent, and that Galveston is nearer the geographical centre of the Union than New York, or even Baltimore. Hence it has some significance that the terminus of the Southern Pacific Railroad is at New Orleans—both the Texas and Pacific and the San Antonio and Pacific forks of it.

That city being also the terminus of the seven Northern lines it may become a great railroad and shipping port. Railroads built up Chicago; but railroads can also built other cities. It promises to become also one of the termini of the lines penetrating Mexico. From Mexico to New York, via New Orleans and Washington, D. C., will one of these days become as common a thoroughfare as is now the route to California. The Southwest is the seat of the great railroad activity of the future.

Capital Stock.

WE received the following letter, but, owing to press of other matters, have been unable to reply to it until now.

"BROAD BROOK, CONN.,
February 17th, 1882.

AM. R. R. JOURNAL CO.,

SIRS:—I was highly pleased with your article on 'Savings Banks,' in the last week's issue of your paper, and I feel encouraged by that to suggest the following topic for your remarks: For the sake of your less informed readers will you please try to give, in the JOURNAL, a lucid exposition of the phrases 'stock outstanding, and 'capital stock.'

"Doubtless the suggestion appears a very simple one to you; but there are many interested in those things who have not a clear and definite knowledge of them."

In reply to the above letter we would state that the laws in the different States, as well as in different countries, vary somewhat in their application to corporations. Corporations in England are organized on a given capital but are not obliged to issue certificates of stock unless they so choose. Subscribers to the stock, however, have a heavier burden resting on them than subscribers to stock here. Take, for instance, a company formed in England; and a man subscribing for four thousand shares, in the event of embarrassment of the company is obliged to take his proportionate share of the stock remaining in the treasury unsold at par. This, as all concede, makes it rather burdensome to a subscriber to a company in England wher all the stock has not been taken up. In this country it is different. Articles of corporation are granted, and shares of stock issued, which stock belongs to the treasury until sold. Now a man subscribing for five thousand shares of stock in any company here, when the company is in difficulty or embarrassed cannot be obliged to take any of the remaining stock which is in the treasury unsold. The company, needing money, takes this stock in the treasury and finds a customer where it can. The above remarks apply more directly to mining companies, to which we infer our correspondent refers. They show the exposition of the phrases "Stock Outstanding and "Capital Stock." Capital stock is the whole number of shares the company is permitted to issue, covering the capital. A company with five hundred thousand dollars capital, with shares placed at five dollars each, would have one hundred thousand shares as its capital stock. The directors, at a meeting, not wishing to handle so much money, and hoping not to need so much, would place a certain number of the shares on the market, hoping to receive from such money sufficient to develop the mine. If the first installment did not bring in the desired amount, they would place another installment on the market. These shares of stock sold will represent the outstanding stock. There are some mines which have been managed so successfully that the outstanding stock has never exceeded a certain per cent of the capital stock, and thus have earned large dividends for the shareholders. After a mine has been successfully developed, and gives promise of profit for many years, the directors can vote to distribute the unissued stock among the stockholders of the company *pro rata* in the shape of extra dividends. Whatever is done with the stock not needed as a means of placing the mine on a working basis makes very little difference, as the company owns such stock, and as the holders of issued stock comprise the company, they are therefore the owners. We would suggest to our correspondent and others, that the investing of money in mining stocks is very much like the investing of money in lottery tickets. We are well aware that one is legalized and the other declared illegal, but taking the great number of companies formed and still forming, the per cent of successful ones is so small that it is just as well to let them alone and use the money in an investment that promises less, but is more sure of giving returns.

DURING its existence of over a quarter of a century, the Harlan & Hollingsworth Company, at Wilmington, Del., has launched and finished over two hundred vessels of various kinds.

Express Cattle Cars.

An experimental trip was made on the 27th ult. over the Central Railroad of New Jersey, under the auspices of the New York Live Stock Express Company, for the purpose of exhibiting their cattle palace cars, of which ten have already been constructed, and which will in a short time begin running over the New York Central and Hudson River Railroad. It is claimed that by the use of these cars, specially built for the purpose, cattle can be brought through on express time over the trunk roads, that it is the most inexpensive plan, and meets with the most favor from the butchers in the East who desire to kill here. The necessity of unloading en route is also done away with by providing feeding and watering troughs in the cars. The cars used in making the experimental trip were furnished with regular passenger car running gear, the Middleton continuous draw-bar elliptic springs, and the Tallman automatic brake. With this equipment it is claimed that trains can be run from Chicago to New York in 48 hours, and even less, a trip which cattle trains now require from four to six days to make. The company expects to make its money by the saving in the shrinkage in the cattle. This now averages about 100 pounds per head. If this shrinkage is reduced one-half—and the projectors of the enterprise claim it can be reduced even more than that—they think they will make from $3 to $5 per head. The cars used by this company in their experiment look outwardly much like the common cattle cars. The interior is divided by movable and flexible arrangements into 16 stalls, in each of which there is ample room for the largest steer to stand or lie down. There is no opportunity for the steers to become herded together, and seemingly no possibility of their being injured. Troughs for feed and water run along the bottom of the cars, and over them are movable boards, which can be raised to allow of feeding. Water is supplied from tanks in the top of the cars and fed through pipes to the troughs. The experimental trip was made with empty cars, and was rather a trial of the impact brake than of the cattle cars, showing that with this brake express time can be made and the train be under the control of the engineer. Besides the cattle car there were three passenger cars without the brake. While the train was running on a grade of 23 feet to the mile, at the rate of 35 miles an hour, the brakes were applied, and the train came to a full stop 1,080 feet from the point where the brakes were applied. This stoppage was so sudden as to jar the passengers considerably, the brakes working so well on the cattle cars as to bring the passenger cars together with a sharp snap and jar. At Plainfield, where the experimental trip ended, another experiment was made, the passenger coaches being detached, and, at the same rate of speed, the train was stopped in front of the station, within eight hundred feet of the point where the power was applied. The experiment evidently satisfied the railroad men, for a number of them who had been invited to witness the test expressed themselves to that effect.

It is spoken of as a wonderful thing that the person who transports mail from Vergennes to Addison, Vermont, is a woman. Just as if transporting males were not a woman's work from time immemorial.

The Detroit *Free Press* has discovered that it takes but thirteen minutes to load an elephant on a railroad train, while it takes twenty for any sort of a woman to kiss her friends goodby, and lose the check of her trunks. But then a woman has more trunks than an elephant.

CONSTRUCTION.

Japan has but one railway and that is only 22 miles long. One train runs each way every day.

The work on the new road-bed of the West Jersey Railroad, near Wenonah, N. J., is nearly completed.

The Montreal *Witness* learns that the Government has positively decided to build the St. Charles Branch.

The Pittsburg and Atlantic Railroad from Chambersburg to Connellsville, Penn., will be under contract by the 1st of June.

The extension of the Indiana, Bloomington and Western Railway from Springfield to Indianapolis will be completed by May 1.

At last advices the Mexican Central Railway was 106 miles out from Paso del Norte, and the Southern Pacific Railroad 206 miles from El Paso.

The double track of the Baltimore and Ohio Railroad between McKeesport and Pittsburg, it is said, will be entirely completed by the 1st of July.

Contracts have been let for the completion of the Fort Worth and Denver City Railroad from Fort Worth to Big Wichita, a distance of 114 miles.

A meeting was held at Janvier, Cumberland Co., N. J., on the 1st inst. to devise means of building an air line railroad from Camden to Cape May, between the West Jersey and Camden and Atlantic railroads.

Over one hundred men are employed on the new Pemigewasset Valley Railroad cuts and bridges of Plymouth, Campton and Thornton, N. H. Five hundred new steel rails have been unloaded at Plymouth for the road.

The feasibility of narrow-gauge railroad communication between the north and south sides of Long Island is again being discussed. Port Jefferson on the north and Islip on the south side are named as terminal points.

The tender of Langdon, Shepard & Co., of St. Paul, Minn., has finally been accepted for the construction of 500 miles of the Canadian Pacific Railway, to be built this season between Brandon and the Rocky Mountains.

A narrow-gauge railroad, 5.8 miles in length, is to be constructed along the line of the Cumberland and Oxford (Maine) canal, in order to develop the extensive water power. The road will connect with the Portland and Ogdensburg Railroad.

Mr. C. P. Huntington has decided to make Hampton Roads, a point opposite Norfolk, the rival port of the Norfolk and Western Railroad, and the Chesapeake and Ohio extension will be put through to that point from Yorktown this summer, and port facilities furnished.

Owing to the extraordinary mild weather railroad construction has been going on all through the winter. The Chicago, Burlington and Quincy road has commenced grading the Denver end of its line, and the Denver and Rio Grande road is largely increasing its forces on the Silverton and other extensions.

The Legislature of Mississippi has passed a law exempting railroad companies from taxation for twenty years, and charters are granted as soon as asked for. In a few years, according to the present outlook, every section of Mississippi will be well provided with railroads, and a choice of markets will be presented for the products of its rich and generous soil.

J. Gregory Smith, of St. Albans, Vermont, president of the Central Vermont Railroad Company, in connection with Messrs. Purley and Booth, the leading lumber merchants of Ottawa, is building the Canada and Atlantic Railway from Ottawa to Rouse's Point, on Lake Champlain. This gives Boston an air line to the capital of Canada and the center of the Canadian lumber regions.

The Crowley Ridge branch of the St. Louis, Iron Mountain and Southern Railroad has been opened for passenger traffic to Gainsville. This line begins at Knoble, Ark., on the Iron Mountain Railroad, and will terminate at Forest City, on the Memphis and Little Rock Railroad, a distance of 100 miles. It is now completed a distance of twenty miles, but it is only necessary at present to run to Gainesville, a distance of thirteen miles.

The contractors for the proposed extension of the Boston, Hoosac Tunnel and Western Railway are Messrs. Bowen & Woodward, of Sherbrooke and Quebec, and in connection with them are Reed, Bowen & Co., of London, England. Sir Charles Fox's sons, of London, are the engineers for the whole enterprise, and they are also the representatives of the syndicate in London which is interested in the construction of this system of railways. The contractors mentioned are at the present time engaged upon a railway, 200 miles in length, in Brazil, and have recently completed two railroads in Spain. Their financial backing for these new enterprises comes from a syndicate which had been formed in London with a capital of $8,000,000 for the purpose of constructing a road in connection with the Canadian Pacific, $500,000 having already been deposited in Montreal for the purpose. But deeming the Boston, Hoosac Tunnel and Western a better opportunity for investment, that enterprise has been taken hold of instead. They will take the place filled for the past year by the Continental Construction Company.

INCORPORATION.

The Governor of Pennsylvania has issued a charter to the Pittsburgh and East End Railroad Company, with a capital stock of $250,000. The road will run from Grant street between Fifth and Seventh avenues to the Pittsburgh Driving Park.

The purchasers of the franchise of the Hanover Junction and Susquehanna Railroad have organized a new company under the name of the Reading, Marietta and Hanover Railroad Company; capital stock $250,000. Mr. Samuel Eby, of Elizabethtown, is president.

The Lebanon and Cornwall Railroad Company has been chartered to build a railroad from the Colebrookdale Railroad to Lebanon, Penn. Robert H. Coleman, the principal owner of the Cornwall Coal Mines, is president of the company, and owns two-thirds of the stock, which is $150,000. The road will be about four miles in length.

The corporators of the Maine Shore Line Railroad Co. met at Bangor, Me., on the 28th ult, and organized as follows; directors, J. M. Green, G. E. Taintor, James E. Lynott, S. D. Leavitt, James R, Talbot, S. N. Campbell and L. A. Emery. J. M. Green was elected president, S. N. Campbell, clerk. The capital is $1,600,000.

A certificate of incorporation has been filed in the office of the Secretary of State at Columbus, Ohio, of the Defiance and Columbus Railroad Company, to run through the counties of Putnam, Allen, Hancock, Hardin, Logan, Union, Delaware and Franklin to the city of Columbus. The capital stock is $50,000. The incorporators are W. C. Holgate, E. P. Hooker, E. Squire, J. T. Grenler, L. Fiedeman, R. L. Abell, John Crow and C. A. Flickinger.

Articles of incorporation of the London, South Park and Leadville Railroad Company have been filed in Leadville, Col., with Hugh J. Jewett, Geo. R. Blanchard and Herbert R. Smith, of New York; John F. Moulton, of Buffalo; and John T. Herrick, of the town of Fairplay, Col., as incorporators. The capital stock is $100,000, in shares of $100, and the incorporators will act as trustees for the first year.

The charter of the Rio Grande and Pecos Railway Company, with a capital stock of $500,000, has been filed in the office of the Secretary of State of Texas. The line will commence at Brownsville, on the Rio Grande; thence through the counties of Hidalgo, Starr,

Seapoo, Seapata and Webb to Laredo; thence to the coal fields in Webb, through the counties of Kinney and Crockett, to the Pecos River, a distance of 500 miles. The directors are: W. W. Waddington, New York; Alex. C. Hunt and J. B. Chaffee, Colorado; J. W. Throckmorton, A. W. Wilcox, H. J. Coke, H. J. Clifford, M. A. Shaffenberg, L. Howell, Texas.

THE Polar Creek Coal and Iron Company was organized at Knoxville, Tenn., on the 3d inst., with a capital of $1,000,000. Colonel G. J. Foreace, of Atlanta, Ga., president of the Rabun Gap Railroad of Tennessee and Northeastern Railroad of Georgia, was elected president of the company. The company owns 20,000 acres of coal lands thirty miles from Knoxville and ten miles from the Cincinnati Southern Railroad.

ARTICLES of incorporation have been filed at Harrisburg, Penn., of the Pacific and Atlantic Railroad Company. The road is 150 miles long, and will pass through the counties of Fayette, Somerset, Bedford, Fulton, Franklin and Cumberland. The capital stock is to be $3,000,000, and will consist of 60,000 shares of a par value of $50 each. The officers are W. C. Mobley, of Parker, Pa., A. L. Robinson, James H. Murdock, and A. D. Armstrong, of Allegheny, and W. H. Coldrew, of Pittsburgh.

THE bondholders of the Bucksport and Bangor Railroad Co. held a meeting at Bangor, Me., on the 28th ult., and organized under the name of the Eastern Maine Railroad Company. Senator Eugene Hale, J. R. Bodwell, Maynard Sumner, G. W. Kimball, S. D. Bailey, Davis Tillson and L. A. Emery were elected directors. Eugene Hale was elected president; L. A. Emery, clerk; Edward Swazey, treasurer; and L. Lincoln, superintendent. No definite action was taken in regard to the extension of the road to Ellsworth.

ORGANIZATION.

THE directors of the Housatonic Railroad Company, recently elected, are: William H. Barnum, David S. Draper, William D. Bishop, Samuel Willets, Horace Nichols, A. B. Mygatt, Edward Leavitt, John B. Peck, Charles K. Averill. The new board elected the same officers as last year, viz: W. H. Barnum, president; D. S. Draper, vice president; Charles K. Averill, secretary and treasurer.

THE directors of the Philadelphia, Marlton and Medford Railroad Company, recently elected, are: Charles D. Freeman, Benjamin Cooper, Elijah B. Woolston, Henry W. Wills, Samuel C. Cooper, Elwood Evans, Joseph Evans, Enoch A. Doughty, Edmund E. Read, William Worrell, Charles J. Walton, Sr., Daniel M. Zimmerman, Job Braddock. President, Charles D. Freeman, secretary and treasurer, Daniel M. Zimmerman.

AT the annual meeting of the Rumford Falls and Buckfield Railroad Company, held at Canton, Me., on the 1st inst., the following officers and directors were elected: President, Israel Washburn, Jr.; vice-president and treasurer, Sullivan C. Andrews; clerk, George D. Bisbee; directors; I. Washburn, Jr., S. C. Andrews, Otis Hayford, N. L. Marshall, R. C. Bradford; superintendent, Oren Spaulding; general ticket agent, R. C. Bradford.

THE bondholders of the Peach Bottom Railway met in York, Penn., on the 1st inst., and reorganized under the name of the York and Peach Bottom Railway Company. A new financial scheme was adopted making two series of bonds; the first, prior in point of lien and interest to the second series, $47,500; second series, subject to first series, $202,479.50; both to bear 5 per cent interest. The capital stock is to be $250,000. C. R. McConkey was elected president.

THE purchasers of the iron mines at Franconia, N. H., known as the New Hampshire Iron Company's property, met at Concord, N. H., on the 3d inst., and organized by the election of the following board of directors: Dr. E. Spaulding of Nashua, Sylvester Marsh of Concord, T. H. Ford of Concord, Benjamin J. Cole of Lake Village, C. M. Ransom of Boston, Hon. E. B. Parker of Franconia, Charles H. Greenleaf of Franconia. Sylvester Marsh was chosen president; Theodore H. Ford, vice-president; L. D. Stevens, treasurer; George D. Eldridge, secretary. Messrs. Eldridge and Straine of Boston are financial agents. The company is to be known hereafter as the Franconia Iron Company of New Hampshire.

AT the annual meeting of the stockholders of the Grand Rapids and Indiana Railroad Company, held at Grand Rapids, Michigan, on the 4th inst., the following board of directors was re-elected: W. O. Hughart, H. J. Hollister, W. R. Shelby, Grand Rapids, Mich.; J. G. Wait, Sturgis, Mich.; John N. McCullough, Thomas D. Messler, Wm. Thaw, Pittsburg, Pa.; John P. Green, Geo. B. Roberts, Philadelphia, Penn.; Robert B. Potter, New York: C. A. Zollinger, Pliny Hoagland, Fort Wayne, Ind.; S. S. Cobb, Kalamazoo, Mich. The officers are: President, W. O. Hughart; vice-president and treasurer, W. R. Shelby; secretary, J. H. P. Hughart; general freight and passenger agent, A. B. Leet; superintendent of the Northern Division, J. M. Metheany; auditor, F. A. Gorham.

PERSONAL.

CAPT. M. L. LUN has taken charge of the extension of the Kentucky Central Railroad.

GEN. FRANK J. HERRON has been elected president of the Washington and Atlantic Railroad Company.

CAPT. J. J. GORMLEY has been appointed supervisor of the business of the associated railroads at Charlotte, N. C.

EDWIN BOOTH travels in a special car, and remains in it during his stay in the various cities he visits, not stopping at hotels.

HENRY S. LITTLE, of Matawan, N. J., has been appointed receiver of the Central Railroad Company of New Jersey, vice Francis S. Lathrop, deceased.

OSCAR TOWNSEND, president of the Cleveland, Tuscarawas Valley and Wheeling Railroad Co., has been appointed its receiver. The entire indebtedness is $5,976,000.

FRANCIS S. LATHROP, president and receiver of the Central Railroad Company of New Jersey, died at his residence in Madison, N. J., on the 3d inst., aged 76 years.

GEN. D. H. RUCKER, lately appointed Quartermaster-General U. S. A., vice Gen. M. C. Meigs, retired, was placed upon the retired list on the 23d ult., and Gen. Rufus Ingalls appointed to the vacancy.

MESSRS. S. M. PETTENGILL & Co., the well known advertising agents, who were burned out on the 31st of January, are now settled at No. 263 Broadway, where they have every facility for transacting such business as belongs to their calling.

CONSOLIDATION.

ARTICLES of consolidation were filed with the Secretary of State of Illinois on the 1st inst. between the Toledo, Delphos and Burlington, the Frankfort, St. Louis and Toledo, and the Toledo, Cincinnati and St. Louis railroad companies under the name of the Toledo, Cincinnati and St. Louis Railroad Company, with a consolidated capital stock of $15,000,000.

ARTICLES of consolidation of the Bellaire and Southwestern Railway Company and the Zanesville and Southeastern Railway Company were filed with the Secretary of the State of Ohio on the 1st inst. The name of the consolidated company is the Bellaire, Zanesville and Cincinnati Railway Company. The papers are signed by S. L. Mooney, president, for the Bellaire and Southwestern Railway Company, and all the directors, and by Mr. Churchill, president of the Zanesville and Southeastern Railway Company, and the directors.

THE Pennsylvania, the New Jersey Southern and the Central Railroad of New Jersey have entered into a five years' contract, from April 1 next, to pool freight, passenger and express business originating at New York, Brooklyn, Jersey City, Newark and Elizabeth, and destined for points on the New York and Long Branch railroads, as well as traffic originating at points on those roads and destined for the cities named.

THE Buffalo, New York and Philadelphia Railway Company have leased the Genesee Valley Canal Railroad, extending from Olean to Rochester, a distance of 110 miles, and the following other roads: Kendall and Eldred, Bradford and Kinzua, McKean and Buffalo, and the Olean, Bradford and Warren. With these leases is acquired 16,000 acres of land in McKean and Elk counties, Pennsylvania, owned by the Buffalo Coal Company.

THE consolidation of the Memphis and Charleston with the East Tennessee, Virginia and Georgia Railroad is announced officially. The outstanding capital stock of the Memphis and Charleston ($5,312,725) will be retired, and in its place the East Tennessee will issue on the 300 miles of the Memphis and Charleston $4,387,000 income bonds, the same amount of preferred stock and $7,000,000 of common stock. The incomes will be 6 per cents, interest April and October.

The Housatonic Railroad.

THE annual the report of directors of the Housatonic Railroad Co., submitted to the stockholders at the meeting held at Bridgeport, February 24th, exhibits a continued and increasing prosperity, and records some important purchases and improvements made during the past year. This road has been long known as one of the solid dividend-paying lines of New England, and from October 15, 1880, to July 15, 1881, four dividends were paid aggregating $94,400.

The branch road from Danbury to Brookfield Junction, originally built by the New York, Housatonic and Northern Railroad Company, but for several years operated by the Housatonic Railroad Company, was purchased by the latter last year, together with terminal facilities at Danbury for $65,000. Over fourteen hundred tons of steel rails were also bought and paid for and the equipment of rolling-stock considerably increased to meet the demands of its liberal passenger and freight traffic. The net earnings of the road showed an increase of seventeen per cent over those of the previous year. The Railroad Commissioners of Connecticut in their annual report, recently issued, speak in well-deserved praise of the excellent condition of the track, roadbed, superstructure and general equipment of the road.

The managers have done a great deal during the past few years to add to the attractiveness of the line for passenger traffic; and the success attending their efforts is very noticeable in the popularity which this route has attained, not only locally, where a marked pleasant feeling exists between the patrons and officials of the road, but among those seeking this route to western Massachusetts and especially those visiting the resorts of the beautiful Housatonic Valley and the famous Berkshire Hills. There is a comfort and convenience to be found on this road and a kindly attentiveness among its officials that have given it a most pleasant reputation and a profitable popularity of far more than local extent.

THE carriages or cars for the metropolitan railroad system of Naples are to be built on the American plan.

Marietta and Cincinnati Railroad.

PRINTED copies of the agreement for the reorganization of the Marietta and Cincinnati Railroad Company were circulated in Baltimore for signatures on the 3d inst. This document, says the Baltimore *Sun*, is in regular legal shape, occupying over six pages of legal cap paper. It sets forth that proceedings for the sale of the road are pending in the Court of Common Pleas of Ross county, Ohio, and the plan of reorganization as heretofore outlined is given in detail. The Farmers' Loan and Trust Company is named to receive the securities deposited under the agreement and the signatures to the plan. The respective creditors are to deposit their securities and evidence of debt by April 15, 1882, and if two-thirds are not then deposited, the holders of the securities that are deposited will unite to protect their own interests at the foreclosure sale. A sale of the property is to be had speedily under such mortgage or mortgages in the manner that counsel may advise. Three persons, as trustees, are to act as a purchasing committee to purchase the road, etc., and that done, reorganization is to follow. A member of the reorganization committee sailed for England on the 1st inst., to secure the securities and signatures of the English holders. The forms of certificates have already been printed.

The Coal Trade.

THE leading coal-carrying companies make the following reports of their tonnage for the week ending February 25, and for the year to same date, compared with their respective amounts carried to the same time last year: —

	Week.	1882.	1881.
Reading Railroad	84,632	1,654,701	1,548,435
Schuylkill Canal	.....	27,655	.....
Lehigh Valley	74,090	1,265,925	1,175,465
Delaware, Lackawanna and Western	59,412	529,460	601,434
Shamokin	14,168	133,351	144,426
Central R. R. of New Jersey	78,883	510,779	584,340
United R. R. of New Jersey	22,889	211,211	230,227
Pennsylvania Coal	11,046	122,600	154,645
Delaware and Hudson Canal	45,113	418,473	511,421
Huntingdon and Broad Top Mountain	14,027	98,238	66,721
Penn. and New York	21,993	336,523	286,966
Clearfield, Pa.	50,364	367,892	275,549

The total tonnage of anthracite coal from all the regions for the week ending February 25, as reported by the several carrying companies, amounted to 335,928 tons, against 570,516 tons in the corresponding week last year, a decrease of 234,588 tons. The total amount of anthracite mined for the year is 3,251,898 tons, against 3,630,979 tons for the same period last year, a decrease of 379,081 tons. The quantity of bituminous coal sent to market for the week amounted to 91,658 tons, against 90,105 tons in corresponding week last year, an increase of 1,553 tons. The total amount of bituminous mined for the year is 675,183 tons, against 542,734 tons for the corresponding period last year, an increase of 132,449 tons. The total tonnage of all kinds of coal for the week is 427,586 tons, against 660,621 tons in corresponding week last year, a decrease of 233,035 tons; and the total tonnage for the coal year is 3,927,081 tons, against 4,173,713 tons to same date last year, a decrease of 246,632 tons. The quantity of coal and coke carried over the Pennsylvania Railroad for the week ending February 25 was 204,743 tons, of which 139,145 tons were coal and 65,598 tons coke. The total tonnage for the year thus far has been 1,634,359 tons, of which 1,156,800 tons were coal and 477,559 tons coke. These figures embrace all the coal and coke carried over the road east and west. The shipments of bituminous coal from the mines of the Cumberland coal region for the week ending February 25 were 40,085 tons, and the total shipments for the year to that date 313,838 tons, an increase of 104,299 tons, the comparison being made with the production for the same period last year. The shipments to the Baltimore and Ohio Railroad were: for the week, 31,743 tons; for the year, 256,409 tons, an increase of 71,513 tons as compared with 1881. There have been no shipments to the canal this year. The shipments to the Pennsylvania Railroad were: for the week, 5,070 tons; for the year, 55,870 tons, an increase of 31,228 tons as compared with 1881. The Reading Railroad shipment for last week ending March 4, was 160,000 tons, of which 22,300 tons were sent to and 25,000 tons shipped from Port Richmond, and 14,800 tons sent to and 9,300 tons shipped from Elizabethport.—*Phil. Ledger, March* 6.

Dead Letter Laws.

THE recent verdicts of the coroner's juries in the matters of the Spuyten Duyvil railroad "accident," and the burning of the Potter building in New York City, forcibly remind us of some old thoughts of ours on "dead-letter laws." There are plenty of these laws, such as those against selling intoxicating liquors without license, betting, profane swearing, traveling on Sunday, those in reference to fire limits and the safety of tenement-houses and other buildings, those holding persons criminally responsible for negligence producing death, and the like. Such laws have never been enforced and never can be so long as the public are so apathetic on these subjects. If Mr. Potter could be sent to prison he and others would become more careful about setting death-traps in buildings. If the brakeman, Melius, could be sent to prison, the next brakeman would go back with his lantern and warn off the approaching train although it might tire him and muddy his boots. *Punch* used to prescribe the tying a director on the front of the engine to prevent collisions. We would recommend tying another to the rear platform. We shall hope to see somebody punished in the city of New York for these murders. And we hope the prosecution will have more foresight or better luck than they had in *Com.* v. *Hartwell*, 128 Mass. 415; S. C., 35 Am. Rep. 391, the case of the Old Colony railroad conductor, indicted for negligently producing a collision and killing a passenger, and where the indictment having alleged that he knew of the approach of the other train, the prosecution failed or omitted to prove it, and he got a new trial. Since then we have not heard of the case. It always cheers us to hear of the conviction of those sportive fellows who point pistols at others to frighten them, and thus kill the subjects of their jest. *State* v. *Hardie*, 47 Iowa, 647; S. C., 29 Am. Rep. 496. Our community ought to be ashamed of their dead-letter laws, and every citizen who interests himself in endeavoring to procure their enforcement is a public benefactor. Let the officers of justice stick to Mr. Potter and the railroad murderers, and see if they cannot enforce these laws for once, just by way of variety. And let some one see if the brutal New York city shop-keepers are obeying the recent law requiring them to furnish seats for saleswomen. We have no idea that one shopkeeper in ten obeys this law. But nothing can be done for a community that does not care to have its laws enforced. It is much easier to have a spasm of virtue once in a while, shed a few tears, subscribe a few dollars, call a few hard names, and find a few sweeping coroners' verdicts. A few years ago the city attorney of Troy faithfully tried to punish citizens who infringed the fire-limits ordinance, and met with no great success. In the same city an earnest attempt to enforce excise penalties was rather frowned upon by the public, and the attorney who engaged in it was regarded as a mean fellow. As a general rule the enforcement of the laws is as thorough as the community deserve or are willing to stand by—*Albany Law Journal.*

Imports of Dry Goods at New York.

The Imports of Foreign Dry Goods at New York for the month of February, were:

ENTERED FOR CONSUMPTION.

	1880.	1881.	1882.
Manufs. of wool	$2,291,682	$2,402,983	$3,206,137
Manufs. of cotton	3,172,620	2,845,818	3,418,659
Manufs. of silk	3,839,708	3,071,392	4,341,717
Manufs. flax	2,084,602	1,280,151	1,870,049
Miscell. dry goods	1,298,340	1,0 5,413	1,265,485
Total ent. for consumption	$13,316,952	$10,695,757	$14,192,047

WITHDRAWN FROM WAREHOUSE.

	1880.	1881.	1882.
Manufs. of wool	$811,423	$856,972	$783,939
Manufs. of cotton	446,815	663,775	540,588
Manufs. of silk	585,583	653,023	631,482
Manufs. of flax	487,089	742,162	563,119
Miscell. dry goods	272,727	349,453	406,690
Total withdr'n from warehouse	$2,603,637	$3,265,385	$2,920,818
Add ent. for con	13,316,952	10,695,757	14,192,047
Total thrown on the market	$15,920,589	$13,961,142	$17,112,865

ENTERED FOR WAREHOUSING.

	1880.	1881,	1882.
Manufs of. wool	$687,320	$698,683	$734,599
Manufs. of cotton	309,659	458,978	428,159
Manufs. of silk	453,643	439,734	578,447
Manufs. of flax	664,735	447,818	484,673
Mis. dry goods	259,266	344,328	386,152
Total ent. for warehouse	$2,374,623	$2,389,541	$2,412,030
Add entered for consumption	13,316,9 2	10,695,757	14,192,047
Total ent. at port	$15,691,575	$13,085,298	$16,604,077

The Imports of Foreign Dry Goods at New York for two months ending with February were:

ENTERED FOR CONSUMPTION.

	1880.	1881.	1882.
Manufs. of wool	$4,438,094	$3,714,524	$,165,135
Manufs. of cotton	5,519,235	5,344,606	6,195,184
Manufs, of silk	6,214,266	5,104,206	7,263,853
Manufs of flax	3,795,048	2,244,868	3,177,072
Mis. dry goods	1,958,378	1,702,803	2,032,638
Total entered for consumption	$21,925,021	$18,111,007	$23,833,882

WITHDRAWN FROM WAREHOUSE.

	1880.	1881.	1882.
Manufs. of wool	$1,310,406	$1,552,464	$1,328,258
Manufs. of cotton	908,561	1,594,774	1,198,698
Manufs. of silk	992,727	1,233,256	1,150,335
Manufs. of flax	977,753	1,426,345	1,026,455
Mis. dry goods	426,791	544,025	604,615
Total withdrawn from warehouse	$4,616,238	$5,350,864	$5,308,361
Add entered for consumption	21,925,021	18,111,007	23,833,882
Total thrown on the market	$26,541,259	$24,461,871	$29,142,243

ENTERED FOR WAREHOUSING.

	1880.	1881.	1882.
Manufs. of wool	$1,188,958	$1,276,357	$1,378,089
Manufs. of cotton	726,498	1,194,120	1,180,256
Manufs. of silk	730,374	967,822	963,482
Manufs. of flax	1,322,760	1,067,125	965,857
Mis. dry goods	462,845	596,753	608,951
Total entered for warehouse	$4,481,435	$5,102,777	$5,996,635
Add entered for consumption	21,925,021	18,111,007	23,833,882
Total ent. at port	$26,406,456	$23,213,784	$28,930,517

SAYS the Albany *Argus*: "Great truths are often said in the fewest words." Do you mean the remark of the Indian who, on sitting upon a wasp's nest, arose and remarked: "Heap hell!"—*Boston Post.*

THIS is a boy's composition on girls: "Girls are the only folks that have their own way every time. Girls is of several thousand kinds, and sometimes one girl can be like several thousand girls if she wants anything. This is all I know about girls, and father says the less I know about them the better off I am."

Statement of the Public Debt of the United States, March 1, 1882.

DEBT BEARING INTEREST.

	Amount Outstanding.	Accrued Interest.
6 per cent loan, 1861-'81, continued at 3½ per ct.	$81,618,200 00	$476,106 16
6 per cent loan 1863-'81 continued at 3½ per ct	47,855,700 00	279,158 25
5 per cent funded loan of 1881	401,503,900 00	1,171,053 04
4½ per cent funded loan of 1891	250,000,000 00	2,812,500 00
4 per cent funded loan of 1907	738,801,350 00	4,925,342 35
4 per cent refunding certificates	546,450 00	3,643 00
3 per cent navy pension fund	14,000,000 00	70,000 00
Aggregate of debt bearing interest	$1,534,331,600 00	$9,737,802 78
Interest due and unpaid		1,408,663 40

DEBT ON WHICH INTEREST HAS CEASED SINCE MATURITY.

	Amount Outstanding.	Interest due & unpaid.
4 to 6 per cent. old debt, 1837.	$57,665 00	$64,174 81
5 per cent. Mexican indemnity stock, 1846	1,104 91	85 74
6 per cent. bonds, 1847	1,250 00	22 00
6 per cent. bounty land scrip, 1847	3,275 00	213 06
5 per cent. Texas indemnity bonds, 1850	20,000 00	2,945 00
5 per cent. bonds, of 1858	8,000 00	....
5 per cent. bonds, of 1860	10,000 00	600 00
6 per cent. 5-20 bonds, 1862, called	370,700 00	8,435 32
6 per cent. 5-20 bonds, June, 1864, called	58,650 00	170 95
6 per cent. 5-20 bonds, 1865, called	75,050 00	18,339 61
5 per cent. 10-40 bonds, 1864, called	455,600 00	109,167 21
6 per cent. Consol. bonds, 1865, called	403,900 00	15,015 03
6 per cent. Consol. bonds, 1867, called	1,075,800 00	202,007 42
6 per cent. Consol. bonds, 1868, called	296,000 00	23,396 18
6 per cent. loan, Feb. 8, 1861, matured Dec. 31, 1880	94,000 00	5,310 00
5 per cent. funded loan 1881, called	2,213,400 00	48,442 75
Oregon War Debt, March 2, 1881, matured July 1, 1881.	128,650 00	6,172 50
6 per cent loan of July 17 and Aug. 5, 1861, matured June 30, 1881	832,550 00	26,182 50
6 per cent loan of July 17 and Aug. 5, 1861, continued at 3½ per cent, matured Dec. 24, 1881, and Jan. 29, 1882, called	3,110,850 00	14,707 73
6 per cent. loan of March 3, 1863, matured June 30, 1881.	257,600 00	5,604 00
1-10 to 6 per cent. Treasury notes, prior to 1846	82,525 35	2,668 06
1-10 to 6 per cent. Treasury notes, 1846	6,000 00	206 00
6 per ct. Treasury notes, 1847.	950 00	57 00
3 to 6 per cent. Treasury notes, 1857	1,700 00	99 00
6 per ct. Treasury notes, 1861.	3,000 00	364 50
7 3-10 per cent. 3 years' Treasury notes, 1861	16,300 00	1,104 43
5 per cent. 1 year notes, 1863.	42,985 00	2,161 35
5 per cent. 2 year notes, 1863.	34,150 00	1,724 80
6 per ct. compound interest notes, 1863-64	223,460 00	45,618 87
3-10 per cent. 3 years' Treasury notes, 1864-65	140,850 00	4,732 85
6 per cent. certificates of indebtedness, 1862-63	4,000 00	253 48
4 to 6 per cent. temporary loan, 1864	2,960 00	244 19
3 per cent. certificates, called.	5,000 00	394 31
Aggregated of debt on which Interest has ceased since maturity	$10,037,925 26	$611,120 65

DEBT BEARING NO INTEREST.

Demand notes, 1861-62	$59,875 00	
Legal tender notes, 1862-63	346,681,016 00	
Certificates of Deposit	11,550,000 00	
Coin certificates, 1863	5,188,120 00	
Silver certificates, 1878	68,674,480 00	
Unclaimed interest		6,536 51
Fractional currency, 1862, 1863 and 1864 $15,441,811 67		
Less amount estimated as lost or destroyed, act of June, 21, 1879 8,375,934 00		
	7,065,877 67	
Aggregate of debt bearing no interest	$439,219,368 67	$6,536 51

RECAPITULATION.

	Amount Outstanding.	Interest.
Debt bearing interest in coin, viz:		
Bonds at 6 per cent., continued at 3½ per cent.	$129,473,900 00	
Bonds at 5 per cent, continued at 3½ per cent.	401,503,900 00	
Bonds at 4½ per cent.	250,000,000 00	
Bonds at 4 per cent.	738,801,350 00	
Refunding certificates	546,450 00	
Navy pension fund, 3 p.c	14,000,000 00	
	$1,534,325,600 00	$11,146,466 18
Debt on which interest has ceased since maturity.	10,037,925 26	611,120 65
Debt bearing no int., viz:		
Old demand and legal-tender notes	$346,740,891 00	
Certificates of deposit	11,550,000 00	
Coin & silver certificates.	73,862,600 00	
Fractional currency	7,065,877 67	
	$439,219,368 67	
Unclaimed interest		6,536 51
	$1,983,582,893 93	$11,764,123 34
Total debt, principal and interest to date, including interest due and unpaid	$1,995,347,017 27	

AMOUNT IN TREASURY.

Interest due and unpaid	$1,408,663 40
Debt on which interest has ceased	10,037,925 26
Interest thereon	611,120 65
Gold and silver certificates	73,862,600 00
U. S. notes held for redemption of certificates of deposit	11,550,000 00
Cash balance available March 1, 1882	155,147,338 86
	$252,617,648 17
Debt, less am't in Treas'y Mar. 1, 1882	$1,742,729,369 10
Debt, less am't in Treasury Feb. 1, 1882	1,752,512,880 73
Decrease of debt during the month	$9,783,511 63
Decrease of debt since June 30, 1881	$97,869,442 88

BONDS ISSUED TO THE PACIFIC RAILROAD COMPANIES, INTEREST PAYABLE IN LAWFUL MONEY.

	Amount Outstanding.	Accrued Interest not paid.
Central Pacific bonds, 1862-64	$25,885,120 00	$258,851 20
Kansas Pacific bonds, 1862-64	6,303,000 00	63,030 00
Union Pacific bonds, 1862-64	27,236,512 00	272 365 12
Cent. Branch Union Pacific bonds, 1862-64	1,600,000 00	16,000 00
West'n Pacific Bonds, 1862-64	1,970,560 00	19,705 60
Sioux City & Pacific bonds, 1862-64	1,628,320 00	16,283 20
Totals	$64,623,512 00	$646,235 12

Interest paid by the United States, $53,405,977.38; interest repaid by transportation of mails, &c., $14,841,656,57; interest repaid by cash payments: 5 per cent. net earnings, $655,198.87; balance of interest paid by United States, $37,909,121.94.

The foregoing is a correct statement of the public debt, as appears from the books and Treasurer's returns in the Department at the close of business, February 28, 1882.

CHARLES J. FOLGER,
Secretary of the Treasury.

Railroads of Massachusetts.

THE report of the Railroad Commissioners of Massachusetts for the year ending September 30, 1881, shows that during the year there were constructed in that State 35.687 additional miles of railroad, as follows: Massachusetts Central, 23.5; Nantucket, 4; Nantasket Beach, 3.897; Chelsea Beach, 1.78; Old Colony (Whittenton branch), 1.6; New York and New England (New Dedham branch), 0.91; and there was a decrease in the number of miles by remeasurement of 0.82.

The total length of railroads making report was 2,754.629 miles of main line and branches, of which 684.905 were double-tracked. The average cost of standard-gauge roads is returned at $58,766.99 per mile: the cost of equipment per mile operated, averages $6,260.89, making the total average cost $65,027.88. The cost of narrow-gauge roads averages $26,435.33 per mile, with $5,230.34 per mile for equipment.

The aggregate capital stock was $122,155,614 12, an increase of $3,416,724.54. The net debt of the companies (the gross debt less cash assets) amounts to $64,850,890.76. The cash assets of all the railroad companies of the State have increased to the amount of $819,863.69. The total gross income for the year of all these corporations was $37,765,395.83, an increase of $2,624,021.06, or over 7.5 per cent.

The total expenses, including rents paid, of all the corporations, amounted to $27,062,644 23, an increase of $3,114,084.99. The net income was $10,701,751.67, a decrease of $490,063 93. The passenger earnings were $17,328,495-48, an increase of $1,408,419.18 over 1880. The freight earnings were $18,607,808.39, an increase of $866,061, or nearly 5 per cent over last year. The local passenger earnings were $11,318,931.66, an increase of $897,429.40 over last year. The through passenger earnings were $4,597 777.86, an increase of $486,9 2.06. The express, mail, and other earnings, included in the above passenger earnings, were $1,411,-785.96, an increase of $24,077.72. The local-freight earnings were $9,073,286.88, an increase of $173,317.47. Through freight was $9,357,-227.80, an increase of $643,813.37. The income from all other sources of the freight department amounted to $177,292.70, against $128,362.54. The increase of passenger mileage—passengers carried one mile—for the year amounts to $79,-777,339. The increase of freight mileage—tons carried one mile—amounts to 121,373,046. The total of passengers carried was 49,834,481, an increase of 4,683,329. The whole number of tons of freight carried was 17,971,072, an increase of 749,505 tons.

The average sum earned on each mile of main track and branch operated was $11,969-19, or, computing double track as additional single track, the average was $9,765.30. The average earnings per mile of the eight standard-gauge railroads terminating in Boston was $12,123.59. The average cost of operating the roads for the year was $8,746.15, and the average percentage of operating expenses to gross receipts was 68.

The total amount of dividends paid was $6,-287,866.82, an increase of $200,148.18. Of the 64 corporations, 35 paid dividends, varying from 2 to 10 per cent.

New Type of Ocean Steamships.

THE keel of a new steamer for the American Quick Transit Steamship Company of Boston has been laid at Nyack, N. Y. The vessel will be of wood and will have a "turtle-back" deck, with no masts. There will be nothing above the deck except her pilot-house, ventilators and smokepipe. Her dimensions will be: Length over all, 151½ feet; on the waterline, 135¼ feet; extreme breadth of beam, 22 feet; depth of hold from crown deck to keelson, 16½ feet; draught forward, 5½ feet; draught aft, 10½ feet; capacity measurement, 512 1-3 tons. The engines, boilers and machinery of this new vessel, the Meteor, are to be of entirely new designs, and are said to be capable of developing an enormous power. She will have three screws, the main one being four-bladed and of such a pitch as to develop a speed of twenty knots an hour, allowing 30 per cent for loss of power. The other screws are two-bladed, of smaller diameter than the main one, and are auxiliary, to be used only in case of accident. They are fitted in the stern, forward of the main screw, and are locked in an upright position, with a plate over them flush with the hull. In case the rudder and main screw should be carried away, the auxiliary screws can be unlocked and the plates covering them may be used to steer with. It is estimated, also, that the cost of construction and equipment of the new type of vessel, whether of wood, iron or steel, will be fully 20 per cent less than the cost of the steamships used now.

New York Stock Exchange.

Closing Prices for the week ending Mar. 8.

	Th. 2.	F. 3.	Sat. 4.	M. 6.	Tu. 7.	W. 8.
Adams Express	141			143		143
Albany and Susq					131½	
1st mortgage						
2d mortgage				108		
American Express	91¾	93	92	92	92½	
Atlantic & Pac. Tel.						
Burl., C. R. & Nor		81				
1st mortgage 5s	99¾	99½	99¾		98⅞	99
Canada Southern	43	43¾	47¾	47	47¾	44¼
1st mortgage guar	93⅞	93¾	93½	93½	93	93
Central of N. Jersey	93	92¾	91½	91	91⅝	89¼
1st mort. 1890						
7s, consol. ass	114½	112½	112½	113¼	113	
7s, convertible ass.						
7s, Income		101				
Adjustment			104			
Central Pacific	89¾	89¾	89⅞	88⅝	88⅞	88¼
6s, gold	114½	115			114¼	
1st M. (San Joaq)		110	109¾			
1st M. (Cal. & Or.)						
Land grant 6s	106¾				106½	
Chesapeake & Ohio				21½	20	20¼
1st pref				31	30	29
2d pref						
1st, series B	78¼		78⅞	78½		75
Chicago and Alton				129	129½	128½
Preferred						
1st mortgage						
Sinking Fund						
Chi,, Bur. & Quincy	131	131¾	131	128¾	129¾	127⅞
7s, Consol. 1903				126		126
Chi., Mil. & St. Paul	109¾	110¾	110¼	109¾	109¾	108⅝
Prefered	121	122¼	122¼	122	120	119½
1st mortgage, 8s						
2d mort., 7 3-10s						
7s, gold						
1st M. (La. C. div)	117¼					116½
1st M. I. & M. div.)						
1st M. (I. & D. ext.)						
1st M. (H.&D. div.)						
1st M.(C. & M.div.)						
Consolidated S. F.		120				
Chi. & Northwestern	131¾	132½	131½	130¾	130⅞	129
Preferred	141½	142¼	142¾	140¼	140	139¼
1st mortgage		104				
Sinking Fund 6s						
Consolidated 7s					132	
Consol. Gold bo'ds		126			123½	
Do. reg						
Chi., R. Isl. & Pac.	131¼	132		130	130¼	130
6s, 1917, c					127	
Clev.,Col.,Cin.&Ind.	79			78½	77¾	77
1st mortgage						
Clev. & Pittsburg gr.		136				
7s, Consolidated						
4th mortgage					109	112
Col.,Chi.,& Ind. Cent.	11	10¾	10½	9¾	9⅝	9¾
1st mortgage						
2d mortgage						
Del. & Hud Canal.	106⅝	107¼	107¼	106½	106¼	105½
Reg. 7s, 1891						
Reg. 7s, 1884						
7s, 1894						
Del.,Lack.& Western	124½	124¼	124	123¾	123½	121⅞
2d mortgage 7s						
7s, Consol. 1907				127½		
Erie Railway						
1st mortgage						126
2d mort. 5s, ext						
3d mortgage					104	
4th mort. 5s, ext		108	108			
5th mortgage						
7s, Consol. gold	125⅜				125	125
Great West. 1st mort		109¼				
2d mortgage	102½	103				
Hannibal & St. Jo						
Preferred	82¼	87½	86	82	82	79
8s, Convertible		104¼				104½
Houston & Tex. Cen			68			
1st mortgage		111½				
2d mortgage						110
Illinois Central	134¼	134	134½	133¾	133½	133½
LakeShore&MichSo	114¾	114⅝	114¾	114¼	114⅛	113⅜
Consol. 7s						
Consol. 7s, reg						
2d Consolidated						
Leh. & W. B. 7s, Con						
Long Dock bonds						
Louisville & Nash.	80⅝	80¼	78⅞	76½	73¼	67¾
7s, Consolidated						
Manhattan	55½	56	55¾	53	52½	52
1st pref				93¾	94	93
Met. Elevated	89¼	90¼	90½	90	90¼	
1st mortgage	100¾	100¾		100⅞		100½
Michigan Central	82¾	82¾	82	81½	82	80
7s, 1902	126					
Morris & Essex		122	122¾	122¾	122	122
1st mortgage						
2d mortgage						115
7s of 1871						
7s, Convertible						
7s, Consolidated	122					120
N.Y. Cen. & Hud. R.	132	132¼	131⅞	132	131½	130¾
6s, S. F. 1883					103	103½
6s, S. F., 1887					108¾	
1st mortgage				133		
1st mortgage, reg.					133½	
N. Y. Elevated	107			108		
1st mortgage		116			116	
N. Y. & Harlem						
Preferred						
1st mortgage						
1st mortgage, reg						
N. Y., Lake Erie & W	37¾	37¾	37¾	36	36¼	34¾
Preferred	76	77	76¼	75	72½	70
2d Consolidated	97¾	97¼	97¾	96	94¾	92
New 2d 5s fund	93		94	94		91¾
N.Y.,N.Hav'n&Hart		169		169	169	
North Mo. 1st mort			120			
Northern Pacific	32¼	32¾	32¼	32¾	31⅝	30¼
Preferred	71¼	71⅞	71¾	70¾	70¼	69¼
Ohio & Mississippi	31½	32	32¼	31	31¼	29¼
Preferred						
2d mortgage				121½		
Consolidated 7s						
Consol. S. Fund						
Pacific Mail S. S. Co	41	41¼	41¼	40⅝	40¾	39⅛
Pacific R. R. of Mo.						
1st mortgage					106¼	
2d mortgage						
Panama					190	
Phila. & Reading	59	59	58¾	57¾	58¼	57
Pitts,Ft.W.&Chi.gtd		135	134½	135		
1st mortgage						
2d mortgage						
3d mortgage						
Pullman Palace Car	124¼	124½	126¼	126		
Quicksil'r Min'g Co					11¾	
Preferred				59	59½	
St. Louis & San Fran	35¾			38¼	37	35
Preferred	50	50		48¼	47	43
1st Preferred				89	87	
St. L., Alt'n & T. H.			31½		27	31½
Preferred					70	60
1st mortgage				119		
2d mort. pref						
Income bonds						
St. L., Iron Mt. & S						
1st mortgage	114½					
2d mortgage	108		107½		107⅜	
Toledo and Wabash						
1st mortgage						
2d mortgage						
7s, Consolidated						
St. Louis Division		105			105	
Union Pacific	114½	114⅞	114	111¼	111¾	111¼
1st mortgage			115½		115¾	115¼
Land Grant 7s	115½	115½	115½		115	
Sinking Fund 8s						118¾
United States Ex	74		74¾			72½
Wabash, St. L.& Pac	34¼	34¾	33¾	33¾	33¼	32¾
Preferred	58½	59	57¾	56¾	57	56¾
New mort. 7s						
Wells-Fargo Ex		128		126	127	
Western Pacific b'ds						
Western Union Tel.	78¾	79¾	78¾	78¾	78⅜	77¼
7s., S. Fconv., 1900	118					117
FEDERAL STOCKS :—						
U. S. 4s, 1907, reg				118	117¼	
U. S. 4s, 1907, coup					118½	
U. S. 4½s, 1891, reg.	113¾		113¾	113¾		
U. S. 4½s, 1891, coup	113¾					
U. S. 5s, 1881, reg						
U. S. 5s, cont'd at 3½				102¼	102¼	
U. S. 6s cont'd at 3¾						
Dt. of Col. 3-65s, reg						
Dt. of Col. 3-65s, coup						

Boston Stock Exchange.

Prices for the Week Ending Mar. 8.

	Th. 2.	F. 3.	Sat. 4.	M. 6.	Tu. 7.	W. 8.
Atch.,Top.&San.Fe	85	85	84¾	81½	81	79¾
1st mortgage	118¼					116
2d mortgage						
Land Grant 7s			114½			
Boston & Albany	165¼		167		164½	164
7s reg		114½				
Boston and Lowell			101		101	101
Boston & Maine		145½				
Boston & Providence			166½			
Bos'n,Hart.& Erie 7s	52¼	52	51¾	48¼	49	47¼
Burl.& Mo.R.L.G.7s						114
Burl.& Mo.R.in Neb						
6s, exempt						
4s						
Chi.,Burl. & Quincy	131¾	131½	130¾	129¼	129½	129
7s						
Cin.,Sand&Clev($50)	24¼		24¼	23½	23⅜	21⅝
Concord ($50)						
Connecticut River						
Eastern		35		34	34	33½
New 4½ Bonds	107¼	107¼	107	107		
Fitchburg		135½	135¼			135
N.Y. & New England		50	49¾	47½	46	43¼
7s	115½	115		113	112	110
Northern N. H			109½			109
Norwich&Worcester				154		
Ogden & Lake Cham						
Preferred						
Old Colony				125⅛	126	
Ph.,Wil.&Balt.($50)						
Portl'd,Saco & Ports					114	
Pueblo & Ark Val						
7s					114	
Pullman Palace Car				126	126¾	124
Union Pacific	114¼	114¾		112	111⅜	111
6s					113¾	113½
Land Grant 7s		113				
Sinking Fund 8s	119			118½	117	
Vermont & Canada						
Vermont & Mass						
Worcester & Nashua						
Cambridge (Horse)						
Metropolitan(Horse)	76¼	76		76		
Middlesex (Horse)						
Cal.&Hecla Min'gCo			229½		238	234
Quincy	46	45¾	45½	45	43¾	43¾

Philadelphia Stock Exchange.

Closing Prices for the Week Ending Mar. 7.

	W. 1.	Th. 2.	F. 3.	Sat. 4.	M. 6.	Tu. 7.
Allegh'y Val. 7 3-10s						
7s, Income	55½			55		
Buff., Pitts & West.	17¾	17⅞	17¼	17¼	16¼	16⅜
Camd'n & Am. 6s, '83						
6s, 1889						
Mort. 6s, 1889						114
Camden & Atlantic					29	
Preferred					34	
1st mortgage						
2d mortgage						
Catawissa	19	18¾		19¼		
Preferred				55	55	
7s, new						
Del. & Bound Brook						
7s				125		
Elmira&Williamsp't						
Preferred						
Hunt. & B. Top Mt.						
Preferred			26½		26¼	
2d mortgage		115	115		115	
Lehigh Navigation	43	42¾	42¾	42½	42¼	42¾
6s, 1884				105½		
Gold Loan					111¾	112
Railroad Loan						117
Conv. Gold Loan					109x	109
Consol. Mort, 7s						
Lehigh Valley		61¾	62		62¼	61¾
1st mort. 6s, coup		122¾				
1st mort. 6s, reg						
2d mort. 7s			131			131
Consol mort. 6s						
Consol.mtg.6s,reg						
Little Schuylkill			57¼	57		57½
Minehill&Sch.Hav'n	62		62½			62½
North Pennsylvania					64	
1st mortgage 6s			105½			
2d mortgage 7s						
Genl. mtg.7s,coup						
Genl. mtg. 7s, reg						
Northern Central						49¾
5s		98	98	98		
Northern Pacific	32		32½	32¼	32⅛	31⅞
Preferred	70½	71¼	71⅜	71¼	70⅛	70⅜
Pennsylvania R. R.	60¼	60½	60¼	60½	60¼	60¾
1st mortgage						
Gen'l mort		124⅛				124⅛
Gen'l mort reg						
Consol. mort. 6s						
Consol. mort. reg						
Pa.State 6s 2d series						
do 3d series						
do 5s, new						
do 3s,						
Phila. & Reading	29	29¼	29⅜	29¾	29	29¼
1st mortgage 6s						
7s of 1893			119½			
7s, new convert		74½				73⅛
Consol. mort. 7s					124¼	
Consol. mort. reg.						
Gen'l mort. 6s	95½	95¾	95¾		95½	95
Philadelphia & Erie				14⅞		
1st mortgage 5s					104¾	
2d mortgage 7s						115
Pittsb.,Cin.&St.L.7s						
Pitts.,Tit.&Buff. 7s,				95		
Schuylkill Navi't'n						
Preferred				12½	12¼	12⅛
6s, 1872	105					
6s, 1882		92¾		91¾		
United Co. of N. J.	185		184½	184¼	184¾	184½
Hestonville, (Horse)	16½	15				
Chestnut&Wal.(do)						
Green & Coates (do)						

Baltimore Stock Exchange.

Closing Prices for the Week Ending Mar. 7.

	W. 1.	Th. 2.	F. 3.	Sat. 4.	M. 6.	Tu. 7.
Baltimore & Ohio..	.....	.....	....	195	.....	.....
6s, 1880.....	.....	.....	.....	.....	.....	.....
6s, 1885.....	.....	.....	.....	.....	.....	.....
Central Ohio ($50)..	.....	.....	.....	.....	.....	.....
1st mortgage.....	.....	107¾	.....	108¼	107¾	.....
Marietta & Cincin'ti	.....	.....	.....	.....	.....	.....
1st mortgage, 7s..	125	.....	125¼	125	125⅝	125
2d mortgage, 7s..	104	104⅛	104⅛	104	103	103½
3d mortgage, 8s..	55½	55¾	55⅝	54½	54⅛	54⅜
Northern Cen. ($50)	.....	.....	50	.....	49⅞	.....
2d mort., 6s 1885..	.....	.....	.....	.....	.....	.....
3d mort., 6s, 1900.	.....	.....	.....	.....	.....	.....
6s, 1900, gold.....	.....	.....	.....	.....	114¼	114¼
6s, 1904, gold.....	.....	112⅝	112⅝	112	.....	.....
O., Alex. & Manas's 7s	.....	.....	.....	.....	.....	.....
Pitts. & Connellsv. 7s	.....	.....	.....	.....	.....	.....
Virginia 6s, Consol.	60½	.....	60¾	60¾	.....	61¾
Consol. coupons..	.....	.....	.....	55	.....	50
10-40 bonds.....	39¾	.....	40	.....	.....	40
Def'd Certificates.	.....	.....	.....	.....	.....	.....
Western Maryland..	.....	.....	.....	.....	.....	.....
1st M., end. by Balt	.....	.....	.....	.....	.....	.....
2d M., do .	.....	.....	.....	.....	.....	.....
3d M., do .	.....	.....	.....	.....	.....	.....
1st M., unendors'd	.....	.....	.....	.....	109	.....
2d M., end. WashCo	.....	.....	.....	.....	.....	.....
2d M., preferred..	.....	.....	106	.....	.....	.....
City Passenger R R.	....	.....	.....	41	.....	.....

London Stock Exchange.

	Closing Prices — Feb. 24.		Feb. 17.	
Baltimore & Ohio (sterling).....114	116	114	116
Central of N. J., $100 shares.... 93	98	93	98
Do. consol. mort.....115	117	115	117
Do. Adjustment Bonds.....104	109	104	109
Do. Income Bonds.....104	107	104	107
Det., G'd Haven & Mil. Equip bds112	114	112	114
Do. Con. M. 5p.c., till '83 aft'r 6p.c110	112	110	112
Illinois Central $100 shares.....135	137	134½	135½
Lehigh Valley Cons. mortgage..118	122	118	122
Louisville & Nashville mort 6s. 97	100	97	100
Do. Sink. Fund bds (S. & N. Ala) 96	99	97	100
Do. capital stock $100 shares. 73	75	87	89
N. Y. Cent. & Hud. R. mt. bds..134	137	134	137
Do. $100 shares.....131½	132⅝	133	134
Do mort. bonds (stg.).....118	120	118	120
N. Y., Lake Erie & West., $100 shs 36¾	37¼	39¾	40¼
Do. 6 p. c. pref. $100 shares.. 75	77	78	80
Do. 1st Con. Mort. bds (Erie) .128	130	128	130
Do. do. Funded Coupon bds.124	126	124	126
Do. 2d Consol Mort. bonds... 97	99	99¼	100¼
Do. do. Funded Coupon bds.. 95	97	97	100
Do. Gold Income bonds..... 88	92	88	92
N. Y., Pa. & Ohio 1st mort. bonds. 44½	45½	45	46
Do. Prior Lien bds (sterling)..104	108	104	108
Pennsylvania, $50 shares..... 61	62	61½	62¼
Do. Con. Sink Fund Mort....115	117	115	117
Philadelphia & Reading $50 shs 29	30	31¼	31¾
General Consol Mortgage.....115	117	115	117
Do. Improvement Mortgage..102	104	102	104
Do. Gen. Mtg. '74, ex-def'd coup. 96	98	97	99
Do. Scrip for the 6 def. ½ coup. 96	99	96	99
Pittsb., Ft. W. & Chi. Eq. bds....104	106	104	106
St. L. Bridge 1st mort. gold b'd.125	127	125	127
Do. 1st pref. stock..... 90	95	95	98
Union Pa. Land Grant 1st. mtg.115	117	116	118
Wabash, St. L. & P. $100 shs..... 28	30	32	34
Do. $100 pref. shares..... 55	57	61	62
Do. gen. mort. bonds..... 83	85	86	88

AMERICAN RAILROAD JOURNAL.

Financial and Commercial Review.

THURSDAY EVENING, March 9, 1882.

IN the money market the quotation for call loans is 5@6 per cent on stocks and 3@3½ per cent on United States bonds.

In the exchange market the actual rates are 4.85|@4.85¼ and 4.89¼@4.89¾, while cable transfers 4.90½@4.90¾, and commercial bills 4.84@4.84½. The actual rates for Continental bills are: francs, 5.13¾@5.14⅜ and 5.18¾@5.19⅜; marks, 94⅝@94¾ and 95¼@95⅝, and guilders, 40⅛@40⅝.

The Supreme Court of Ohio, on the 7th inst., declared illegal and invalid the recent attempted consolidation of the Cleveland, Columbus, Cincinnati and Indianapolis, and the Cincinnati, Hamilton and Dayton railroad companies, on several grounds, among which are: (1) Two railroad companies owning lines of railroad only connected by other railroads which such companies hold by lease are not authorized to become consolidated into one corporation under Revised Statutes, section 3,379; and (2) The lines of two railroad companies being in their general features parallel and competing cannot be connected for the carriage of freight and passengers over both continuously within the meaning of Revised Statutes, section 3,379, and hence such companies cannot become consolidated into one corporation under the section.

At a meeting of the bondholders of the Atlantic and Great Western Railway Company (New York, Pennsylvania and Ohio Railroad) held in London on the 3d inst., Sir George Balfour and Mr. Henry C. Raikes, members of Parliament, and Rev. John L. Bates were elected voting trustees for the first mortgage bondholders, and Mr. Charles P. Lewis, member of Parliament, for the second mortgage bondholders. The majorities were: first mortgage bonds $22,000,000 against $3,500,000; second mortgage bonds, $9,000,000 against $1,500,000.

The earnings of the Cumberland Valley Railroad for the year ending December 31, 1881, were $724,769, against $624,813 for the previous year, an increase of $99,956. The net earnings of the main line were $220,429, of which $177,785 was used for a 10 per cent dividend on stock, $26,548 for interest on bonds, and $13,639 for taxes, leaving a balance of $2,457. Betterments have been added in various ways. An increased business is expected from the Shenandoah Valley and Norfolk and Western Railroads during the current year.

The bill which was recently passed by the Legislature of New Jersey, providing that a railroad company may issue stock at par for the amount of its indebtedness, upon demand for payment, was returned by the Governor with his objections, and was subsequently passed over the veto by a decided majority in both houses. By this bill the Central Railroad Company of New Jersey will be enabled to issue 80,000 shares of stock for the purpose of retiring its income and other bonds to the amount of $8,000,000 which are now due or can be called at once, unless restrained by the courts, to which application has been made for that purpose.

THE stockholders of the Grand Rapids and Indiana Railroad Company, at their meeting on the 4th inst., voted to guarantee the $500,000 bonds for the Mackinaw extension. The report of the directors, which was presented, shows that during the year 1881 the company paid all expenses and interest on its debt, and still has a net balance in the treasury of $63,000.

From the report of the directors of the Hannibal and St. Joseph Railroad Company for the year ending December 31, 1881, we learn that the earnings during the year were $2,257,231.31, with income from other sources amounting to $368,332.64, making a total of $2,625,563.98. The operating expenses, including taxes and car service, were $1,452,618.57; coupon interest amounted to $654,640; the 7 per cent dividend on preferred stock amounted to $355,810. These items, added to $108,681.99, expenditures for the year in construction and equipment, make a total of $2,571,750.56, leaving an available surplus from earnings, &c., of $53,813.42. There is no floating debt. The company has 292 miles of track.

A circular has been issued from the treasury department at Washington stating that on and after March 10th, the fee of 75 cents per 100 bushels heretofore exacted for ascertaining the dutiable quantity of salt, will not be collected. In cases where the dutiable weight or quantity of salt is required to be ascertained at the expense of the owner, agent or consignee, only the actual expense incurred in such service will be charged and collected.

The sub-treasurer in this city issued a notice on Saturday last that owners of bonds embraced in the 107th call could have them redeemed here immediately without rebate, instead of at Washington, upon depositing the amount of five cents for each $1,000 of the bonds redeemed, as a repayment of express charges on forwarding the bonds to the department.

The Middlesex Horse Railroad Company of Boston has increased its capital stock $100,000, for the purpose of providing additional tracks in Malden, new stables, rolling stock, etc. The amount of capital stock now stands at $650,000.

The citizens of Bangor, Me., have approved of a plan of subscription for the purpose of raising $20,000 to aid the Shore Line Railroad from Bangor to Calias, and a committee has been appointed to raise the money, which will be placed in the hands of trustees until paid over to the corporation. The trustees are George Stetson, William B. Hayford and Charles V. Lord.

The cotton mills of Mississippi have proved very profitable for their owners in every instance. The one at Wesson pays 26 per cent, and the stock is worth over $300. Those at Enterprise and Natchez are said to pay as well. The cotton factories of Georgia and Alabama are immensely profitable, and the stock in them, as almost a general rule, is away above par. This is not unnatural either—where the cotton is produced is the proper place to manufacture it.

According to the statement of the Comptroller of the City of New York, the total funded debt on the 28th of February was $135,274,507-07, not including $5,203,295 revenue bonds, issued in anticipation of taxes. Included in this statement is $913,500 debt of the annexed district above the Harlem River. The amount in the sinking fund for the redemption of the debt on Feb 28 was $36,588,710.68. During the month of February warrants were drawn against the City Treasury aggregating $3,893,001.80, making a total of $6,233,082.19 since Jan. 1. Stocks and bonds to the amount of $2,726,100 were issued during January and February, of which $1,832,600 was for current expenses of the City Government.

It is reported from New Orleans that traffic contracts have been concluded between the Morgan and Huntingdon Railway lines. The Morgan terminus in New Orleans will be used by the combined lines, including the Southern Pacific.

In future, United States notes, silver certificates and fractional notes equalling or exceeding three-fifths of their original proportions are redeemable at their full face value. Fragments of United States notes, silver certificates and fractional notes, each constituting clearly one-half, but less than three-fifths, are redeemable at one-half the full face value. Fragments of less than a half are redeemable only when accompanied by an affidavit stating that the missing portion has been totally destroyed.

The receipts of the Buffalo, Pittsburg and Western Railroad for the month of January, 1882, were $53,084.19, the expenses $27,337.23, and the net profits $25,746.96. For the month of January, 1881, the receipts were $39,831.86, the expenses $31,157.67, and the net profits $8,674.19—showing an increase in earnings of $13,252.23, a decrease in expenses of $3,820.44, and an increase in net profits of $17,072.77. The net profits for the six months ending January 31st were $193,585. This includes $27,000 and the interest at 6 per cent on the cost of the New Castle and Pitt. City Railway earned by the New Castle road and paid in cash. The net earnings for the period named show an increase of $63,256 or 48.53 per cent as compared with the corresponding period of the preceding year.

The agreement for the reorganization of the Marietta and Cincinnati Railroad Company has been signed by the reorganization committee and the Baltimore and Ohio Railroad Company; and the Farmers' Loan and Trust Co., of this city, is now receiving the securities and the stocks of the Cincinnati and Baltimore and the Baltimore Short Line Railroad Companies to be deposited under the plan of reorganization, and is issuing the reorganization certificate therefor, which we are informed can be used as a delivery. The right to make such deposit will expire on the 15th of April.

The plan submitted by a committee of prominent gentlemen appointed by the Mayor of New Orleans to devise means for an adjustment of the city debt proposes the use of $3,-

600,000 worth of premium bonds bought by the syndicate, but not yet destroyed, and $6,000,000 of premium bonds not yet issued, and the extension of all city bonds to 40 years, bearing 5 per cent interest. The merit of this plan seems to be that it pays the city debt without paying anything so far as the present generation is concerned.

It has been decided to make the Manhattan "second preferred" a 6 per cent cumulative security, thus placing the holders of the Metropolitan stock on a par with the holders of New York or "first preferred" stock.

The Railroad Commissioner of Minnesota has decided, in the case of the liability for taxation of the Northern Pacific Railroad Company upon its earnings over a portion of its line owned by the Manitoba Railroad Co. with which it has running arrangements, that the company operating the road must pay the tax on the ground that the running arrangement is equivalent to a lease. The decision applies to all the railways in the State.

It is said that during nine months of the year 1881 three dividends were declared upon the capital stock of the Westinghouse Air-brake Company, amounting in all to nearly 100 per cent. The amount paid Mr. George Westinghouse at one of these dividend periods was about $60,000. The par value of the stock is $50. The last sales were made at $320, and there is none to be had at that figure.

It is officially announced in London that the Grand Trunk Railway Company of Canada will pay a full dividend on its first and second preferred stock.

There is said to be a cash balance in the Treasury of the State of Texas amounting to between $1,000,000 and $2,000,000, which may be used for the purchase of outstanding State bonds, but the bondholders refuse to surrender them for less than $1.40 on the dollar.

At the close of February the City Treasurer of Philadelphia had a cash balance of $3,177,615.26, the receipts during the month being $924,552.58 and the expenses $753,959.81.

The assessed value of real estate for taxation at St. Louis for the present year is officially stated at $162,177,610; personal property, $30,414,630; total, $192,592,240. This is an increase over last year on real estate of $22,180,140; on personal property of $2,947,870.

The number of hogs packed in Cincinnati during the season which closed on the 28th ult. was 384,878. This is 137,547 less than during the winter season of 1880-81.

The State of Pennsylvania has called in all her 6 per cent bonds, and the old 5s of 1867 from series A to D, inclusive. Interest on these issues ceased on the 1st instant.

The following quotations of sales of railway and other securities, for the week, are in addition to those given elsewhere in our columns:

New York.—Atlantic and Pacific inc., 33½; do. 1st, 96; Atchison, Colorado and Pacific 1st, 97; Atlanta and Charlotte inc., 33; Boston and New York Air Line pref., 64; Boston, Hartford and Erie 1st, 49; Buffalo and Erie 7s, new, 123½; Cedar Falls and Minnesota, 15; do. 1st, 105; Chicago, Louis and New Orleans, 68; Chicago, St. Paul, Minneapolis and Omaha, 30⅞; do. pref., 99½; do. consol., 99½; Cincinnati, Sandusky and Cleveland, 45; Columbia and Greenville pref., 75; Columbus, Chicago and Indiana Central inc., 52; do. 1st, Trust Co. certif. ass. sup., 119; Chicago, Milwaukee and St. Paul 1st, S. M. div., 103¼; do. Chicago and Pacific W. div., 93; do. Southwest div., 104; Chesapeake and Ohio cur. int., 40; Cedar Rapids, Iowa Falls and Northern 1st, 105; Chicago and Alton Inc., 103; Chicago and Northwestern Ext. bonds, 105½; do. S. F. 5s, 101½; Denver and Rio Grande, 55½; do. 1st, 112½; do. consol., 100; Denver, South Park and Pacific 1st, 101½; East Tennessee, Virginia and Georgia, 10½; do. pref., 16½; do. inc., 47; do. 5s, 69; Green Bay, Winona and St. Peter, 9; Gulf, Colorado and Santa Fe 1st, 108½; Evansville and Terre Haute 1st, 95½; Flint and Pere Marquette, 91⅜; Hudson River 2d S. F., 110½; Indiana, Bloomington and Western, 36; do. 1st, 88½; Indianapolis, Decatur and Springfield 1st, 103; do. 2d inc., 60; International and Gt. Northern 1st, 107; Kansas Pacific 1st consol., 100½; do. Denver div. ass., 107; Lehigh and Wilkesbarre consol. ass., 106; Louisville and Nashville Gen'l mort. 6s, 97; do. St. Louis div. 1st, 104; do. 2d, 52⅜; do. New Orleans and Mobile div., 95; Long Island, 50; Louisiana and Missouri River, 16; Lake Erie and Western, 28; do. 1st, 104; do. inc., 52; Louisville, New Albany and Chicago, 61; do. 1st, 101¼; Lafayette, Bloomington and Muncie 1st, 103; Minneapolis and St. Louis, 19; Manhattan Beach, 29⅜; do. imp. 7s, 85; Marietta and Cincinnati 1st pref., 11; do. 2d pref., 6; Mobile and Ohio, 22½; do. 1st deben., 90; Missouri, Kansas and Texas, 27⅜; do. consol., 101½; do. 2d, 61¾; do. gen'l mort. 6s, 77; Missouri Pacific, 92⅝; Memphis and Charleston, 47½; Milwaukee, Lake Shore and Western, 43; do. 1st, 99½; Metropolitan Elevated 2d, 99; Michigan Southern S. F., 108½; Missouri Pacific 3d, 111; Nashville, Chattanooga and St. Louis, 55½; New York, Ontario and Western, 22½; Norfolk and Western pref., 44¼; do. Gen'l mort., 102⅜; Northern Pacific 1st, 98; New Orleans Pacific 1st, 87; Nevada Central 1st, 101; New York, Penn. and Ohio inc., 42; Ohio Central, 18¾; do. 1st, 94; do. inc., 37; Ohio Southern, 15⅜; do. inc., 30; do. 1st, 86; Oregon Transp., 62; Oregon Railway and Nav., 130; do. 1st, 106½; Peoria, Decatur and Evansville, 25½; do. 1st, 105; Rome, Watertown and Ogdensburg, 20; Rochester and Pittsburg, 30¼; do. 1st, 101; Richmond and Alleghany, 20; do. 1st, 90; Richmond and Danville, 122; do. West Point, 144; do. 1st, 101; St. Paul and Sioux City 1st, 111½; Southern Pacific of California 1st, 104½; South Carolina inc, 50; do. 2d, 85; St. Paul and Duluth pref., 75; St. Louis, Kansas City and Northern, Omaha div. 1st, 109; St. Paul, Minneapolis and Manitoba, 110¼; do. 2d, 106; St. Louis and San Francisco 2d, Class A, 103; do. B, 87; do; C, 87; St. Louis, Iron Mountain and Southern 5s, 78; Toledo Delphos and Burlington, 12¼; do. inc., 23; Texas and Pacific, 35⅝; do. inc. L. G., 60½; do. Rio Grande div. 1st, 79¾; Wabash, St. Louis and Pacific Gen'l mort. 6s, 84; Winona and St. Peter 1st, 110; Arkansas 6s, Fund., 28; Georgia 7s, gold, 117¾; Louisiana 7s, consol., 65; Missouri 6s, 1887, 109½; do. H. & St. J. issue, 1886, 104; North Carolina 6s, Jan. and July, 18; Tennessee 6s, old, 47½; do. new, 48; Am. Dist. Tel., 45; Sutro Tunnel, ¾; Colorado Coal and Iron, 39⅜; do. 1st, 90; Consolidation Coal, 30⅛; Cam. Coal, 30½; Maryland Coal, 17; New Central Coal, 18; Central Mining, 1; Deadwood, 5½; Excelsior, 1½; Homestake, 19½; Ontario, 35; Robinson, 3⅞; Silver Cliff, 2; Standard, 16¼.

Philadelphia.—Am. S. S. Co. 6s, 107; Connecting R. R. 6s, 118; Central Transportation, 35; Catawissa new pref., 63½; Elmira and Williamsport 6s, 115; Huntingdon and Broad Top Mt. consol. 5s, 88½; New Orleans Pacific 1st, 89¼; Norfolk and Western pref., 48½; Nesquehoning Valley, 54½; Philadelphia and Reading R. R. scrip, 81½; Philadelphia, Germantown and Norristown, 105¾; Philadelphia, Wilmington and Baltimore 4s, 94½; Pennsylvania and New York Canal 6s, 125; Philadelphia City 6s, 1897, free, 127; do. 1900, 130; Pennsylvania R. R. 5s, 104; Pennsylvania Canal 6s, 95; Pennsylvania Company 4½s, 98; St. Paul and Duluth, 30; do. pref., 73; Texas and Pacific consol. mort. 6s, 96¾; do. 6s, Rio Grande div. 80½; West Jersey and Atlantic 6s, 108½. The latest quotations are: City 6s, 108@118; do. free of tax, 128@132; do. 4s, new, 108@113; Pennsylvania State 5s, new loan, 117@117½; do. 4s, old, 110@112; do. 4s, new, 114@114½; Philadelphia and Reading R. R., 29¼@29⅜; do. consol. mort. 7s, reg., 124@125; do. mort. 6s, 117@120; do. gen'l mort. 6s, coupon, 94¾@95⅛; do. 7s, 1893, 119¼@120; do. new, conv., 73@74; United New Jersey R. R. and Canal, 184@185; Buffalo, Pittsburg and Western, 16⅜@16⅝; Pittsburg, Titusville and Buffalo 7s, 94½@95⅛; Camden and Amboy mort. 6s, 1889, 113½@114½; Pennsylvania R. R., 60¼@60⅜; do. general mort. 6s, coupon, 124@124½; do. reg., 124@125; do. consol. mort. 6s, reg., 117@118; Little Schuylkill R. R., 57@57½; Morris Canal, 65@69; do. pref., 160@169; Schuylkill Navigation, 5@6; do. pref., 12½@13; do. 6s, 1882, 92½@93; do. 1872, 104½@106; Elmira and Williamsport pref., 58@60; do. 6s, 115@—; do. 5s, 95@100; Lehigh Coal and Navigation, 42¼@42⅜; do. 6s, 1884, 105@106½; do. R. R. loan, 116@118; do. Gold Loan, 111½@112¾; do. consol. 7s, 116¾@117½; Northern Pacific, 32@32½; do. pref., 70⅜@70¾; North Pennsylvania, 63@64; do. 6s, 105@106; do. 7s, 119@120; do. General mort. 7s, reg., 120@123½; Philadelphia and Erie, 14@15; do. 7s, 114¾@115½; do. 5s, 104@105; Minehill, 61¾@62½; Catawissa, 18¾@19¼; do. pref., 54¾@55¼; do. new pref., 53@54½; do. 7s, 1900, 116½@—; Lehigh Valley 61¾@61⅞; do. 6s, coupon, 122½@123½; do. reg., 123@123½; do. 2d mort. 7s, 130½@131½; do. consol. mort. 120½@123½; Fifth and Sixth streets (horse), 149@155; Second and Third, 109@115; Thirteenth and Fifteenth, 74@80; Spruce and Pine, 47@50; Green and Coates, 70@80; Chestnut and Walnut, 90@91; Germantown, 70@80; Union, 110@115; West Philadelphia, 107@109; People's 13@14; Continental, 100@102.

Baltimore.—Atlanta and Charlotte, 70; do. 1st, 108; Atlantic Coal, 1.15; Baltimore City 6s, 1890, 115¼; do. 6s, 1902, new, 130; do. 5s, 1916, 122; do. 5s, 1885, 101½; do. 5s, 1894, 114¾; Chicago and Eastern Illinois, 102; George's Creek Coal, 100; Marietta and Cincinnati 1st sterling, 123½; Ohio and Mississippi, Springfield div., 121; Parkersburg Branch, 7; Richmond and Danville, 120; Virginia Black scrip, 33; do. Peelers, 37; Virginia Midland 2d mort, 108; do. 5th mort., 93; Virginia and Tennessee 8s, 120; Wilmington, Columbia and, Augusta, 109½. The latest quotations are: Baltimore City 6s, 1886, 108@108½; do. 4s, 1920, 112@—; Baltimore and Ohio, 190@210; Central Ohio 1st, 107¾@109; Columbia and Greenville 1st,—102¾; Canton 6s, gold, 102@107; Northern Central, 49@49⅞; do. 6s, 1904, gold, 112@112¾; do. 6s, 1885, 105½@—; Richmond and Danville, gold, —@104; Virginia Midland 5th mort., 91@96.

Boston.—Atlantic and Pacific 6s, 92½; do. 6s, inc., 30; Burlington and Missouri River in Neb. 6s. non-exempt, 102; Boston Land, 7½; Boston, Water Power, 5½; Boston, Clinton, Fitchburg and New Bedford, 50; Chicago, Burlington and Quincy 4s, old, 84½; do. 4s, Denver ext., 81½; do. 5s, 1919, 102; Cincinnati, Sandusky and Cleveland 7s, 100½; Connotton Valley, 6s; do. 7s, 55; do. 7s, Straitsville div., 42½; Connecticut and Passumpsic Rivers R. R., 92; do. 7s, 115; Chicago, Milwaukee and St. Paul, Dubuque div. 6s, 101½; Detroit, Lansing and Northern pref., 112½; Flint and Pere Marquette, 21; do. pref., 91⅝; Iowa Falls and Sioux City, 80; Kansas City, St. Joseph and Council Bluffs 7s, 114½; Kansas City, Fort Scott and Gulf 7s, 110; Little Rock and Fort Smith, 47½; do. 7s, 110; Mexican Central 7s, 69; do. block, new, 87; Marquette, Houghton and Ontanagon, 50; Massachusetts Central, 17; do. 6s, 80; New York and New England 6s, 102⅜; New Mexico and Southern Pacific 7s, 113½; Ogdensburg and Lake Champlain inc., 44; Pullman Palace Car Co. 7s, 1888, 104; Rutland, pref., 22⅜; do. 6s, 100; Summit Branch, 11½; Sonora R. R., 25; do. block No. 3, 150; do. No. 4, 20; Toledo, Delphos and Burlington, 6; do. Southeast div. 6s, 13; do. St. Louis div., 6s, 15½; Toledo and Cincinnati St. Louis div., 5½; Wisconsin Central, 13; do. 2d series, 44; Allouez Mining Co., 2⅞; Atlantic, 14½; Brunswick Antimony, 12; Douglas, 1; Franklin, 10; Harshaw, 3; Huron, 2; National, 2⅛; Napa Consol Quicksilver, 6; Osceola, 31¾; Phœnix, 3; Silver Islet, 17½; Sullivan, 1⅛.

It is reported that Prof. J. Lawrence Smith, of Louisville, Ky., lately discovered in a native iron which was found in 1875 in the Province of St. Catarina, Brazil, the singular physical property that in its natural condition it is very feebly attracted by the magnet, but if a fragment is heated to redness and then cooled there is manifested a magnetic property with the usual intensity of iron.

Fire Proof Cars.

It has been a matter of surprise to many that in railroad accidents attended with fire like the recent one at Spuyten Duyvil, the passenger coaches should burn so rapidly and fiercely. The query often arises, What is there in the construction of a car that is so remarkably combustible? It is not generally known, perhaps, that it is a common practice to pack the spans below the floors of passenger cars with shavings, to deaden the noise and increase the warmth; but such is the case, and in building a drawing room or sleeping car from fifteen to twenty bushels of wood shavings are frequently used in this way. The shavings are those that come from the planing-machines in the car shops and are packed between the floors to a thickness of about nine inches. Of course, when a collision occurs that shatters the floor of a car so packed, the shavings immediately furnish a great supply of most combustible tinder to feed the flames from an overturned stove or broken lamp, which but for the shavings might be comparatively harmless or at least much more easily subdued. It is said that shavings were so used in the Idlewild and Empire and this of itself would seem to be a sufficient reason for the rapid burning of those cars which has not been otherwise accounted for.

The Pennsylvania Railroad Company have adopted a system of filling the floors of their cars with mineral wool, and with most satisfactory results, this material having the advantage of being a non-conductor of heat and sound as well as fire proof, and at the same time furnishing a remarkably economical method of increasing the comfort and safety of the cars and their passengers. Three inches of mineral wool are considered adequate where double the thickness of shavings would be necessary, and the cost of filling one hundred square feet is only six dollars. This valuable packing material (by a proper use of which in all parts it is claimed a car can be made practically fire proof at a cost of about $30—which would soon be returned by the saving in fuel) is growing rapidly in favor among railroad officers and car builders, over 700,000 pounds of it being now in use in passenger cars alone. Information concerning the latest plans for its use and the cost and facts in regard to the same determined by practical tests can be obtained of the U. S. Mineral Wool Co., 16 Cortlandt street, this city.

A Pair of Hibernating Bats.

The Lonaconing (Md.) *Valley Times* gives an account of the discovery of a pair of antediluvian bats in a coal mine, from which the following facts are extracted. Mr. Anthony Reese, a miner employed in the Scranton mine, near Barton, Allegany County, Md., dislodged what appeared to be a piece of petrified wood in a seam of coal 1,000 feet from the opening of the mine and 250 feet below the surface. In the presence of two other miners it was discovered that the find was a pair of bats and that they were alive. They sip water, but do not seem to be able to devour food, and most of the time are in a torpid condition. They are quickly roused when handled, and one of them bit Mr. Reese's finger till it bled. The discovery was made on the 16th inst., and the bats are still alive. One escaped while Mr. Reese was taking it home, but strange to say, it was found again in the mine near where originally discovered. The editor's theory is that the bats were passing the season of hibernation in the hollow of some decayed tree, perhaps thousands of years ago, when a convulsion of nature buried the tree in the depths of the earth. The coal development came, the tree became a part of the coal stratification, the bark a petrifaction, and the sleeping bats were caged in a living tomb. But what saved the bats from perishing? They did not need air, they did not need food, they were waiting in a torpid state peculiar to their species and adapted to their nature, for a season that never came to them. The subtle influences of nature that touched them with life at the approach of spring were cut off, as it were, and their state of somnoleney continued without interruption. The organism that can retain life three months without sustenance or respiration ought, if the surrounding conditions are the same, to retain the vital spark three years; then why not three thousand? Decay was arrested because, with these creatures, constituted as they are, their entombment was simply an indefinite prolongation of their season of hibernation.—*Baltimore American.*

Her lips were like the leaves, he said,
By autumn's crimson tinted.
Some people autumn leaves preserve
By pressing them, she hinted.
The meaning of the gentle hint
The lover did discern,
And so he clasped her round the neck,
And glued his lips to her'n!

Large Bessemer Steel Castings.

The Pittsburg Steel Casting Company have succeeded in making the largest Bessemer Steel casting ever made in this country. The casting, as described by the Pittsburg *Chronicle*, is a cog-wheel to form part of a blooming mill for their own works, and will weigh when turned and finished over 16,000 pounds. The same works have heretofore made crucible steel castings of three or four tons weight, but nothing at all approaching this in size has been cast of either grade of steel. Besides the size of the casting the rapidity with which the work was performed and the grade of the steel make it a notable feature. The casting was made in two "blows," of 32 minutes each, one ladle being kept standing until the second one was filled, when both were taken to the mould and poured simultaneously. The steel was very low in carbon. The entire arrangements, which were carried out under the superintendence of Mr. Wm. Hainsworth, were remarkably perfect, and their success in every respect indicates the high degree of perfection to which the steel manufacturing business has been raised in Pittsburgh.

Railroad Manners in France.

American travelers by the line running from Brussels to Paris may as well spare themselves the expense of hiring sleeping-cars as, after paying for such, they will not be allowed to enjoy them by the French Custom House officers, and if they attempt to protest may render themselves liable to insolence, brutality and imprisonment. An instance of this kind of treatment is given in a dispatch to the *Evening Telegram* of the 4th inst.:

"Seven Americans, viz: Mr. Fred. Eames, of Watertown, N. Y.; Mr. Leon Louluin, formerly of Chicago; Mr. Rhoni, secretary of the Compagnie Generale Transatlantique; Mr. L. A. Simpson, formerly of Rochester; Mr. and Mrs. Reynolds, of Providence; and Mr. Cyrus Field Willard, of Boston, were subjected to indefensible brutality at the frontier station of Feigneis on the night of the 1st inst. They were awakened by the Custom House officials to have their luggage examined, were abused for not immediately complying, and assaulted by the *Commissaire de Police* for protesting against the way in which Mrs. Reynolds was treated. That lady was roughly dragged out of the sleeping-car bare-headed, without bonnet or cloak, and was exposed to the coarse jeers of the *douaniers*. The male portion of the party resisting the violence done them, gendarmes with fixed bayonets were called to the assistance of the officials, and Messrs. Louluin, Willard and Simpson were arrested and refused permission to telegraph to the American Minister and their friends. They were not released until morning and were condemned to pay a fine of 500 francs each, coupled with police surveillance for eight months. The case seems exceptionally bad and calls for action on the part of our representatives here.

Boy Inventors.

Some of the most important inventions have been the work of mere boys. The invention of the valve motion to the steam-engine was made by a boy. Watt left the engine in a very incomplete condition, from the fact that he had no way to open or close the valves except by means of levers operated by the hand. He set up a large engine at one of the mines, and a boy was hired to work these valve levers. Although this was not hard work, yet it required his constant attention. As he was working these levers he saw that parts of the engine moved in the right direction, and at the exact time that he had to open or close the valves. He procured a strong cord, made one end fast to the proper part of the engine, and the other end to the valve lever, and had the satisfaction of seeing the engine move off with perfect regularity of motion. A short time after, the foreman came around and found the boy playing marbles at the door. Looking at the engine he soon saw the ingenuity of the boy, and also the advantages of so great an invention. Mr. Watt then carried out the boy's inventive genuis in a practical form, and made the steam-engine a perfect automatic working machine.—*Manchester Times.*

Recent experiments show that the tensile strength of glass is between 2,000 and 9,000 pounds per square inch, and the crushing strength between 6,000 and 10,000 pounds per square inch. Mr. Traulionie finds that flooring glass one inch square and one foot between the end supports breaks under a load of 170 pounds.

Boston *Courier*:—"A young lady of this city was recently noticed by her mother to be fondling and kissing a pet kitten. 'Why, Mary,' said the mother, 'you have kissed that kitten more in five minutes than you have me in five years.'—'Don't you know why I'd rather kiss the kitten than you, mother?'—'No, my child.'—'You haven't got whiskers!'"

Tommy was a little rogue, whom his mother had hard work to manage. Their house in the country was raised a few feet from the ground, and Tommy, to escape a well-deserved whipping, ran from his mother and crept under the house. Presently the father came home, and hearing where the boy had taken refuge, crept under to bring him out. As he approached on his hands and knees, Tommy asked, "Is she after you, too."—*Baptist Weekly.*

Two countrymen pause at the serpent house in the Jardin des Plantes and contemplate the goodness and wisdom of Heaven, as revealed in the boa constrictor. "Say," says the first countryman, "what's the insect tied himself up in a knot for like that?" "Oh," replied the other, in a superior manner. "I suppose he wanted to remind himself of something when he wakened up—that's why."

THE usefulness of advertising was shown in a remarkable way a few days ago in New Haven. A druggist made a mistake in putting up a prescription, selling oxalic acid, a deadly poison, for German salts. Discovering his error, he rushed out in pursuit of his patron. Failing to catch her, he advertised in a newspaper to prevent the use of the acid. Fortunately the lady saw the advertisement, and mischief was prevented.

FOR SALE.

Six new 3ft. Gauge Locomotives, 18 to 24 tons, June, July and August delivery.
Ten new 4ft. 8½in. or 5ft. Gauge Locomotives, June, July, and August delivery.
Two new Ladder Tank Locomotives, 3ft. Gauge, 10 tons, May and June delivery.
Second-hand Standard Gauge Locomotives and Passenger Cars, immediate delivery.
New Box, Flat, and Gondola Cars, 4ft. 8½in. and 3ft. Gauge, for immediate delivery.
New Passenger and Combination Cars, ft. Gauge, delivery 30 days.
New Passenger and Combination Cars 4ft. 8½in. Gauge, delivery 60 days.
New Car Wheels, Iron and Steel Rails.
Narrow-Gauge Rolling stock a specialty.

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Interest allowed on Deposits subject to Draft. Securities, &c., bought and sold on Commission.
Investment Securities always on hand.

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No. 17 Wall St., New York.

Interest allowed on temporary and standing deposits. Stocks and Bonds bought and sold on Commission only, either on Margin or for Investment.

Brown Brothers & Co.,
No. 59 WALL STREET, NEW YORK,
—BUY AND SELL—
BILLS OF EXCHANGE
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Issue Commercial and Travelers' Credits in Sterling, AVAILABLE IN ANY PART OF THE WORLD, AND IN FRANCE IN MARTINIQUE AND GUADALOUPE.

Make TELEGRAPHIC TRANSFERS OF MONEY between this and other countries, through London and Paris.

Make Collections of Drafts drawn abroad on all points in the United States and Canada, and of drafts drawn in the United States on Foreign Countries.

NO OTHER LINE IS SUPERIOR TO THE
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HOOSAC TUNNEL ROUTE
WEST.

6.30 A.M. ACCOMMODATION.

Connecting at Syracuse, N. Y., at 7.15 P.M., with through sleeping cars for Cincinnati, Cleveland, Toledo, *DETROIT AND CHICAGO.*

3.00 P.M. CINCINNATI EXPRESS.

Pullman Sleeping Car attached, running through to Cincinnati without change. (Only Line running Pullman Cars from Boston.) This car runs *via* Erie Railway and N.Y., P. & O. R.R., making direct connection for Louisville, St. Louis, Kansas City, New Orleans, and all points in Texas and New Mexico.

3.00 P.M. ST. LOUIS EXPRESS.

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ARRIVING AT 8.00 A.M. SECOND MORNING.

Through sleeping car for Buffalo, Toledo, Fort Wayne, Logansport, Lafayette, Danville Tolono, Decatur and St. Louis, making direct connection with through Express Trains for Kansas, Colorado, Texas, and all points in the

SOUTHWEST.

6.00 P.M. PACIFIC EXPRESS.

The only line running a through sleeping car *via* Buffalo and Detroit without change, arriving at Chicago at 8.00 A.M. second morning, making sure connections with through Express Trains for Iowa, Nebraska, Kansas, Colorado, the Pacific Coast, Wisconsin, Minnesota and all points in the

WEST AND NORTHWEST.

THE ABOVE TRAINS RUN DAILY, SUNDAYS EXCEPTED.

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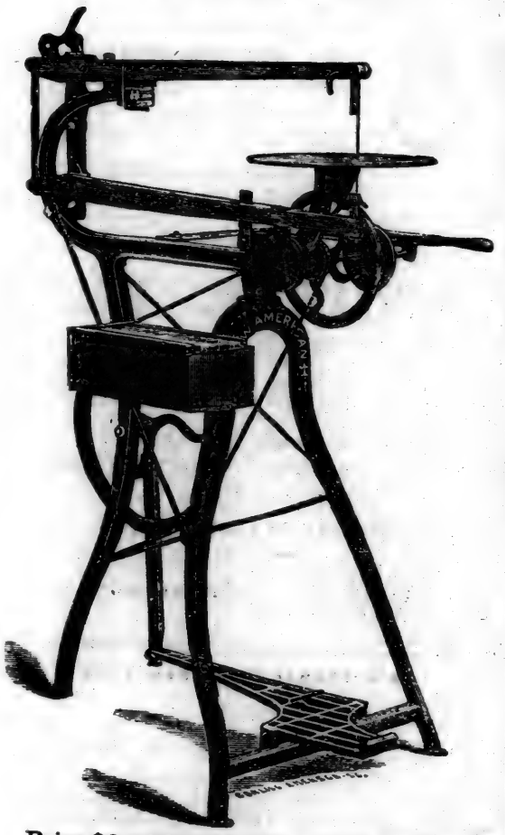
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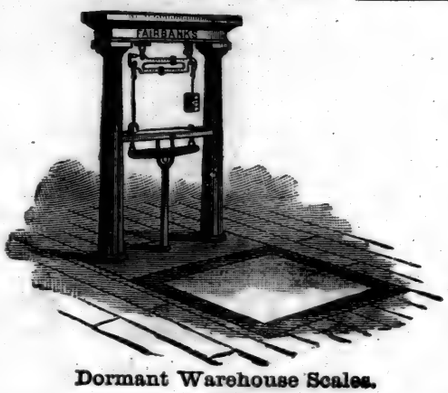


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TO THE TRAVELING PUBLIC.

During the Centennial season—six months closing September 10, 1876—the Erie Railway carried almost THREE MILLION passengers, without a singe accident to life or limb, or the loss of a piece of baggage.

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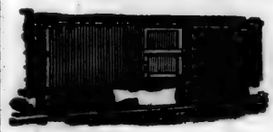


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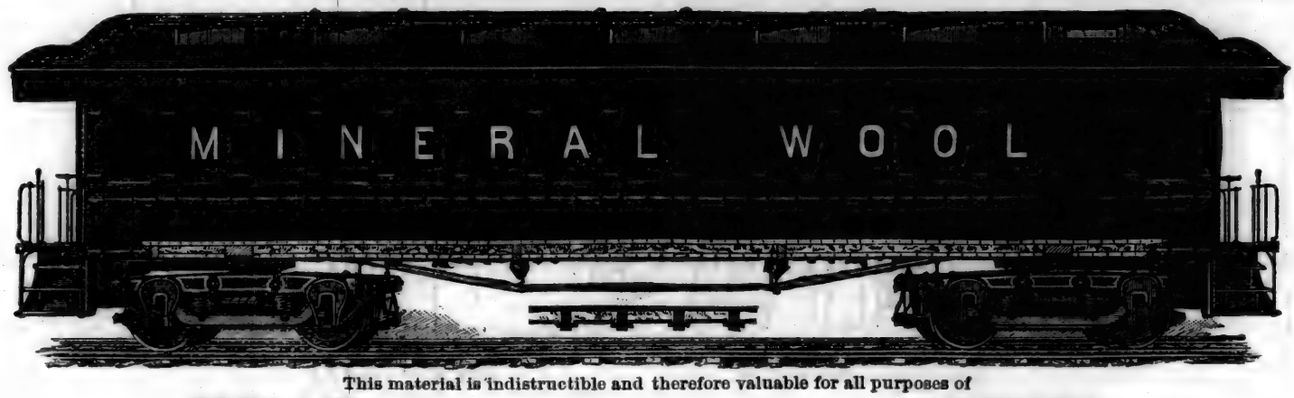
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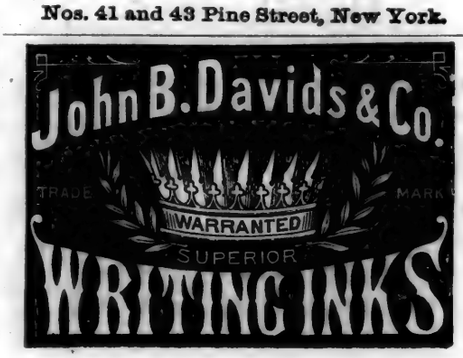
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SECOND QUARTO SERIES.—VOL. XXXVIII., No. 11.] **NEW YORK, MARCH 18, 1882.** [WHOLE No. 2,395.—VOL. LV.

Practical Engineering.

THE length of the submarine tunnel between Italy and Sicily, says an English paper, will be 13,200 metres. The maximum depth of the sea above the line of tunnel is 110 metres. The thickness of rock between the roof of the tunnel and the bottom of the sea is 35 metres. The direction of the tunnel from St. Agata to Punta del Pizzo is almost due northwest to southeast. The two inclines descending to the tunnel will first run parallel with the shore and then descend to the lowest level by spiral tunnels. The length of these inclines is each 4,500 metres, and the area occupied by each spiral tunnel 350 metres. The degree of inclination will be about 35 per 1,000—about that of the tunnel between Busalla and Pontedecimo, which has been found by experience to be perfectly practical. The center of the submarine tunnel will be on a higher level than the two ends. Wells and subsidiary tunnels will be constructed to drain off the percolating water, and the most difficult part of the line will be first commenced, which will show the geological construction of the ground and the difficulties to be overcome. According to the opinion of all geologists, the bottom of the Straits of Messina consists of crystalline rock (granite gneiss and mica schists). Neither in Calabria nor in Sicily can the upper strata that cover this crystalline rock be so thick as to reach the level of the bottom of the descending inclines. Geological and hydraulic considerations agree in the conclusion that the submarine isthmus between Puwta del Pizzo and St. Agata cannot consist of material that is compact or easily corroded.

The New Bergen Tunnel.

TRAINS of the Pennsylvania Railroad Company commenced running over the straightened road through the Bergen cut in Jersey City on Saturday last. All trains will hereafter be run over it. The improvements at the cut have not yet been completed. When the road was first surveyed the road-bed was laid through the hill by a route that could most easily be prepared for it. The result was that between the entrance to the cut on the east side of Bergen Hill to the west end at the west side of Bergen Hill there were four curves—two to the right and two to the left. The points of emergence from the two ends of the hill were on the straight line of the road-bed to the west, and the project of making a straight road through the hill of rock was mooted. Four years ago work was begun, and the new road over which the trains run cuts off three of the most westerly of the curves. The road through the cut will not be straightened, however, till the curve at Baldwin avenue is abandoned. Men are still engaged on the work of excavating and drilling at that point, and it will probably be some weeks before trains can be run over it. When "the cut" is straightened the railroad company proposes to make a bee-line track from the ferry into the hill. The contemplated improvements east of the cut will cost probably $2,000,000.

The new cut, when completed, will be a mile long, and its average depth is 25 feet. The cut has been made through solid trap-rock, about 125,000 yards of which have been blasted out. The cost of the improvement as far as it has gone is about $500,000.

Patent interlocking apparatuses, such as are in use on the Philadelphia elevated railroad, have also been placed at the Hackensack bridge. These, it is claimed, make it impossible for trains to come into collision. The levers will not work if the wrong one be drawn, and if the engineer disobeys a signal he will be carried to a siding.

Massachusetts Central Railroad.

THE Massachusetts Central corporation, as is well-known, was organized some twelve or thirteen years since for the purpose of constructing a railroad between Boston and Northampton. For this purpose a capital of $3,000,000 was subscribed, and the work carried on until the panic of 1873 caused its stoppage, as was the case with many similar schemes. Until about two years since the enterprise remained stationary, when at that time a reorganization was made, the outstanding bonds, some $1,500,000, being purchased at a low figure; and by the aid of a syndicate of Boston capitalists, who subscribed for $1,500,000 of new bonds at 80 per cent of their nominal value, with a bonus of 50 per cent of the amount of their subscriptions in the stock of the road, the enterprise was put upon its feet again, with the result that up to the present time the line between Boston and Jefferson, 48 miles, has been in operation for several months, with satisfactory results to the management. Of the above 48 miles, 4½ miles are over the track of the Boston and Lowell Railroad, between Boston and Cambridge.

Beyond Jefferson there is a section 12 miles in length to Coldbrook which is fully graded and ready for track-laying, which will commence within a few days, or as soon as the season will admit. The rails and ties for this section are on hand; in fact, the steel rails for the entire line to Northampton have been purchased and are ready to be laid as fast as the grading is completed. Between Coldbrook and Ware, a distance of 14 miles, work has been under way during the winter, and by April 1, this section also will be in shape to receive the superstructure, and by the 1st of June it is the expectation that the line will be opened through and in operation to Ware.

West of Ware there is a section reaching to Bendville, 7 miles, upon which but little work has been done; the work upon this section, however, is of a light character and can be quickly executed. Between Bendville and Northampton, a distance of 21 miles, the work upon the road-bed is nearly completed, with the piers and abutments ready for the iron work.

The road, when finished, will make an important connection with the Hoosac Tunnel via a line between Amherst and West Deerfield. Upon this section but little work has been executed, though the right of way has been mostly secured. The work upon this section will be easy and can be quickly constructed.

For the present the section already completed is operated by the Massachusetts Central. The Lowell Railroad, however, has contracted to operate the road upon its completion for a term of 25 years, paying therefor to the Central corporation 25 per cent of the gross earnings.

Earthquake in Costa Rica.

INTELLIGENCE reached here on the 14th inst., via Panama, of an appalling earthquake in Costa Rica. So far as learned four towns have been destroyed, viz: Alajuela, San Ramon, Crecia and Heredia.

Costa Rica—which means rich coast—is the most southern of the five small Spanish republics which pass collectively under the title of Central America. With an area of 21,495 square miles, it has an estimated population of 200,000, made up of people of Spanish, Indian and mixed descent. Although generally mountainous, with many volcanoes, the country generally has a mild and temperate climate, never subject to extremes, and having no

other changes than those of the dry and wet seasons. The soil is remarkably fertile. Costa Rica, in common with the whole Central American district, is subject to earthquakes, and the houses are generally built in the best way to avert danger from such phenomena; they cover a large area, and are but one story in height. Sometimes a volcano bursts out, and the earthquake accompanies it with almost unheard-of violence, as in the great eruption of Cosiguina, in Nicaragua, in 1835, when ashes were thrown all over Central America, and the shocks were felt over an area having a radius of 1,500 miles. Hitherto, however, there have been no seriously destructive earthquakes recorded in the Costa Rican section.

On April 16, 1854, the capital of San Salvador, which is situated at the base of a volcano, was completely destroyed by an earthquake. The city at the time contained 30,000 inhabitants, but as the catastrophe happened by daylight, only 100 lives were lost, although the whole population was made homeless. An attempt was made to rebuild the city nearer the sea, but the people preferred the old site, despite its dangerous situation, and the new city ultimately rose from the ruins of the old. On March 4, 1873, it was visited by a fresh disaster, which resulted in a loss of 800 lives and the destruction of $12,000,000 worth of property.

The most recent volcanic eruption of note occurred on June 29, 1880, when the Volcano del Fuego, in Guatemala, which lies to the north of San Salvador, sent forth a vast mass of hot ashes which caused considerable destruction of property and the loss of numerous lives. On September 3, 1874, Gautemala was also visited by an earthquake, which ruined several towns and inflicted considerable loss of life. Guatemala has also been the scene of the most destructive earthquake recorded in Central America. The town of La Antigua, near the Volcano del Fuego, was on that occasion ruined by one of the most terrible earthquakes of which we have any record in modern times. The effects of the tremendous convulsion of July 29, 1773, were felt as far as Mexico.

The town of Alajuela, where thousands of lives are reported to have been lost by the recent earthquake, was one of the most important and prosperous places in Costa Rica, and had a population of about 8,000 souls. It stood in the mountainous region in the centre of the republic, 29 miles west by south of Cartago, with which it was connected by a railroad built by Henry Meiggs Keith, a nephew of Henry Meiggs, the Peruvian railroad magnate, and opened for traffic on January 1, 1873. This railroad was intended to extend from ocean to ocean, but it has not yet been completed. The other destroyed towns mentioned in dispatches were smaller and less important places.

Steel Rail Consumption.

Mr. F. W. Webb, chief mechanical engineer of the London and North Western, in a recent lecture or speech at Manchester, said he had made a calculation showing that for every mile (q. train mile) run the actual loss of the steel rails was about one-third of a pound of steel, so that on the London and North Western 15 cwt. of steel disappeared from the rails every hour of the day. The London and North Western consumes 20,000 tons of steel annually for repairs and renewals of their rails. The wear and tear of the locomotives of the London and North Western necessitates a new engine being put into the traffic every five working days.—*Herapath, Feb.* 26.

Financial Law.

Negotiable instrument — draft — acceptance.—A promise in writing to pay a draft to be drawn for a sum named is an authority to draw for that sum and no more. If the draft be drawn for more, the promisor will not be bound to pay any part of it. The rule is otherwise in the case of a draft in existence at the time the promise is made. In such case the promise will be treated as a partial acceptance, and the promisor will be bound to that extent. Molson's Bank v. Howard, 40 N. Y. Sup. 15; Central Savings Bank v. Richards, 109 Mass. 414; 14 Am. Law Reg. (N. S.) 401; Weggerstoffe v. Keene, 1 Strange, 214; Edwards on Bills, 419; Byles on Bills, 194; Daniel on Neg. Inst., § 561; Bissell v. Lewis, 4 Mich. 450; Nelson v. First National Bank, 48 Ill. 59. Missouri Sup. Ct., Oct., 1881. *Brinkman* v. *Hunter*. Opinion by Hough, J. (73 Mo.)

Joint makers—statute of limitations.—In an action on a joint and several promissory notes against one of two makers, to which he pleaded payment and limitations, it was *held*, that evidence was admissible of payment of items of interest and of part of the principal by the co-maker, who was dead when the suit was brought, indorsed on the note in his handwriting, and of admissions by the maker sued, to take the note out of the operation of the statute of limitations, and show it was the latter's debt. The effect of part payment by one of two or more joint and several makers of a note, to prevent the bar of the statute, was considered in Ellicott v. Nichols, 7 Gill, 86, and again in Schindel v. Gates, 46 Md. 604. In these cases it was held as the settled law of this State that such payment, if made before the statute has attached, is sufficient to take the note out of the operation of the statute as to all makers; on the principle that the payment by one is payment for all. Maryland Ct. of Appeals, Jan. 27, 1881. *Burgoon* v. *Bixler*. Opinion by Bartol, C. J. (55 Md. 384.)

Bona fide holder—purchase at a discount.—Plaintiff purchased, a short time before maturity, for $30, five promissory notes of $20 each. These notes were secured by a mortgage. *Held*, that a finding of the trial court, in an action on the notes, that plaintiff was not a *bona fide* purchaser, would not be disturbed. The rights of a holder of negotiable paper, purchased before due, are to be determined by the simple test of honesty and good faith on his part in making the purchase. In determining whether the purchaser has acted in good faith or not, the amount of the consideration may become a material inquiry. In Dewitt v. Perkins, 22 Wis. 474, it was held that purchasing a note of $300 for $50, against a solvent maker, was very strong, if not conclusive, evidence of bad faith. And a like decision was rendered in Hunt v. Sanford, 6 Yerg, 387, where a note for $333.33 was purchased for $125; and in Gould v. Stevens, 43 Vt. 125, where a note for $300 was purchased for $50. In some of the cases it is said that the consideration must be full and fair, as well as valuable. Goldsmid v. Lewis Bank, 12 Barb. 410; Hall v. Wilson, 16 id. 548. In Miller v. Race, 1 Burr. 452, the action being for a bank bill that was stolen, Lord Mansfield said: "Here an innkeeper took it *bona fide* in his business from a person who had the appearance of a gentleman. Here is no pretense or suspicion of collusion with the robber, for this matter was strictly inquired into at the trial, and it is so stated in the case. Indeed, if there had been any collusion or any circumstance of unfair dealing the case had been otherwise." If it had been a note for £1,000 it might have been suspicious; but this was a small note for £2 10s. only, and money given in exchange for it. The same principles were afterward applied by the same judge to negotiable paper, and Miller v. Race may be regarded as the leading authority upon this branch of the law. Nebraska Sup. Ct., Nov. 12, 1881. *Smith* v. *Jansen*. Opinion by Maxwell, C. J.—*Albany Law Journal.*

The Cable Car.

The essential features of the construction of the cable car which has been in successful operation in San Francisco for some time, and is now in operation in Chicago, are: a three-inch iron cable that runs, at the rate of six miles an hour, in a tube that is erected some eight or ten inches below the street surface. Attached to the car there is a projecting rod, on the end of which are braces and clutches, so adjusted with rollers that they can be made to either seize or release the cable almost instantly, by the mere application of a brake. The rollers slip along the wire and give the car an easy start instead of a jerk, and thus save the wires also. The tube in which the cable runs is quite elaborate, constructed of iron and laid in a bed of concrete cement. It is divided into two sections, the lower one being used as a drain. In the upper tube are rollers for the wire rope to rest upon, thirty-four inches apart, when not in use. While in motion the cable passes over these rollers, being held up by the projecting rod and fastened to the car. In the upper side of the tube there is an opening $\frac{7}{8}$ of an inch wide, through which the projecting rod passes and clutches the cable, or releases it, at will. To protect the tube from snow and ice a steam pipe is laid throughout its length. The estimated cost of the "plant" for the cable system is said to be about a hundred thousand dollars per mile.

A Locomotive for Smuggling.

A singular adaptation of the railway engine has just been made in Russia. Information having been given to the authorities at Alexandrovo, on the Polish frontier, that the locomotive of the express leaving that station for Warsaw had been ingeniously converted into a receptacle for smuggling goods, it was carefully examined during its sojourn at the station. Though nothing was found wrong, it was deemed advisable that a Custom House official should accompany the train to its destination, where the engine furnace and boiler were emptied and deliberately taken to pieces. In the interior was discovered a secret compartment, containing 123 pounds of foreign cigars and several parcels of valuable silk. Several arrests were made, including that of the driver, but his astonishment at finding the engine to which he had so long been accustomed converted into a hardened offender against the laws was so genuine that he was released and allowed to return to his duties.

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AT the annual meeting of the AMERICAN RAILROAD JOURNAL CO., held at the office of the Company, No. 284 Pearl street, New York, February 8, the following officers were elected:—

GEO. F. SWAIN, *President.*
S. PROCTOR THAYER, *Vice-President.*
EDW. A. WRIGHT, *Treasurer.*
CHAS. T. VALENTINE, *Secretary.*

New York, Saturday, March 18, 1882.

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A BILL FOR THE ENCOURAGEMENT OF RECEIVERS.

THE United States Senate Judiciary Committee reported to the Senate a few days ago a new bankruptcy bill, which is being generally discussed. The bill in its present form contains only nine sections as compared with one hundred and fifty-six sections in the old Bankrupt law of 1867. Brevity in public statutes is a novel feature and worthy of all commendation, but the poet Horace says, "Aiming at brevity, I become obscure," leaving us to infer that in his opinion clearness is far more to be preferred than brevity. It is not our purpose to discuss at length the legal merits of the bill, which is certainly a very obscure one to a layman, but simply to explain briefly its main features.

It is provided in section one, that any insolvent person owing five hundred dollars or more may petition the U. S. District Court to be adjudged a bankrupt. Upon such adjudication the Court appoints a receiver of his estate, who after due notice hears and disposes of the cause, and marshals and distributes the estate among the creditors of the petitioner "according to the rules and practice of equity."

The practice of equity in similar cases is such an arrangement of the different funds under administration as shall enable all creditors to receive their due proportions notwithstanding any liens or other claims to prior satisfaction out of a portion of these funds. The rule of courts of equity, in marshalling assets, is, that every claimant shall be satisfied, as far as such assets can, by any arrangement consistent with the nature of their respective claims, be applied for that purpose. This rule necessarily requires many different methods of relief to suit the actual circumstances of different cases.

Under this plan equitable demands are reckoned as assets, and equitable claims can be proved against an insolvent estate. But how much are these receivers to be paid? The rule we have just stated is the one under which the receivers of insurance companies have acted in the State of New York, but the results attained have been more than lamentable. A receiver is supposed to be a person who carefully gathers up the assets of an insolvent corporation and distributes them equitably and promptly among the creditors with as little expense as possible. Experience has shown, however, that receivers—there are some honorable exceptions—if not dishonest are too often insatiable plunderers legalized by law. The commercial world has come to distrust receivers, and it will not regard with favor a bankruptcy law that revolves about such officers.

Under the proposed bill receivers take the place of the old registers in bankruptcy and assignees, and exercise a broader jurisdiction than both officers combined. As the appointment of receiver lies within the discretion of the court, and a separate receiver is appointed for each case, there is danger that ignorant and incompetent men may be selected to discharge the delicate and important duties connected with the office. The only reference to fees is in the last section, where power is given to the Supreme Court to fix all "fees and costs for services." Such fees and costs may, for aught we know, be even more than under the old law.

The general scope of the bill is very broad. For instance, the Court is to have power to grant extensions of time for payment, and to reduce the amount of indebtedness *pro rata* for the purpose of allowing the debtor to proceed with his business if it shall seem best so to do; and any agreement between the debtor and a majority in amount and number of his creditors may be carried into effect if approved by the Court. In other words, each case is to be treated separately and disposed of at the discretion of the Court, which can make any order that it believes will be for the interest of the creditors. It may at any time order that all or any other proceedings be stayed or dismissed and may require all or any claims to be presented forthwith, and any claim not due may be matured by a rebate. If it appears that any creditor has oppressively sought to bring about the bankruptcy of the debtor or to obtain any fraudulent advantage over other creditors, such wrong-doer is denied any participation in the estate.

There are to be no preferred debts except that money obtained and used in good faith, though unsuccessfully, to avert an impending bankruptcy or to save a threatened sacrifice of property or for sickness or other like necessity may be preferred in payment or security. No provision whatever is made for wages for personal labor of employes, contrary to universal precedent. Finally, the bankrupt is to be discharged whether a dividend is paid or not, if it appears that his debts and liabilities were incurred without fraud and that his inability to make payment has arisen from accident and misfortune. Assent of creditors is unnecessary, and the act applies to corporations as well as individuals.

It will be seen that the plan of the bill is entirely unlike the old U. S. bankrupt law. The weak spot in the bill lies in entrusting almost everything to a receiver, who is not required to give bonds or any other guarantee for the faithful discharge of his duties. About all that creditors can do in the matter is to make an agreement with the debtor, if they can, and ask the Court to sanction it. The receiver can grant a discharge to a bankrupt at his pleasure, and the only remedy of the creditors seems to be an appeal from his decision; and as the receiver is a creature of the Court his decisions will not be very easy to reverse. The bill is a very favorable one for debtors, and it does not seem to us that it will be more acceptable to creditors than the old law. But it has not yet become statute law, and there will be time enough to criticise it when it is finally enacted. As it is now drawn it ought to be entitled "A bill for the Encouragement of Receivers."

THE RAILROAD ERA IN MEXICO.

BUT few of our readers appreciate the full significance of the new departure of the Mexican Government in the matter of internal improvements. It is, of course, well known that several railroads are undertaken to be constructed in the neighboring Republic chiefly by United States capital and skill, for that fact is industriously kept before the readers of our newspapers in order to establish money credit and to purchase railroad material. But the movement in Mexico is something more important than would be the building of so many thousand miles of steam roads in a new territory in our country; it means a peaceful, but radical, revolution for the Mexican people and policy. The Mexican population of the present day consists of a heterogeneous people, having the original Aztec or Indian as its base, with a superimposed mixture of the Spaniards, the conquering race. There are comparatively few of pure Castilian

blood who, either in their parent home or in the New World, have shown ability to cope with the more northerly races. But there is enough of the Spanish admixture to impress upon all Mexico the language and literature of old Spain, and with it the ideas, tone and religion of an old and decaying civilization. Hitherto the hope and aim of the Mexican, like his Spanish progenitors, have been that of arms and domination. Manual labor he despises. With plenty of the "lust of gold," and fondness for semi-barbaric pomp, he had little taste for, or persistence in, agriculture or the mechanic arts. Science, applied or abstract, had little attraction for him: his ideals were found in the hoary past and in the Latin literature as handed down by the Roman church. Hence it has been easy to find soldiers at forty cents a day in almost any cause, or by any leader who could either pay the cash or give opportunities of plunder. Agriculture was in one sense impossible; the crops were raised on large plantations, and every considerable "hacienda" was an armed camp, with regular outposts and sentries at night. Personal property was insecure, and the products of landed property had little commercial value. Where all ownership was thus qualified, of course there was little incentive to labor or to save.

President Diaz and his successor Gonzales have seen the rivalry going on between the American, English and German residents for the control of the trade of Mexico; and it has somehow come to be understood that the presence of machinery, and particularly that complete synthesis of machinery, the modern railroad, was a prominent factor in national power and social progress. True, this lesson is forced upon them by the tremendous strides of their northern neighbors, but they are none the less entitled to credit for waking up to this idea, accompanied as it is with plans for inducing immigration, establishing new ports and harbors, draining and irrigating work, etc. The result has been a new departure in national policy; an effort to embrace the blessings of the materialistic age. With a boldness truly surprising, the policy of pledging the revenues to the extent of say five to ten millions per annum to build roads has been entered upon; and several trunk lines have been begun, which, though they may not be carried out to their ultimate completion, will be useful as far as they do go. Any one who has any knowledge of the Latin races will naturally anticipate that this experiment in granting subsidies out of the national treasury will be sure to end in scandal and disappointment to both sides. It narrowly escaped a great moral evil in our own experiment with the Pacific railroads, and it is now generally conceded that we halted our subsidy policy in just the nick of time. The chances are that the subsidized corporations will corrupt the officials of the Government, and that, sooner or later, there will be an explosion, a change of officers, a reversal of policy, and a repudiation of the promised subsidies. However this may be, and however dear the experience may at first cost, the railroads secured will ultimately pay the outlay. At these prices they are cheaper than war. Already laborers are in demand at double the former pay as soldiers; and although slow to take up new ideas, the Mexican cannot avoid seeing the immense utility of the steam-horse.

The revolution of peace threatens to extinguish the little revolutions of arms. Besides strengthening the central federal authority, and thereby repressing local insurrection, it makes steady industry possible. Mining for the precious metals, for example, will take on a wonderful development and, as was the case in our western territories, lead to a great inrush of population, which will, in time, settle to other pursuits. At first the Mexican Government insisted upon having all its railroads built from the center out towards the frontiers—such was the fear of annexation by the Yankees. Now, however, grown bolder by time and larger views, the international roads are permitted to be built from either end; and, at the rate they are now progressing, in from three to five years we shall see two or more continuous lines to the Mexican capital city, and perhaps beyond these far toward Central America.

There are five principal systems authorized; three of them with, and two without, subsidy.

1st. The Mexican National, or "Palmer-Sullivan" system, extending from the capital to the northern frontier at Laredo, with extensive branches to the Gulf and Pacific, narrow (3 ft.) gauge.

2d. The Mexican Central, or "Boston" system, extending from the capital northerly via Durango to the frontier at El Paso, with branches to the Gulf at Tampico, and to the Pacific at Manzanillo and Guaymas.

3d. The Interoceanic, or "Degress-Gould" system, extending from the capital to the Rio Grande at Laredo, with branches to the Gulf ports and interior cities.

4th. The Mexican Southern, or "Romero-Grant" system, extending from the capital southerly to Acapulco and Tehuantepec on the Pacific, and to Anton Lizardo (Vera Cruz) on the Gulf, with branches to Oaxaca and other points.

5th. The International Railway, or "Frisbie-Huntington" system, extending from the northern frontier at Piedras Negras (Eagle Pass) via Durango, to the capital, with a branch from a point near Morelia to Gihuatanejo on the Pacific coast, and one to San Luis Potosi.

The two latter receive no subsidy in bonds or lands, while the first receives a subsidy equal to about $10,000 a mile, the next two in order bonds equal to about $15,000 per mile. It will be seen that all lines converge on the city of Mexico, and hence those leading to the northern frontier will, in a sense, be competitive. The three standard-gauge lines, however, are virtually prolongations of existing systems in the United States; and it may be claimed that the narrow gauge is also intended to be. Gen. W. J. Palmer, who is at the same time the leading spirit in the Denver and Rio Grande system and of the Mexican National, may aspire to connect the two systems ultimately; but at present there is a gap of more than a thousand miles between his lines terminating at Laredo and the connected narrow gauges of the north.

The Mexican Central is held in the main by the same parties who have the Atchison, Topeka and Santa Fe, and it is a sustained effort on the part of Boston capital to control a line through from Chicago to Mexico. If it is completed without a break-down it may prove to be a stroke of genius; but it has competition along all the good country it occupies. The Gould southwestern system from St. Louis, covering Arkansas and Texas, is itself so vast that the line of 700 miles is but a trifling extension and will be a formidable competitor to the two foregoing. It hugs the coast nearer, and claims a superior soil. The International is, in effect, an extension of the Huntington line from New Orleans and Galveston via San Antonio into the heart of Mexico. New Orleans is its natural northern terminus, and the track is laid to the vicinity of Eagle Pass on the frontier. During the summer the grading forces will cross over into Mexico, and the line is said to be very direct and easy to the vicinity of Zacatecos, 450 miles, where it will intersect the line of the Central. The route thence to Mexico is not settled, but in the State of Durango it reaches valuable iron, silver and gold mines.

There are other minor grants made to corporations and to the States, both with and without subsidy, most of which will be absorbed into the foregoing if ever built, and which, added to those enumerated, aggregate some 20,000 miles of railroad. If the subsidized lines are all built it will call for an issue of about 165 millions of bonds. There is either too much or not enough of this sort. If it does not demoralize the government itself, or teach the recipients to shirk their engagements and go to lobbying for more "aid," the experience of Mexico will be fortunate. In any event there is a prospect that there may be 5,000 to 10,000 miles of road built, which will serve as a nucleus, and will go far toward changing the character of the Mexicans. This is just what the old regime, the priests and the women, affect to dread—they predict they may be Americanized.

INCORPORATION.

The St. Clairsville Company has been incorporated in Ohio to operate a railway from St. Clairsville to the Cleveland and Tuscarawas Valley Railway, a distance of two or three miles; capital $5,000.

There was a hearing before the Legislative Committee on incorporations at Hartford, Conn., on the 14th inst., upon a petition for the incorporation of the Mexican International Construction Company, whose purpose is to construct and operate a railroad from Eagle Pass, Texas, to the City of Mexico.

Articles incorporating the Waukegan and Western Railroad Company were filed at Springfield, Ills., on the 13th inst. The capital of the Company is $300,000, and the principal office is at Chicago. D. W. V. Erskine and S. A. Bradbury, of Waukegan, and R. L. Lyons, Geo. W. Silsby and M. C. Spaulding, of Chicago, are the incorporators and first board of directors. The road is to run from Waukegan, in Lake county, to the western boundary of said county, a distance of eighteen miles.

A certificate of incorporation has been issued by the Secretary of State of West Virginia to the "Wheeling and Harrisburg Railway Company." The proposed road is to commence at Wheeling and run thence by the most practicable route to a point on the West Virginia State line in Marshall county. From

thence it is proposed to run the road by the best possible route to Harrisburg, Pa. The Wheeling *Intelligencer* says: "The business men at the head of this corporation is a sufficient guarantee of its success, and when finished and the Wheeling and Lake Erie reaches us a consolidation of the two would make a big through route to the East."

THE following names appear in a petition for a private bill for the construction of a railway from Victoria, British Columbia, to Nanaimo; Lewis M. Clement, San Francisco, chief engineer of the Atlantic and Pacific railway; Dennis Jordon, Leland Stanford, John M. Coleman, J. H. Turner, and Thomas Earle. The name of the company is the Vancouver Land and Railway Company. An immediate commencement is intended, with four years for the completion, the consideration being a land grant of 1,900,000 acres in the coal belt to Seymour Narrows.

A NEW company has been formed in Pittsburg, by a portion of the creditors and bondholders of the Siemens-Anderson Steel Company, to operate the works. The name of the new corporation is the Pittsburg Steel and Iron Company, the corporators being A. M. Byers, Lloyd Brothers, Rohnson, Rea & Co., John Scott and David A. Stewart. The capital stock is $1,000,000, of which $100,000 is to be paid in. It is said that more than one-half of the bonds of the old company are held by the incorporators of the new company. Application has been made to the Governor of Pennsylvania for a charter.

ARTICLES of incorporation were filed with the Secretary of State of Illinois on the 13th inst., of the Peoria and St. Louis Air Line Railway Company, to run from Peoria, Ill., to East St. Louis. The incorporators are John A. Brahm, Hobart Hamilton, T. W. McNeeley, Hiederich Fisher, John Tice and J. G. Stodtmann, of Petersburg, Ill.; Francis Low, Havana, Ill.; W. W. Brown, Waverly, Ill.; P. E. Huggins and E. W. Hayes, Bunker Hill, Illinois., all of whom, except P. E. Huggins, are also the first board of directors. The capital of the company is $1,000,000, and the principal office is located at Petersburg.

A CHARTER was granted at Harrisburg, Penn., on the 10th inst. to the Oil City and Chicago Railroad Company, which proposes building a railroad 40 miles in length, starting at Oil City and running to a point on the line of the New Castle and Oil City Railroad at or near Jackson Center, Mercer county, a distance of 40 miles. The enterprise has been projected by the Buffalo, Pittsburgh and Western Railroad Company, whose president, J. W. Jones, is also president of the new railroad company. With the completion of the contemplated line, the Buffalo, Pittsburgh and Western will have an extension of its line 76 miles from Oil City to New Castle, the company now owning the New Castle and Oil City Railroad. The capital stock of the company is $1,400,000. The directors are Clarence H. Clark, Geo. F. Tyler, B. K. Jamison and H. M. Sill, Philadelphia; H. A. V. Post, New York; Archer N. Morton, Summit, N. J.; Charles C. Pomeray and Charles E. Kimball, New York. The principal office will be in Philadelphia.

THE incorporators of the Ontario Pacific Railway Company are Messrs. A. F. Gault, Alexander Ross, A. F. McIntyre, W. C. Wallace, David Flack, Samuel Coulson, John Bergin, Oscar Fulton, David Morrice, Martin O'Gara, J. L. P. Shanly, J. S. McCuaig, Darby Bergin and James Bonifield. It is proposed to construct, complete and operate a double or single line of railway from the town of Cornwall, through the counties of Stormont, Russell and Carleton to Ottawa, thence through the county of Carleton and Arnprior, thence through the county of Renfrew to the village of Eganville, thence along the valley of the river Bonnechere, crossing over the height of land which divides the waters of the river Ottawa from those of the Georgian Bay, by way of Lake Nipissing to the village of Sault Ste. Marie, and also as an extension of such line of railway as a spur or branch from the western terminus of such line to a point hereafter to be determined upon the shore of Lake Superior, adjacent to deep water navigation. The company shall have power to construct bridges over the St. Lawrence and St. Mary rivers, and shall have a capital of at least $3,000,000, in shares of $100 each. The operations are to be commenced as soon as $300,000 of the capital stock has been subscribed, and 10 per cent paid thereon.

PERSONAL.

SIDNEY DILLON has been re-elected president of the Union Pacific Railway Company.

JOHN J. MITCHELL has been elected president and R. P. Tansey secretary of the Kansas City, St. Louis and Chicago Railroad Company.

J. B. BARNES has been appointed master mechanic of the Wabash, St. Louis and Pacific Railway at Fort Wayne, Ind., vice C. R. Morris, resigned.

JOSEPH HICKSON has been elected president, L. J. Sargeant vice-president, and Charles Pearcy secretary and treasurer, of the Chicago and Grand Trunk Railroad Company.

HENRY YONGE, Jr., has been appointed agent in this city of the Ocean Steamship Company of Savannah. He is a nephew of the late George Yonge, who, until recently, was the Company's agent here.

THE engineering party from Annapolis, Md., under Thomas Franklin, who have been working for the National Railroad in Mexico, it is understood have been relieved and will shortly return home.

JOSEPH S. HARRIS, recently elected president of the Lehigh Coal and Navigation Company, has resigned his position as general manager of the Central Railroad Company of New Jersey. to take effect May 1.

THE Wharton Railroad Switch Company of Philadelphia has effected the purchase of forty acres of land at Jenkintown from the North Pennsylvania Railroad Company. The works will be removed to that place.

THE Houston and Texas Railway Company and Morgan's Louisiana and Texas Railroad and Steamship Company have made satisfactory arrangements with the Southern Pacific Railroad Company for business to New Orleans and New York.

MR. R. M. BREERETON, an eminent English engineer, in speaking of the American locomotive, says that the greater duty performed by it is due to the better design and better system of working it. He regards it as superior to those made in any other country.

COL. JOHN M. ROBINSON has been elected president of the Bay Line, the Seaboard and Roanoke, Raleigh and Gaston and Raleigh and Augusta Air Line companies, to fill the vacancy caused by the death of Captain D. R. Murchison, and Mr. Livingston Minnis, of Boston, has been elected director in his stead.

THE new English steamship James A. Garfield, of the President's Line, has been chartered to load railway supplies at Glasgow for Rosario, Argentine Confederation, South America. The freight to be paid for this service is $32,000. She will load in South America for Philadelphia.

THE directors of the Carolina Central Railroad Company have made Major John C. Winder general manager of the line from Weldon to Wilmington and Shelby, including the Raleigh and Gaston, Raleigh and Augusta and Carolina Central railroads. Captain W. W. Chamberlain, of Norfolk, Va., was made financial agent for the same roads.

COMMANDER JIMENEZ, of the Mexican Navy, passed through this city on the 14th inst., on his way to New Haven for the purpose of inspecting the manner in which the work is being done on the construction of the large floating docks and marine railways for the Mexican Government which were ordered through the Mexican firm of Wexel & Degress—and parts of which have already been shipped to Mexico.

THE Southwestern Railway injunction case of Hammond et al., vs. Schultz, et al., was decided at Winnipeg, Manitoba, on the 11th inst. The Chief Justice held that 7,500 shares of subscribed stock were good, and that the 500 shares subscribed for by Adams were also good; that the election of Gen. Hammond and associates was good and valid; that the election of Dr. Schultz and party was void; that Dr. Schultz and friends had interfered with the management and control of the road, and that the injunction restraining them from interfering with the management of the road should lie.

ORGANIZATION.

THE directors of the Quincy, Missouri and Nebraska Railroad Company, recently elected, are: Solon Humphreys, Willis H. Blodgett, T. S. House, of New York; Charles Ridgely, Springfield; C. W. Keyes, C. S. Bull, Henry Root, Amos Green and F. G. Jamesen, of Quincy.

THE stockholders of the St. Louis, Jerseyville and Springfield Railroad Company, at their recent meeting in Jerseyville, Ills., elected the following board of directors: John C. Gault, James F. How, St. Louis; Wm. F. Morrill, Chicago; and Wm. H. Fulkerson and Morris R. Locke, Jerseyville.

THE stockholders of the Wabash, St. Louis and Pacific Railroad Co., at their meeting in St. Louis on the 14th inst., elected the following five directors to serve for three years; Solon Humphreys, Charles Ridgeley, George L. Dunlap, James F. Joy, and Sidney Dillon. The other ten directors hold over.

AT the annual meeting of the stockholders of the Missouri Pacific Railroad Co., held at St. Louis on the 7th inst., the following board of directors was elected: Jay Gould, Russell Sage, F. L. Ames, William F. Buckley, R. S. Hayes, S. H. H. Clark, Sidney Dillon, Thomas T. Eckert, George J. Forrest, Samuel Sloan, A. L. Hopkins, H. G. Marquand, and George Gould.

THE directors of the Frederick and Pennsylvania Line Railroad Co., elected on the 4th inst., are: Charles E. Trail, John Cron, L. W. White, H. H. Carter, J. DuBarry, Val. L. Brenner, B. F. Stewart, M. E. Doll, Wm. C. Birely Z. James Gittinger and M. E. Getzendanner. President, Chas. E. Trail; vice-president, H. H. Carter; secretary and treasurer, Stephen W. White.

AT the annual meeting of the West Jersey Railroad Company, held on the 6th inst., the following board of directors was elected: George B. Roberts, Thomas Jones Yorke, Lewis Mulford, Coleman F. Leaming, Charles E. Elmer, John M. Moore, Strickland Kneass, Thos. H. Dudley, George Wood, J. N. DuBarry, N. Parker Shortridge, Thos. H. Whitney, Edmund Smith.

AT the annual meeting of the stockholders of the Atlanta and Charlotte Air-Line Railway Company, held in this city on the 8th inst., Hiram W. Sibley, Eugene Kelly, Richard Irving, Jr., W. H. Fogg, P. P. Dickinson, Hiram Sibley, Skipwith Wilmer, R. A. Lancaster, James H. Young, B. R. McAlpine, Jas. E. Grannis and Robert Stobo were elected directors. Hiram Sibley was re-elected president.

At the annual meeting on the 7th inst. of the stockholders of the Southwest Pennsylvania Railroad Company—a leased line of the Pennsylvania Railroad Co.—the following directors were elected: J. N. DuBarry, president, D. R. Davidson, John K. Ewing, Robert Hogsett, William J. Howard, George F. Huff, Strickland Kneass, G. B. Roberts, D. E. Huff, N. Parker Shortridge, Edmund Smith, George A. Torrence, and J. F. Wentling.

AT the recent annual meeting of the Union

Depot stockholders in St. Louis the following directors were elected: Jay Gould, A. L. Hopkins, A. H. Calef, New York, and R. S. Hays, J. F. How, Wm. Taussig and D. S. H. Smith, St. Louis. Directors elected for the St. Louis Bridge Company are: Julius S. Walsh, Jr., and J. Pierpont Morgan, of New York. The St. Louis Tunnel Company elected as directors Julius S. Walsh, Wm. Taussig, W. S. Humphreys, N. S. Choteau and A. J. Thomas, of New York.

At the annual meeting of the stockholders of the St. Louis and San Francisco Railroad Co., at St. Louis on the 14th inst., the number of directors was increased from 6 to 13, and the following gentlemen were elected: C. P. Huntington, Leland Stanford, Jay Gould, Russel Sage, J. E. Seligman, Edward F. Winslow, A. H. Hatch, James O. Fish, William F. Buckley, A. W. Nickerson, C. W. Rodgers, W. L. Trask, and R. S. Hays. The seven first named are new directors; the last six composed the old board and were re-elected.

The directors of the Kansas City, St. Louis and Chicago Railroad Co., elected on the 14th inst., are: George Straut and W. H. Mitchell, Chicago; H. J. Higgins, Higginsville, Mo.; George M. Shelly, Kansas City; John M. Woodson, John J. Mitchell, and R. P. Tansey, St. Louis; P. H. Rhea, Marshall, Mo., and Thomas Shakelford, Glasgow, Mo., John J. Mitchell was elected president and R. P. Tansey, secretary. This road runs from Kansas City to Louisiana, Mo., and is leased to the Chicago and Alton Railroad Company, which operates it.

At the annual meeting of the stockholders of the Union Pacific Railway Company, held in this city on the 8th inst., the following gentlemen were re-elected directors for the ensuing year: Sidney Dillon, New York; Elisha Atkins, Boston; Frederick L. Ames, Boston; Ezra Baker, Boston; S. H. H. Clark, Omaha; F. Gordon Dexter, Boston; David Dows, New York; Grenville M. Dodge, Council Bluffs; T. T. Eckert, New York; Jay Gould, New York; Solon Humphreys, New York; Russell Sage, New York; Augustus Schell, New York; William L. Scott, Erie, Pa., and John Sharp, Salt Lake City.

CONSTRUCTION.

Another railway has been projected in Canada, to run from Cornwall to Ottawa, passing through the counties of Stormont, Russell and Carleton.

The York, Penn., *Democrat* says that the line of railroad from Silver Spring, Lancaster county, to Marietta, in the same county, will be built this spring.

The work of laying more links of the double track on the Grand Trunk Railway of Canada, between Toronto and Montreal will be resumed as soon as the frost is out of the ground.

Messrs. William Wharton, Jr., & Co. are laying a line of track on Thirty-third street, Philadelphia, from Spruce to Walnut, which will connect the Lombard and South Streets Railway with the West End and Angora.

The survey of the proposed railroad from Bristol to some point in New Haven, Vt., intersecting with the Rutland and Burlington division of the Central Vermont Railroad, will be made as soon as the weather admits.

The Bradford, Penn., *Argus* says that an effort is being made to build a narrow gauge railroad from Meehoopany, Bradford county, to Dushore, Sullivan county, connecting with the Lehigh Valley Railroad at the former place.

The Bedford (Penn.) *Gazette* says that the location of the line of the South Pennsylvania Railroad is being rapidly pushed to completion, and that the engineers in charge expect to have it finished early in April, after which the entire line will be put under contract.

Over one million of dollars was expended last year in improving the line of the Chicago and Grand Trunk Railroad, and adding to its equipment. All but 20 miles of the road is laid with steel rails, and the steel for the remaining twenty miles is now being delivered and will be put down at once.

The track of the Pennsylvania Railroad, between Bristol and Schenck's Station, has recently been raised four feet without in the least interrupting the business of the road. To accomplish this the ties were each raised about three inches, the gravel filled in the space, and the operation repeated along the line between the points named until the desired height was attained.

Referring to the Chesapeake and Ohio Railway, President Huntington says: "We hope by June 1 to complete the gap between Memphis and Paducah, but we shall not wait until then to put on through cars to Newport News. The eastern end of our road-bed is yet a little soft and we are not taxing it with through business. In the beginning Louisville was our objective point, but our plans are growing and now we shall connect ocean with ocean."

At the annual meeting of the stockholders of the St. Louis, Jerseyville and Springfield Railroad Co., at Jerseyville, Ill., on the 7th inst., President Lock stated that he had leased the road to the Wabash, St. Louis and Pacific Railway Company in perpetuity; that the road was constructed from Bates to the Mississippi River in accordance with the terms of the subscription notes and right-of-way bonds of January 1, 1882.

With regard to the prospects for the completion of the West Virginia Central and Pittsburg Railroad, President Davis is reported to have said: "We will soon have the railroad completed from a junction with the Baltimore and Ohio Railroad, near Piedmont, southward to the summit of the Alleghanies, near 'Fairfax Stone.' It will run through the counties of Mineral, Grant, Tucker and others, and will open up for market, both west and to tidewater, a rich coal, iron and lumber section of our State. I venture the assertion that in the next ten years the country through which the road passes will have doubled in population and in wealth."

CONSOLIDATION.

Articles of consolidation between the Missouri Pacific Railroad in Nebraska, and the Missouri Pacific Railroad in Missouri, have been filed with the Secretary of State of Nebraska. The consolidation will be known as the Missouri Pacific Railroad Company. It is ratified and approved by the shareholders of each company. The articles of the Missouri Pacific in Nebraska are signed by A. A. Talmage, president, and that of the Missouri Pacific Railway Company in Missouri by Jay Gould, president.

The "Three Americas" Railway.

Hon. Hinton Rowan Helper, the projector of the above-named railway, having been interviewed for the purpose of obtaining information as to the progress of the movement, is reported to have replied: "The Three Americas Railway is designed to run from a point to be hereafter chosen on Hudson's Bay, through Canada, the United States, Mexico, Guatemala, Honduras, Salvador, Nicaragua, Costa Rica, Colombia, Ecuador, Peru, Bolivia, and the Argentine Republic. An effort is now being made to form a preliminary Three Americas Railway Company, for the purpose of obtaining the requisite charters from those Governments. A series of preambles and a resolution authorizing the republication and gratuitous distribution by Congress of 100,000 copies in English and 50,000 copies in Spanish of the book on the proposed Three Americas Railway, was introduced in the House of Representatives by the Hon. James B. Belford, of Colorado, on the 6th of last month, and was referred to the Committee on Printing, but has not yet been reported to the House by that committee."

Canadian Pacific Railway.

From an official announcement of the Canadian Pacific Railway syndicate it appears that construction westward from Winnipeg will be pushed forward henceforth with the utmost vigor, not only for the purpose of opening the country for settlement as early as possible, but to facilitate as well the transportation of men and material to the heavier work in the Rocky mountains. These mountains are to be attacked simultaneously from the east and west in the spring of 1883, but to reach the scene of operations from the direction of Winnipeg the unparalleled feat of laying 500 miles of track in one continuous line in six months will have to be accomplished. The Sault Ste. Marie Branch is to be constructed immediately, and will be connected with every railway across the United States line that can exchange traffic. The western course of the main line is to be kept as near as possible to the shore of Lake Superior. The main eastern terminus, it may be added, is to be at Montreal. On the Pacific Division work is in active progress from Port Moody, on the seacoast, to Kamloops, at the confluence of the north and south branches of the Thompson River. From Kamloops eastward the road will be put under contract immediately, this portion being known as the "Rocky Mountain Division." It is expected that trains will be running from Kamloops to Winnipeg by 1887. The Pacific Division and the eastern connections to Montreal will all have been completed previously, and by the date named there will be all-rail transit from ocean to ocean on the great Canadian line, the whole of which is under the management of the Canadian Pacific Company.

Iron slag is ceasing rapidly to be a waste product. At an English iron-works it is employed as a non-conductor of heat. When it is ground it is molded into bricks of great toughness, which are also impervious to frost and 30 per cent lighter than common clay bricks. Cement, concrete, and artificial stone are likewise made from the slag.

It is stated by the *Engineering* that the commission appointed by the French Government to examine the plan of the canal proposed to unite the Atlantic and the Mediterranean have not made a decisive report. The canal would be 270 miles long, connecting Bordeaux and Narbonne, with Toulouse as one of its ports. Its highest point would be 500 feet above the level of the sea. It would be supplied with water from the River Garonne and other minor sources, and would admit of the passage of ships of war. Its military advantages are those which appear most obvious, but its promoters claim that it would be also useful to agriculture by enabling the vine to be cultivated along its banks. The commission estimate the cost at nearly $300,000,000, and desire further information before recommending its construction.

Pennsylvania Railroad Company.

THE following is an abstract of the Thirty-fifth Annual Report of the president and directors of the Pennsylvania Railroad Co.—being for the year ending December 31, 1881—which was presented to the stockholders at their annual meeting in Philadelphia on Tuesday last:—

The gross earnings on the Pennsylvania Division, main line and branches, Pittsburg to Philadelphia, for the year ending December 31, 1881, were $27,647,008.79, the operating expenses $15,468,468.60, and the net earnings $12,178,540.19; to which add interest on investments, etc., $3,723,626.07, making a total of $15,902,166.26; from which deduct payments for leases and rentals, interest on bonded debt, etc., $5,770,448.04, leaving as net earnings the sum of $10,131,718.22. Compared with the year 1880, there is an increase in gross earnings of $1,659,351.17, with an increase in expenses of $1,416,982.82, making the increase in net earnings $252,368.35. There was a decrease in interest from investments, etc., of $82,125.03, and an increase in interest on bonded debt, etc., of $80,010.26—making the increase in the net income of the company over 1880, $80,233.06.

The gross earnings of the United New Jersey Railroad and Canal Company, including the Belvidere Delaware Railroad and Flemington Branch, during the year 1881, were $13,022,864.99, expenses $8,811,281.03, and the net earnings $4,211,583.96; to which add interest from investments, $210,836.46—making the total net earnings $4,422,420.42. The amount disbursed for interest, dividends, etc, was $4,725.285.16—showing a net loss of $302,864.74. Compared with the year 1880, the gross earnings show an increase of $1,478,183.25, with an increase in expenses of $596,073.02—making the increase in net earnings $882,110.23; to which add increase in interest received from investments, $18,452.22, making the total increase $900,562,45. There was an increase in payments on account of dividends, interest, etc., of $168,118.32—making the net loss in operating the New Jersey Division $732,444.13 less than in 1880.

Deducting the net loss from operating the New Jersey Division from the net income of the Pennsylvania Division, as shown above, leaves a balance of $9,828,853.48; from which deduct payments to the fund for the purchase of securities guaranteed by the Pennsylvania Railroad Company, under trust created Oct. 9, 1878, $600,000, Pennsylvania Railroad Company's consolidated mortgage bonds, redeemed by sinking fund, $286,480, deficiency in meeting interest guaranteed by the Pennsylvania Railroad Company on bonds of the Baltimore and Potomac Railroad Company $37,177.77, and for advances made, $106,154.45; advanced Shamokin Coal Co., to protect property, $7,000; deficiency in meeting interest by Allegheny Valley Railroad Co., $242,620.82, and for advances made $157,464.18; deficiency in meeting interest by Sunbury, Hazleton and Wilkesbarre Railway Co., $50,000; by Frederick and Pennsylvania Line Railroad Co., $15,000; by American Steamship Co., $90,000; and by Philadelphia and Erie Railroad Co., $175,973.53—in all, $1,767,870.75—leaving balance to credit of income account $8,060,982.73; out of which was paid dividends of eight per cent, amounting to $5,861,718—leaving amount to be transferred to credit of profit and loss account for 1881, $2,199,264.73; to this is added $7,793,948.71 to credit of that account December 31, 1880, and $350,865.90 realized from settlements of old accounts and profit on sale of securities—leaving $10,344,079.34 to credit of profit and loss December 31, 1881, a gain during the year of $2,550,130.63.

The gross earnings of the Philadelphia and Erie Railroad in 1881 were $3,454,309.05, the expenses $2,430,060.30, and the net earnings $1,024,248.75. Deduct interest charged for the use of equipment, $165,345.12, and amount expended for extraordinary expenses, $135,278.49, leaves net amount applicable to payment of interest, etc., $723,625.14, which amount was paid to the Philadelphia and Erie Railroad Company as rental. Compared with 1879, the gross earnings show a decrease of $273,424.68, the expenses an increase of $71,706.52, and the net earnings a decrease of $345,130.60. The amount applicable to the payment of interest shows a decrease of $376,986.66.

The gross earnings of all the lines east of Pittsburg and Erie for the year 1881 were $44,124,182.83, the expenses $26,709,809.93, rental and interest on equipment $2,762,271.76, and the net earnings $14,652,101.14; for the year 1880 the gross earnings were $41,260,072.49, expenses $24,625,047.57, rental and interest on equipment, $2,728,562.13, and net earnings $13,906,462.79—showing an increase in gross earnings of $2,864,110.34, an increase in expenses, etc., of $2,118,471.99, and an increase in net earnings of $745,638.35.

The number of tons of freight moved over the lines east of Pittsburg and Erie in 1881 was 32,606,264, against 27,399,173 in 1880, an increase of 5,207,091. The number of tons carried one mile in 1881 was 3,700,811,373, against 3,292,991,330 in 1880, an increase of 407,820,043.

The number of tons of freight moved in 1881 over the main line and branches, including 1,082,862 tons of fuel and other materials for the Company's use, was 19,312,227, embracing 9,209,306 tons of coal and coke. For the previous year 16,341,568 tons were moved, showing an increase of 2,970,659 tons, or 18.18 per cent, while the increase in coal tonnage was 1,195,984 tons, and in coke shipments 518,599 tons. Of the 18,229,365 tons of individual freight moved on the main line and branches in 1881, 2,207,529 were through and 16,229,365 local freight.

The number of passengers carried on all lines east of Pittsburg and Erie for the year 1881 was 18,985,409, against 16,575,042 in 1880, an increase of 2,410,367. The total mileage of passengers was 446,316,555, against 382,787,186 in 1880, an increase of 62,529,369.

The total earnings of the lines owned or controlled by the Pennsylvania Railroad Company west of Pittsburg, and operated by the Pennsylvania Company, and the Pittsburg, Cincinnati and St. Louis Railway Company, in 1881 were $31,058,790.94, the expenses $19,533,467.95, and the net earnings $11,525,322.99; in 1880 the earnings were $29,503,989.76, the expenses $17,554,438.06, and the net earnings $11,949,551.70—showing an increase in earnings of $1,554,801.18, with an increase in expenses of $1,979,029.89, making the decrease in net earnings $424,228.71. From the net earnings of 1881, $8,752,909.13 is deducted for rentals, interest, and liabilities of all kinds chargeable thereto, leaving a net profit of $2,772,413.86. The deduction for like purposes in 1880 was $9,791,510.29, leaving a net profit of $3,158,041.41.

The other lines west of Pittsburg in which the Pennsylvania Railroad Company has an interest, but which are worked through their own individual organizations, show a loss after the payment of interest and rental of $941,124.98, of which this company is responsible for $260,486,12, which deducted from the net earnings, as stated above, leaves a net profit on all the lines west of Pittsburg of $2,511,927.74, against $3,072,052.28 in 1880, showing a decrease of $560,124.54.

The number of tons moved on all lines west of Pittsburg in 1881 was 25,914,352; do. moved one mile, 2,903,856,815. In 1880 the number of tons moved was 22,302,291, and the number moved one mile 2,426,038,735.

The number of passengers carried on all lines west of Pittsburg in 1881 was 10,701,576; do. carried one mile, 364,865,113. In 1880 the number of passengers carried was 9,665,994, and the number carried one mile 321,783,885.

The gross earnings of all lines operated east and west of Pittsburg in 1881 were $75,182,973,77; and the gross expenses, excluding rentals, interest, dividends, etc., were $46,243,277.88—showing net earnings $28,939,695.89; in 1880 the gross earnings were $70,764,062.25, the expenses $42,179,485.63, and the net earnings $28,584,576.62—showing an increase in earnings of $4,418,911.52, in expenses of $4,063,792,25, and in net earnings of $355,119.27.

The number of tons of freight moved on all the lines east and west of Pittsburg in 1881 was 58,520,616; and the number moved one mile, 6,604,667,188. In 1880 the number of tons moved was 49,701,464, and the number moved one mile 5,719,030,065.

The number of passengers carried on all lines east and west of Pittsburg in 1881 was 29,686,985; and the number carried one mile 811,181,668. In 1880 the number carried was 26,241,036, and the number carried one mile 704,571,071.

The Provincial Railway.

THE Ottawa (Ca.) *La Minerva*, of the 7th inst., contained the following announcement:—

The Canadian Pacific Railway Company have bought the line from Ottawa to Montreal, including the Aylmer and St. Jerome branches; and a provincial syndicate, represented in the contract by the Hon. Mr. McGreevy and Messrs. A. Desjardine, M.P., A. Quimet, M.P., and L. A. Senecal, has bought the line from St. Martin to Quebec, including the Joliette, Berthier and Piles branches and the Three Rivers loop line.

The Pacific Company has also bought the two private lines at St. Lin and St. Eustache, which they are obliged to finish, to keep in good condition and to work regularly. The price paid by the Pacific syndicate for 141 miles is $4,000,000 and the other syndicate pays $4,000,000 for 214 miles. The Provincial syndicate is also obliged to complete works costing $698,000.

One of the clauses of the contract with the Pacific syndicate provides that the terminus, including the passenger station, "will be fixed and will remain perpetually" at the Quebec Gate Barracks, unless the railway is extended to Quebec, where the terminus will then be. The freight between Quebec and the West shall be divided according to the number of miles used belonging to the syndicate and the Government respectively.

The Stock Exchanges and Money Market.

New York Stock Exchange.

Closing Prices for the week ending Mar. 15.

	Th. 9.	F. 10.	Sat. 11.	M. 13.	Tu. 14.	W. 15.
Adams Express	.....	142	140½	.....	140	139½
Albany and Susq.	131½	....	.....	.....	.....	.....
1st mortgage	.....	.....	.....	.....	.....	.....
2d mortgage	108¾	.....	.....	.....	.....	108¼
American Express	.....	92½	.....	33¼	.....	92
Atlantic & Pac. Tel.	.....	.....	.....	.....	.....	.....
Burl., C. R. & Nor.	80	.....	.....	.....	.....	.....
1st mortgage 5s	98¾	98¾	99	99	99¼	99½
Canada Southern	47	46	44	45½	46	46½
1st mortgage guar	93	93½	.....	.....	.....	.....
Central of N. Jersey	89¾	86⅝	82	78¼	78¼	82¾
1st mort. 1890	115	.....	.....	.....	115½	.....
7s, consol. ass	.....	113	111½	111	.....	111¾
7s, convertible ass	.....	.....	114	.....	.....	.....
7s, Income	.....	.....	.....	90	93½	.....
Adjustment	.....	.....	.....	.....	.....	105
Central Pacific	88¼	88⅞	87½	88¾	88¾	90
6s, gold	114	.....	114¾	115	115	.....
1st M. (San Joaq)	.....	.....	.....	110½	.....	.....
1st M. (Cal. & Or.)	103½	.....	.....	.....	.....	.....
Land grant 6s	.....	.....	.....	.....	.....	.....
Chesapeake & Ohio	20	20	21	21¾	21	21
1st pref	28¾	29½	.....	29¾	30¾	31
2d pref	21	.....	.....	22	.....	.....
1st mort., series B	76	77	77	.....	77⅛	78½
Chicago and Alton	128¾	127¾	128	.....	.....	.....
Preferred	.....	.....	133	.....	.....	.....
1st mortgage	.....	.....	.....	.....	.....	.....
Sinking Fund	.....	.....	.....	.....	.....	.....
Chi,, Bur. & Quincy	129	129¼	128½	129	129	130
7s, Consol. 1903	.....	.....	.....	.....	125⅞	125⅝
Chi., Mil. & St. Paul	109½	108⅞	108½	109⅞	109⅞	111½
Prefered	119½	120	119⅜	120	.....	121
1st mortgage, 8s	132	132	.....	.....	.....	.....
2d mort., 7 3-10s	.....	.....	.....	.....	.....	.....
7s, gold	.....	.....	.....	.....	.....	.....
1st M. (La. C. div)	.....	.....	.....	117	116	.....
1st M. I. & M. div.)	.....	.....	.....	.....	.....	.....
1st.M. (I. & D. ext.)	.....	.....	.....	.....	.....	.....
1st M. (H.&D. div.)	.....	113⅞	.....	.....	.....	.....
1st M.(C. & M.div.)	.....	.....	.....	.....	.....	.....
Consolidated S. F.	.....	.....	.....	.....	118	120
Chi. & Northwestern	130	129	129	129¾	130	131⅛
Preferred	138¾	139	138	139	140	138⅞x
1st mortgage	107	.....	107	.....	.....	.....
Sinking Fund 6s	.....	.....	.....	.....	112	.....
Consolidated 7s	.....	132	132	132	.....	.....
Consol. Gold bo'ds	.....	.....	.....	124¼	.....	123½
Do. reg	.....	.....	.....	.....	.....	.....
Chi., R. Isl. & Pac.	129½	129	129	129¾	130	130
6s, 1917, c	127	127	.....	.....	.....	.....
Clev.,Col.,Cin.&Ind.	75⅞	75	74	75⅞	77½	78½
1st mortgage	.....	.....	.....	.....	.....	.....
Clev. & Pittsburg gr.	.....	134¼	.....	.....	.....	.....
7s, Consolidated	.....	.....	.....	.....	.....	.....
4th mortgage	.....	112	112	.....	.....	.....
Col.,Chi.,& Ind. Cent.	9¾	9¾	9¾	10¼	10¼	10¼
1st mortgage	.....	.....	.....	.....	.....	.....
2d mortgage	.....	.....	.....	.....	.....	.....
Del. & Hud Canal.	106½	105	103¾	.....	105	105⅝
Reg. 7s, 1891	.....	.....	.....	.....	.....	.....
Reg. 7s, 1884	.....	.....	.....	.....	.....	.....
7s, 1894	.....	.....	.....	.....	.....	.....
Del.,Lack.& Western	122¼	118⅞	117⅞	118½	120	122½
2d mortgage 7s	.....	.....	.....	.....	.....	.....
7s, Consol. 1907	.....	.....	.....	.....	.....	.....
Erie Railway	.....	.....	.....	.....	.....	.....
1st mortgage	125	.....	126¾	.....	.....	.....
2d mort. 5s, ext	.....	.....	.....	103	.....	.....
3d mortgage	.....	.....	102¾	103	103	.....
4th mort. 5s, ext	.....	.....	.....	.....	.....	.....
5th mortgage	.....	.....	.....	.....	.....	.....
7s, Consol. gold	126	.....	125¾	125	.....	126
Great West. 1st mort	109	.....	.....	.....	.....	.....
2d mortgage	.....	.....	.....	.....	.....	.....
Hannibal & St. Jo	.....	.....	.....	.....	.....	.....
Preferred	81	80½	81½	82	84	82½
8s, Convertible	104¼	104	104½	.....	.....	104½
Houston & Tex. Cen	64¾	65	63⅝	65½	64	64¼
1st mortgage	111	.....	.....	.....	.....	.....
2d mortgage	.....	.....	117	.....	.....	.....
Illinois Central	134	134	132	133	133¾	135¼
LakeShore&MichSo	113¾	113¾	111¾	112½	113¾	114¾
Consol. 7s	.....	.....	.....	.....	128	.....
Consol. 7s, reg	.....	.....	.....	.....	.....	.....
2d Consolidated	.....	.....	123¾	.....	.....	.....
Leh. & W. B. 7s, Con	.....	.....	.....	.....	.....	.....
Long Dock bonds	.....	.....	.....	.....	.....	.....
Louisville & Nash.	73⅝	71¾	73¼	74	73	73¾
7s, Consolidated	.....	.....	.....	.....	121	.....
Manhattan	52	48	47¾	52	52¾	53¾
1st pref	92	.....	.....	94¼	.....	.....
Met. Elevated	.....	87½	85	.....	87	.....
1st mortgage	.....	100½	100¼	100¾	100½	100½
Michigan Central	80⅞	80¾	80	80½	81¼	82
7s, 1902	.....	126	125¾	.....	.....	.....
Morris & Essex	120	120	121	119¾	.....	120¾
1st mortgage	.....	.....	.....	.....	.....	.....
2d mortgage	115	.....	.....	.....	.....	.....
7s of 1871	.....	.....	.....	.....	.....	.....
7s, Convertible	.....	.....	.....	.....	.....	.....
7s, Consolidated	.....	120½	.....	.....	.....	121½
N.Y.Cen. & Hud. R.	131¼	130½	130¼	130¾	130¾	130½x
6s, S. F. 1883	.....	.....	.....	.....	.....	103¾
6s, S. F., 1887	.....	.....	108¾	.....	.....	.....
1st mortgage	.....	.....	.....	.....	.....	.....
1st mortgage, reg	.....	.....	.....	.....	.....	.....
N. Y. Elevated	.....	105¾	.....	.....	104	.....
1st mortgage	116	.....	115½	.....	.....	.....
N. Y. & Harlem	.....	.....	.....	.....	.....	.....
Preferred	.....	.....	.....	.....	.....	.....
1st mortgage	.....	.....	.....	.....	.....	.....
1st mortgage, reg	.....	.....	.....	.....	.....	.....
N. Y., Lake Erie & W	35⅝	35¼	34⅞	36	36¾	37
Preferred	70	73½	69¼	.....	.....	.....
2d Consolidated	93¾	92½	92½	93	94	94¾
New 2d 5s fund	.....	.....	90	88¼	.....	.....
N.Y.,N.Hav'n&Hart	.....	169	.....	.....	.....	.....
North Mo. 1st mort	.....	.....	.....	.....	.....	.....
Northern Pacific	30½	30¼	29¾	30¾	31¼	31¾
Preferred	70	69¾	69¾	70½	70¾	71⅞
Ohio & Mississippi	30¾	30¾	30	30¾	32	32½
Preferred	90¾	.....	.....	.....	.....	.....
2d mortgage	.....	.....	121	.....	.....	.....
Consolidated 7s	.....	.....	.....	.....	.....	.....
Consol. S. Fund	.....	118¾	.....	.....	.....	.....
Pacific Mail S. S. Co	39½	40	39	39½	40	40
Pacific R. R. of Mo.	.....	.....	.....	.....	.....	.....
1st mortgage	106	...	106	106	.....	.....
2d mortgage	.....	.....	.....	.....	.....	.....
Panama	.....	.....	.....	.....	.....	.....
Phila. & Reading	57	55	53¾	53¼	54	57¼
Pitts,Ft.W.&Chi.gtd	.....	136	135½	.....	.....	.....
1st mortgage	.....	137	.....	.....	.....	.....
2d mortgage	.....	.....	.....	.....	.....	.....
3d mortgage	.....	.....	.....	.....	.....	.....
Pullman Palace Car	123¾	124	124	.....	125¼	123
Quicksil'r Min'g Co	11¼	.....	.....	.....	11¾	12
Preferred	.....	.....	.....	.....	.....	.....
St. Louis & San Fran	35	.....	34¾	.....	.....	.....
Preferred	46	47	45	.....	.....	.....
1st Preferred	.....	.....	88¼	.....	87½	.....
St. L., Alt'n & T. H.	25	24	.....	.....	25	26½
Preferred	.....	64	64	64	.....	67
1st mortgage	.....	.....	.....	.....	.....	.....
2d mort. pref	.....	.....	106½	.....	.....	.....
Income bonds	.....	.....	.....	.....	.....	.....
St. L., Iron Mt. & S	.....	.....	.....	.....	.....	.....
1st mortgage	.....	.....	.....	.....	.....	.....
2d mortgage	107	.....	.....	.....	.....	.....
Toledo and Wabash	.....	.....	.....	.....	.....	.....
1st mortgage	110	.....	.....	.....	.....	.....
2d mortgage	.....	.....	.....	.....	.....	.....
7s, Consolidated	.....	.....	.....	.....	.....	.....
St. Louis Division	104½	.....	.....	.....	.....	.....
Union Pacific	112⅝	112½	111¾	110⅝x	111	112
1st mortgage	115¼	115¼	115	115⅝	115¼	.....
Land Grant 7s	115¼	.....	115	.....	116¼	.....
Sinking Fund 8s	.....	.....	.....	116	.....	117⅛
United States Ex	73	.....	73½	.....	.....	.....
Wabash, St. L.& Pac	33	32½	32	32¾	33¼	34¾
Preferred	56¾	56	56½	57¾	57	58
New mort. 7s	.....	.....	.....	.....	.....	.....
Wells-Fargo Ex	128	.....	.....	126½	.....	126
Western Pacific b'ds	.....	.....	.....	.....	.....	.....
Western Union Tel.	78	77½	76¾	78¾	79½	81⅛
7s., S.F conv., 1900	.....	.....	.....	.....	.....	117
FEDERAL STOCKS:—						
U. S. 4s, 1907, reg	.....	.....	.....	117½	.....	.....
U. S. 4s, 1907, coup	118½	.....	118½	118½	.....	118
U. S. 4½s, 1891, reg	.....	.....	.....	.....	.....	.....
U. S. 4½s, 1891, coup	.....	.....	.....	118⅞	.....	.....
U. S. 5s, 1881, reg	.....	.....	.....	.....	.....	.....
U. S. 5s, cont'd at3½	.....	.....	102¾	102¾	102¾	.....
U. S. 6s cont'd at3½	.....	.....	100¾	.....	.....	.....
Dt. of Col. 3-65s, reg	.....	.....	.....	.....	.....	.....
Dt. of Col.3-65s,coup	.....	.....	.....	.....	.....	.....

Boston Stock Exchange.

Prices for the Week Ending Mar. 15.

	Th. 9.	F. 10.	Sat. 11.	M. 13.	Tu. 14.	W. 15.
Atch.,Top.&San.Fe.	81¾	82½	81¾	82	82⅞	82¾
1st mortgage	.....	116	.....	.....	116½	117
2d mortgage	.....	.....	.....	.....	.....	.....
Land Grant 7s	.....	114	.....	.....	.....	.....
Boston & Albany	164	.....	163	.....	.....	161½
7s reg	.....	.....	125½	.....	.....	.....
Boston and Lowell.	101	.....	101	101	100¾	.....
Boston & Maine	.....	.....	145	144½	.....	.....
Boston& Providence	.....	.....	.....	.....	.....	.....
Bos'n,Hart.& Erie7s	48¼	48½	48	.....	48	48
Burl.& Mo.R.L.G.7s	.....	.....	.....	.....	.....	.....
Burl.& Mo.R.in Neb	.....	.....	.....	.....	.....	.....
6s, exempt	.....	.....	.....	.....	.....	112
4s	.....	.....	.....	.....	.....	.....
Chi.,Burl. & Quincy	128½	129¾	128	129½	129¾	129½
7s	.....	.....	.....	.....	.....	.....
Cin.,Sand&Clev($50)	21	22½	....	.....	.....	23½
Concord ($50)	.....	.....	.....	.....	.....	.....
Connecticut River	.....	.....	165	.....	.....	.....
Eastern	33	.....	.....	.....	34	.....
New 4½ Bonds	105¾	.....	105½	106	106	.....
Fitchburg	.....	.....	.....	.....	.....	.....
N.Y. & New England	43	45¾	44	45	46	46
7s	110	110¾	111	112	112	112½
Northern N. H.	.....	.....	.....	.....	109	.....
Norwich&Worcester	.....	.....	.....	.....	.....	.....
Ogden & Lake Cham	.....	35	.....	.....	.....	.....
Preferred	.....	.....	.....	.....	.....	.....
Old Colony	125	126	126	125	126	125
Ph.,Wil.&Balt.($50)	.....	.....	.....	.....	.....	.....
Portl'd,Saco & Ports	115	.....	115	.....	115	.....
Pueblo & Ark Val	.....	.....	.....	.....	.....	.....
7s	.....	.....	.....	112	112	112
Pullman Palace Car	....	124	123½	.....	122½	124
Union Pacific	113	112¾	111	112	111½	111½
6s	.....	.....	.....	.....	.....	.....
Land Grant 7s	112½	.....	.....	.....	.....	.....
Sinking Fund 8s	.....	.....	.....	117	.....	116
Vermont & Canada	.....	.....	.....	.....	.....	.....
Vermont & Mass	.....	135	.....	.....	.....	.....
Worcester & Nashua	.....	.....	.....	.....	.....	55¾
Cambridge (Horse)	.....	.....	.....	.....	.....	.....
Metropolitan(Horse)	.....	.....	.....	.....	.....	.....
Middlesex (Horse)	.....	.....	.....	.....	.....	.....
Cal.&Hecla Min'gCo	.....	.....	231	231	.....	233
Quincy	43	43¾	.....	44	45	45

Philadelphia Stock Exchange.

Closing Prices for the Week Ending Mar. 14.

	W. 8.	Th. 9.	F. 10.	Sat. 11.	M. 13.	Tu. 14.
Allegh'y Val. 7 3-10s	.....	.....	.....	.....	.....	.....
7s, Income	.....	.....	.....	.....	.....	.....
Buff., Pitts & West.	16½	16¾	16¼	16¼	16¼	16¾
Camd'n & Am. 6s, '83	.....	101¾	.....	.....	.....	.....
6s, 1889	.....	.....	.....	.....	.....	.....
Mort. 6s, 1889	.....	.....	.....	.....	.....	.....
Camden & Atlantic	.....	.....	.....	30	.....	.....
Preferred	.....	.....	.....	.....	.....	.....
1st mortgage	.....	.....	.....	.....	.....	.....
2d mortgage	.....	.....	.....	.....	.....	.....
Catawissa	.....	.....	.....	19	19	19
Preferred	54½	.....	.....	.....	.....	.....
7s, new	.....	.....	.....	.....	.....	.....
Del. & Bound Brook	.....	.....	.....	.....	.....	.....
7s	.....	.....	.....	.....	.....	.....
Elmira&Williamsp't	.....	.....	.....	.....	.....	.....
Preferred	.....	.....	.....	.....	.....	.....
Hunt. & B. Top Mt.	...	.....	.....	.....	.....	.....
Preferred	.....	25¾	.....	.....	.....	26
2d mortgage	.....	.....	.....	.....	.....	.....
Lehigh Navigation	41	40¾	39⅞	40	39¾	39⅝
6s, 1884	.....	.....	.....	104¾	.....	104½
Gold Loan	112½	112	.....	112½	111⅝	.....
Railroad Loan	.....	.....	.....	.....	.....	.....
Conv. Gold Loan	109	.....	.....	.....	.....	.....
Consol. Mort, 7s	.....	117	.....	.....	116¾	116¾
Lehigh Valley	61¾	61¾	61½	61¾	61¾	61
1st mort. 6s, coup	.....	.....	.....	.....	.....	.....
1st mort. 6s, reg	.....	.....	.....	.....	.....	.....
2d mort. 7s	.....	.....	.....	.....	.....	.....
Consol mort. 6s	120	120	120	.....	.....	.....
Consol.mtg.6s,reg	121	.....	.....	.....	.....	.....
Little Schuylkill	.....	.....	.....	57	.....	57¼
Minehill&Sch.Hav'n	.....	.....	.....	.....	.....	.....
North Pennsylvania	.....	.....	.....	.....	.....	63¾
1st mortgage 6s	.....	105½	105½	.....	.....	.....
2d mortgage 7s	.....	.....	.....	.....	.....	.....
Genl. mtg.7s,coup	.....	122	122	.....	.....	120¼
Genl. mtg. 7s, reg	.....	.....	.....	.....	.....	.....
Northern Central	.....	49	.....	.....	48½	.....
5s	.....	.....	.....	.....	.....	.....
Northern Pacific	30¼	30½	30¼	30	30¾	31
Preferred	69¼	69¾	69¾	69¾	70¼	70
Pennsylvania R. R.	60¾	60¼	60¼	60	60¼	60¼
1st mortgage	.....	.....	.....	.....	.....	.....
Gen'l mort	124¼	.....	.....	.....	.....	.....
Gen'l mort reg	.....	.....	.....	.....	.....	.....
Consol. mort. 6s	.....	.....	.....	.....	.....	.....
Consol. mort. reg	.....	.....	.....	.....	.....	.....
Pa.State 6s 2d series	.....	.....	.....	.....	.....	.....
do 3d series	.....	.....	.....	.....	.....	.....
do 5s, new	118	118	118	.....	.....	.....
do 3s,	.....	.....	.....	.....	.....	.....
Phila. & Reading	28¼	28¾	27⅝	26⅝	26¾	27⅛
1st mortgage 6s	.....	.....	.....	.....	.....	.....
7s of 1893	.....	.....	.....	.....	.....	120¼
7s, new convert	72½	.....	71	71	.....	.....
Consol. mort. 7s	.....	.....	.....	125	.....	.....
Consol. mort. reg	.....	.....	.....	.....	.....	.....
Gen'l mort. 6s	94	94	94½	93½	94	93⅛
Philadelphia & Erie	14½	14	14½	14¼	.....	.....
1st mortgage 5s	.....	.....	.....	.....	.....	.....
2d mortgage 7s	.....	.....	.....	.....	.....	115
Pittsb.,Cin.&St.L.7s	118	118	118	.....	118	118
Pitts.,Tit.&Buff. 7s,	.....	94	.....	.....	.....	.....
Schuylkill Navi't'n	..	..	.....	.....	.....	.....
Preferred	.....	12½	.....	12½	.....	.....
6s, 1872	.....	.....	.....	.....	.....	.....
6s, 1882	.....	92¾	.....	.....	.....	92
United Co. of N. J.	184½	.....	184½	184½	184¼	.....
Hestonville, (Horse)	.....	.....	.....	.....	.....	.....
Chestnut&Wal.(do)	.....	.....	.....	.....	.....	.....
Green & Coates (do)	.....	.....	.....	.....	.....	.....

Baltimore Stock Exchange.

Closing Prices for the Week Ending Mar. 14.

	W. 8.	Th. 9.	F. 10.	Sat. 11.	M. 13.	Tu. 14.
Baltimore & Ohio	.....	.....	....	195	190	190
6s, 1880	.....	.....	.....	.....	.....	.....
6s, 1885	.....	.....	.....	.....	.....	.....
Central Ohio ($50)	.....	.....	.....	46¾	.....	.....
1st mortgage	108¾	.....	108¼	.....	108¼	.....
Marietta & Cincin'ti	.....	.....	.....	.....	.....	.....
1st mortgage, 7s	.....	124	124	124	.....	.....
2d mortgage, 7s	102¾	102¾	102½	101¾	100¾	100¾
3d mortgage, 8s	54¾	54¼	54¾	54	53¾	53¼
Northern Cen. ($50)	49	.....	.....	.....	48¾	.....
2d mort., 6s 1885	.....	.....	.....	.....	.....	.....
3d mort., 6s, 1900	.....	.....	.....	.....	.....	.....
6s, 1900, gold	.....	.....	.....	.....	114¾	.....
6s, 1904, gold	112½	.....	.....	.....	112½	.....
Pitts. & Connellsv.7s	.....	.....	.....	122	121	.....
Virginia 6s, Consol.	61½	60¾	61	61¼	61	61¼
Consol. coupons	.....	.....	.....	60½	.....	.....
10-40 bonds	39½	.....	39¾	39½	.....	.....
Def'd Certificates	.....	13	.....	.....	.....	.....
Western Maryland	.....	.....	.....	.....	.....	.....
1st M.,end.by Balt	.....	.....	.....	.....	.....	.....
2d M., do	.....	.....	.....	.....	.....	.....

3d M.,	do	.....	.....	.....	.....	.....
1st M.,	unendors'd	.....	.....	.....	.....	.....
2d M.,	end. WashCo	.....	.....	.....	.....	.....
2d M.,	preferred	.....	.....	.....	.....	.....
City Passenger R R.		.....	.....	.....	40¼	.....

London Stock Exchange.

	Closing Prices			
	Feb. 24.		Feb. 17.	
Baltimore & Ohio (sterling)	114	116	114	116
Central of N. J., $100 shares	93	98	93	98
Do. consol. mort	115	117	115	117
Do. Adjustment Bonds	104	109	104	109
Do. Income Bonds	104	107	104	107
Det., G'd Haven & Mil. Equip bds	112	114	112	114
Do. Con. M. 5p.c., till '83 aft'r 6p.c	110	112	110	112
Illinois Central $100 shares	135	137	134¼	135¼
Lehigh Valley Cons. mortgage	118	122	118	122
Louisville & Nashville mort 6s.	97	100	97	100
Do. Sink. Fund bds (S. & N. Ala)	96	99	97	100
Do. capital stock $100 shares.	73	75	87	89
N. Y. Cent. & Hud. R. mt. bds.	134	137	134	137
Do. $100 shares	131½	132½	133	134
Do mort. bonds (stg.)	118	120	118	120
N. Y., Lake Erie & West., $100 shs	36¾	37¼	39¾	40¼
Do. 6 p. c. pref. $100 shares	75	77	78	80
Do. 1st Con. Mort. bds (Erie)	128	130	128	130
Do. do. Funded Coupon bds.	124	126	124	126
Do. 2d Consol Mort. bonds	97	99	99¼	100½
Do. do. Funded Coupon bds.	95	97	97	100
Do. Gold Income bonds	88	92	88	92
N. Y., Pa. & Ohio 1st mort. bonds.	44½	45½	45	46
Do. Prior Lien bds (sterling)	104	108	104	108
Pennsylvania, $50 shares	61	62	61½	62½
Do. Con. Sink Fund Mort.	115	117	115	117
Philadelphia & Reading $50 shs	29	30	31¼	31¾
General Consol Mortgage	115	117	115	117
Do. Improvement Mortgage	102	104	102	104
Do. Gen. Mtg. '74, ex-def'd coup.	96	98	97	99
Do. Scrip for the 6 def. ½ coup.	96	99	96	99
Pittsb., Ft. W. & Chi. Eq. bds.	104	106	104	106
St. L. Bridge 1st mort. gold b'd.	125	127	125	127
Do. 1st pref. stock	90	95	95	98
Union Pa. Land Grant 1st. mtg.	115	117	116	118
Wabash, St. L. & P. $100 shs	28	30	32	34
Do. $100 pref. shares	55	57	61	62
Do. gen. mort. bonds	83	85	86	88

AMERICAN RAILROAD JOURNAL.

Financial and Commercial Review.

THURSDAY EVENING, March 16, 1882.

THE money market this morning was easy at 4 to 6 per cent for call loans on stocks. Time loans were 5@6 per cent on stocks, and 2½@3½ per cent on Governments. Call loans on United States bonds were 2@3 per cent. Prime mercantile paper was 5@6 per cent.

The posted rates of the leading drawers of of sterling were 4.85½@4.86 and 4.89½. The actual rates were 4.84¾@4.85 and 4.88¾@4.89 with cable transfers 4.89¾@4.90½, and prime commercial bills 4.83½@¾. The actual rates for Continental bills are: Francs, 5.14⅜@5.15 and 5.19⅜@5.20. Marks 94⅝@¾ and 95½@⅝, and guilders, 40⅛ and 40⅝.

The stockholders of the St. Louis and San Francisco Railroad Co., at their meeting in St. Louis on the 14th inst., approved of the propositions to purchase the St. Louis, Arkansas and Texas Railroad and the Joplin Railway, and to lease, purchase or consolidate the St. Louis, Wichita and Western Railway; and also the action of the board of directors in making a mortgage deed on all the Company's property to secure the payment of coupon bonds to the amount of $30,000,000.

The Secretary of the Treasury issued on the 15th inst. three calls for bonds (continued sixes) to the amount of $15,000,000, payable in parcels of $5,000,000 each on May 3, 10 and 17 respectively. The bonds embraced in (109th) the 3d of May call are "continued" registered bonds of the acts of July 17 and August 5, 1861, as follows:—

$50—No. 2,151 to No. 2,200; $100—No. 14,701 to No. 15,300; $500—No. 10,701 to No. 10,900; $1,000—No. 51,601 to No. 52,300; $5,000—No. 16,851 to No. 16,950; $10,000—No. 34,951 to No. 35,500. All the numbers are inclusive.

Many of the bonds originally included in the above numbers have been transferred and cancelled, leaving outstanding the amount overstated. The call for May 10 (110th) embraces:—

$50—No. 2,201 to No. 2,230; $100—No. 15,301 to No. 15,500; $500—No. 10,901 to No. 11,000; $1,000—No. 52,301 to No. 53,050; $5,000—No. 16,951 to No. 17,050; $10,000—No. 35,501 to No. 36,100. All the numbers are inclusive.

The call which expires May 17 (111th) embraces the following:—

$50—2,231 to No. 2,250; $100—No. 15,501 to No. 15,700; $500—No. 11,001 to No. 11,100; $1,000—No. 53,051 to No. 53,500; $5,000—No. 17,051 to No. 17,100; $10,000—No. 36,101 to 36,670. All the numbers are inclusive.

From a return presented to Parliament it appears that the shareholders of the Canada Pacific Railway are George Steven, $500,000; Duncan McIntyre, $600,000; J. S. Kennedy & Co., New York, $500,000; J. J. Hill, St. Paul, $500,000; R. B. Angus, $500,000; D. A. Smith, $500,000; H. S. Northcote, $186,000; Morton, Rose & Co,, $741,000. The Frankfort interest is $122,500; the London interest, $255,000; the Paris interest, $745,000, making a total subscribed capital of $6,100,000, upon which 30 per cent has been paid.

The message of President Nunez, on the reassembling of the Congress of the United States of Colombia, estimated the exports at $15,836,943 for the year, while the imports were $12,183,970. The entire revenues for the year were $6,339,209. No interest was paid to the foreign bondolders.

The capital stock of the Concord (N. H.) Horse Railroad Company has been increased $5,000 for the purpose of extending the line from West street southerly through Turnpike to Stow, a distance of about one-fifth of a mile. The capital will be increased in the sum of $5,000.

An injunction has been issued against the Minnesota State Treasurer, prohibiting the payment of interest on the coupons of $4,000,000 of new bonds of the State, on the ground that the Governor has been prohibited by injunction from issuing the said bonds.

In accordance with the recent decision of the Supreme Court in the case of Welsh vs. Merritt, the Secretary of the Treasury has notified the collectors of customs at New York, Philadelphia and Boston that the instructions of July 19 and September 2, 1879, are revoked, and that duties on imported sugar are to be collected on the apparent color of the sugar as compared with Dutch standard. It is stated that upward of $2,000,000 will have to be refunded.

The Receivers of the Philadelphia and Reading Railroad and Coal and Iron companies commenced paying on the 15th inst. the six months' interest to March 1 on the Receiver's certificates issued September, 1880, for materials and supplies.

The $10,000,000 new debenture bonds of the Louisville and Nashville Railroad Company, which have recently been negotiated, have forty years to run, bear six per cent interest, principal and interest payable in gold, and are secured by the pledge of bonds and stocks of various roads owned by the Louisville and Nashville, by a mortgage to follow the general mortgage, and by a sinking fund sufficient to extinguish the whole issue of bonds by the time of maturity.

The Secretary of the Treasury has suspended the order for the collection of the wages certificate tax of the Philadelphia and Reading Railroad Company until the present suit to test the legality of the tax reaches a decision. Ordinarily the course is to compel the tax payer to pay and bring a claim for recovery if the tax is wrong, but the Secretary of the Treasury, it is stated, reverses the rule, because the courts have already sustained an injunction to restrain the collection of the tax, and four committees of Congress have, at different times, reported in favor of measures to relieve the company from it. He has, therefore, decided that the legality of the tax should be finally and authoritatively adjudicated before proceeding to collect.

The rule to show cause why an injunction should not be issued in the case of Edward C. Knight against the Central Railroad Company of New Jersey and others, restraining the Company, and Frederick A. Potts, George G. Haven, Sidney Dillon, Jay Gould, John S. Barnes, Benjamin Williamson, John Kean and Frederick T. Frelinghuysen from issuing any additional stock by virtue of Senate bill 111, which rule was returnable on the 13th inst. in the District Court at Trenton, N. J., was postponed until March 28th by consent of counsel. The temporary injunction granted the 24th ult. was continued.

In the United States Circuit Court, Pittsburg, Penn., on the 7th inst., in the case of the Central Railroad Company of New Jersey vs. the Lehigh and Wilkesbarre Coal Company, the final report of the Master was received and confirmed; and the receivers having turned over to the proper officers the several mining properties under their control, and their actions having been ratified in the courts having jurisdiction of the property of said company in New York, Rhode Island, Connecticut and Massachusetts, and the decree of the Circuit Court having been complied with, the receivership was discharged, and the receiver's bond vacated and sales filed. This is the end of six years' litigation, and the Master's report shows that the Company is now in good financial condition. In addition to the inventories of property owned by the company the receivers handed over $38,000 in cash, with which certain outstanding current obligations are to be settled. The withdrawal of the receivers will not disturb the relations of this corporation with the Central Railroad Company of New Jersey.

The Chief of the Bureau of Statistics reports that the total value of the exports of domestic breadstuffs from the United States in February, 1882, were $11,173,239, and in February, 1881, $13,919,046, a decrease of $2,735,807; and for the eight months ended February 28, 1882, $135,294,678, against $182,428,626 for the corresponding period of the previous year, a decrease of $47,123,948. The greatest portion of this decrease was in wheat, which fell off 35,000,000 bushels in quantity and $32,000,000 in value. In wheat flour the decrease was over

$6,000,000, Indian corn, 22,000,000 bushels in quantity and nearly $8,000,000 in value, and in rye, $1,000,000 and a like number of bushels.

The Poplar Creek Coal and Iron Co., which was organized at Knoxville, Tenn., on the 3d inst. with a capital of $1,000,000, owns twenty thousand acres of land at Winter Gap, thirty miles from Knoxville and ten miles from the Cincinnati Southern Railroad, embracing the celebrated Poplar Creek coal fields. The company expects to be shipping coal by the 1st of November.

The following securities have been added to the list at the New York Stock Exchange: $300,000 general mortgage 6 per cent bonds of the Houston and Texas Central Railway; $7,000,000 6 per cent bonds of the Louisville, Cincinnati and Lexington Railway, issued by the Louisville and Nashville Company; $1,242,500 7 per cent first mortgage consolidated bonds of the Denver and Rio Grande Railway; $6,000,000 common stock and $1,000,000 6 per cent income bonds of the Virginia Midland Railway; $528 000 Texas and Pacific (Rio Grande Division) bonds; $520,000 first mortgage bonds and $520,000 coupon mortgage bonds of the International and Great Northern Railroad; $6,100,000 Chicago and Pacific (Western Division) 5 per cent bonds of Chicago, Milwaukee and St. Paul Railway; $3,500,000 6 per cent first mortgage bonds and $5,000,000 stock of the Elizabethtown, Lexington and Big Sandy Railroad; $2,000,000 6 per cent Eastern extension bonds of the Chesapeake and Ohio Railway, and $762,000 bonds of the Houston, East and West Texas Railway. The Governing Committee transferred the first consolidated mortgage bonds of the Pittsburg, Cincinnati and St. Louis Railway from the "free list" to the regular call, and placed $2,500,000 of the second consolidated mortgage coupon bonds on the regular call.

The following quotations of sales of railway and other securities, for the week, are in addition to those given elsewhere in our columns:

New York.—Atlantic and Pacific 6s, 95⅜; Am. Dock and Imp. 5s, 97; Boston and New York Air Line pref., 62½; Chicago, St. Paul, Minneapolis and Omaha, 33¼; do. pref., 103⅛; do. consol., 99, Chicago, St. Louis and New Orleans, 73; Chesapeake and Ohio cur. int., 45; Chicago, Milwaukee and St. Paul 1st, S. M. div., 103¾; do. Chicago and Pacific W. div., 92; Columbus, Chicago and Indiana Central inc., 51; Chicago and Northwestern S. F. 5s, 101¼; Cairo and Fulton 1st, 107½; Denver, South Park and Pacific 1st, 101⅞; Denver and Rio Grande, 56⅛; do. 1st, 112⅝; do. consol., 100; Danbury and Norwalk, 65; East Tennessee, Virginia and Georgia, 11⅝; do. pref., 19; do. inc., 50⅜; do. 5s, 72; Elizabeth, Lexington and Big Sandy 6s, 97; Evansville and Terre Haute 1st consol., 95½; Flint and Pere Marquette, 91; Green Bay, Winona and St. Peter, 20¼; do. 1st, 85; Indiana, Bloomington and Western, 39; do. 2d, 73; International and Gt. Northern 1st, 107; do. coupon 6s, 84; Keokuk and Des Moines 1st, 105½; Kansas Pacific 1st consol., 102; do. 6s, 1895, 110; do. 6s, Denver div. ass., 107; Louisiana and Missouri River, 16; Lake Erie and Western, 30⅛; do. inc., 55; Louisville, New Albany and Chicago, 64½; do. 1st, 101½; Louisville and Nashville Gen'l mort. 6s, 96⅝; Lehigh and Wilkesbarre consol. ass., 103; Lafayette, Bloomington and Muncie 1st, 101; Michigan Central 8s, S. F., 104⅝; Manhattan Beach, 30; Marietta and Cincinnati 1st pref., 10; do. 2d pref., 6; Mobile and Ohio, 25; do. 1st deben., 82; do. 24 endeb., 51; do. new mort. 110¾; Missouri, Kansas and Texas, 29½; do. consol., 102; do. 2d, 60½; do. gen'l mort. 6s, 77½; Missouri Pacific, 94⅞; do. 1st consol., 102; Memphis and Charleston, 52½; Minneapolis and St. Louis, 19; Milwaukee, Lake Shore and Western, 41¾; do. 1st, 99½; Metropolitan Elevated 2d, 90; Nashville, Chattanooga and St. Louis, 60; do. 1st, 114⅞; New York, Ontario and Western, 24; Norfolk and Western pref., 48; do. Gen'l mort., 102; New Orleans Pacific 1st, 86; Northern Pacific 1st coupon, 97¾; Ohio Southern, 17; do. inc., 27¾; Ohio Central, 19½; do. 1st, 84½; do. inc., 34¼; Oregon Railway and Nav., 130; do. 1st, 106½; Oregon Transp., 63½; Peoria, Decatur and Evansville, 28; Rome, Watertown and Ogdensburg, 20; do. 1st, 80; Rochester and Pittsburg, 33⅛; do. 1st, 100; do. inc., 40; Richmond and Alleghany, 22½; do. 1st, 90; Richmond and Danville, 121; do. West Point, 111; do. 1st, 98; St. Louis, Jacksonville and Chicago 1st, 115½; South Carolina 1st, 100; St. Louis and San Francisco 2d, Class B, 87; Paul and Duluth, 29¾; St. Paul, Minneapolis and Manitoba, 112½; do. 1st, 109; do. 2d, 106½; St. Paul and Sioux City 1st, 111¼; Southern Pacific of California 1st, 104¾; St. Louis, Iron Mountain and Southern, Arkansas Branch 1st, 107½; do. Cairo, Arkansas and Texas 1st, 105½; Toledo and Wabash Equip., 61; Toledo Delphos and Burlington, 15½; do. inc., 21; Texas and Pacific, 38⅝; do. inc. L. G., 62; do. consol. 6s, 95; Rio Grande div. 6s, 80; Toledo, Peoria and Western 1st, 111; Winona and St. Peter 1st, 109½; Wabash, St. Louis and Pacific Gen'l mort. 6s, 82½; do. Chicago division 5s, 78; Arkansas 7s, M., O. & R. R., 25; do. L. R. & Ft. S., 20; do. L. R., P. B. & N. O., 22; Alabama, Class A, 81½; Louisiana 7s, consol., 64; Missouri 6s, 1887, 106; do. H. & St. J. issue, 1886, 106; North Carolina consol. 4s, 80¾; Tennessee 6s, old, 47¾; Sutro Tunnel, ⅝; Am. Dist. Tel., 43; Colorado Coal and Iron, 39¼; do. 6s, 90; Consolidation Coal, 29½; Robinson Mining Co., 3⅞; Standard, 15.

Philadelphia.—Am. S. S. Co. 6s, 107½; Central Transportation, 35; Catawissa new pref., 53; Chesapeake and Delaware Canal 6s, 88½; Delaware Division Canal, 41; Huntingdon and Broad Top Mt. consol. 5s, 88; Harrisburg and Lancaster 6s, 103; New Orleans Pacific 6s, 88; Nesquehoning Valley R. R., 54½; Pennsylvania and New York Canal 7s, 1896, 123; Philadelphia, Wilmington and Baltimore 4s, 92; Philadelphia and Reading income 7s, 95; Philadelphia City 6s, 1884, 104½; do. 6s, 1895, free, 126½; do. 6s, 1901, free, 131; do. 4s, 100½@112; Pittsburg 7s, W. L., ex-int., 123½; Sunbury, Hazleton and Wilkesbarre 2d mort. 6s, 26; Shamokin Valley and Pottsville 7s, 118; Steubenville and Indiana 7s, 103; Texas and Pacific consol. mort. 6s, 95½; Union and Titusville 7s, 99; Warren and Franklin 7s, 109. The latest quotations are: City 6s, 108@118; do. free of tax, 128@132; do. 4s, new, 108@113; Pennsylvania State 5s, new loan, 117½@118½; do. 4s, old, 110@112; do. 4s, new, 114@114½; Philadelphia and Reading R. R., 27⅛@27½; do. consol. mort. 7s, reg., 124½@125; do. mort. 6s, 119@120; do. gen'l mort. 6s, coupon, 93@94; do. 7s, 1893, 120@120¾; do. new, conv., 71@73; United New Jersey R. R. and Canal, 184@185; Buffalo, Pittsburg and Western, 16½@16⅝; Pittsburg, Titusville and Buffalo 7s, 93½@95; Camden and Amboy mort. 6s, 1889, 113½@114; Pennsylvania R. R., 60½@60¾; do. general mort. 6s, coupon, 124@124½; do. reg., 124@125; do. consol. mort. 6s, reg., 124½@125; Little Schuylkill R. R., 57@57½; Morris Canal, 65@69; do. pref., 160@169; Schuylkill Navigation, 5@6; do. pref., 12½@13; do. 6s, 1882, 92@93; do. 1872, 104½@106; Elmira and Williamsport pref., 58@60; do. 6s, 115@—; do. 5s, 95@100; Lehigh Coal and Navigation, 39½@39⅝; do. 6s, 1884, 104@105; do. R. R. loan, 116½@118; do. Gold Loan, 111@112; do. consol. 7s, 116½@117; Northern Pacific, 30⅞@31; do. pref., 70½@70⅝; North Pennsylvania, 63@64; do. 6s, 102@106; do. 7s, 119@120; do. General mort. 7s, reg., 121½@122½; Philadelphia and Erie, 14@15; do. 7s, 114¾@115¼; do. 5s, 104@105; Minehill, 62@62½; Catawissa, 18¾@19¼; do. pref., 54¼@55¼; do. new pref., 53@54; do. 7s, 1900, 116½@—; Lehigh Valley 60⅝@61⅛; do. 6s, coupon, 122@122½; do. reg., 123@123½; do. 2d mort. 7s, 130½@131¼; do. consol. mort. 120@123; Fifth and Sixth streets (horse), 152@155; Second and Third, 109@115; Thirteenth and Fifteenth, 74@80; Spruce and Pine, 45@50; Green and Coates, 70@80; Chestnut and Walnut, 90@91; Germantown, 70@80; Union, 110@115; West Philadelphia, 107@112; People's 12¼@13; Continental, 100@102.

Baltimore.—Atlanta and Charlotte, 69½; do. 1st, 107¾; Atlantic Coal, 1.40; Baltimore City 6s, 1884, 104½; do. 6s, 1900, 128½; do. 6s, 1902, 130; do. 6s, 1903, 114½; do. 5s, 1894, 115; do. 5s, 1916, 122; do. 4s, 1920, 112; Baltimore and Ohio, 1st, pref., 126; do. 2d pref., 122; do. 6s, 1885, 107½@107¾; Columbia and Greenville 1st, 101; Canton Co. 6s, gold, 103½; Marietta and Cincinnati 3d, Trust certif., 54½; Maryland 6s, exempt, 108¾; Ohio and Mississippi, Springfield div. 1st, 119½; Richmond and Danville gold bonds, 101; Union R. R. 6s, end. by Canton Co., 113; Virginia Midland, 39¾; do. 1st mort., 111; do. 2d mort, 107⅞; do. 5th mort., 94; Virginia Peeler, coupons, 35; Wilmington, Columbia and Augusta, 110. The lastest quotations are: Atlanta and Charlotte Railroad, 69½@—; do. 1st, 107½@108; Baltimore and Ohio, 190@191; Columbia and Greenville 1st, —@102; City Passenger R. R., 40@41; Central Ohio 1st, 108@—; Canton 6s, gold, 102@104½; Marietta and Cincinnati 1st, 123@124; do. 2d, 100¾@100⅞; do. 3d, 53¾@54; Northern Central, 48⅜@48½; do. 6s, 1885, 106@107; 6s, 1900, gold, 114½ do. 1904, gold, 112½@—; do. 5s, 1926, —@97¾; Pittsburg and Connellsville, 7s, 122@—; Richmond and Allegany, 19½@22; Virginia Midland 2d mort., 107¾@108; do. 5th mort., 90¼@94; do. inc., —@75; Virginia consol. coupon, 50@52; do. 10-40s, 40; Virginia and Tennessee 8s, 120@125; do. 2d, 6s, 100½@102.

Boston.—Atlantic and Pacific 6s, listed, 93½; 6s, inc., 32; Boston Water Power, 5¼; Boston Land, 7¾; Burlington and Missouri River in Neb. 6s. non-exempt, 102; Central Iowa, 30; Chicago, Milwaukee and St. Paul, Dubuque div. 6s, 102; Chicago, Burlington and Quincy 4s, old, 86½; do. 4s, Denver ext., 84½; do. Wisconsin Valley div., 97; Connotton Valley, 7s; do. 7s, 67; do. 7s, Straitsville, 35; Cincinnati, Sandusky and Cleveland 7s, 98; Chicago and West Michigan, 70, do. 5s, 94; Flint and Pere Marquette, 20½; do. pref., 91; Iowa Falls and Sioux City, 75; Kansas City, St. Joseph and Council Bluffs 7s, 115; Kansas City, Fort Scott and Gulf, 70; do. pref., 122; do. 7s, 110; Kansas City, Lawrence and Southern, 5s, 104; Kansas City, Topeka and Western, 7s, 116½; Little Rock, Missouri River and Texas, 40; Louisiana and Missouri River R. R., 16; do. pref., 30; Little Rock and Fort Smith, 39½; do. 7s, 110; Mexican Central 7s, 78½; do. block, new, 93; Marquette, Houghton and Ontanagon, 50; pref., 110; do. 8s, 114; Massachusetts Central, 6½; do. 1st, 70; New York and New England 6s, 103½; New Mexico and Southern Pacific 7s, 110½; Northern Pacific 6s, 96; Portsmouth, St. Falls and Conway, 4½s, 87; Rutland, pref., 23½; do. 6s, 100; Rupublican Valley, 6s, 103¾; South Boston Horse Rd, 71; Southern Kansas and Western, 7s, 112; Summit Branch, 10; SonoraR. R., 10; 1st, 7s, 99¾; do. block No.3, 465; do. No. 4, 325; Toledo, Delphos and Burlington, 7¾; do. Southeast div. 6s, 67; do. inc., 19¼; do. Cincinnati and St. Louis, 7¾; do. inc., 18; Wisconsin Central, 16; Atlantic Mining Co., 14; Allouez, 2¾; Brunswick Antimony, 12; Catalpa, 47½c; Crescent, 37½c; Franklin, 10½; Huron, 2¾; Harshaw, 3; National, 2; Osceola, 32; Phœnix, 3; Pewabic, 13; Sullivan, 1⅛; Silver Islet, 23.

It is pleasant to read the following, but how would you feel if it were yourself? A celebrated divine having preached before a Bible Society, a committee of the Society waited on him to request the publication of so much of the sermon "*as related to the subject in hand.*"

Production of the Precious Metals.

THE work of gathering information in reference to the production of precious metals in the United States was entrusted by the Census Bureau to Mr. Clarence King, who divided the field into three parts: the Pacific division, with headquarters at San Francisco; the Rocky Mountain division, with headquarters at Denver; and the Eastern division, with headquarters at Newport, R. I. In the course of the work 2,292 mines were examined, and 413 mills and smelting works. The production by States and geographical divisions for the census year ending May 31, 1880, is shown in the following table:—

	Gold.	*Silver.*	*Total.*
PACIFIC DIVISION.			
Alaska	$5,951	$51	$6,002
Arizona	211,965	2,325,825	2,576,790
California	17,150,941	1,150,887	18,301,828
Idaho	1,479,653	464,550	1,944,203
Nevada	4,888,242	12,430,667	17,318,909
Oregan	1,097,701	27,793	1,125,494
Utah	205,747	3,068,614	3,274,361
Washington	135,800	1,019	136,819
Total	$25,176,000	$19,469,406	$44,645,406
DIVISION OF THE ROCKY MOUNTAINS.			
Colorado	$2,699,898	$16,549,274	$19,249,172
Dakota	3,305,843	70,813	3,376,656
Montana	1,805,767	2,905,068	4,710,835
New Mexico	49,354	392,337	441,691
Wyoming	17,321	....	17,321
Total	$7,878,183	$19,917,492	$27,795,675
EASTERN DIVISION.			
Alabama	$1,301	.....	$1,301
Georgia	81,029	$332	81,361
Maine	2,999	7,200	10,199
Michigan	.....	25,858	25,858
New Hampshire	10,999	16,000	26,999
North Carolina	118,953	140	119,093
South Carolina	13,040	56	13,096
Tennessee	1,998	.....	1,998
Virginia	9,321	.....	9,321
Total	$239,640	$49,586	$289,226
SUMMARY.			
Pacific Division	$25,176,000	$19,469,406	$44,645,406
Division of the Rocky Mount's.	7,878,183	19,917,492	27,795,675
Eastern Division	239,640	49,586	289,226
Total	$33,293,823	$39,436,484	$72,730,307

The Coal Trade.

THE leading coal-carrying companies make the following reports of their tonnage for the week ending March 4th, and for the year to same date, compared with their respective amounts carried to the same time last year:—

	Week.	1882.	1881.
Reading Railroad	162,729	1,817,431	1,682,952
Schuylkill Canal	.....	27,655	.....
Lehigh Valley	149,876	1,415,800	1,276,337
Delaware, Lackawanna and Western	90,138	619,599	686,811
Shamokin	17,593	151,305	162,392
Central R. R. of New Jersey	48,870	559,649	640,458
United R. R. of New Jersey	41,645	252,856	260,767
Pennsylvania Coal	22,961	145,562	177,745
Delaware and Hudson Canal	83,823	502,296	594,255
Huntingdon and Broad Top Mountain	13,760	111,998	75,301
Penn. and New York	35,846	372,369	308,812
Clearfield, Pa.	56,242	424,134	316,329

The total tonnage of anthracite coal from all the regions for the week ending March 4, as reported by the several carrying companies, amounted to 560,041 tons, against 482,821 tons in the corresponding week last year, an increase of 77,220 tons. The total amount of anthracite mined for the year is 3,717,970 tons, against 4,020,381 tons for the same period last year, a decrease of 302,411 tons. The quantity of bituminous coal sent to market for the week amounted to 107,933 tons, against 76,483 tons in corresponding week last year, an increase of 31,455 tons. The total amount of bituminous mined for the year is 783,116 tons, against 619,217 tons for the corresponding period last year, an increase of 163,899 tons. The total tonnage of all kinds of coal for the week is 667,974 tons, against 559,304 tons in corresponding week last year, an increase of 108,670 tons; and the total tonnage for the coal year is 4,501,086 tons, against 4,639,598 tons to same date last year, a decrease of 138,512 tons. The quantity of coal and coke carried over the Pennsylvania Railroad for the week ending March 4 was 233,323 tons, of which 156,783 tons were coal and 76,540 tons coke. The total tonnage for the year thus far has been 1,867,682 tons, of which 1,313,583 tons were coal and 554,099 tons coke. These figures embrace all the coal and coke carried over the road east and west. The shipments of bituminous coal from the mines of the Cumberland coal region for the week ending March 4 were 48,419 tons, and for the year to that date 362,257 tons, an increase of 124,540 tons, as compared with the corresponding period of 1881. The coal was carried to tide-water as follows: Baltimore and Ohio Railroad— week, 39,132 tons; year, 295,541 tons; increase compared with 1881, 86,343 tons. Chesapeake and Ohio Canal— week, 1,374 tons; year the same; increase compared with 1881, 1,374 tons. Pennsylvania Railroad—week, 7,598 tons; year, 63,647 tons; increase compared with 1881, 34,948 tons. The year 1882 so far has been one of great prosperity to the Cumberland region, the shipments to date aggregating 100,000 more than during the corresponding period of any year in the last decade. The shipments for the first nine weeks of each year of the past eleven were as follows: 1872, 177,776 tons; 1873, 226,442 tons; 1874, 195,924 tons; 1875, 147,110 tons; 1876, 165,059 tons; 1877, 106,695 tons; 1878, 106,630 tons; 1879, 136,240 tons; 1880, 263,042 tons; 1881, 237,717 tons; 1882, 362,257 tons. The Reading Railroad shipment for last week, ending March 11, was 93,500 tons, of which 14,400 tons were sent to and 24,000 tons shipped from Port Richmond, and 5,700 tons sent to and 12,500 tons shipped from Elizabethport.—*Phil. Ledger, March* 13.

Memphis and Little Rock Railroad.

THE Supreme Court of Arkansas has decided that unless the Memphis and Little Rock Railroad Company pays the State $202,133.33, with interest at 3 per cent from December 1879, the Memphis and Little Rock Railroad and rolling-stock shall be sold by a special commissioner on March 30, 1882, subject to the mortgage of May, 1860, and the purchaser will be given immediate possession of the road. It appears that in January, 1861, the Legislature appropriated $100,000 and loaned it to the Memphis and Little Rock Railroad Company for ten years, the Company giving a mortgage on the road as collateral. The mortgage was never recorded, but was filed in the office of the Secretary of State. The State brought suit to foreclose the mortgage, when the Company claimed that in May, 1860, it had given a mortgage on all of its property, which mortgage was duly filed; that in March, 1871, a third mortgage had been executed and filed, and that under this mortgage the road had been sold, subject to the liens first named, and a new company organized; and that the bondholders under the first mortgage had accepted a proposition made them by the new company and surrendered their bonds to the trustees named in the proposition; that the first and last mortgages were subsequently forwarded, in trust, and the present company organized, and hence that the State had nothing but a mortgage of the equity of redemption. The Chancery Court, where the suit was brought, decided in favor of the State, and the railroad company appealed to the Supreme Court.

Something about Brakemen.

"How many types of the many-sided brakemen we have traveled with," said the jester, musing over five years of platform travel. "There is the plural one, you know, who always doubles up on the names of his stations and calls out, 'Clevelands! Clevelands! Change cars for Hudsons, Ravennas and Akrons! This car's for Buffalo's!'"

"And the jovial one," said the fat passenger," the jolly brakeman, who is always happy; who, when we run into a penitentiary town, always shouts, 'Moyamensing! Change suits! seven years for refreshments! If you tell him the fire has gone out, he wants to know who left the door open. The crosser the passengers are, the merrier he is, and it would be a thing without parallel to see him mad."

"And the dismal brakeman," said the cross passenger, "who puts wet wood in the stove and leaves the door open, and spills grease on you when he lights the candles, and if you ask him when we get there he sighs and says we may never get there. He points out of the window at a whistling-post and says: 'There's where number six run off and killed Billy Bly last week.' And when we cross a ravine he says, 'This is the same kind of a bridge the Astabula disaster happened on.' And he points to a heart-broken looking man two seats ahead of you and tells you, 'His wife is dead. We've got her in the baggage car.' And then in a determined effort to increase your gloom, if possible, he adds, 'Only one he had.'"

"And the cautious brakeman," said the sad passenger, "the slow spoken man who always looks at his watch very carefully before he will tell you at what hour the train is due at the terminus, and looks out the window very earnestly to get his land mark before he tells you where you stop for dinner."

"And the irascible duffer," said the man on the wood box, "who roars 'Naw!' when you ask him if this is a mail train and bangs the door against your elbow every time he comes in, and tells a bewildered woman who wants to know how she can get to Niblet's Siding that night 'that she can get off at the tank when we stop at Brewster's, run down on 12 and catch 22 coming back on 15's time and that's the only train that stops there.' And he gets so filled with wrath that he has to go out on the platform now and then and swear it off at the little snow-birds on the telegraph wires. I know him," the man on the wood box said, as he rubbed his elbow with pathetic emphasis.

"And the liar," said the woman who talks bass, "who tells you that the train makes close connection with other trains at places that are not junctions, who tells you he'll build a fire in that car after they leave the next station and you find that station is the end of his run, who says he'll help you out with your bundles and then runs back into the parlor car to talk with the engineer's daughter, and who always tells you he has no key when you ask him to turn a seat for you."—*Burlington Hawkeye.*

THE old man sighed as he took the golden-haired, laughing boy upon his knees, and stroking his shining tresses, said: "Ah, how much I should like to feel like a child again." Little Johnnie ceased his laughter, and looking soberly up into his grandfather's face, remarked: "Then why don't you get mamma to spank you?"—*Brooklyn Eagle.*

A quiet young man from Shangha
Indulged in a piece of squash pai.
His life work is o'er,
His form here no moer
Will visible be to the ai.

Incidents on a Street-Car.

"THAT makes eight of those fellows I've helped off the car on this trip," said the conductor of a Broadway car, as he assisted a drunken man to the pavement at Barclay street last night.

"Did they all insist in shaking hands as that one did?" asked a *Tribune* reporter, who was on the rear platform.

"Oh, my, yes!" replied the conductor. "I always have to shake hands with them. Sometimes it seems as if they would never let go. Why, only two or three nights ago a big Irishman got hold of my hand and nearly pulled me off the car. I held on to the brake handle with all my might, and pulled the strap for the car to start, but the fellow still held on until I thought sure I would go over backwards. Another time I was running a car on the Grand and Forty-second street cross-town line, when a great burly German got on, and insisted on hugging me. I tried to get him to sit down, but he was bound to stand on the platform, and before I knew it he had his arms about me, and was hugging me with all his might. I was pretty near smothered, but at last managed to squirm out of his grasp. Yes, they always want to shake hands, and often ask me to come and see them. Almost all say that they will see me again, and invite me to drink."

"Do you ever have any trouble in getting their fares?"

"No; as a general thing they have a little money left over from their spree, although often they hand over only a penny or a button at first. Then again, they bother us in taking a long time to find their money, pulling a penny out of one pocket and 2 cents out of another, until they get enough. One fellow gave me the top of a pepper-box, one night, for a quarter, while another handed over a $5 gold piece with 4 cents. I was sorry for that fellow, for I didn't discover his mistake until I was handing in the fares at the office."

"Do they trouble other passengers much?"

"Oh, no! Sometimes they get boozy and fall over against other passengers, but we generally get them into corner seats where they bother no one. They are usually harmless. Once in a while one thinks himself insulted and makes a row, but then we put him right off the car. The hardest thing is to get them to sit still. They are always bobbing up to ask if they have got to their street yet. And then they will persist in riding on the rear platform, where we have to hold them on, which is a great nuisance. When they want to get off the car they are mad if we come to a full stop. They want to get off while the car is moving. If we stop, they wait till we start."

"Do they often fall off the car while it is in motion?"

"Once in a while, but they are never hurt very badly—only cut and bruised a little. There seems to be a guardian angel or something that watches over a drunken man. We always look out for them, but sometimes while we are collecting fares, they fall off."

"Liquor is a good thing," said the conductor, looking wistfully at a beer saloon across the street," if you use it right, but if you use it rashly it will misuse you." At this point the reporter thought it was time to go.

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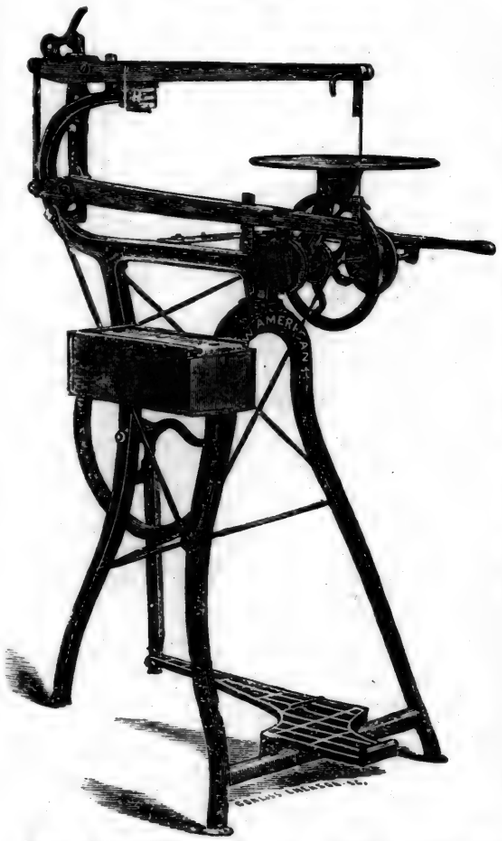
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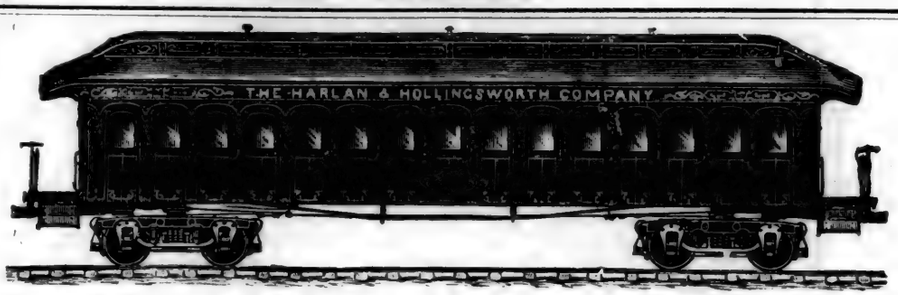
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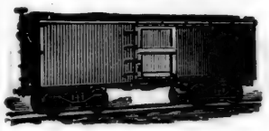
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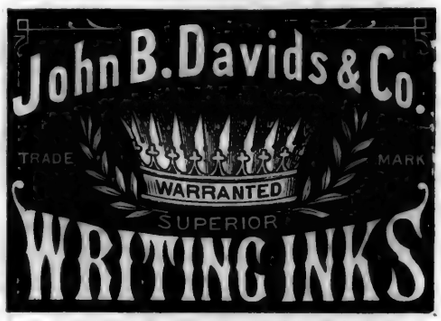
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SECOND QUARTO SERIES.—VOL. XXXVIII., No. 12.] NEW YORK, MARCH 25, 1882. [WHOLE No. 2,396.—VOL. LV.

Propelling Street Cars by Air.

A TEST of the Mekarski compressed-air motor for driving street cars was made yesterday in the Dauphin street depot of the Germantown Passenger Railway Company. The motor is a French patent, and controlled in this country by Col. John E. Gowen, who has undertaken to demonstrate the feasibility of running cars on the streets of Philadelphia upon this new plan. The car fitted up for the test was improperly constructed for developing the full power of the motor, as the battery of cylinders was placed in one end of the car instead of being distributed underneath. Consequently much valuable space was lost, and the battery contained only seventy cubic feet of air instead of 100 as designed. The object of the test, however, was attained in showing that the motor had sufficient power to drive a heavily loaded car over the tracks. With the battery charged with air compressed to 450 pounds to the square inch the car made several trips up and down in the depot, but did not venture out on the street, as the tracks had not been prepared for it. It will be several weeks yet before thorough tests for efficiency can be made, and if these result satisfactorily tests for economy will be made with cars constructed on an approved model. It is claimed that cars propelled by this system can be run at a cost of 4 cents per mile, or one-half what horse-power costs.—*Philadelphia Record, March* 15.

Railway Progress in Spain.

THE railway system has not yet acquired any very great development in Spain, but still it is making some progress. In January this year the Spanish railway network comprised 4,573⅛ miles of first-class in operation, 856⅞ miles of similar line in course of construction, and 868¾ miles of similar line which had received official approval, making an aggregate of 6,698¾ miles. At the same date there were 263⅛ miles of line of local interest in operation, and 492¼ miles of similar line in course of construction or authorized, making an aggregate of 755⅝ miles. Spain also possessed at the same date 135⅜ miles of rural tramways, of which 34⅜ miles were in operation. It is, therefore, claimed that Spain possesses altogether 7,187½ miles of line, of which 4,871¼ miles are in working, while 1,310⅝ are in course of construction, and 1,007½ miles have only attained the stage of an authorization. The extent of new line opened in Spain last year was 238⅛ miles. The first Spanish line was that from Barcelona to Mataro, opened in 1848. Between 1848 and 1882—a period of 34 years—the annual average constructive progress made had thus been 142½ miles per annum. The most active period in the annals of Spanish railway construction must be said to be the years comprised between 1859 and 1866, inclusive. In these eight years 2,685 miles were completed, giving an average of 335¾ miles per annum. The first rural tramway brought into operation in Spain was opened in 1875, and small additions have been made to this class of line in every subsequent year.

Firemen as Archers.

GENERAL M. C. MEIGS and two other archers were out at the Wallach schoolhouse Saturday afternoon, shooting arrows with life-lines attached as for fire-escapes. There was no difficulty in throwing an arrow, with the end of a line attached, clear over the flagstaff, about eighty feet high. An arrow with a 150 feet of cord wound around the head was thrown at least twice the height of the building and flagstaff. With a little practice any of our firemen will be able to throw the end of a line into a window seventy-five feet above the pavement, or to throw a small ball of twine as high as the Washington Monument. Such twine will hold the weight of 100 feet of rope, which will support a ton. The Potomac archers propose to offer a prize to the best archer among the firemen at the close of the shooting season, which begins in April and closes in November. They will ask the Fire Department that some of the firemen be permitted to shoot with them from time to time, and also to practice archery at the engine-houses.—*Washington Despatch.*

The Whale Trade.

THE appreciation in the price of sperm oil, which has risen from 80 cents per gallon a year ago to $1.07 at the present time, has considerably encouraged our merchants, and while we do not look for an increase of our fleet by purchase or building, there is a prospect that several vessels, such as the Sea Queen, Desdemona, Rousseau and Tamerlane, which are now lying at the wharves, and but for the advance in sperm oil would either, in the probable course of events, have been sold or broken up, may be fitted away. The stock of sperm oil in this country on January 4, 1882, was about 16,500 barrels against 27,500 at the same time the previous year, and in Europe 3,500, against 6,500 barrels a year ago, showing a total reduction of 17,000 barrels in stock at home and abroad as compared with last year. There is a prospect of a reduction of about 5,000 barrels in the importation of sperm oil this year as compared with 1881, when the import was 30,000 barrels, which would give a total of 22,000 barrels less on the market, allowing that the importation to England from her colonies —4,000 barrels—should be the same as last year. The consumption of sperm oil in this country last year was 24,000 barrels, and abroad 26,000 barrels, a total of 50,000, and, considering the reduced stock on hand and the prospective reduced import, there would be a bare market on the 1st of January, 1883, providing the consumption equals that of 1881. The next thing to be considered is, to what extent lubricating substances will enter into consumption caused by the advance of sperm oil. In 1877, when the average price of sperm oil was $1.13 per gallon, the amount consumed in England was fully equal to any time in the last five years, when the price has ruled considerably lower. These figures would seem to indicate that the price of sperm oil is not likely to drop below $1 per gallon the present year, and it may advance even to $1.25 per gallon. Such an outlook, as stated above, has given encouragement to our merchants, and may cause the transfer of some vessels which were put into the Artic fleet at the time when sperm whaling was unprofitable to the latter branch again. Such a movement, however, is not likely to be entered into to such an extent as to cause any material reduction in the catches of either sperm or whale oil. The whaling fleet at the present time shows a reduction of 11 vessels in the aggregate as compared with five years ago, when there were 172 ships and barks, brigs and schooners employed in the industry.—*New Bedford Standard.*

Value of Salt.

NOTHING that we eat is more valuable than salt, nor could anything except bread be more missed. Animals, in fact, will travel distances and brave great dangers to obtain it. On the coast of Sierra Leone brothers will sell their sisters, husbands their wives, and parents their children, for salt. In the district of Accra, on the Gold coast of Africa, a handful of salt is the most valuable thing upon earth, after gold,

and will purchase a slave or two. Salt with the Bambers is such a luxury that to say of a man, "He flavors his food with salt," is to imply that he is rich. No stronger mark of affection can be shown in Muscovy than the sending of salt from the tables of the rich to their poor friends. Spilling salt was held to be an unlucky omen by the Romans, and the superstition has descended to ourselves. Leonardo De Vinci availed himself of this tradition in his famous picture of the "Lord's Supper" to indicate Judas Iscariot by the salt-cellar knocked over accidentally by his arm. When we say of a lazy fellow that "he does not earn his salt" we consciously allude to an ancient custom among the Romans. Among them a man was said to be in possession of a "salary" who had his "salarium," his allowance of salt, wherewith to save the food by which he lived Thus salary comes from salt, and in this view of the word how many there are who do not "earn their salt."

Varieties of Crude Iron and their Uses.

Pig iron may be classed as foundry, forge, and Bessemer, each having several grades or qualities, with specific uses and particular values. That which determines the class to which an iron belongs, and its quality and value, is the character of the ore, fuel, and limestone used in the operation of smelting in the blast furnace. The proportion of iron in ore runs from 30 to 70 per cent. The ores found in Great Britain are mostly low grade, while those in the United States are generally high grade ores. Different impurities combine with the iron in the ore, and in varying proportions, and it is the office of the blast furnace to remove these in part, existing in chemical and mechanical combinations with the iron. The second stage is the puddling or boiling furnace, where a further elimination of impurities takes place, and in which also most of the carbon imparted in the blast furnace is eliminated.

In the process of extracting iron from the combination in which it is held as ore, impurities are absorbed by the iron because of the necessary contact with the fuel used. And the use of the different fuels gives rise to various artificial distinctions. Thus we have anthracite pig, because the smelting is effected by anthracite coal. There is also bituminous iron, coke and charcoal iron, cold and hot blast charcoal iron, and various other distinctions, depending on the kind and quality of the fuel used with various kinds of ore. The molten iron is permitted to run into a sand or other prepared bed, where it hardens, and is broken up into lengths of about three feet, and is then termed pig iron. In that condition it contains 93 to 94 per cent iron, and 3 to 5 per cent carbon, besides several other elements useful when combined in certain well-understood proportions, but destructive of the quality of the iron when out of such proportions. Chief among these are sulphur, phosphorus, silicon, and manganese. Pig iron takes its position commercially according to the amount of carbon, sulphur, phosphorus, and silicon it contains. The more carbon, the less strength; the less carbon, the greater the strength within certain limits. Tensile strength and ductility are two qualities sought in all kinds of iron, in varying degrees, and to secure these calls for the exercise of skill and experience. Silicon must be eliminated to certain limits, and sulphur and phosphorus reduced to well-defined and understood proportions, to answer given purposes.

For steel a further elimination of these, and perhaps other, elements is necessary, and for wrought iron the process is carried still further. Absolutely pure iron is chemically possible, but is commercially valueless. Silicon in large proportion is an element of weakness, and gives pig iron a strongly crystalline character. Pig, with a high percentage of silicon, is worth less than when there is less silicon, because it lacks strength. Sulphur makes iron "red short"—that is, brittle when red; and phosphorus makes it "cold short"—that is, brittle when cold. Neither quality is in very heavy demand alone, but a mixture of each—an iron of a half-and-half character—is most serviceable because it possesses the qualities of both. This is termed neutral iron.

Foundry iron is so called because it is used chiefly in foundries for castings. Its character is determined largely by the fuel used in smelting. No. 1 American iron is high in carbon, possesses great fluidity, is very open in its granular or crystalline formation, and is especially adapted because of its fluidity to the making of fine castings, where a smooth and even surface is desirable. It bears a general resemblance in its structure and adaptability to the Scotch irons, but is stronger than any of them. Its breaking strength is higher than Scotch, and it is not quite as fluid. For this reason American founders often mix one or two of the six or eight Scotch brands with their own high grade, close grained American pig. It stands a little watering easily. Scotch makes an excellent mix in foundry work where scrap is used.

No. 2 American foundry is generally stronger than No. 1, because it has less carbon and is closer grained. It carries less sulphur and phosphorus than the Scotch iron, and has therefore greater value, and makes a better iron. The lightness and symmetry of American castings and general foundry and machine shop work is due, in a great measure, to the fact that, American iron being stronger, it takes less of it to answer a given purpose. There is less weight and more strength, and hence there is more room for the exercise and display of mechanical taste and ingenuity. The art of mixing has been carried to a high degree of perfection by the careful selection of pig to produce desired results.

Gray forge, the second kind mentioned, is used in rolling-mills to make merchant iron, structural iron, plates, etc. Foundry irons pass through the cupola only when they are reduced to a molten state and at once turned into castings; but gray forge pig is broken up, thrown into a boiling furnace in 500-pound charges, more or less, and then, after melting, is subjected to the careful and skillful manipulations of the puddlers from one and a half to two hours, after which the spongy mass is passed through the rolls. The purpose of this laborious operation is to eliminate the deleterious elements still further required to obtain the fibrous nature characteristic of rolled iron. Neutral iron is made out of either a neutral ore or out of a mixture of red short and cold short ores. It has less carbon than foundry, and greater tensile strength, and corresponds to Staffordshire, but differs from it in possessing greater strength and less silica and phosphorus. The Middlesboro' iron is used largely for rails and ship plates, and is mixed with red short iron to produce a desirable grade of merchant bar. Much of English iron is cold short because of the presence of phosphorus, and hence is not in favor among American consumers. Americans have become accustomed to a superior quality of iron, less liable to variation in strength. English irons are somewhat uncertain, and recourse in case of dissatisfaction is impracticable. For the construction of water and gas pipes English iron is often used to advantage because great strength is not required.

Bessemer pig, the third class mentioned, is comparatively a new product, and is divided into three grades, Nos. 1, 2, and 3, according to the amount of carbon it contained. Bessemer iron is non-phosphoritic, and must be made of ores that will yield iron containing not over one-sixteenth of one per cent of phosphorus in the pig after reduction. Titanic acid often exists, and hardens the iron to an undesirable degree, and, when it occurs, it is an unwelcome and also unmanageable element. The largest deposits of Bessemer ores are in Spain, Algeria, the island of Elba, the Lake Superior region, Missouri, and the Cornwall ores of Lebanon, Pa. There are other deposits, and some of them give promise of profitable development. The cost is increased by scarcity in the face of an extraordinary demand, and also by reason of the distance between sources of supply and points of consumption. The present market values range from $6 to $10 per ton. These ores are used in the Bessemer steel rail manufacture almost exclusively, and are so named because they are chiefly used in the process invented by Sir Henry Bessemer, which greatly reduces the cost and labor of manufacture. Metallurgists are not as yet agreed as to what is the most desirable and serviceable chemical combination for a steel rail. Continuous experiments and observation have been made with a view of determining this result. There is danger of a rail being too soft or too hard. If too soft, it wears away too fast; if too hard, it is liable to fracture. The basic process, with which the names of Reese in America and Gilchrist and Thomas in England are so intimately connected, has brought into requisition a large body of ores heretofore of very inferior value because of the presence in them of a large percentage of phosphorus, which no process prior to the one named could remove. Two causes have operated to impede the adoption of that process in this country. First, the high quality of American ores renders dependence on foreign ore and pig iron more limited; and, second, the urgency of requirements for immediate wants in railway construction has demanded the entire attention of steel rail manufacturers. The demand for Bessemer ores and pig is stimulating mining and manufacturing enterprise in that direction. Virginia ore fields have opened up hopes for abundant supplies, but the efforts of investors, experts, blast furnace managers and others who have gone thither have not been attended with the promised success, except in a few marked instances.—*Bradstreet's.*

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AT the annual meeting of the AMERICAN RAILROAD JOURNAL CO., held at the office of the Company, No. 284 Pearl street, New York, February 8, the following officers were elected:—

GEO. F. SWAIN, *President.*
S. PROCTOR THAYER, *Vice-President.*
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CHAS. T. VALENTINE, *Secretary.*

New York, Saturday, March 25, 1882.

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FREE PASSES.

THE question of free passes has been discussed and rediscussed, but is as far from a settlement as ever. The discussion in the Iowa Legislature showed that railroad deadheadism in that State is carried to extraordinary limits. An advocate for the abolition of free passes in that State recently said that in that commonwealth all judges of the United States Supreme Court, members of the cabinet, senators, and representatives and their families, governors of States, judges, and clerks of State courts, members of legislatures, sheriffs, and so on, in Iowa, to township assessors, have free passes, and are, in effect, bribed by the corporations. Not every individual among all these officers is a dead-head--the assessors get them only from companies having land to be taxed in their towns—but nearly all are, and in a word, "whenever a man gets into a responsible office, where he has relations with the people on one hand and with the corporations on the other," he is given a free pass. And lawyers and jurors are deadheaded, so that a belief is taking root that it is out of the question for a man to get a fair trial of a suit against a railroad. In Iowa not long since a young attorney in a railroad suit found thirteen jurors out of thirty-five drawn, with passes in their pockets, and was then frowned down by the judge and compelled to take a jury out of the lot without further questions on that head.

Notwithstanding this alleged state of facts a bill for the abolition of free passes was defeated by more than a two-thirds vote. A similar bill is now pending in the Ohio Legislature. In Connecticut a legislator has introduced a bill providing that the State treasury pay the expense of members of the Legislature to and fro.

As the giving of a pass is a difficult matter to control, it might be well for the State to require the railroads to pass certain classes of public officers, legislators, and judges, as a duty to the State, as they now do the railroad commissioners. This would deprive corporations of power to confer the pass as a favor, and in which character it becomes so suspicious. Corporations might resist such a law, on the ground that the State has no right to apply the property of any individual to public uses without his own consent; but if such a law were passed and accepted by the corporations, it would be the readiest practical way out of the difficulty.

RIVALRY OF THE NEW YORK TRUNK LINES.

IN the course of what seems to have been a combined effort to sustain the prices of certain stocks in the market, the New York Tribune of recent date contained a series of reporters' "interviews" with certain prominent personages, among them Messrs. Jay Gould, Russell Sage, Cyrus W. Field and William H. Vanderbilt. The latter, while avowing his conviction that the trunk line war was to be peacefully and finally settled by the device of an advisory committee, and its judgment on the subject of through rates to the several seaports, took occasion to refer to the Erie as "a bankrupt concern." President Jewett accordingly has been interviewed through the same medium, and retaliates that Mr. Vanderbilt has been guilty of that which he condemns in others, "depreciating the property of his neighbors," and exposes the misstatement with some warmth—as well he may, as Mr. Vanderbilt has just withdrawn, worsted, from a long contest in an attempt to bankrupt some of his rivals.

Let us see whether or no the Erie is bankrupt, and what are its prospects. Mr. Vanderbilt undoubtedly has a great and valuable property in his New York Central and Lake Shore roads; but he has no perpetual guaranty of their present value. We do not attach much significance to the old cry of "eighty per cent water" with which the former property was so long assailed. The weakness of both roads lies in the fact that they can be reproduced for less than their present capital cost; or, at least, other roads can be built which can perform essentially the same service for much less money. On the branch and lateral lines also much of the local traffic may be divided, and unless the Central management is improved the best of it will be lost.

Mr. Vanderbilt is smarting under another recent defeat in an attempt to take away the southwestern connection of his neighbor, Mr. Jewett. The Cleveland, Columbus, Cincinnati and Indianapolis, a road leading from Cleveland southwest to Indianapolis, with arms to St. Louis, Columbus, Dayton and Cincinnati, was, at one time, through the machinations of James McHenry, secured as a feeder of the Atlantic and Great Western and Erie. Recently it was sought to transfer it to the New York Central system, which would, in effect, have rendered the Central independent of the Wabash for a St. Louis outlet, and would have secured a direct Cincinnati outlet. The plan has miscarried, and Erie retains its hold on both. All that is required now is an entrance for the Erie into Chicago. This can be obtained in several ways: (1) by the use of the Wabash line from a point near Fort Wayne; (2) by the use of the new "Seney" road paralleling the Lake Shore from Buffalo; (3) by using the Pennsylvania or Baltimore and Ohio to an intersection with its own lines in Ohio, as heretofore; or, (4) by constructing an independent line from Galion or Marion to Chicago, a distance of 200 miles, part of which has been constructed. Doubtless the new "Seney" line will be as glad to obtain an outlet to New York as the Erie will to reach the Lake City. Should the "Seney" line be controlled by the Vanderbilt interest, or should it ally itself with the new Delaware-Lackawanna road of Gould-Taylor, recourse can be had to the others. The Detroit connection is assured by the Great Western of Canada; and doubtless some of the Grand Trunk's seaboard traffic can be exchanged with the Erie at Buffalo. There is, therefore, no great difficulty about the western connections of the Erie. It cannot be shut out from the great western traffic centers, and it lies under no necessity of controlling parallel lines at high cost, as does the Central.

Something more than through freight is needed to pay dividends, however. The competition has become so keen that vast amounts of field-produce are hauled to the seaboard at barely train expenses. The profit on grain, for example, would not pay for hauling and make good the loss and repair of cars and motive power. In the matter of express and

passengers the strife is not so fierce, and the through passenger business of the Erie is done at a profit. Reaching the same terminal points, New York, Buffalo, Niagara, Rochester and Boston, the New York Central, though still retaining the preponderance of local traffic, by dint of a most illiberal and antiquated administration contrives to drive off a good deal of profitable travel to its neighbor the Erie—or, to put it in the other form, by superior stations, cars, more attentive service, and more wide-awake officers, the Erie manages to attract a very respectable share of passenger business to and from points it reaches in common with the Central system. This inroad upon the business of the Central is growing. The completion of the West Shore line close alongside the Central all the way from New York to Buffalo, will do for it what the "Seney" does west of Buffalo: intensifies the competition, and virtually duplicates the roads. The Gould-Taylor route to Buffalo, via the Lackawanna Valley, parallels both the Central and Erie so far as through traffic is concerned; but as Vanderbilt has recently acquired an interest in the Philadelphia and Reading for coal purposes, the new road is a much more direct injury to the Central than to the Erie, while the Grand Trunk's through line between Boston, Portland and Chicago is still more pointedly aimed at the Vanderbilt system. Turn which way he will, therefore, the holder of the latter stocks sees nothing but coming opposition, and consequent diversion of business and loss of profits.

What is to be the outcome of the struggle of the four lines now nearing completion between New York and the Niagara River? Of course the Central will contend for its share; and equally, of course, will the others—the Erie as much as any. There is not much difference in the length of the several routes or in the cost of operation, equating grades and fuel supply. It resolves itself largely into a question of terminal facilitates and management. The Erie is at no disadvantage as to terminal facilities just now, and is making great additions to them. Its management, much improved of late years, will, now its second track is laid and gauge changed, have time to take up the questions of shortening its main line and reducing its grades. It has improved its rolling-stock greatly. It might with advantage adopt anthracite fuel for its passenger service, and add a fourth daily through express train. All these and other reforms will engage the attention of its departments, and compel it to keep near the lead. Mr. Jewett himself is a growing man; but upon his chief subordinates has rested the burden of bringing up the Erie, so that it not only remains the most picturesque but is becoming the most popular also of the trunk lines between New York and the cities in the Mississippi basin.

CONSTRUCTION.

The double track of the West Jersey Railroad has been completed below Glassboro' and Barnsboro.'

The track on the Knobel branch of the Missouri Pacific Railroad was completed on the 16th inst. to the 31st mile post.

The Southern Pacific Railroad had reached on the 16th inst. a point 245 miles from El Paso, and the Mexican Central Railroad was reported out 110 miles from Paso del Norte.

The Government of Salvador, Mexico, has granted a concession for a railway 200 miles long, with a subsidy guaranteed and coal rights on the Sempa River, to an American syndicate.

The Acting Governor of Jalisco, Mexico, has ratified the contract with the Mexican Central Railroad to add twelve hundred dollars to the federal subvention for every kilometre of the road built in the State.

The Vesuvius Railway having been successfully accomplished, it is now proposed to make the ascent to the crater of Mount Ætna, in Sicily, equally easy by a similar plan. A company has been formed at Palermo for carrying out the project.

It is remarked that much more rapid progress is being made with the works of the Arlberg Tunnel than was achieved in the corresponding period in connection with the St. Gothard and the Mont Cenis Tunnels. The length of the Arlberg Tunnel is 11,411 yards, and the distance completed to the close of January, 1882, was 3,652 yards.

The directors of the Union Passenger Railway Company, Philadelphia, have decided to adopt the cable motor system, such as is said to be in successful operation in Chicago, on that portion of the Columbia avenue branch extending from Twenty-third street to the entrance of the East Park, a distance of upwards of three-quarters of a mile. The street over which it is intended to run this system will be repaved with Belgian blocks, and the cost of the entire improvement will be in the neighborhood of $200,000. It is expected that it will be completed early in the summer.

Concerning the progress of construction on the Northern Pacific Railroad, vice-president Oakes is reported to have said: "The track is now down in the Yellowstone Valley to a point 125 miles west of Glendire, and twenty miles beyond the mouth of the Little Rosebud. The open winter has been very favorable for work, and grading and track laying have scarcely been interrupted. We have laid ninety miles in the Yellowstone Valley during the winter months. West of our present terminus we have forty miles graded and ready for the rails. We expect to reach Coulson, 225 miles west of Glendire, in the month of June, and shall be at Bozeman, at the Eastern Slope of the Rocky Mountains, by September 1. We shall then have over 1,000 miles of completed track on this side of the mountains. On the Pacific slope the road was opened last fall to Pend d'Oreille Lake. It will reach Rock River by the end of March, a distance of 245 miles from Wallula. We expect to have 200 miles more of track finished by the 30th of September, which will bring us to Missoula, in western Montana, and open a continuous line of 670 miles eastward from Portland, Oregon. With the 145 miles of our Pacific Division, running to Puget Sound, this will make an aggregate of 815 miles of completed road on the Pacific slope. Work is also going forward on the Rocky Mountain Division. Two tunnels, one near Helena and one at Bozeman, are being driven as rapidly as possible. The company has on hand at the Montana terminus ninety-five miles of steel rails, and on the Pacific side 160 miles ready for track laying, with an additional fifty miles of rails on the way to the Pacific by sailing vessels."

ORGANIZATION.

The directors of the South Carolina Railroad Company, are: John H. Fisher (lately receiver), Samuel Sloan, J. J. Higginson, E. E. Chase, F. A. Stout, H. C. Hardy and Henry P. Talmadge, of New York; and Andrew Simonds and W. H. Brawley, of Charleston.

At a meeting of the directors of the Missouri Pacific Railroad Company, held on the 18th inst., the following officers were elected for the ensuing year: President, Jay Gould; first vice-president, R. S. Hayes; second vice-president, A. L. Hopkins; secretary and treasurer, A. H. Calef; assistant secretary, Wm. Arnold.

The officers of the St. Louis, Iron Mountain and Southern Railway Company, elected on the 18th inst., are: President, Jay Gould; first vice-president, R. S. Hayes; second vice-president, Thos. T. Eckert; secretary and treasurer, A. H. Calef; assistant secretary, S. D. Barlow.

At the annual meeting of the Petersburg and Weldon Railroad Company, held at Petersburg, Va., on the 15th inst., E. T. D. Myers, of Richmond, was re-elected president, and the former board of directors, consisting of T. M. Logan, Jos. Bryan, F. R. Scott, W. H. Palmer and R. G. Pegram.

The directors of the Sutro Tunnel Company, recently elected, are: C. W. Brush, David Cahn, F. F. Son, William Irvine, William Johns, Hugh Marshall and John Myer. The officers are: C. W. Brush, president; William Irvine, vice-president; Pelham W. Ames, secretary; Lazard Freres, treasurer, and A. Thomas, superintendent.

The present board of directors of the Pennsylvania Railroad Company have been nominated for re-election, viz: George B. Roberts, N. Parker Shortridge, Henry D. Welsh, H. S. Cummins, S. M. Felton, H. M. Phillips, William Thaw, Wistar Morris, J. Price Wetherill, H. H. Houston, A. M. Fox, William L. Elkins and Alexander Biddle. The election will be held, according to the terms of the charter, on the 28th of the present month.

The following gentlemen have been elected directors of the Winnipeg and Hudson's Bay Railway and Steamship Company: H. Sutherland, Winnipeg; Hon. J. Skead, W. Bannerman, M. P., Renfrew; Amos Rowe, Winnipeg; P. G. Brown and C. Smith, Ottawa. H. Suth-

erland was elected president, and C. Smith, vice-president. A resolution was adapted selecting Winnipeg as the place for the head offices of the company.

At the annual meeting of the Sandy River Railroad Co., held at Phillips, Me., five directors were elected, as follows: N. B. Beal, D. L. Denison, W. F. Fuller, of Phillips; P. H. Stubbs, of Strong, and D. M. Binney, of Farmington. The board elected N. B. Beal president. Superintendent Wilbur declines re-election. The gross earnings of the road for the year were $14,516; expenses, $11,436; interest on debt, $3,000. Number of passengers carried, 15,000; freight, 4,000 tons. The road is two-foot gauge, eighteen miles.

The stockholders of the Bangor and Piscataquis Railroad Co., at their recent annual meeting in Bangor, Me., elected the following board of directors: Moses Giddings, A. G. Wakefield, John S. Ricker, J. S. Wheelwright, M. S. Drummond, Arad Thompson, Thomas S. Moor, W. H. Strickland, Chas. L. Marston, Wm. B. Hayford, and A. M. Robinson. At a subsequent meeting of the directors the following officers were re-elected: Moses Giddings, president; Arthur Burns, superintendent, and H. W. Blood, clerk and treasurer.

INCORPORATION.

Articles of incorporation have been filed at Columbus, Ohio, of the Lynchburg, Georgetown and Higinsport Railroad Company; capital $100,000.

The incorporators of the Great Eastern (Canada) Railway Company are Hon. James Armstrong, C. M. G., Hon. J. S. C. Wurtele, Messrs. John Rankin, C. B. Carter, T. T. Turnbull, F. X. Methot, M. P., L. H. Massue, M. P., and F. Vanasse, M. P. The capital stock of the company is fixed at $6,000,000, and it is stipulated that the work of construction shall commence at Huntington during 1882, and the section between St. Lambert and Dundee, must be completed by May, 1884. The connection must be made with the Intercolonial and American railways before December, 1885.

Articles incorporating the Grand Tower and Carbondale Railway Company were filed with the Secretary of State of Illinois on the 18th inst. by Ethan A. Hitchcock and Thos. G. Allen, of St. Louis, and John Storms, Jr., Thos. M. Williamson and Jos. D. Waters, of Grand Tower, Ill., all of whom are the first board of directors. The capital stock of the company is $50,000, with the principal office at Grand Tower. The object of the company is to purchase and operate the railroad running from Carbondale to Grand Tower, on the Mississippi River, a distance of 24 miles, which passes to and through vast coal fields.

A charter has been granted at the State Department at Harrisburg, Penn., to the Phœnixville and West Chester Railroad Company, which proposes the construction of a line from a point on the Pennsylvania Railroad, between Wayne Station and Valley Creek, to a point in or adjacent to Phœnixville, a distance of 20 miles. The capital stock of the new company is $500,000, divided into 1,000 shares. The directors are: J. N. DuBarry, president; George B. Roberts, A. J. Cassatt, Edmund Smith, John P. Green, George M. Dorrance, N. Parker Shortridge, John Price Wetherill and Henry D. Welsh.

Articles incorporating the Litchfield, Carrollton and Western Railroad Company were filed with the Secretary of State of Illinois, on the 20th inst. The object of the Company is to construct a railroad from Litchfield, Montgomery county, passing through Carlinville, Macoupin county, thence to Greenfield and Carrollton, in Greene county, to a point on the Mississippi River in Calhoun county, opposite Clarksville, Mo., a distance of about seventy-eight miles, crossing the Illinois River, and for a part of the distance passing through a broken-timbered country.

Articles incorporating the Chicago and Kansas City Air-Line Railroad Company were filed with the secretary of Illinois on the 15th inst. The route of the proposed road is from Chicago to Kansas City, passing through the counties of Cook, Dupage, Will, Kendall, La Salle, Putnam, Storke, Knox, Warren, Henderson and Hancock, in Illinois, to the Mississippi River, and thence by the most desirable route to Kansas City. The principal office is to be established at Chicago, and the capital stock will be $5,000,000. The incorporators and directors are Elias Morris, George S. Hardenbrook, Robert L. Martin, Frank H. Dickey and Horace F. White, of Chicago; John A. Leslie, of New York, and John M. Davies, of San Francisco.

Railroad Law.

Hays & Co. v. Penna. R. R. Co., operating the Cleveland and Pittsburg Railroad.

Rights and duties of railroad carriers—Discrimination in rates of freight.

Charge to the jury by Baxter, Circ. J. February 12, 1882.

After reviewing the claims of the parties to the suit the judge said:—

But as a correct appreciation of the rights and duties of railroad carriers may aid you in the discharge of the duty which the law imposes upon you, of correctly deciding upon the facts, a few general observations touching the matter will not, I trust, be considered inappropriate.

Railroads are quasi-public highways. If the Legislature of your State were to enact a statute purporting upon any pretext whatever, to authorize one or more persons, either with or without compensation, to take private property and appropriate the same to his or their private use, the courts would, under the responsibilities imposed upon them by the Constitution, be bound to declare the same unconstitutional and void. It is only upon the hypothesis that railroads are quasi-public highways that the Legislature can constitutionally invest them with authority to condemn private property to their use. And being such highways, every individual constituting a part of the public for whom railroads are constructed possesses the right to equal facilities and accommodations in their use. If the law were otherwise, as you can readily see, the business interests of individuals and communities would be, to a greater or less extent, dependent on the favor of railroad officials. If a railroad corporation could with impunity carry the same class of freight over the same road, and between the same points, for one man or class of men, at a less rate than they exacted from other and competing interests; if they could lawfully require one man to pay fifteen cents per bushel for the transportation of wheat from Cleveland to New York, while they did the same service for another and rival merchant for ten cents; or bring other merchandise for certain favorite friends and refuse to carry for others—they could make and unmake the fortunes of whomsoever they chose. Railroads, whose capacities for good and evil were not fully comprehended a quarter of a century ago, are now regarded as essential to the rapid development and prosperity of the country. No one can at this time successfully compete in manufacturing, mining or in commercial pursuits without the use of railroads. They have pretty much superseded every other mode of inland transportation, and if their manipulators are authorized, for any reason, sinister or otherwise, to invidiously discriminate against one man or community, in the interest of other and rival interests, they would be in the possession of a power which, skillfully exerted, would demoralize trade and extinguish honest competition, to the impoverishment of those they disliked and the enrichment of their favorites. Now if, by chance, selfish and ambitious men ever acquire control of any considerable number of competing roads, they could, by disfavoring the refractory and rewarding the obsequious, largely control both business and public sentiment within the radius of their influence, and thus increase their individual fortunes and strengthen their power.

I am glad, gentlemen, to be able to say that railroad corporations are invested with no such dangerous power. Their officers are in a qualified sense trustees for the public, as well as for the shareholders, and are, in law as well as in morals, bound to execute the trusts imposed upon them by their charters, so as to secure to every one applying therefor equal facilities in the use of their roads and upon the same terms.

You are to decide in this case whether there have been any discriminations made against this plaintiff. It is conceded that the schedule freight rates for 1876 from Salineville to Cleveland were $1.60 per ton for the first 8,000 tons shipped, thirty cents less on the next 8,000 tons, forty cents less on the third 8,000 tons, fifty cents less on the fourth 8,000 tons, and sixty cents less on the fifth 8,000 tons, and on all coal in excess of the last amount, transported for any one man or firm. The effect of this rebate was to give to the heaviest shipper better rates than shippers of less amount enjoyed. Is such a discrimination authorized by law? I wholly dissent from the proposition that it is. If such a rebate is authorized in shipping coal, it is in transporting wheat or any thing else transported in large quantities. The effect of such a policy would be to add to the strong and crush out the weak. If you find higher rates had to be paid by the plaintiffs than were exacted from others, such a discrimination is wrong to the plaintiffs, and they are entitled to reclaim what they overpaid with interest.

The plaintiff further alleges that the defendants owned or controlled a dock used by or connected with the railroad. The plaintiff applied for the use of the dock and was refused it, while others were allowed to use it. It was said by defendant that there was no room on the dock for any but the three persons entitled to use it. That is not a sufficient defense. All customers are entitled to equal chances for using the dock, and the plaintiff had as much right to it as the others had. But as no proof has been introduced by which the estimate of the damage done the plaintiff from this exclu-

sion from the docks can be formed, I cannot submit the question of damages to you.

The plaintiffs state that their business was ruined by the discriminations, and ask for damages on that account. At the beginning of the trial I declined to enter into an examination of that injury. These would come under the head of speculative damages, and have no place here. Courts refuse in this form of an action to inquire into and determine this question. The plaintiff had a remedy for these damages at the time. He could have paid the high rates and then recovered back the overcharge by suit, or he could by an action in this court, have compelled the defendant to extend to him the same privileges that others had. Although the overcharges may have been the legitimate cause of failure, that branch of the subject is now withheld from your consideration. There are three questions to be considered by you—the overcharges, the extent of the overcharges, and the amount of the overcharges.

Verdict for plaintiff for $4,584.—*Legal Intelligencer.*

Feeding and Watering Live Stock in Transit.

We have frequently had occasion to refer to the necessity of railroad managers attending promptly to the demands that are made from various parts of this country, and abroad, concerning the proper treatment of live stock in transit. The Boards of Health of many of the large cities, and points to which American cattle are shipped, have during the past year denounced, in strong language, the lack of attention that has been paid to this important matter; and the leading scientific societies across the water, and men prominent in humanitarian and commercial matters on both sides of the water, have strongly proclaimed against the barbarity practiced in not properly feeding and watering cattle en route for market. The cruel and inhuman neglect which has allowed cattle in transit to go three or four days at a time without food or water, has been attended with most disastrous results, and it is only surprising that the evil to health and commerce, of the old system, has not been more readily appreciated and more quickly remedied. The lack of food and water must necessarily change most injuriously the condition of the animals; their secretions are vitiated, and being re-absorbed, taint all the tissues, rendering the meat absolutely unfit for human food, and in many cases poisonous to the consumer. The animals being feverish and diseased, putrid sores are frequently found in the carcasses of the beef.

The matter has become one of international importance and the governments of Europe as well as our own Government have made exhaustive researches and investigation looking to the adoption of a system whereby the stock can be regularly fed and watered daily; and in this planning the railroad companies have most cordially entered.

The system perfected by Mr. Tingley, of this city, and operated by the Humane Live Stock Express Company, has met with the strongest approval, and may be looked upon as the one most in favor, alike among railroad men, shippers, government officials and the general public. It has already been adopted by some of the leading trunk lines in the United States, and also on the Lynn & Fakenham Railroad, at Sheffield, England, and will be in operation on the railroads in Austria and France within three months. It consists of a long row of feed cups, arranged on both sides of the railroad track, between which trains loaded with cattle are stopped, and boys walk along pushing into the cars, directly under the nose of each animal, a cup filled with grain, corn, oats and cut hay, and, after eating, the water is let in in same cups through connecting rubber tubes, thus affording ample time for feeding and watering, not only improving the condition of the stock for human food, but saving the shipper a large amount now lost in weight by shrinkage. The saving in this way will amount to several million of dollars annually, in the United States alone. This system of cattle restauration, by the use of an improvement recently added to it by Mr. Tingley, can be readily operated through the openings in the ordinary cars used throughout the United States without any attention whatever.

Illinois Central Railroad.

During the month of February, 1882, the traffic on the lines operated by this company was (estimated):—

In Illinois	$535,145 00
In Iowa (leased lines)	154,242 00
Total	$689,387 00

The traffic for the same month in 1881, on the same mileage, was (actual):—

In Illinois	$443,679 31
In Iowa (leased lines)	80,819 77
Total	$524,499 08

During February, 1882, the land sales were 1,306.41 acres for $7,346.69, and the cash collected on land contracts was $7,984.39.

L. A. Catlin, *Secretary.*

A Valuable Car, Engine and Machinery Cleaner.

A very useful and convenient article for cleaning cars, engines and machinery generally, is manufactured by the Brown Manufacturing Company of Providence, R. I., and is being extensively used by machinists, railroad men and manufacturers, among whom it has grown rapidly popular since its introduction. The special absorbent machinery wipers, intended especially for the above-mentioned purpose, are also valuable for a great variety of uses, particularly in factories, mills, etc., and supply a want that it is surprising has not been supplied before in an economical way. The price of these wipers, $3 for 100 or $25 for 1,000, is such as to make them universally available. The Brown Manufacturing Company furnish their customers with a receipt for easily and cheaply washing the soiled wipers, and by this system a great source of danger from spontaneous combustion is removed, as no oily waste in rags need be allowed to collect in any factory or building where these wipers are used.

Costly Railroad Carpeting.

The splendid Turkish rugs which are in use at the Pennsylvania Railroad Station at Fifteenth and Filbert streets, Philadelphia, have attracted a great deal of attention from travelers and visitors at the station. One of them, the one used in the principal ladies' saloon, is fifteen feet square and is of the finest Turkish make. It has a red ground, with decorations in blue and purple, and fringed edges. The colors are subdued, and the richness of its texture is only apparent upon close examination. Its cost was not less than $900, and it was purchased with an idea of economy, the fabric being capable of standing constant use without showing early signs of wear. There are one or two smaller rugs more striking in appearance but not so valuable, having cost about $300 each.

Commerce of New York.

The foreign imports at New York for the month of February were :—

	1880.	1881.	1882.
Ent. for cons.	$20,585,964	$17,812,805	$22,833,559
Do. for warehousing	7,622,450	6,389,790	6,540,098
Free goods	10,984,396	9,363,596	10,815,027
Specie and bullion	972,574	591,072	225,462
Total ent. at port	$40,165,384	$34,157,263	$40,414,146
Withdrawn from warehouse	6,808,808	6,539,640	7,575,257

The foreign imports at New York for two months from January 1, were :—

	1880.	1881.	1882.
Ent. for cons.	$40,680,829	$33,174,618	$45,058,944
Do. warehouse	14,905,826	12,130,280	13,799,659
Free goods	23,628,271	19,523,225	21,091,170
Specie and bullion.	1,847,612	5,314,499	600,146
Total ent. at port	$81,062,538	$70,242,622	$80,549,819
Withdrawn from warehouse	13,896,134	14,391,864	15,251,652

The foreign imports at New York for eight months of the fiscal year were :—

	1880.	1881.	1882.
Six months ending January 1	$266,228,601	$280,770,515	$252,275,460
January	40,897,154	36,085,359	40,135,673
February	40,165,384	34,157,263	40,414,146
Total eight mos.	$347,291 139	$351,013,137	$332,825,279

The duties received at New York for eight months ending with February were :—

	1880.	1881.	1882.
6 mos. ending Jan. 1	$59,271,080 94	$69,593,542 80	$75,083,478 15
In Jan	11,960,677 78	10,572,559 15	13,387,515 96
In Feb.	12,254,602 24	11,217,766 87	13,585,053 25
Total 8 mos.	$83,486,360 96	$91,383,868 82	$102,056,047 37

The exports from New York to foreign ports for the month of February, were :—

	1880.	1881.	1882.
Dom. produce	$23,349,543	$27,064,588	$24,402,719
For. free goods	235,877	682,033	803,049
Do. dutiable	305,728	389,282	529,289
Specie and bullion	605,022	1,184,443	8,247,861
Total exports	$24,496,170	$29,320,476	$33,982,918
Do. exclusive of specie	23,891,148	28,136,303	25,735,057

The exports from New York to foreign ports for two months from January 1, were :—

	1880.	1881.	1882.
Dom. produce	$48,018,234	$55,591,308	$51,367,499
For. free goods	606,434	1,990,800	1,227,631
Do, dutiable	683,246	819,114	988,661
Specie and bullion.	1,424,941	2,218,957	9,518,302
Total exports	$50,732,655	$60,620,179	$63,102,093
Do. exclusive of specie	49,307,714	58,401,222	53,583,791

The exports (exclusive of specie) from New York to foreign ports for eight months ending with February were :—

	1880.	1881.	1882
Six months ending January 1	$197,760,586	$220,839,350	$187,136,859
January	25,416,566	30,264,919	27,848,734
February	23,891,148	28,136,303	25,735,057
Total produce	$247,068.300	$279,240,572	$240,720,650
Add specie	4,758,007	6,868,358	15,789,351
Total exports	$251,826,307	$286,108,920	$256,510,001

It is stated that about the beginning of February the first train on the Continent of Europe lighted with electricity ran between Frankfort-on-the-Main and Hanau. The result was most satisfactory. A dynamo-electric machine was placed on the locomotive. The rotary motion of the axles of the cars was also used to create a current. The entire apparatus was under the control of the engineer.

Anthracite Coal Tonnage.

THE following is an official statement of anthracite coal tonnage for the month of February, 1882, compared with the same month in 1881 :—

	1882.	1881.
Reading Railroad	364,286	436,415
Lehigh Valley Railroad	337,752	421,819
Central Railroad of New Jersey	229,225	323,209
Delaware, Lackawanna & Western	260,941	360,125
Delaware and Hudson Canal	187,339	285,606
Pennsylvania Railroad	136,031	141,838
Pennsylvania Coal Co.	66,839	106,153
New York, Lake Erie and Western Railroad	22,826	43,004
Total	1,605,243	2,118,173

The following is the statement for the two months ending with February, 1882, compared with the year 1881 :—

	1882.	1881.
Reading Railroad	772,654	828,573
Lehigh Valley Railroad	696,968	752,576
Central Railroad of New Jersey	493,517	560,023
Delaware, Lackawanna & Western	552,456	629,452
Delaware & Hudson Canal	409,740	472,680
Pennsylvania Railroad	302,023	297,580
Pennsylvania Coal	163,025	176:988
New York, Lake Erie & Western Railroad	48,769	72,943
Total	3,439,154	3,790,818

The stock of coal on hand at tide-water shipping points, February 28, 1882, was 546,315 tons; on January 31, 1882, 586,933 tons—decrease, 40,6 8 tons.

The Tea Trade.

THE subject of tea-growing in this country has at various periods occupied much attention among those engaged in the tea trade, but all attempts to produce the plant on native soil have so far resulted in very indifferent success. Some years ago an unsuccessful attempt was made to grow tea in Pennsylvania, and later the Le Duc plantation was started in Florida, and leaf was produced of a flavor which can be much surpassed, at a lower cost, by importation. With regard to the popular belief that the very finest teas are retained by the Chinese themselves, and that it is almost impossible to procure certain choice brands, those engaged in the trade ridicule the idea, and state that there is no description of the leaf that is not obtainable in China in return for money.

Before the war there was a line of clippers engaged in the tea trade running to this port, and the voyage from China was at that period a matter of from 90 to 140 days. Starting usually about the same time, the rivalry between the ships as to speed was intense, and old salts and veteran tea traders still delight in recounting the long races which were then wont to take place. The captain and the crew of the ship which first entered the bay were always certain to receive from the owners a liberal largess to increase the mariner's feeling of joy at the triumph of his ship, and the fortunate owners in turn were enabled to realize a handsome profit on the cargo which possessed the advantage of being the first in the market. Nowadays, however, the clippers engaged in the tea trade have disappeared, and nearly all the tea imported into this country comes in English bottoms through the Suez Canal. A much smaller quantity also finds its way hither on the Pacific Mail steamers to San Francisco and thence by rail overland. The first shipment of tea to this country passing through the Suez Canal came on board the English ship Glenartney, in July, 1875.

Upon the subject of the taxation of tea opinion among those engaged in the trade is almost unanimous, and is to the effect that the abolition of the tax was a mistake. In the early part of the war the tax upon tea was 25 per cent *ad valorem;* later it was reduced to 15 per cent. During Grant's second Administration, in July, 1872, the tax upon tea was removed altogether. This, it is claimed, has proved to have been an ill-advised measure, as the tax was one of the simplest and most easily collectible to be imagined, and its removal has not resulted in any appreciable benefit or lessening of cost to the consumer. It is further stated that the tax had the effect of keeping out certain trashy grades of tea, which are now more largely imported than was formerly the case. The immense revenue to the Government to be derived from this source by taxation will be readily perceived by noting the importation of tea into this country during the past year alone, which was as follows: green, 19,339,196 pounds; black, 22,629,076 pounds; total, 41,968,272 pounds. The tea brokers have an organization for the protection and regulation of their trade, known as the Tea Brokers' Association, which was recently formed. Its offices are in the Roberts Building, No. 97 Water street.

Philadelphia and Reading Companies.

The following is the comparative statement of the Philadelphia and Reading Railroad Company and the Philadelphia and Reading Coal and Iron Company for the month of February, 1882 and 1881 :—

	1882.	
GROSS RECEIPTS.	*Profit for mo.*	*Year to date.*
Railroad traffic	$411,271 29	$1,807,391 88
Canal traffic	*l*21,618 25	*l*49,679 09
Steam colliers	28,148 71	115,513 56
Richmond coal barges	*l*1,709 74	*l*2,520 14
Total Railroad Co	$416,092 01	$1,870,706 21
Reading Coal & Iron Co.	22,564 12	152,406 09
Total of all	$438,656 13	$2,023,112 30
TONNAGE & PASSENGERS.	*Month.*	*Year to date.*
Tons of coal on railroad	453,973.12	1,722,466.01
Tons of merchandise	598,536.04	1,778,549.06
Passengers carried	754,863.00	2,580,071 00
Coal transp by stm colliers	38,229.08	133,549.12
TONS OF COAL MINED.		
By Coal and Iron Company	202,611.02	826,983.05
By tenants	88,043.04	307,252.04
Total mined from lands owned and controlled by Co. and from leasehold estates	290,654.06	1,134,235.09

	1881.	
GROSS RECEIPTS.	*Profit for mo.*	*Year to date.*
Railroad traffic	$520,380 83	$1,523,207 23
Canal traffic	*l*12,513 71	*l*41,598 89
Steam colliers	23,032 10	67,879 80
Richmond coal barges	422 14	1,166 37
Total Railroad Co	$531,321 36	$1,550,654 51
Reading Coal & Iron Co.	100,080 73	175,973 95
Total of all	$631,402 09	$1,726,628 64
TONNAGE & PASSENGERS.	*Month.*	*Year to date.*
Tons of coal on railroad	566,421.05	1,578,750.01
Tons of merchandise	410,650.05	1.289,490.10
Passengers carried	638,970.00	2,145,085.00
Coal transp by stm colliers	31,261.14	109 *87.08
TONS OF COAL MINED.		
By Coal and Iron Company	235,161.08	666,619.01
By tenants	102,911.11	311,925.01
Total mined from lands owned and controlled by Co. and from leasehold estates	338.072.19	978,544.02

Total of both companies for month of February, 1882 : Gross receipts, $2,169,004.80 ; gross expenses, $1,739,448.67—profit, $438,-656.13. The receivers say the falling off in receipts is due to the voluntary restriction of coal production in the month.

The Coal Trade.

THE leading coal-carrying companies make the following reports of their tonnage for the week ending March 11th, and for the year to same date, compared with their respective amounts carried to the same time last year:—

	Week.	1882.	1881.
Reading Railroad	97,016	1,914,448	1,846,206
Schuylkill Canal	.....	27,655	.....
Lehigh Valley	76,235	1,492,233	1,420,724
Delaware, Lackawanna and Western	76,654	696,253	783,651
Shamokin	17,635	168,941	180,732
Central R. R. of New Jersey	62,923	622,572	723,814
United R. R. of New Jersey	26,239	279,096	299,601
Pennsylvania Coal	11,073	156,636	199,408
Delaware and Hudson Canal	46,689	549,086	687,225
Huntingdon and Broad Top Mountain	13206,	125,205	85,169
Penn. and New York	27,077	399,425	337,908
Clearfield, Pa.	53,963	478,097	362,747

The total tonnage of anthracite coal from all the regions for the week ending March 11, as reported by the several carrying companies amounted to 385,127 tons, against 600,026 tons in the corresponding week last year, a decrease of 214,900 tons. The total amount of anthracite mined for the year is 4,228,018 tons, against 4,745,599 tons for the same period last year, a decrease of 517,581 tons. The quantity of bituminous coal sent to market for the week amounted to 60,766 tons, against 52,621 tons in corresponding week last year, an increase of 8,155 tons. The total amount of bituminous mined for the year is 943,014 tons, against 758,234 tons for the corresponding period last year, an increase of 184,980 tons. The total tonnage of all kinds of coal for the week is 445,902 tons, against 652,647 tons in corresponding week last year, a decrease of 206,745 tons and the total tonnage for the coal year is 5,171,032 tons, against 5,503,633 tons to same date last year, a decrease of 332,601 tons. The quantity of coal and coke carried over the Pennsylvania Railroad for the week ending March 11 was 211,001 tons, of which 143,118 tons were coal and 67,883 tons coke. The total tonnage for the year thus far has been 1,078,683 tons, of which 1,456,701 tons were coal and 621,-982 tons coke. These figures embrace all the coal and coke carried over the road east and west. The shipments of bituminous coal from the mines of the Cumberland coal region for the week ending March 11 were as follows: for the year, 389,056 tons, an increase of 133,100 tons; for the week, 57,915 tons, an increase of 18,897 tons, the comparison being made with the production for the same period last year. Of this 43,964 tons were shipped by the Baltimore and Ohio Railroad, 2,388 tons by the Chesapeake and Ohio Canal, and 7,941 tons by the Pennsylvania State Line Road. There has been shipped to the Chesapeake and Ohio Canal this year 3,763 tons. The Reading Railroad shipment for last week, ending March 18, was 113,090 tons, of which 19,000 tons were sent to and 21,000 tons shipped from Port Richmond, and 8,500 tons sent to and 8,300 tons shipped from Elizabethport.—*Phil. Ledger, March* 20.

AN English firm have lately supplied to the order of the Societe Anonyme de Loth, (woolen mills) near Brussels, a double leather driving-belt. This belt is 75 inches wide and 153½ feet long, and it is to transmit 650 indicated horse power. The power is taken from the fly-wheel of an 800-horse power Corliss engine. This fly-wheel is 28 feet diameter and 6 feet 6 inches wide. It has been found that this enormous belt runs perfectly straight, and it has hitherto given entire satisfaction. The mills are the largest of the kind in Belgium. They give employment to more than 3,000 people. There are in the weaving shed no fewer than 1,000 looms.

The Stock Exchanges and Money Market.

New York Stock Exchange.

Closing Prices for the week ending Mar. 22.

	Th.16.	F.17.	Sat.18.	M.20.	Tu.21.	W.22.
Adams Express	141½	140	140	140	143½	.....
Albany and Susq.	..	....	.....	.....	135	.....
1st mortgage	.....	.....	.....	.....	.....	.....
2d mortgage	.....	.....	.....	.....	.....	.....
American Express	.....	93	.....	93	.....	94
Atlantic & Pac. Tel.	.....	.....	.....	.....	.....	.....
Burl., C. R. & Nor.	.....	.....	.....	80	80½	.....
1st mortgage 5s	.....	.....	.....	99¾	.....	99¾
Canada Southern	46¾	49	50	50¼	49½	50¾
1st mortgage guar	93½	.....	.....	94¼	.....	.....
Central of N. Jersey	81	85½	84⅞	83¼	84	82¾
1st mort. 1890	.....	115½	.....	.....	.....	.....
7s, consol. ass	113	112¾	113¾	.....	.....	.....
7s, convertible ass.	.....	.....	.....	.....	.....	.....
7s, Income	93	95	.....	.....	.....	.....
Adjustment	104⅞	105	.....	.....	.....	.....
Central Pacific	89½	90⅞	91⅛	91⅜	91¾	92¼
6s, gold	114¾	115	115	114¾	.....	.....
1st M. (San Joaq)	.....	.....	.....	.....	.....	.....
1st M. (Cal. & Or.)	.....	.....	.....	.....	.....	.....
Land grant 6s	.....	.....	.....	.....	.....	.....
Chesapeake & Ohio.	21½	22	23	23⅛	23	22⅞
1st pref	.....	33	33	34	32½	33½
2d pref	.....	22½	24⅛	.....	.....	.....
1st mort., series B	78½	79	77	79½	.....	79⅞
Chicago and Alton.	129¾	131	131	132	131½	132¼
Preferred	.....	.....	.....	.....	.....	.....
1st mortgage	.....	.....	.....	.....	.....	.....
Sinking Fund	.....	.....	.....	.....	.....	.....
Chi,, Bur. & Quincy	131	132½	133	134	133	134
7s, Consol. 1903	.....	125	.....	.....	.....	.....
Chi., Mil. & St. Paul	111⅝	113⅜	113¾	113¾	114⅜	114½
Prefered	121⅛	123¾	123¾	124	.....	.....
1st mortgage, 8s	.....	.....	.....	.....	.....	132½
2d mort., 7 3-10s	.....	.....	.....	.....	.....	120
7s, gold	.....	.....	.....	.....	.....	125½
1st M. (La. C. div)	117¼	117⅜	118¼	.....	.....	.....
1st M. I. & M. div.)	.....	.....	.....	120	.....	.....
1st. M. (I. & D. ext.)	.....	120	.....	120	.....	120
1st M. (H.&D. div.)	.....	114	.....	.....	.....	.....
1st M.(C. & M.div.)	.....	.....	.....	.....	.....	.....
Consolidated S. F.	120	.....	120	120	.....	119¼
Chi. & Northwestern	131½	132⅝	132⅜	133⅜	133¼	133
Preferred	139⅜	140⅜	140¼	141	141	141½
1st mortgage	.....	.....	107½	.....	.....	.....
Sinking Fund 6s	.....	.....	.....	.....	.....	.....
Consolidated 7s	.....	.....	131½	.....	.....	.....
Consol. Gold bo'ds	.....	.....	124	124	.....	125
Do. reg	.....	124	.....	124	.....	.....
Chi., R. Isl. & Pac.	131¾	133¾	133	133	132¾	133
6s, 1917, c	.....	.....	.....	.....	.....	.....
Clev.,Col.,Cin.&Ind.	79	78⅞	79⅛	79½	.....	.....
1st mortgage	.....	.....	.....	.....	.....	.....
Clev. & Pittsburg gr.	.....	136	136	134½	.....	136
7s, Consolidated	.....	.....	.....	.....	.....	.....
4th mortgage	.....	.....	.....	.....	.....	.....
Col.,Chi.,& Ind. Cent.	10	10¾	10¾	10⅝	11	11
1st mortgage	.....	.....	.....	.....	.....	.....
2d mortgage	.....	.....	.....	.....	.....	.....
Del. & Hud Canal.	105½	106⅜	106¾	105¼	105½	105¼
Reg. 7s, 1891	.....	.....	.....	.....	.....	115
Reg. 7s, 1884	.....	.....	.....	.....	.....	105½
7s, 1894	.....	118	.....	.....	.....	118
Del.,Lack.& Western	121½	122⅞	122¾	121¼	121¾	122½
2d mortgage 7s	.....	.....	.....	.....	.....	.....
7s, Consol. 1907	.....	.....	.....	.....	.....	.....
Erie Railway	.....	.....	.....	.....	.....	.....
1st mortgage	.....	.....	.....	.....	.....	.....
2d mort. 5s, ext	.....	.....	.....	.....	.....	.....
3d mortgage	.....	.....	104	104	.....	.....
4th mort. 5s, ext.	.....	.....	.....	.....	.....	.....
5th mortgage	.....	.....	.....	.....	.....	.....
7s, Consol. gold	.....	.....	126	.....	.....	.....
Great West. 1st mort	.....	.....	.....	.....	.....	.....
2d mortgage	.....	103	.....	103½	.....	.....
Hannibal & St. Jo.	.....	.....	.....	.....	.....	.....
Preferred	83	85	83½	85	84¾	84¾
8s. Convertible	104½	.....	106	.....	.....	.....
Houston & Tex. Cen	67	70	.....	71	68½	69
1st mortgage	.....	.....	.....	.....	.....	112¼
2d mortgage	.....	.....	.....	119	.....	120
Illinois Central	134½	136⅜	136¼	136½	136½	136½
LakeShore&MichSo	115	115⅝	116⅜	117¼	117¾	118
Consol. 7s	.....	126	.....	.....	.....	.....
Consol. 7s, reg	.....	.....	.....	.....	.....	.....
2d Consolidated	.....	.....	.....	.....	.....	.....
Leh. & W. B. 7s, Con	.....	.....	.....	.....	.....	.....
Long Dock bonds	.....	.....	.....	119	.....	.....
Louisville & Nash.	73	75¼	75⅝	76¾	76¾	76⅞
7s, Consolidated	.....	.....	.....	.....	.....	.....
Manhattan	53⅜	53½	53⅜	53⅞	53½	54
1st pref	93	.....	.....	.....	.....	.....
Met. Elevated	88	90½	90	89	.....	89¾
1st mortgage	100⅛	100¾	.....	101	.....	101
Michigan Central	81½	83¼	84¾	85½	86	86½
7s, 1902	126	.....	.....	.....	.....	.....
Morris & Essex	.....	122½	.....	.....	.....	122½
1st mortgage	.....	.....	.....	134	.....	.....
2d mortgage	.....	115	.....	.....	.....	.....
7s of 1871	.....	.....	.....	.....	.....	.....
7s, Convertible	.....	.....	.....	.....	.....	.....
7s Consolidated	.....	.....	.....	.....	.....	.....
N.Y. Cen. & Hud. R.	130¼	131½	132¼	132¾	132¾	133
6s, S. F. 1883	.....	103½	.....	.....	.....	.....
6s, S. F., 1887	.....	.....	.....	.....	.....	.....
1st mortgage	.....	.....	.....	.....	.....	.....
1st mortgage, reg	.....	.....	.....	.....	.....	.....
N. Y. Elevated	105	.....	.....	.....	.....	.....
1st mortgage	116¼	.....	.....	.....	.....	.....
N. Y. & Harlem	.....	.....	.....	.....	.....	.....
Preferred	.....	.....	.....	.....	.....	.....
1st mortgage	.....	.....	.....	.....	.....	.....
1st mortgage, reg	.....	.....	.....	.....	.....	.....
N. Y., Lake Erie & W	37½	37⅜	38⅛	37¾	37	37⅜
Preferred	74	75⅛	77⅞	77	75¼	75
2d Consolidated	95¾	96⅛	96½	95⅛	.....	95¼
New 2d 5s fund	93¼	.....	.....	94	.....	.....
N.Y.,N.Hav'n&Hart	.....	170	170	.....	170	.....
North Mo. 1st mort	.....	.....	.....	.....	.....	.....
Northern Pacific	32½	34½	34½	35½	35¼	35½
Preferred	71¾	74¼	75¾	75⅝	76	75¾
Ohio & Mississippi	32⅞	34⅝	34¾	35	35⅝	34⅜
Preferred	.....	95	98	100	.....	.....
2d mortgage	.....	.....	.....	.....	.....	.....
Consolidated 7s	.....	.....	.....	.....	.....	.....
Consol. S. Fund	.....	.....	.....	121	.....	.....
Pacific Mail S. S. Co	39¾	40⅜	41¾	42	42	42⅞
Pacific R. R. of Mo.	.....	.....	.....	.....	.....	.....
1st mortgage	.....	.....	.....	.....	.....	.....
2d mortgage	.....	.....	.....	.....	.....	.....
Panama	.....	.....	.....	.....	190	.....
Phila. & Reading	57½	59¾	60¾	59¼	60	60
Pitts,Ft.W.&Chi.gtd	.....	137	.....	.....	.....	.....
1st mortgage	.....	.....	.....	.....	.....	.....
2d mortgage	.....	.....	.....	.....	.....	.....
3d mortgage	.....	.....	.....	.....	.....	.....
Pullman Palace Car	124	125	127	126¼	126⅞	127½
Quicksil'r Min'g Co	.....	.....	.....	.....	.....	.....
Preferred	.....	59	.....	58	.....	57
St. Louis & San Fran	.....	.....	38	40	39¼	40
Preferred	.....	49½	50¾	53	52½	53¾
1st Preferred	.....	89	90	.....	.....	.....
St. L., Alt'n & T. H.	26½	27¾	.....	29¾	28½	29
Preferred	70	73¾	74	.....	.....	.....
1st mortgage	.....	.....	.....	.....	.....	.....
2d mort. pref	.....	.....	.....	.....	.....	.....
Income bonds	.....	.....	.....	.....	.....	.....
St. L., Iron Mt. & S	.....	.....	.....	.....	.....	.....
1st mortgage	114¾	.....	.....	115	.....	.....
2d mortgage	.....	106¾	.....	107½	.....	.....
Toledo and Wabash	.....	.....	.....	.....	.....	.....
1st mortgage	.....	.....	.....	.....	.....	.....
2d mortgage	.....	.....	.....	.....	.....	.....
7s, Consolidated	101	.....	.....	.....	.....	.....
St. Louis Division	.....	.....	.....	.....	.....	105
Union Pacific	111⅝	112⅞	113¾	114½	114¾	114½
1st mortgage	115¾	115¾	115¾	116	.....	116
Land Grant 7s	.....	.....	.....	.....	.....	.....
Sinking Fund 8s	112⅝	.....	.....	.....	.....	.....
United States Ex	72½	.....	74	.....	.....	74½
Wabash, St. L.& Pac	33½	34½	34⅝	34¾	34⅞	35⅛
Preferred	58	59⅝	59¾	59⅝	59⅜	61
New mort. 7s	.....	.....	.....	.....	.....	.....
Wells-Fargo Ex	126¾	126¾	127½	128	127	.....
Western Pacific b'ds	.....	.....	.....	.....	.....	.....
Western Union Tel.	81¾	83⅞	84¾x	84¾	84½	87⅛
7s..S.F conv., 1900	.....	.....	.....	118	.....	.....
FEDERAL STOCKS:—						
U. S. 4s, 1907, reg	.....	.....	.....	.....	.....	.....
U. S. 4s, 1907, coup	.....	118½	118	118⅜	118½	.....
U. S. 4½s, 1891, reg	.....	.....	.....	.....	.....	.....
U. S. 4½s, 1891, coup	.....	.....	.....	.....	.....	.....
U. S. 5s, 1881, reg	.....	.....	.....	.....	.....	.....
U. S. 5s, cont'd at3½	102¾	.....	.....	.....	103¾	102½
U. S. 6s cont'd at3¾	.....	.....	.....	.....	.....	.....
Dt. of Col. 3-65s, reg	.....	.....	.....	.....	.....	.....
Dt. of Col.3-65s,coup	.....	.....	.....	.....	.....	.....

Boston Stock Exchange.

Prices for the Week Ending Mar. 22.

	Th.16.	F. 17.	Sat.18.	M.20.	Tu.21.	W. 22.
Atch.,Top.&San.Fe.	82¼	83¾	84¼	85⅞	85¾	86½
1st mortgage	.....	117	118	119	118¾	117
2d mortgage	.....	.....	.....	.....	.....	.....
Land Grant 7s	114	.....	.....	115¼	.....	115
Boston & Albany	161¾	161	162	162½	163	.....
7s reg	.....	.....	.....	.....	.....	.....
Boston and Lowell.	101	.....	.....	101	.....	.....
Boston & Maine	.....	.....	.....	.....	.....	.....
Boston& Providence	.....	.....	.....	.....	.....	.....
Bos'n,Hart.& Erie7s	48¾	52	53¼	52¼	51	51¾
Burl.& Mo.R.L.G.7s	.....	.....	.....	.....	.....	.....
Burl.& Mo.R.in Neb	.....	.....	.....	.....	.....	.....
6s, exempt	.....	.....	.....	.....	.....	.....
4s	.....	.....	.....	.....	82	.....
Chi.,Burl. & Quincy	131¼	132	133	134¼	133¼	134
Cin.,Sand&Clev($50)	24	.....	24½	.....	.....	24½
Concord ($50)	.....	.....	.....	25	.....	.....
Connecticut River	.....	.....	.....	.....	.....	.....
Eastern	34	.....	.....	34	.....	34
New 4½ Bonds	107	.....	107¼	107⅜	107	107
Fitchburg	.....	.....	.....	129	128	.....
N.Y. & New England	.....	.....	48¼	49¾	48⅛	49¼
7s	.....	115	115	115	.....	.....
Northern N. H.	.....	109	.....	109	.....	108
Norwich&Worcester	.....	.....	.....	.....	.....	.....
Ogden & Lake Cham	.....	.....	.....	.....	.....	.....
Preferred	.....	.....	.....	.....	.....	.....
Old Colony	126	.....	126¼	.....	126½	128
Ph.,Wil.&Balt.($50)	.....	64	.....	.....	.....	.....
Portl'd,Saco & Ports	.....	.....	.....	.....	.....	.....
Pueblo & Ark Val	.....	.....	.....	.....	.....	.....
7s	112	113¼	114	114½	115	.....
Pullman Palace Car	124½	124½	125	127	127	.....
Union Pacific	112	112¼	114¼	114¾	114¼	114¾
6s	.....	.....	.....	.....	.....	.....
Land Grant 7s	.....	.....	.....	.....	.....	.....
Sinking Fund 8s	.....	.....	.....	118	117¾	117¾
Vermont & Canada	.....	.....	.....	.....	.....	.....
Vermont & Mass	.....	.....	.....	.....	.....	.....
Worcester & Nashua	.....	.....	56	56	.....	.....
Cambridge (Horse)	.....	.....	.....	.....	.....	.....
Metropolitan(Horse)	.....	.....	.....	.....	76	.....
Middlesex (Horse)	.....	.....	.....	.....	.....	.....
Cal.&Hecla Min'gCo	.....	.....	236½	240	240	.....
Quincy	.....	45¾	45¾	45¾	45½	47

Philadelphia Stock Exchange.

Closing Prices for the Week Ending Mar. 21.

	W.15.	Th.16.	F. 17.	Sat.18.	M.20.	Tu.21.
Allegh'y Val. 7 3-10s	.....	.....	.....	.....	.....	.....
7s, Income	.....	.....	55	55	55½	.....
Buff., Pitts & West.	16½	17½	17½	17¼	17¾	17¾
Camd'n & Am. 6s, '83	.....	.....	.....	.....	101½	.....
6s, 1889	.....	.....	.....	.....	.....	.....
Mort. 6s, 1889	114¼	114	.....	.....	.....	.....
Camden & Atlantic	.....	.....	.....	.....	.....	.....
Preferred	.....	.....	.....	.....	.....	.....
1st mortgage	.....	.....	.....	.....	.....	.....
2d mortgage	.....	.....	.....	.....	.....	.....
Catawissa	19	19¼	.....	20¾	21	21¼
Preferred	54	.....	.....	.....	.....	.....
7s, new	.....	.....	.....	.....	.....	.....
Del. & Bound Brook	.....	.....	.....	.....	.....	.....
7s	.....	.....	.....	.....	.....	.....
Elmira&Williamsp't	.....	.....	.....	.....	.....	.....
Preferred	.....	.....	.....	.....	.....	.....
Hunt. & B. Top Mt.	.....	.....	.....	.....	.....	.....
Preferred	26½	.....	.....	26¼	26	.....
2d mortgage	.....	.....	.....	.....	.....	.....
Lehigh Navigation	40	40¾	41⅝	41⅝	41¼	41
6s, 1884	104½	104	.....	.....	.....	.....
Gold Loan	112	.....	112	.....	.....	.....
Railroad Loan	.....	.....	.....	.....	.....	.....
Conv. Gold Loan	.....	.....	.....	.....	109	.....
Consol. Mort, 7s	.....	.....	.....	.....	.....	.....
Lehigh Valley	61¼	61⅝	61½	61⅛	60¾x	60¾
1st mort. 6s, coup	123½	122	.....	.....	.....	.....
1st mort. 6s, reg	.....	123½	.....	.....	.....	.....
2d mort. 7s	.....	.....	.....	.....	.....	.....
Consol mort. 6s	120	120	.....	121	.....	121
Consol.mtg.6s,reg	.....	.....	.....	.....	.....	.....
Little Schuylkill	.....	.....	.....	.....	55	.....
Minehill&Sch.Hav'n	.....	.....	.....	.....	.....	.....
North Pennsylvania	63¾	63¾	.....	.....	63¾	.....
1st mortgage 6s	.....	.....	.....	.....	.....	.....
2d mortgage 7s	.....	.....	.....	.....	.....	.....
Genl. mtg.7s,coup	.....	.....	.....	.....	.....	.....
Genl. mtg. 7s, reg	.....	.....	.....	.....	.....	.....
Northern Central	48½	49¼	49½	.....	.....	.....
6s	96¾	96½	.....	.....	.....	.....
Northern Pacific	31¾	32½	34	34½	35	35⅝
Preferred	71¾	71⅞	74½	75¼	75⅝	76
Pennsylvania R. R.	60½	61⅜	62¾	62½	63	63
1st mortgage	.....	.....	.....	.....	.....	.....
Gen'l mort	.....	.....	.....	.....	.....	.....
Gen'l mort reg	.....	.....	.....	.....	.....	.....
Consol. mort. 6s	117¾	.....	.....	.....	.....	.....
Consol. mort. reg	.....	.....	.....	.....	.....	.....
Pa. State 5s, new	.....	.....	.....	.....	.....	.....
do 4s, new	.....	.....	.....	.....	.....	.....
Phila. & Reading	28⅛	28¾	30	30⅛	29¾	30⅛
1st mortgage 6s	.....	.....	.....	.....	.....	.....
7s of 1893	.....	.....	.....	.....	.....	.....
7s, new convert	72	.....	75	75	75	.....
Consol. mort. 7s	.....	124	124	124	.....	125
Consol. mort. reg	.....	.....	.....	.....	.....	.....
Gen'l mort. 6s	93½	93⅝	94¼	94¾	95	95
Philadelphia & Erie	.....	15½	15⅝	16½	.....	15
1st mortgage 5s	.....	.....	.....	.....	.....	.....
2d mortgage 7s	.....	.....	.....	.....	.....	.....
Pittsb.,Cin.&St.L.7s	118	.....	.....	.....	.....	.....
Pitts.,Tit.&Buff. 7s,	.....	.....	.....	94	.....	.....
Schuylkill Navi't'n	.....	.....	.....	.....	.....	.....
Preferred	.....	.....	12¼	12½	12½	.....
6s, 1872	.....	.....	.....	.....	.....	.....
6s, 1882	.....	.....	93	.....	93	.....
United Co. of N. J.	185	.....	185½	185¾	.....	184
Hestonville, (Horse)	.....	.....	.....	.....	.....	.....
Chestnut&Wal.(do)	.....	.....	.....	.....	.....	.....
Green & Coates (do)	.....	.....	.....	.....	.....	.....

Baltimore Stock Exchange.

Closing Prices for the Week Ending Mar. 21.

	W. 15.	Th.16.	F. 17.	Sat.18.	M.20.	Tu.21.
Baltimore & Ohio	190	190	.....	.....	.....	.....
6s, 1880	.....	.....	.....	.....	.....	.....
6s, 1885	.....	.....	.....	.....	.....	.....
Central Ohio ($50)	.....	.....	50	.....	.....	.....
1st mortgage	.....	.....	.....	.....	.....	.....
Marietta & Cincin'ti	.....	.....	.....	.....	.....	.....
1st mortgage, 7s	.....	124¾	.....	.....	.....	124½
2d mortgage, 7s	101½	101¾	103	.....	102¾	102½
3d mortgage, 8s	54½	55⅜	56¼	56¼	56¾	55¼
Northern Cen. ($50)	.....	50	.....	.....	.....	.....
2d mort., 6s 1885	.....	.....	.....	.....	.....	.....
3d mort., 6s, 1900	.....	.....	.....	.....	.....	.....
6s, 1900, gold	.....	.....	114¼	.....	114¾	.....
6s, 1904, gold	112½	.....	.....	.....	112¾	.....
Pitts.& Connellsv.7s	122	.....	.....	.....	.....	.....
Virginia 6s, Consol.	.....	.....	.....	62½	63	.....
Consol. coupons	50¼	.....	.....	.....	55	.....
10-40 bonds	39⅝	39⅝	.....	40¼	.....	.....
Def'd Certificates	.....	.....	.....	.....	.....	.....
Western Maryland	.....	.....	.....	.....	.....	.....
1st M.,end.by Balt	.....	.....	.....	.....	.....	.....
2d M. do	.....	.....	.....	.....	114¾	.....
3d M., do	.....	.....	.....	.....	125½	.....
1st M.,unendors'd	.....	.....	.....	.....	.....	.....
2d M.,end.WashCo	.....	.....	.....	.....	.....	.....
2d M., preferred	.....	.....	.....	.....	.....	.....
City Passenger R R.	.....	.....	.....	.....	.....	40¼

London Stock Exchange.

	Closing Prices — Mar. 10.		Mar. 3.	
Baltimore & Ohio (sterling)	111	113	111	113
Central of N. J., $100 shares	93	98	93	98
Do. consol. mort	113	115	114	116
Do. Adjustment Bonds	104	109	104	109
Do. Income Bonds	102	105	102	105
Det., G'd Haven & Mil. Equip bds	112	114	112	114
Do. Con. M. 5p.c., till '83 aft'r 6p.c	110	112	110	112
Illinois Central $100 shares	137	139	136	138
Lehigh Valley Cons. mortgage	118	122	118	122
Louisville & Nashville mort 6s.	97	100	99	101
Do. Sink. Fund bds (S. & N. Ala)	97	100	99	101
Do. capital stock $100 shares.	75	77	81	83
N. Y. Cent. & Hud. R. mt. bds.	134	137	134	137
Do. $100 shares	133½	134½	134	135
Do mort. bonds (stg.)	118	120	118	120
N. Y., Lake Erie & West., $100 shs	36½	37	38¼	38¾
Do. 6 p. c. pref. $100 shares	72	74	78	80
Do. 1st Con. Mort. bds (Erie)	127	129	128	130
Do. do. Funded Coupon bds.	122	125	124	126
Do. 2d Consol Mort. bonds	95	97	98	100
Do. do. Funded Coupon bds.	90	95	97	99
Do. Gold Income bonds	88	92	88	92
N. Y., Pa. & Ohio 1st mort. bonds.	47	48	48	49
Do. Prior Lien bds (sterling)	101	105	101	105
Pennsylvania, $50 shares	61½	62½	61	62
Do. Con. Sink Fund Mort.	115	117	114	116
Philadelphia & Reading $50 shs	29¼	29¾	29½	30½
General Consol Mortgage	115	117	115	117
Do. Improvement Mortgage	103	105	102	104
Do. Gen. Mtg. '74, ex-def'd coup.	96	98	96	98
Do. Scrip for the 6 def. ¼ coup.	96	99	96	99
Pittsb., Ft. W. & Chi. Eq. bds.	104	106	104	106
St. L. Bridge 1st mort. gold b'd.	125	127	125	127
Do. 1st pref. stock	94	98	90	95
Union Pa. Land Grant 1st. mtg.	116	118	116	118
Wabash, St. L. & P. $100 shs	32	34	33	35
Do. $100 pref. shares	57	59	58	60
Do. gen. mort. bonds	84	86	87	89

AMERICAN RAILROAD JOURNAL.

Financial and Commercial Review.

THURSDAY EVENING, March 23, 1882.

IN the money market this morning call loans were easy at 4 to 6 per cent on stocks, and 2 to 3 per cent on United States bonds. Time loans on stocks were 4 and 5 per cent. Prime mercantile paper 5 and 6 per cent.

The posted rates for prime bankers' sterling were 4.87@4.90; the actual rates were 4.86@¼ and 4.89¼@½, with cable transfers 4.90@½, and prime commercial bills 4.84½@¾. For Continental bills the actual rates are as follows: Francs, 5.14⅜@5.15, and 5.18¾@5.19⅜; Marks 94¾@⅞ and 95⅝@¾, and guilders, 40⅛ and 40⅝.

The case of the Philadelphia and Reading and Baltimore and Ohio Railroad companies against the Central Railroad Company of New Jersey, relative to Senate bill No. 111, authorizing the conversion of bonds into extra stock, will be argued in the United States Circuit Court at Trenton on Tuesday, the 28th inst.

The gross earnings of the Buffalo, Pittsburg and Western Railroad for the month of February, 1882, were $48,505.43, the expenses $22,431.50, and the net profit $26,073.93; for the month of February, 1881, the gross receipts were $40,023.85, the expenses $31,077.45, and the net profit $8,946.40—showing an increase in gross receipts of $8,481.58, with a decrease in expenses of $8,645.95, making an increase in the net profits of $ 7,127.53.

According to a recent statement of the Treasurer of Georgia, the bonded debt of the State is only $9,726,660, while it is indorser for about $700,000 of railroad bonds, on which it holds a first lien. The property held by the State, including the Western and Atlantic Railroad, on which it receives an annual rental of $300,000, if sold in the open market would bring a sum sufficient to wipe out her entire indebtedness.

The capital of the Chemical Bank of this city is only $300,000, but its deposits aggregate $14,000,000, on which a discount business of $13,500,000 is transacted. Its shareholders are paid a dividend of 25 per cent quarterly. The stock is held at $2,000, probably the highest quotation of bank shares in the world.

An important railroad case was tried in the Sixth United States Circuit Court, in Ohio, in February last, in the suit of Hayes & Co., vs. the Cleveland and Pittsburgh Railroad Company, involving the duties as well as the rights of railroad carriers, and the question of discriminations in freight charges. The transactions out of which the suit grew took place in 1876, at Cleveland, Ohio, and on the railroad between Cleveland and Salineville Circuit. The charge of Judge Baxter to the jury declaring it unlawful for a railroad company to exact from one customer more than another, and that all patrons are entitled to equal privileges will be found on another page of the JOURNAL. The jury brought in a verdict against the railroad company for $4,584, being the amount the plaintiff was charged in excess of the freight charges to more favored customers.

The prospectus of the United States Railway Share and Trust Co., with a capital of £1,000,000, was issued in London on the 20th inst. The purchases at present will be confined to the following stocks: New York Central and Hudson River, Pennsylvania, Baltimore and Ohio, Illinois Central, Lake Shore and Michigan Southern, Chicago and Northwestern, Chicago, Milwaukee and St. Paul, Chicago, Burlington and Quincy, Chicago, Rock Island and Pacific, Union Pacific, Central Pacific, and Atchison, Topeka and Santa Fe.

The receipts of the Grand Trunk Railway Co. of Canada for the month of January, 1882, were £161,925, the expenses £134,422, and the net profit £27,508; for the month of January, 1881, the receipts were £161,259, the expenses £126,863, and the net profit £37,396—showing a decrease in receipts of £2,334, with an increase in expenses of £7,559, making a decrease in net profit of £9,893.

The trustees of the Hannibal and St. Joseph Railroad Company filed on the 20th inst., in the United States Circuit Court at Jefferson City, Mo., an amended bill in equity, and after reciting the acts of the Assembly under which the lien was created, an order to restrain and enjoin the sale of the road is asked. The relief especially asked for is that the three million dollars paid the State be adjudged full payment of all liability of the Company to the State, that the mortgage and lien of the State be adjudged vested in the trustees; that if the Court decides to the contrary, then the $3,000,000 paid in June, with interest and income thereof, be repaid to the trustees.

The gross receipts of the New York, Pennsylvania and Ohio Railroad for the month of January, 1882, were $409,058, against $431,346 for the month of January, 1881, a decrease of $22,288. The net earnings, after deducting all charges, rents, etc., amounted to $368, against $39,135 for the same period last year, showing a decrease of $37,767.

The session of the Legislature of Tennessee recently called by the Governor was not convened for the purpose of considering the question of the State debt, and under the law of the State its Legislature cannot at an extra session legislate on any subject not mentioned in the call of the Governor which convened it.

The following quotations of sales of railway and other securities, for the week, are in addition to those given elsewhere in our columns:

New York.—Atlantic and Pacific 1st, 96⅝; Boston and New York Air Line pref., 65; Cairo and Fulton 1st, 107¾; Chicago, Milwaukee and St. Paul 1st, S. M. div. 6s, 103¾; Charlotte' Columbia and Augusta, 50; Cedar Falls and Minnesota, 20; Chicago, St. Paul, Minneapolis and Omaha, 38⅞; do. pref., 105⅝; do. consol., 101¼, Columbia and Greenville pref., 83; Central Iowa, 33; do. 1st, 111; Chicago, St. Louis and New Orleans, 79; do. 1st, 116; Chesapeake and Ohio cur. int., 47½; do. 1st, Series A, 103; Columbus, Chicago and Indiana Central inc., 52½; Chicago, Burlington and Quincy 8s, 104; Chicago and Northwestern Interest bonds, 105; Dubuque and Sioux City, 71½; Denver and Rio Grande, 61; do. 1st, 113; do. consol., 103½; Denver, South Park and Pacific 1st, 103; East Tenn., Virginia and Georgia, 12; do. pref., 20; do. inc., 52½; do. 5s, 75; Elizabethtown, Lexington and Big Sandy 6s, 100; Evansville and Terre Haute 1st, 95; Flint and Pere Marquette 1st, 115; Green Bay, Winona and St. Peter, 11⅜; Georgia R. R. and Bank, 165; Gulf, Colorado and Santa Fe 1st, 108; Houston and Texas Central 1st, Western div., 107⅝; Indiana, Bloomington and Western, 41; do. 1st, 89½; International and Gt. Northern 1st, 107¼; do. coupon 6s, 84½; Indianapolis, Decatur and Springfield 1st, 103½; Keokuk and Des Moines, 19; do. pref., 20; do. 1st, 105; Kansas Pacific 1st consol., 103½; do. 6s, Denver div. ass., 108¾; do. 6s, 1895, 110; Long Island, 51¾; Louisiana and Missouri River, 17; do. 1st, 101¾; Lake Erie and Western, 35; do. inc., 55; do. Sandusky div. 1st, 50; Louisville, New Albany and Chicago, 68; do. 1st, 102; Lehigh and Wilkesbarre consol. ass., 105½; do. inc., 86; Lafayette, Bloomington and Muncie 1st, 102½; Louisville and Nashville Gen'l mort. 6s, 97; do. N. O. and Mobile 1st, 94; do. St. Louis div. 2d, 51½; Manhattan Beach, 31¾; Marietta and Cincinnati 1st pref., 13; do. 2d pref., 8; Mobile and Ohio, 26; do. 1st deben., 82; do. 24 deben., 52; Missouri, Kansas and Texas, 35⅜; do. gen'l mort. 6s, 82; do. consol. 7s, 105; do. 2d, 68½; Missouri Pacific, 98; Milwaukee, Lake Shore and Western, 46½; Memphis and Charleston, 52½; Michigan Southern S. F., 108½; Michigan Central 5s, 94; Nashville, Chattanooga and St. Louis, 64¾; do. 1st, 114⅞; New York, Ontario and Western, 26; Norfolk and Western pref., 51⅜; do. Gen'l mort., 103; New Orleans Pacific 1st, 87½; Northern Pacific 1st, 98½; Ohio Central, 17; do. 1st, 94½; do. inc., 41; Oregon Railway and Nav., 136; do. 1st, 106½; Oregon Transp., 69¼; Ohio Southern, 17½; do. 1st, 87½; do. inc., 33; Ohio and Mississippi, Springfield div. 1st. 121; Peoria, Decatur and Evansville, 31¼; Rochester and Pittsburg, 36; do. inc., 45; Richmond and Alleghany, 24; do. 1st, 93; Richmond and Danville, 134; do. West Point, 133½; do. 1st, 99¾; Rome, Watertown and Ogdensburg, 26; do. 1st consol., 89; St. Louis, Kansas City and Northern, Omaha div. 1st, 111¾; St. Louis, Alton and Terre Haute div. bonds, 40; Southern Pacific

of California 1st, 104¾; South Carolina inc., 49; do. 1st, 100½; St. Paul and Duluth, 29½; do. pref., 75; St. Paul, Minneapolis and Manitoba, 120½; do. 1st, 109¼; St. Louis, Iron Mountain and Southern 5s, 81; do. Cairo, Arkansas and Texas 1st, 106; St. Louis and San Francisco 2d, Class A, 103; do. B, 89½; St. Paul and Sioux City 1st, 111¾; Toledo Delphos and Burlington, 17; do. inc., 22; Texas and Pacific, 45¼; do. inc. L. G., 68½; do. Rio Grande div. 1st, 84; Virginia Midland, 49; Wabash, St. Louis and Pacific Gen'l mort. 6s, 84½; do. Iowa div. 1st, 90½; Arkansas 7s, issued to Central R. R., 21; do. L. R. & F. S. Rd., 25; Louisiana 7s, consol., 64¾; Missouri 6s, 1888, 110¼; North Carolina consol. 4s, 80; Tennessee 6s, 49½; Virginia 6s, old, 36; Canton Co. 6s, gold, 61; Sutro Tunnel, ¾; Colorado Coal and Iron, 44¾; do. 6s, 91; Consolidation Coal, 30; Central Mining, ¾; Deadwood, 6½; Excelsior, 1¾; Homestake, 18; Little Pittsburg, 1⅝; Standard, 15½.

Philadelphia.—Am. S. S. Co. 6s, 107¼; Belvidere Delaware 3d, 104½; Buffalo, Pittsburg and Western pref., 23½; Central Transportation, 35; Catawissa new pref., 53½; Chesapeake and Delaware Canal 6s, 88; Elmira and Wiliamsport 6s, 116; ; Harrisburg and Lancaster 6s, 103; Huntingdon and Broad Top Mt. consol. mort. 5s, 90; New Orleans Pacific 6s, 87; Northern Pacific 6s, Missouri div., 101; Norfolk and Western pref., 45½; Perkiomen 6s, 104; Pennsylvania and New York Canal 7s, 123; Philadelphia and Reading Coal and Iron deben. 7s, 65; Philadelphia, Wilmington and Baltimore 4s, 93¾; Philadelphia, Germantown and Norristown, 106⅛; Philadelphia and Reading scrip, 83; Pennsylvania R. R. consol. 5s, 104¾; St. Paul and Duluth pref., 73; Susq. Canal pref. 6s, 72½; Texas and Pacific 6s, 106; do. consol. mort. 6s, 96½; do. Rio Grande div. 6s, 83; Warren and Franklin 7s, 109. The latest quotations are: City 6s, 108@118; do. free of tax, 128@132; do. 4s, new, 108@113; Pennsylvania State 5s, new loan, 117½@118½; do. 4s, old, 110@112; do. 4s, new, 114@114½; Philadelphia and Reading R. R., 30⅛@30¼; do. consol. mort. 7s, reg., 125@125½; do. mort. 6s, 119@120; do. gen'l mort. 6s, coupon, 94¾@95½; do. 7s, 1893, 120@121; do. new, conv., 74½@75½; United New Jersey R. R. and Canal, 184@185; Buffalo, Pittsburg and Western, 17¼@17⅜; Pittsburg, Titusville and Buffalo 7s, 94½@95½; Camden and Atlantic mort. 6s, 1889, 114@114½; Pennsylvania R. R., 63@63; do. general mort. 6s, coupon, 124@124½; do. reg., 124½@125; do. consol. mort. 6s, reg., 117@118; Little Schuylkill R. R., 57@58; Morris Canal, 65@69; do. pref., 165@169; Schuylkill Navigation, 5@6; do. pref., 12@12½; do. 6s. 1882, 92@94; do. 1872, 104½@106; Elmira and Williamsport pref., 58@60; do. 6s, 115½@116¼; do. 5s, 95@100; Lehigh Coal and Navigation, 40⅞@41; do. 6s, 1884, 104@105; do. R. R. loan, 117@118; do. Gold Loan, 111½@112; do. consol. 7s, 116½@117¼; Northern Pacific, 35⅝@35½; do. pref., 76@76½; North Pennsylvania, 63½@64; do. 6s, 105½@106; do. 7s, 119@120; do. General mort. 7s, reg., 120@122; Philadelphia and Erie, 14¾@15½; do. 7s, 114@115; do. 5s, 104½@105½; Minehill, 62@62½; Catawissa, 20¾@21½; do. pref., 53½@54@; do. new pref., 53@53¾; do. 7s, 1900, 116@—; Lehigh Valley 60½@61; do. 6s, coupon, 121½@123; do. reg., 123½@124; do. 2d mort. 7s, 130½@132; do. consol. mort. 120¼@121½; Fifth and Sixth streets (horse), 152@155; Second and Third, 109@115; Thirteenth and Fifteenth, 73@75; Spruce and Pine, 45@47; Green and Coates, 74@75; Chestnut and Walnut, 90@91; Germantown, 70@80; Union, 110@115; West Philadelphia, 104@112; People's 12@13; Continental, 100@102.

Baltimore.—Atlantic Coal, 1.30; Atlanta and Charlotte, 72; do. 1st, 107½; Baltimore City 6s, 1890, 114¼; Columbia and Greenville 1st, 100½; Central Ohio, pref., 47; Maryland Defense 6s, 6s, 103½; North Carolina 4s, 80; Northern Central 5s, 97¾; Ohio and Mississippi, Springfield div. 1st, 120½; Richmond and Danville gold 100; Virginia Midland 2d mort., 107; do. 5th mort., 91½; do. Virginia Peeler, 34; do. coup,. 35 Virginia and Tennessee 2d, 6s, 101¼; Wilmington, Columbia and Augusta, 100.

Boston.—Atlantic and Pacific 6s, 93¼; do. 6s, inc., 31; Boston Revere B ach and Lynn, 124; Boston Water Power, 5⅝; Boston Land, 8; Burlington and Missouri River Railroad in non-exempt, 103¾; Nebraska 6s, Cedar Rapids and Missouri River, 140; Central of Iowa, 33½; do. 1st, 110¾; Chicago, Milwaukee and St. Paul, Dubuque div. 6s, 103½; California Southern blocks, 130; do. 7s, 80; Connotton Valley, 6½; do, 7s; 57; do. 7s, Straitsville div, 40; Chicago, Burlington and Quincy 4s, old, 86½; do. 5s, 1919, 102½; do. 4s, Denver ext., 84½; Chicago, Iowa and Nebraska, 145; Chicago and West Michigan, 5s, 90; 7s, 115½; Flint and Pere Marquette, 24½; do. pref., 96; Iowa Falls and Sioux City, 77; Kansas City, Fort Scott and Gulf, 7s, 110; Kansas City, Lawrence and Southern, 5s, 103½; Little Rock, and Fort Smith, 49½; do. 7s, 109; Louisiana and Missouri River 16; do. pref., 34; Mexican Central, 7s, 85; do. blocks, new, 99½; Marquette, Houghton and Ontanagon, 64; do. 1st 100; Massachusetts Central, 9½; do. 1st, 60; Northern Pacific 6s, 97; NewYork and New England 6s, 104; New Mexico and Southern Pacific 7s, 112½; Ogdensburg and Lake Champlain consol, 6s, 96; Rutland, 4; pref., 23½; Rupublican Valley, 6s, 103¾; Sonora, 40⅝; do. 7s, 107½; Summit Branch, 11; Toledo, Delphos and Burlington, 7½; do. inc., M. L., 21; do. Southeast div. 6s, 70; do. inc. 6s, 18¾; Toledo, Cincinnati and St. Louis, 11⅝; do. 6s, 60; do. inc., 19¼; Wisconsin Central, 18; do. 2d. series, 44; Atlantic Mining Co., 14; Allouez, 3½; Brunswick Antimony, 12; Copper Falls. 2½; Franklin, 11; Harshaw, 2½; National, 2; Osceola, 32; Pewabic, 12½; Pœnix, 2⅝; Ridge, 50c.; Sullivan, 1; Silver Islet, 20.

Astonished at His Popularity.

Ike Schwindelmeyer is a relative of old man Schwindelmeyer, of the well-known Galveston firm of Schwindelmeyer & Co. Ike is a recent importation from Germany, and travels for the firm. He has a very great opinion of himself, nd thinks that Schwindelmeyer owns this world and has a builder's lien on the next. Not long since young Schwindelmeyer visited Houston. On the morning of his arrival, after breakfast, he started up the avenue. It happened that the funeral of a prominent citizen was also proceeding up the avenue. Ike was about abreast of the hearse, and the gentlemen on the sidewalks removed their hats, and remained uncovered until the hearse had passed. Ike took all this to himself, and politely returned the salutations with some pleasant remark, as "A peautiful morning, shentlemens!" or "How is yerself to-day?" There was a large crowd of gentlemen at the corner of Pecan street, and when Ike and the hearse came up they all took off their hats reverently. Ike was moved at this universal homage, and exclaimed, half confidentially to himself: "I vonder who tole 'em I was traveling for Schwindelmeyer & Co.!"—*Galveston News.*

Gen. Mahone's Claim Allowed.

A session of the United States Circuit Court was held at Richmond, Va., on the 17th inst., Judges Bond and Hughes presiding, for the purpose of making the final distribution of the funds still to the credit of the cause of the Atlantic, Mississippi and Ohio Railroad case on petition of Gen. Wm. Mahone, former president of the road, asking pay for his services as such president. Judge Hughes, speaking for the court, said that the claims of the petitioner were in the nature of choses in action against the Atlantic, Mississippi and Ohio Company, and could not be paid in preference to mortgages, and that they must stand upon consent, and not upon adjudication by the court. He thought they were equitable and just, and was gratified that the new company, as assignees of the State mortgages of $4,000,000, had consented to their payment, and a decree in favor of Gen. Mahone for $30,000 was entered. The court announced that claims for labor, material and supplies due when the receivers were appointed, amounting to over $200,000, will be paid.

Politeness in a Ladies' Car.

The trial of the case of William H. Johnson, of Pittsburg, Penn., against the Georgia Railroad Co., for $10,000, suit for damages, was concluded at Morgan Superior Court, Georgia, on the 15th inst. The case grew out of an incident which occurred on a passenger train of the Company one day last July. Among the passengers was William H. Johnson, a commercial traveler doing business for a house in Pittsburgh. While sitting in the ladies' car he pulled off his coat, and was requested by the conductor to put it on again. As the day was warm and oppressive he refused to do so, and after some words had been exchanged, as to the requirements of politeness, the conductor threatened to put him off the train. Johnson was unmoved by the threats, and persisted in his refusal to make himself uncomfortable, when the train was stopped near Madison and he was ejected. He brought suit for damages, but on trial the jury disagreed, nine of them, it is said, considering that he was not entitled to damages, and the remainder estimating his loss at $100. It is not thought that the case will be pushed further, as the juries and conductors seem to have thesame ideas of etiquette.

A street railroad is to be constructed between Bakersfield and Summer, Kern county, Cal.

The "Witch" Pay Car.

WHENEVER a short, sharp whistle is heard in the vicinity of a mining town, between the 10th and 25th of the month, the "Witch" is expected to dash in sight. The "Witch" is the pay car of the Philadelphia and Reading Coal and Iron Company. As her engineer, Michael Fitzpatrick, says, she takes up less space and can cover more ground than anything on the road. "Mike," as he is familiarly called, ought to know the "Witch's" capacity, as he has driven her for five years, this coming May. The "Witch," is a combination of locomotive and passenger car. The Company built five of these combinations for official use. Four of these, the "Witch," "Ariel," "Stag" and "Transit" are in use. The "Gem" was torn to pieces by an explosion at Mahanoy City some years ago. The "Witch" is always used by Paymaster Jones of the Coal and Iron Company and his clerks. She weighs 10 tons 7 cwt., and can travel a mile very close to a minute. A short time ago a representative of the Pottsville *Miners' Journal* a took trip with the Paymaster to Mahanoy City, via Tamaqua. Fitzpatrick was asked how fast he could send her. On a good road he felt confident of being able to cover a mile in a minute and two seconds. He was asked if he couldn't shorten the time a second, but refused. There was a mile in the vicinity of Brockville that would be just the place to show her speed, he said, if it weren't for a bad spot—a slight depression in the road-bed. When this spot was reached the "Witch" gave a jump which satisfied all on board that if she were traveling at the rate of a mile in 1.02 the track would be too hot to hold her at any bad spots. On the Lebanon Valley Railroad the engineer said it was an easy matter to run the "Witch" very fast. "I have run her, he said on these branch roads 20 miles in 24 minutes, and 26 miles in 30 minutes. You hear a good deal about engines running a mile a minute, but there's not many of 'em do it. I never knew but one to do it around here. She drew a Shamokin passenger train. An engine has an advantage over the "Witch." Our drivers are only 42 inch. But give me a nice piece of road and the "Witch" would cover her mile in at least 1.02, and perhaps a shade less. I'm sure of those figures, however." On Monday, following the fast train to Reading, the "Witch" did her mile in a minute. Paymaster Jones was on board at the time. The little engine made her first run in November, 1855. When built she was a wood burner. In August, 1876, she was turned out of the shops after a thorough overhauling. In fact she was to all intents and purposes new. She had been changed to a coal burner. Michael Fitzpatrick was appointed engineer. He has been an employe of the company for 16 years. To use his own words, he climbed the ladder from the lowest rung. He began life as a brakeman, then became switch tender. For five years he was fireman of a Shamokin passenger train engine. By that time he was found fully qualified to run an engine, and was offered the "Witch. He has filled his present position with great satisfaction. It is one of considerable responsibility. Taking chances on single tracks, between towns, isn't the safest sort of occupation, but Fitzpatrick appears to be peculiarly fitted for that sort of life. He is intelligent, careful, yet quick to act, has a strong nerve and is the soul of good nature. He has been very fortunate in the matter of accidents, and it is his boast, made very modestly, however, that he has never killed or hurt anything. His fireman is John Broderick, who, in addition to being a good fireman is a lightning switchman. Fitzpatrick, when asked how many tons of silver he had carried in his time, said he couldn't answer. He was satisfied, however, that if he could get 5 per cent of it together he would retire from railroading, much as he liked the "Witch."

Earnings and Expenses of the Pacific Railroads since their Completion.

THE Speaker of the House of Representatives at Washington laid before that body on the 16th inst. a letter from the Secretary of the Interior, transmitting, in response to a resolution of the House, a statement of the gross earnings, operating expenses and net earnings of the Pacific railroads during each year from the date of their completion. The totals are as follows:—

Central Branch Union Pacific, from October, 1868, to December 31, 1881—Gross earnings, $5,042,891; operating expenses, $3,581,699.10; net earnings, $1,461,191.90. The interest of first mortgage bonds, amounting to $95,000 per annum, is not included in the operating expenses.

Union Pacific, from November, 1869, to December 31, 1881—Gross earnings, $157,899,369.66; operating expenses, $78,213,915.47; net earnings, 79,685,454.19. The annual interest on the first mortgage bonds of the Union division amounts to $1,633,740. Since the consolidation the annual interest on the first mortgage bonds amounts to $2,480,640 and is not included in the operating expenses in this statement. This statement, however, includes the Kansas Pacific and Denver Pacific, which was consolidated with the Union Pacific January 20, 1880.

Kansas Pacific, from November, 1868, to December 31, 1879 (394 miles, subsidized with bonds)—Gross earnings, $25,567,996.18; operating expenses, $14,536,720.14; net earnings, $11,031,276.04. The interest on the first mortgage bonds, amounting to $378,180 per annum, is not included in this statement, of operating expenses. The earnings and expenses of this road subsequent to December, 1879, are included in the statement for the Union Pacific.

Central Pacific, from November 6, 1869, to December 31, 1881—Gross earnings, $184,381,096.63; operating expenses, $119,873,378.88; net earnings, $64,507,717.75. Interest on the first mortgage bonds, amounting to $1,717,080 per annum, is not included in the operating expenses.

Sioux City and Pacific, 117.42 miles, from September 30, 1868, to December 31, 1881—Gross earnings, $4,471,927.52; operating expenses, $3,279,933.88; net earnings, $1,191,993.64. Interest on the first mortgage bonds, amounting to $97,680 per annum, is not included in the operating expenses.

The letter of transmission states that prior to July 1, 1878, no official returns were furnished the department, but the data are believed to be reliable.

Chesapeake and Ohio Railway.

AT the annual meeting of the stockholders of the Chesapeake and Ohio Railway Company, held at Richmond, Va., on the 16th inst., the report of the president was presented covering the operation of the road for the past fifteen months, and showing that during that time the extension of the main line to the deep waters of the Chesapeake Bay at Newport News and the connection with the Southwestern system of railroads, by means of the Elizabethtown, Lexington and Big Sandy Road have been completed—two events which will have a very important bearing upon the future operations of the Company, opening as they do a continuous connection with the largest Western cities of the Ohio Valley. The general tenor of President Huntington's report shows a prosperous condition of the affairs of the Company. The gross earnings for the fifteen months are placed at $3,375,968; expenses, $2,743,430; net earnings, $632,538. A resolution was adopted authorizing the directors to construct a branch road from Newport News to Old Point Comfort The old board of directors was unanimously re-elected.

Chicago, Milwaukee and St. Paul Railway.

THE following is the official statement of the directors of the Chicago, Milwaukee and St. Paul Railway Company for the year ending December 31, 1881:

Gross earnings, 1881		$17,025,461.66
Less operating expenses, including taxes		10,317,931.14
Net earnings		$6,707,530.52
By interest and other income profits	$324,112.14	
By cash received for sales of land	311,196.23	$635,308.37
Total		$7,342,838.37
Interest on bonds, 1881		4,127,389.12
		$3,215,449.77
Amount of 3½ per cent on common and preferred stock paid October, 1881		992,416.04
		$2,223,033.73
Amount of capital stock—		
Preferred	$14,401,483	
Common	20,404,261	
Total	$34,805:744	
Dividend of 3½ per cent, payable April, 1882		1,218,201.04
Balance		$1,004,832.62

The extension of the St. Paul and Omaha Railroad to Lake Superior, now approaching completion, will open a new and short line from all northern Kansas, Nebraska and Dakota. On the route of the road are the timber forests of Wisconsin and Minnesota, so that instead of shipping the timber 100 to 400 miles by lake to Chicago for distribution, it can be sent direct by rail to the West and Southwest, which afford the great markets for timber. The ports which the road will reach on Lake Superior are about the same distance from Buffalo and other points on Lake Erie as Chicago and Milwaukee. The grain from the Omaha road will be carried East through the lakes by the same vessels that carry the Northern Pacific and Manitoba wheat, and these vessels return

with coal and merchandise for distribution through the prairies. The heart of the road is located at St. Paul and Minneapolis, which are important distributing points for the Northwest. Minneapolis has to-day a capacity in its flour-mills to grind annually 25,000,000 bushels of wheat, a part of which is carried by this system of roads, the flour being then shipped from Minneapolis to the East either by all rail through Chicago or by its line to Lake Superior, and from thence East by water. The Company has 1,250,000 acres of unsold land and has $1,200,000 in securities for lands already sold. In addition the Company has a land grant of ten sections per mile for the road now being finished in Wisconsin to Bayfield and its Lake Superior branch, so that 340,000 acres more land will be acquired by the construction of the 100 miles of grade this year.

Pig Iron Product.

THE Bulletin of the American Iron and Steel Association for March 1st and 8th contains an elaborate series of tables giving in detail the production of pig iron in the United States for the year 1881, compiled from returns received from the manufacturers, and compared with similar returns for the years 1880 and 1879, from which we gather the following leading facts touching the pig iron industry of the country in those years:—

The total production of pig iron in the United States during 1881 was 4,641,564 net tons of 2,000 pounds. This is an increase of eight per cent, over that of 1880, while the product for the latter year was forty per cent greater than that of 1879, which was 3,070,875 net tons. During 1881 there were imported 520,161 net tons, and the stock on hand at the beginning of foreign and domestic pig was 640,790 net tons, making the total supply for the year 5,802,516 net tons. At the close of the year we had on hand 222,043 net tons of pig iron, foreign and domestic, which, being deducted from the total supply, makes the consumption for the year 5,580,473 net tons. The consumption for 1880 was 4,469,265 net tons, or over a million tons less than last year. About one-third of this was used in the production of Bessemer steel, the remainder was required to supply the miscellaneous iron and steel works of the country.

The small percentage of increase in 1881 compared with that of the year before is accounted for by the fact that the boom in pig iron, which came in the latter third of 1879, did not show itself in an increased capacity for production until 1880. In that year the idle furnaces were put in operation and all driven to their utmost capacity. This was continued through 1881, and the eight per cent increase is due mainly to new furnaces. Twenty-six States and one Territory made pig iron in 1881. That Territory was Washington, and it, with Colorado and California, each made pig iron in that year for the first time. North Carolina, which had suspended pig iron making since 1877, resumed last year, and Minnesota has had since 1880, a single furnace in active operation.

The largest production and the largest increase in tons were, of course, in Pennsylvania, which made 2,190,786 net tons, nearly half the whole product of the country. The increase over last year's product was 107,665 tons. The largest percentage of increase was in States having a smaller product. Virginia increased from 29,934 tons to 83,711; Alabama from 77,190 tons to 98,081; Georgia from 27,321 tons to 37,404; Tennessee from 70,873 tons to 87,406; Illinois from 150,556 tons to 251 781; Ohio's increase is relatively very small, being from 674,207 tons to 710,546. New York, Maryland, West Virginia, Kentucky and Indiana made less pig iron in 1881 than in 1880.

Of the total pig iron product for 1881, 2,268,264 net tons were produced with bituminous coal, 1,734,462 from anthracite, and 638,838 from charcoal. The use of anthracite was less in 1881 than in 1880; the use of bituminous coal and charcoal has steadily increased. Of 701 furnaces in the United States on December 31, 1880, there were 446 in blast and 255 out of blast; of 716 furnaces on December 31, 1881, there were 457 in blast and 259 out of blast. In 1881 there were built twenty-five new furnaces in the United States and twenty-three others were commenced. In the same year twelve furnaces were abandoned.

Out of the 107,665 tons of increase in the pig iron product in Pennsylvania last year, Alleghany county increased 85,044 tons. The Upper Susquehanna district fell off from 168,128 tons in 1880 to 125,787 in 1881. The Schuylkill Valley produced 309,049 tons, about 2,000 more than in 1880. The Lehigh Valley's product was 560,190 tons against 544,987 in 1880. The Lower Susquehanna district produced 218,927 net tons against 217,889 the year before, and the Shenango Valley made 198,968 tons in 1881, a falling off of 16,345 tons from its product during 1880. The decreased production of pig iron in the eastern part of the State is more than made up by large gains in the bituminous region outside of Alleghany county.

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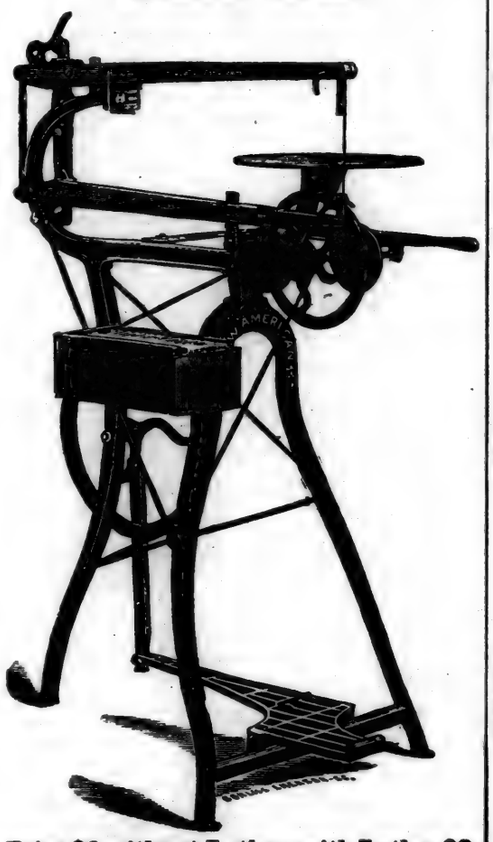
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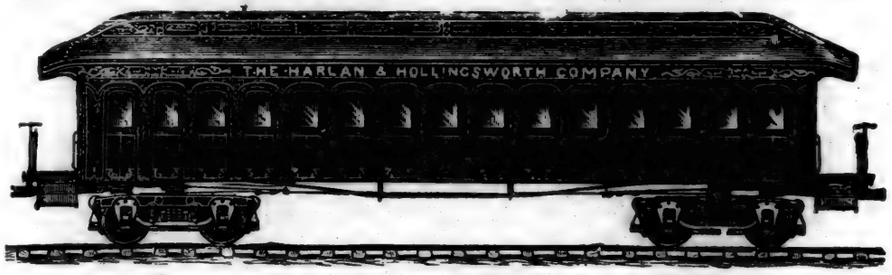
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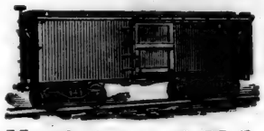
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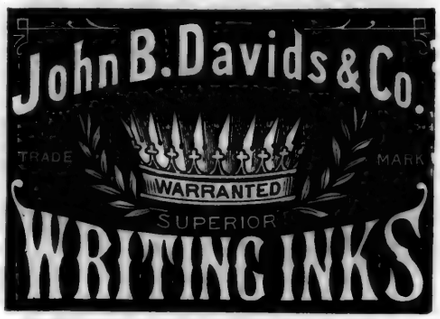
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Electric Tramway Cars.

THE first application of electricity to the driving of tramcars in this country was lately made at the North Metropolitan Tramway works, Leytonstone. The car was fitted with a large number of Faure accumulators, ranged under the seats and communicating with a motor underneath, which, in its turn, by means of pinion-wheels, acted upon the wheels of the car. The accumulators having been charged at a dynamo-machine in the company's yard, a number of ladies and gentleman who had been invited to witness the experiment mounted upon the car and had a few runs with it up and down a quarter of a mile of tramway in Union-road, to the amazement of the inhabitants, who, for the first time in their lives, saw a tramcar full of people traveling at the rate of 7 or 8 miles an hour without any visible motive power. As proving the applicability of electric force to locomotion, the experiment was an undoubted success. The accumulators, which weighed a ton and a half, exerted, with one charging, a force equal to that of twenty-five horses for one hour—that is to say, five horses for five hours, and so on. In other words, the car could have run with its full number of passengers for half a day, with an ample allowance for waste of energy. The objection to this system, as at present carried out, rests on two grounds—first, that the car with its load of accumulators weighs as much as five tons; and, secondly, that the pinion-wheels make a loud grinding noise, such as seriously to incommode the public. Both these defects the promotors hope to be able to remedy by attaching the motor, which is practically a dynamo machine reversed, direct to the axle, thus dispensing with pinion-wheels and reducing friction. The attachment of the motor direct to the axle would necessitate in the case of tramcars the use of driving-wheels small enough to make a large number of revolutions per minute with a low rate of progression. In the case of railway trains it would enable a very high rate of speed to be attained—probably 100 miles an hour—with driving-wheels of moderate size. The promotors are sanguine enough to believe that at no distant day they may be able also to introduce electric cabs and omnibuses guided like velocipedes. All vehicles driven by electricity could, of course, with a little additional expenditure of force be lighted by the same means. It only remains to add, with reference to the electric tramcar, that it can be worked, started, stopped, and reversed by the moving of a small switch-handle, and that the promoters calculate upon being able to work tramways with electricity at one-half the cost of horse power. The experiment was carried out by Mr. Radcliffe Ward on behalf of the Faure Accumulator Company.—*The Railway Times, London.*

Sawdust and Soda.

A RECENT feature of interest in the chemical market has been the rise in oxalic acid, which is costing 14½c per lb. to import to-day, against 12¼@12½c in January, 10½c in October, 9½c in July, 1881, and 7½c in June, 1880. It will be seen, therefore, that this chemical is nearly 100 per cent higher to day than it was a year and a half ago. No oxalic acid is made in this country, and when the English manufacturers are producing an excess of this as of other chemicals, it is their custom to unload their surplus in this country at any price which can be obtained. It is not believed that 7½c in 1880 covered the cost of production, and for more than twelve months past one of the largest makers has voluntarily ceased making oxalic acid. Other concerns have been paid to relinquish the manufacture, and hence the business has now got into few and strong hands, and the result will probably be that prices will be pushed to the other extreme. Oxalic acid is chemically prepared from sawdust by the use of potash and soda. In its commercial form it is in crystals, which resemble Epsom salts, and are sometimes mistaken therefor with direful results, since oxalic acid is a deadly poison. The principal use of oxalic acid is for bleaching purposes, and it is employed in the leather trade and by manufacturers of straw goods and printed calicoes.

Literal Oil on Troubled Waters.

A MOST striking experiment was tried at the Scottish port of Peterhead recently. A figure of speech, for it has hitherto been little else, was turned into a literal fact. Oil was poured on the waves with the result of calming the fair-way at the harbor's mouth, so that a small boat could enter in a storm. It has long been known that oil exerted this effect. It does so by simply destroying the friction of the air on the surface of the water. It smooths the way of the wind, and, consequently, calms the surface of the sea. Its accidental application has probably produced the wide-spread knowledge of its effect which has made the figure of speech universal. We are not aware that any scientific attempt has ever been made to apply oil to the waves. At Peterhead pipes were laid down and a large quantity of oil was forced through them. The oil at once rose to the surface and spread in a thin film on the water, with the effect of reducing the roughness to a mere swell. Small boats were thus able to enter the harbor which could not have ventured to do so in the rough sea which was running before the oil was spread upon it. So far, therefore, yesterday's experiment was successful. Whether it opens up the possibility that harbor mouths may be made generally safe in rough weather by the expenditure of a few hundred gallons of oil can perhaps only be decided by further trials. The machinery is, however, laid down, and further tests will therefore be easily applied. It is evident that the effect, as described yesterday, is one which would make all the difference between safety and danger in a harbor frequented by fishing boats, and it is in such harbors that it is likely, if anywhere, to be of permanent value.—*London Daily News.*

Using One's Eyes.

How many of us go through life without ever realizing that our eyes have to be educated to see, as well as our tongues to speak, and that only the barest outlines of the complex and ever-changing images focused on the retina ordinarily impress themselves upon the brain? That the education of the eye may be brought to a high state of perfection is shown in numerous ways. There are many delicate processes of manufacture which depend for their practical success upon the nice visual perception of the skilled artisan, who, almost unconsciously, detects variations of temperature, color, density, &c., of his materials which are inappreciable to the ordinary eye. The hunter, the mariner, the artist, the scientist, each needs to educate the eye to quick action in his special field ot research before he can hope to become expert in it. The following story, which is quite apropos, is related of Agassiz, and it is sufficiently characteristic of this remarkably accurate observer to have the merit of probability. We are told that once upon a time the Professor had occasion to select an assistant from one of his classes. There were a number of candidates for the post of honor, and, find-

ing himself in a quandary as to which one he should choose, the happy thought occurred to him of subjecting three of the more promising students in turn to the simple test of describing the view from his laboratory window, which overlooked the side-yard of the college. One said that he saw merely a board fence and a brick pavement; another added a stream of soapy water; a third detected the color of the paint on the fence, noted a green mold or fungus on the bricks, and evidences of "bluing in the water, besides other details. It is needless to tell to which candidate was awarded the coveted position. Houdin, the celebrated prestidigitateur, attributed his success in his profession to his quickness of perception, which, he tells us in his entertaining autobiography, he acquired by educating his eye to detect a large number of objects at a single glance. His simple plan was to select some shop window full of a miscellaneous assortment of articles, and to walk rapidly past it a number of times every day, writing down each object which impressed itself upon his mind. In this way he was able, after a time, to detect instantaneously all of the articles in the window, even though they might be numbered by scores.—*The Penn Monthly.*

New Classification of the States.

Mr. Henry Gannett, the geographer of the tenth census, suggests a new classification of States, which will commend itself to persons engaged in business pursuits as well as to teachers. The terms "New England," "Middle," "Southern," "Western," etc., with the gradual multiplication of States, have ceased to possess distinctive meanings, or make artificial divisions not in accord with facts of climate, race distribution, crops and other matters of practical import. Mr. Gannett proposes to employ, for puposes of division, two north and south lines, and one running east and west. The Appalachian chain of mountains marks the first north and south line, and the Cordilleras the second. The States along the eastern slope of the Appalachian chain are to be called, as at present, the Atlantic States, and are to be divided by Mason and Dixon's line into North and South Atlantic States. The States of the whole Mississippi Valley are to be termed Central States, and divided by the Ohio River and the southern border of Missouri and Kansas into Northern Central and Southern Central States. The Western States will embrace all those traversed by or west of the Rocky Mountains. These five classes, with the exception of the last, are measurably alike in extent and population.

The North Atlantic States are nine in number—Maine, New Hampshire, Vermont, Massachusetts, Rhode Island, Connecticut, New York, New Jersey and Pennsylvania.

The South Atlantic, likewise nine in number—Delaware, Maryland, District of Columbia, Virginia, West Virginia, North Carolina, South Carolina, Georgia and Florida.

The Northern Central, eleven in number—Ohio, Indiana, Illinois, Michigan, Wisconsin, Minnesota, Iowa, Missouri, Dakota, Nebraska and Kansas.

The Southern Central, of which there are but eight at present—Alabama, Mississippi, Louisiana, Texas Indian Territory, Arkansas, Tennesee and Kentucky.

The Western, eleven — Montana, Idaho, Washington, Oregon, Wyoming, Colorado, New Mexico, Arizona, Utah, Nevada and California.

In matters of climate these sections have each their peculiar differences of temperature and rainfall. There is a wide difference in these respects between the North Atlantic and South Atlantic States, and between the Northern Central and the Southern Central States, while the Western have an arid climate, with little rain and great extremes of heat.

With respect to historical development, it will be observed that the Atlantic States, containing the "original thirteen," mark the first stage of our political history, the Central States the second and the Western States the last.

As regards industrial activities, the North Atlantic States produce over 60 per cent of the whole of our manufactures, while the two Southern sections produce all our sugar, rice and cotton, and about where the four sections just named adjoin is the center of production of our tobacco.

The North Atlantic and Northern Central States contain 86 per cent of our foreign element; the South Atlantic and Southern Central States 90 per cent of the colored element.

These sections, as here grouped, are further distinguished by the fact that they differ in their modes of local government, the two Northern, with slight exceptions, having township government, and the two Southern being without it. The Northern Central States produce 71 per cent of the cereals of the country.

It will be seen that the proposed classification designates in brief terms sections of country having points of interest in common, and answers better for practical purposes than the old one, which, if utility is to prevail, must ultimately become obsolete. Its use in the weather reports, for example, would be exceedingly convenient, and convey more definite ideas than are commonly obtained from the present terminology. Other advantages will suggest themselves to the reader.

Ottawa River Ship Canal.

C. H. Plummer, of Saginaw, Mich., visited Ottawa, Canada, on the 17th ult., in connection with the Ottawa River Ship Canal project. The route proposed to be traversed by this canal is as follows: Starting at Montreal, passing up the Ottawa River to Ottawa, a distance of 110 miles, already improved to nine feet; thence up the Ottawa River to Mattawa, a total distance of 305 miles above Montreal; thence up the Mattawa to the east end of Nipissing, a distance of 441½ miles; thence through Nipissing and down French River to Georgian Bay, 80 miles, a total distance from Montreal of 429½ miles. This route, it is claimed, is shorter by 423 miles than the St. Lawrence River and larger lakes route. By this route Mr. Plummer says the cattle traffic of the Northwest will be secured, as the dangers of the three great lakes, Huron, Erie and Ontario, will be avoided by keeping land locked and having 1,500 miles more of smooth water than by the American route, and 500 miles more than the St. Lawrence and Welland, being but 1,714 miles of ocean as against 3,633 from New York. The manner suggested for its construction is, for the Dominion Government to set apart a certain amount of land in the Northwest for the express purpose of opening up and improving the route in such a manner as the facts will warrant, and that they appoint a committee whose duty it shall be to make terms with some good and responsible parties for the completion of the work. The project has been endorsed by the Chicago Board of Trade, and it has received the approbation of New York capitalists. Mr. Walter Shanly thinks it would make the best barge route in the world.

The Jeanette Expedition.

The first official report of George W. Melville, Chief Engineer of the Jeanette Expedition, was recently received at the Navy Department, Washington. The report is dated Yakutsk, Siberia, January 6, 1882, and is a recital of the perilous adventures and extreme suffering of the gallant crew that left the United States nearly three years ago for the purpose of discovering the northwest passage. Many of the officers and crew have found their graves in the polar regions, and little doubt exists that Captain De Long has met with the fate of Sir John Franklin and his companions. The Jeannette, after having drifted twenty-two months in the tremendous pack of ice in the Arctic Ocean, was finally crushed and sunk on the 12th of June, 1881, in latitude 17 deg. 15 sec. north, longitude 155 deg. The entire crew, thirty-three in number, took to the three boats, which, laden with provisions, they dragged over the ice to Bennett Island, where they arrived on the 29th of July. Subsequently by a similar toilsome portage they pulled their way over the ice until they reached Simontka island on the 10th of September. On that frozen route they endured unheard of hardships. For six days, during which they made 120 miles, they had not a mouthful of food and the men were more or less frostbitten. On the 12th of September the three boats sailed in company from Simontka island, and the same night were separated in a gale. It is much to be feared that few of the party in the first and second cutters survive to tell the doleful tale of that terrible voyage where death was hailed as a relief from intense cold and hunger. But the whale boat, containing Chief Engineer Melville, Lieut. Danenhower, Newcomb, Cole, Bartlett, Wilson, Louderbach, Manson, Long, Sing, Amquin and Leach finally reached Yakutsk. Honorable mention is made by Engineer Melville of Lieut. Danenhower, Joseph Bartlett and Hubert Leach for the fortitude and heroism they displayed under the most trying circumstances. The forlorn hope of that gallant crew were kindly cared for by the Russian government, and as they will soon embark for the United States, we may expect to hear from them such thrilling accounts of their personal experiences as must almost seem incredible.

Track laying has commenced on the Alliance, Niles and Ashtabula Railroad.

AMERICAN Railroad Journal. ESTABLISHED 1832.

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AT the annual meeting of the AMERICAN RAILROAD JOURNAL Co., held at the office of the Company, No. 284 Pearl street, New York, February 8, the following officers were elected:—

GEO. F. SWAIN, *President.*
S. PROCTOR THAYER, *Vice-President.*
EDW. A. WRIGHT, *Treasurer.*
CHAS. T. VALENTINE, *Secretary.*

New York, Saturday, April 1, 1882.

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THE ADVISORY RAILROAD COMMISSION AND DIFFERENTIAL RATES.

MESSRS. COOLEY, THURMAN and WASHBURNE, who have been selected by the Trunk Line presidents to hear, consider, and determine the question in dispute submitted to them, have a complicated task before them, and their decision will mark a turning point in the transportation evolution. The question propounded is, in substance: What, if any, shall be the difference in rates charged on traffic between common points in the Western Basin, and the ports of New York, Philadelphia and Baltimore? For some reason the New York roads, and their chief customers, the great shippers, happen to be the champions of uniform rates to all ports, while Baltimore advocates a discrimination of less rates to that port; Philadelphia, comparatively indifferent, insists that if any allowance is made to her Southern neighbor, an allowance should also be made to her, as was formerly the case. The problem is full of complex and conflicting interests, and it is not surprising that the respective advocates should be found on both sides of the same proposition, now on this, and now on that, as may seem to suit their interests.

In the progress of railroad development it has happened that two or more lines would reach the same points and termini. Even roads that were projected independently and far apart, by their natural prolongations have been pushed out to an intersection or interlacing with the feeders of each other. This is especially the case with the branches and extensions of the four or five trunk lines whose main stems lie across the Appalachian ridge quite separated from each other. There are now five great through lines or systems between Chicago and New York, with a prospect of two more to be completed within the year, viz: the New York Central, the New York, Lake Erie and Western, the Pennsylvania, the Baltimore and Ohio, and the Grand Trunk of Canada; the stem portions of the two new lines being known as the West Shore of New York, and the Chesapeake and Ohio. Most of them have access to the other four great centers of the West—Cincinnati, Louisville, Indianapolis and St. Louis—and it results that there is a fine-cut competition from these and other intersecting points.

In order to keep this competition within bounds the railroads have been compelled to hit upon some rule to meet such cases, and the usage has been generally for the shortest line to establish the rate, and for the longer lines to accept it; which, other things being equal, gave the least profit to the longer ones. In railroad operation there are other factors entering largely into the cost of transportation as well as distance, such as length of haul, grades and curves, cost of fuel, return loads, climate, and terminal expenses and access. A large part of the produce from the far West is, moreover, destined to European ports, and hence ocean freights must be reckoned in along with land freight. Montreal, Boston, New York, Philadelphia and Baltimore have each steamship lines plying to the same British ports, and it follows that rates between the Western fields and the point of consumption on the other side of the Atlantic must be nearly alike by whatever route the article is carried.

So far as foreign-bound products are concerned, therefore, it is difficult to see how any other rule can be adopted than that of which New York men are the exponents, viz: that there shall be no difference in the rates of land carriage to either of these ports, and similarly that the ocean rates between Liverpool or Glasgow shall be the same, regardless of distance, operating-conditions, or harbor facilities.

This is practically the way business is now done; but the rates are altogether too low, below the actual cost of the work done. Grain was reported to have been taken under charter to Liverpool by one large vessel during the past week at one penny a bushel, or about seventy-five cents a ton, barely the cost of loading and unloading. It is possible that the same grain was brought from Minnesota at twenty cents a hundred, or barely enough to pay train expenses, leaving nothing for cost of road, rolling-stock and engines.

Herein lies the difficulty. Somewhere or somehow the fixed charges of interest on cost and administration must be borne, or the roads must become bankrupt. It is not fair to saddle the whole of this burden upon the local traffic; nor on the other hand to carry the foreign-borne traffic at a loss, which domestic customers must bear. This is, however, what has been done up to a late day. The disparity between local and through rates everybody concedes is too great; but it is difficult to see how legislation could do any good, while it would certainly do some harm. Voluntary or enforced agreement among the trunk lines would correct it, if it could be maintained. This is the function of the new commission to say on what basis they shall agree; it is for themselves to devise some manner of preventing infractions. Likely the present money forfeiture plan will be tried before resort is had to a joint purse or pool of through business.

The inland rates being the same between common points for competing lines there would still be some inequalities and hardships, as there would be under any system. For example, between New York and St. Louis some routes are direct while others pass through Chicago; it must result that some roads must do part of their business at less profit than other parts. Besides, the Baltimore and Ohio aspires to do business to New York, while the Pennsylvania actually does carry indifferently to either of the three great ports. Baltimore is one hundred and seventy-five miles further from the main ocean and has a less favorable navigation than the Chesapeake and Ohio terminus at Hampton Roads, so that whatever advantage the Baltimore and Ohio Railroad has in distance inland, it is compensated by its longer water line. Boston is nearer Liverpool than New York, but it is further from Chicago. There is one hardship, however, which it behooves the trunk line managers to mitigate or abate: the injustice of hauling the longer distance for a mere trifle of the charge on the same articles for a short distance is a national scandal. As now worked, the Chicago grain is hauled through Rochester to New York for less than the Rochester shipper pays to either New York or Chicago, and so of other intermediate places. One result of this inequality is a derangement of values in

both real and personal property, and in the value of capital invested in manufacturing. Making all due allowance for the difference in return freights, and large and small shipments, there should be some rule which would come nearer a fair average. Since, like the post office, and telegraph, the railroad companies are doomed to do a part of their work with inadequate pay, they may as well distribute a portion of their losses along their lines to local customers rather than concentrate it all on the competitive through business.

After the commission has decided the ratio between the respective cities, it will be in order for the railroad managers to decide what shall be the weight of the tariff; and in settling this they cannot do better than to place it at such a figure that rates to the seaboard in carload lots shall never be less than the rates to intermediate points—or, to put it in the other way, the charge for a part of the haul shall not exceed that for the entire haul. Some such rule as this would go far to quiet political agitation.

CONSTRUCTION.

ANDERSON, S. C., has subscribed $25,000 to the Savannah Valley Railroad.

WORK is soon to be resumed on the Gainesville and Dahlonega (Ga.) Railroad.

THE four tracks of the New York Central Railroad are now completed and in use from Albany to Buffalo.

STEEL rails are being laid on the Richmond and Danville Railroad, between Atlanta, Ga. and Charlotte, N. C.

THE engineers of the Philadelphia and Reading Railroad Company, who are locating a line from Shamokin to Sunbury, have reached the latter place.

IN order to encourage railroad enterprises in Texas, the Legislature of that State has passed a law exempting them from taxation for a period of twenty years.

THE double track of the West Jersey Railroad between Glassboro and Wenonah is so far completed that the company expects to run upon it the first week in April.

THERE are over 200,000 men and 100,000 horses and mules employed in railroad construction in Texas. There about 2,000 miles of road under contract, and about 6,000 more to be contracted for.

THE end of the track of the East Line and Red River Extension of the Missouri, Kansas and Texas Railway had been laid to a distance of fourteen miles from Greenville, the initial point, on the 25th ult.

THE Fort Worth and Denver City Railway which is being constructed by the Texas and Colorado Railway Improvement Company, has been completed and opened for business for a distance of twenty-five miles from Fort Worth.

A DISPATCH from Laredo, Texas, says that work on the Mexican Oriental Railway is progressing rapidly and a very large force is engaged on grading the first 100 miles, which will be completed and ready for the steel in a few days.

A PRELIMINARY survey of the projected Laconia and Lake Village (N. H.) horse railroad has been made, the whole distance being about two and a quarter miles. The estimated cost is $15,000. It is thought that ground will be broken immediately.

THE work of track-laying on the New Orleans Pacific Railway progresses without interruption. At the close of work on the 28th ult. the end of the track was within eighteen miles of the Atchafalaya River, and all trains on completed road were running on time.

MR. EDISON'S electric railway in process of construction for experiment at Menlo Park, N. J., has been tested, and trains run something like twenty miles an hour. The best speed attained by the Siemens electric engine last year in England was ten miles an hour.

THE Chicago, Milwaukee and St. Paul Railway Company has decided to build a new branch line running from Maquoketa, Jackson county, Iowa, to Dubuque. The townships along the proposed route have voted subsidies to aid in the construction of the new line.

A DISPATCH received in the City of Mexico announces the discovery of a new route to the table land, from Tampico, on the Gould-Degress railroad survey. One thousand men have crossed the Rio Grande at Laredo, and are now at work constructing a line of railway granted under the Gould-Degress concession.

THE Atchison, Topeka and Santa Fe Railroad company is building a branch from Las Vegas to the celebrated Hot Springs, six miles distant from Las Vegas. It is expected that the branch will be completed by April 1, at which time the railroad company will open a new and elegant hotel, just erected at the springs.

THE State of Mechoacan some time ago demanded the cancellation of its contract with the National Construction Company for the building of a railroad between Morello and Paracuaro. The Company appealed to the Federal Court of Mechoacan, and the Governor now offers to amicably arrange the matter.

TRACK-LAYING on the Missouri, Kansas and Texas Division of the Missouri Pacific Railway had reached on the 25th ult. a point ten miles south of Temple and 130 miles from Fort Worth. At the present rate of progress the month of April will see the line completed through to Taylor, on the International and Great Northern Railway, where it terminates.

THE survey for the projected railroad from the coal regions to Kingston, N. Y., by way of the Delaware and Hudson Canal has been completed, and if the engineer's report is favorable, the construction of the road will at once proceed. The route, as surveyed, follows the line and grade of the canal mainly, although the distance has been materially shortened in numerous cases, and it is said a fine grade and route for the road have been secured.

AN agreement has been entered into between Origen Vredenburgh, as owner of the franchise of the New York Underground Railroad, and the directors of the company, whereby he agrees to build the road, if the right to pass under Broadway is secured, for $3,000,000 a mile, to be paid in the company's bonds and capital stock. He is also to receive $3,000,000 in stock for the franchise.

THE Baltimore and Potomac Railroad Company commenced operating on the 26th ult. the extension of their double track southward from St. Agnes to Winans station, eight miles, and northward from Benning's to Wilson's station, eight miles, or sixteen miles in all. Winans is eight miles from Baltimore and twenty-six miles from Wilson's. The work of double-tracking the road is being pushed rapidly, and will be finished in a few months.

THE River Front Railroad on Delaware Avenue, Philadelphia, was finished on the 23d ult., the workmen meeting at a point near Arch street. The road extends from Dock street northward to a connection with the Pennsylvania Railroad at the Kensington depot of that company, and a branch connects with the Reading Road at Richmond. It is a single track from Dock street to Callowhill, and north of that point becomes a double track. Previous to building the road northward from Dock street the River Front Railroad extended only from the latter street in a southerly direction to Greenwich Point.

INCORPORATION.

IN the Railway Committee at Ottawa, Ontario, on the 28th ult., the bills to incorporate the Lake Arthabaska and Hudson Bay Railway, were passed. An amalgamating clause was in each case stricken out.

A CHARTER was issued at the State department, Harrisburg, Pennsylvania, on the 27th ult., to the Youghiogheny River Coal Company, the principal office of which is at Erie. The capital is $1,000,000, and William L. Scott, of Erie, is the president.

ARTICLES of incorporation were filed at Albany, N. Y., on the 28th ult. of the Portage and Cuba Low Grade Railroad Company, to continue for 100 years. The road is to be constructed from the New York, Lake Erie and Western Railroad, in Portage, to Cuba, a distance of 33 miles. The capital stock is $2,000,000. Richard G. Taylor, Wilson D. Bissell, and J. Wesley Bridgman, all of Buffalo, are incorporators.

ARTICLES of association have been filed with the Secretary of State of Wisconsin, incorporating the Milwaukee and Lake Winnebago Railroad Company. This line is a continuation of the Wisconsin Central Railroad, and will extend from Neenah along the west shore of Lake Winnebago, probably running nearly parallel with the Chicago and Northwestern Railway, to Oshkosh, Fond du Lac, and thence southward to Schleisingerville, in Washington county, on the Northern division of the Chicago, Milwaukee and St. Paul Railway, using the latter the remainder of the way into Milwaukee.

THE Providence, Webster and Springfield Railroad Company has been chartered, with Horatio N. Slater of Webster, Mass., Horatio N. Slater, Jr., of Providence, R. I., Oscar F.

Chase of Thompson, Conn., Edwin Bartlett of Oxford, Mass., Amos Bartlett, Asher T. Moore and C. H. Labaree of Webster, Mass., John Rhodes of Millbury, Mass., and E. P. Morton of Dudley as its directors. Its capital is $110,000, and the line of its road is to be from the North Village in Webster through Dudley and Oxford to the Boston and Albany Railroad in the westerly part of Auburn, a distance of eleven miles.

ORGANIZATION.

At a meeting of the stockholders of the New York, Texas and Mexico Railroad Company, held on the 25th ult., D. E. Hungerford, G. De La Spina, E. J. Payne, J. M. Bronson, F. S. Guerreo, and Edward Seligson were elected directors. Subsequently, J. M. Bronson was elected president, D. E. Hungerford vice-president, J. S. Hopkins secretary, and G. A. Levi treasurer.

At a meeting of the stockholders of the Watertown and Boston Railroad Company, held in Boston on the 21st ult., the following directors were chosen: D. B. Flint, Samuel Walker, George N. March, John H. Conant, R. L. Davis, George K. Snow, George H. Sleeper, Edward E. Allen, Henry C, Derby, Hiram Whitney, Robert P. Stack, Miles Pratt. At a subsequent meeting the directors chose E. E. Allan clerk and George N. March treasurer.

The directors of the Central Tunnel Railway Company, elected on the 25th ult., are: Wm. E. Worthen, Gen. Cochrane, Henry C. Stetson, Gouverneur Tillotson, John Schuyler, Ogden P. Pell, Charles B. Meserole, William C. Nicoll, Spencer D. Schuyler, Eugene Schieffelin, William Kent, Stephen Lockwood and H. F. Pultz. Gen. Cochrane was elected president; William E. Worthen, vice-president; Henry C. Stetson, treasurer; William Kent, secretary, and John Schuyler, chief engineer.

The stockholders of the Pittsburgh, Cincinnati and St. Louis Railway Co., at their annual meeting in Columbus, Ohio, on the 21st ult., elected the following directors: G. B. Roberts, J. W. McCullough, Wm. Thaw, Thomas D. Messler, Wistar Morris, Henry H. Houston, J. N. Du Barry, J. P. Wetherill, W. H. Barnes, D. S. Gray, R. Sherrard, Jr., George W. McCook, John P. Green. The only change in the directory was made by the election of George W. McCook, of Steubenville, in place of A. J. Cassatt.

The organization of the Peoria and Western Railroad Company has been perfected by the election of General John G. Fonda, president, Henry Ketchum vice-president, and E. W. Merrill secretary. The object of this organization is to construct a narrow-gauge railway from Peoria, Ills., to a point on the Mississippi near Fort Madison, Ia., to connect with the Fort Madison and Northwestern, a narrow-gauge read being constructed in a northwesterly direction through Iowa. Work will be commenced at an early day and be pursued rapidly.

At the annual meeting of the "American Exchange in Europe Company" held in this city on the 27th ult., the following directors were elected: James G. Batterson of Hartford, P. A. Chadbourne of Williamstown, Mass., Charles P. Choute of St. Louis, Sylvester T. Everett of Cleveland, Ohio, Henry F. Gillig of London, England, Joseph R. Hawley of Hartford, Henry S. Hyde of Springfield, Mass., L. M. Lawson of New York, Cyrus H. McCormick of Chicago, Ill., George H. Stayner of New York. The interim dividend of 6 per cent for the half year was confirmed. Joseph R. Hawley was re-elected president and L. M. Lawson, H. S. Hyde and Henry F. Gillig were elected vice-presidents. The office of the Company has been removed to 162 Broadway, in this city.

The stockholders of the Toledo, Delphos and Burlington Railroad Co., the Toledo, Cincinnati and St. Louis Railroad Co., and the Frankfort, St. Louis and Toledo Railroad Co., met at Toledo, Ohio, on the 21st ult. The chief business transacted was the election of fifteen directors of the consolidated Company, which will hereafter bear the name and be operated as the Toledo, Cincinnati and St. Louis Railroad Company. The following gentlemen were chosen directors for the ensuing year: John M. Corse, Henry D. Hyde, S. C. Blanchard, Oliver Ames, R. M. Pomeroy, Wm. A. Haskell, W. D. Hobbs, Geo. Ripley, C. W. Pierce, E. B. Phillips, Pliny Nickerson, W. D. Forbes, John McNab, Geo. William Ballou and George W. Kneisly. They represent mainly the new subscribers to securities of the Company, who have raised a sum of money sufficient to complete the extensions of the road with its terminals at Toledo, Ironton, Cincinnati and St. Louis, and provide all necessary equipment. At a meeting of the new board of directors, held in Boston on the 24th ult., R. M. Pomeroy was elected president, and the following executive committee: John M. Corse, chairman; Oliver Ames, Warren D. Hobbs, Henry D. Hyde, and R. M. Pomeroy, ex-officio.

CONSOLIDATION.

Articles of consolidation of the Cleveland, Indiana and St. Louis Railroad Company with the Paris, Montezuma and Northwestern Railroad Company were filed with the Secretary of State of Indiana on the 28th ult. The first named is the old Anderson, St. Louis and Lebanon Railroad Company. The consolidated line will run from Anderson, where it connects with the Bee Line, to Paris, Ill., where it will connect with the Indianapolis and St. Louis Railroad. Twenty miles of the road from Anderson to Noblesville is completed. The capital is $2,500,000.

Stored Force for Tramcars.

A successful demonstration of the application of stored-up force to the propulsion of a tramway car was made at Leytonstone on Saturday. The experiment was tried on the line of rails connecting the North Metropolitan Tramway Company's carriage works with the company's lines. The car was an open one of Continental make. A large number of Faure's improved accumulators, which had been previously charged at the Tramway Company's works, were placed under the seats and connected with a dynamo machine under the car, the motion of which was communicated to the wheels of the car by a cog-wheel arrangement. Connection was established and broken by the simple movement of a switch. The car moved off at a speed which was easily regulated, for according to the distance the switch was moved the driver could run his car with a supply of force from a greater or less number of accumulators, at his pleasure. It is claimed by Mr. Radcliffe Ward, who was conducting the experiment, that this method of propelling conveyances has an enormous advantage over others in point of economy, while its noiselessness, freedom from the nuisances of smoke or steam, and its safety are obvious recommendations over traction engines.—*Pall Mall Gazette.*

The Task of the Advisory Commission.

The New York *World* speaks of the trunk line's Advisory Commission as the "respectable and unfortunate gentlemen" who were chosen because they were entirely without knowledge of the subject upon which they were called upon to decide about differential rates.

"In New York they were told that it is true that Baltimore and Philadelphia were nearer Chicago than New York, as the crow flies, but that freight tracks do not go as the crow flies, and that freight could actually be moved cheaper over the longer distance and the easier grades of the New York Central than over the shorter distance and the more difficult grades of the Pennsylvania and of the Baltimore and Ohio. This seemed reasonable; but when the commission went to Philadelphia the only fact they learned was that a straight line was the shortest distance between the points (which it practically is not in transportation), and that Philadelphia was nearer to Chicago than New York was. The mountains between Philadelphia and Chicago were leveled and the valleys filled up, on paper, in the showing made by Philadelphia before the Advisory Commission, when the question was of comparative rates to Philadelphia and to New York, although when Baltimore comes into question Philadelphians are prepared to maintain that the mere item of distance is only one factor and not necessarily the chief factor in the cost of transportation, and to compassionate Baltimore on the unfortunate geographical position which gives it higher mountains than Philadelphia has to climb in order to go West, and a hundred miles more of inland navigation in order to go East.

"And more recently the commission was listening in Baltimore to other remarkable arguments. They were told in the first place that Baltimore is entitled to a liberal allowance for its natural advantages. In the second place it is entitled to a liberal allowance for its natural disadvantages. In the third place it is entitled to an allowance for its artificial disadvantages.

"It is scarcely to be expected that the commission will grant these modest but inconsistent claims. They must draw the line somewhere. In fact, it is to be hoped that after they have listened to a few more of the mutually destructive and self-destructive absurdities put forward as the 'claims' of rival cities, they will conclude to report that the real

question in the case—the question how freight can be carried most cheaply from the West to the seaboard—cannot be settled by testimony and argument such as they have been listening to, but can only be settled by experiment. It is to be hoped, that is to say, that they will recommend to the roads to 'adjust' the rates of freight, not by 'pools' and 'commissions,' but by the carrying of freight in competition."

Land Grant Railroads.

THE Speaker of the House of Representatives at Washington laid before that body on the 29th ult. a communcation from the Secretary of the Interior in response to a resolution calling for information relative to railroad corporations to which grants of public lands have been made which have not been completed within the time required by law. The Secretary's letter is accompanied by a report from the Commissioner of the General Land Office. The report names 10 States—Mississippi, Alabama, Louisiana, Florida, Arkansas, Missouri, Michigan, Iowa, Wisconsin, and Minnesota—to which grants have been made for the construction of railroads. It also names eight corporations—the Northern Pacific, California and Oregon (now the Oregon Branch of the Central Pacific), the Oregon Central, (now the Oregon and California,) the Atlantic and Pacific, the Southern Pacific of California, (main line,) the Oregon Central, the Texas Pacific, (now the Texas and Pacific,) and the New Orleans, Baton Rouge and Vicksburg, (now the New Orleans Pacific) —to which grants of public lands were made direct. The following is a synopsis of the status of these corporations:

Northern Pacific—The granting act of July 2, 1864, required the completion of the entire road on or before July 4, 1876. On May 7, 1866, a joint resolution of Congress extended the time for the commencement and for the completion of the road two years. July 1, 1868, a joint resolution extending the time for the commencement of the work to two years and required the completion of the entire road on or before July 4, 1877. March 1, 1869, a joint resolution consenting to the issue of bonds; April 10, 1869, a joint resolution authorizing the extension of a branch line from Portland, Oregon, to Puget Sound; May 31, 1870, authorizing the issue of mortgage bonds and extending the indemnity limits; July 15, 1870, a proviso requiring the company to pay the cost of surveying, selecting, and conveying the lands granted before the issue of patents to the company. Under date of June 11, 1879, the Secretary of the Interior (Schurz) held that the effect of the resolution of July 1, 1868, was to extend the time for the completion of the road to July 4, 1879. The entire length of the proposed line of road is 2,270 miles; 531 miles had been built before the expiration of the time at which the entire line was required to be built, and 1,739 were uncompleted at that time; 475 miles have been completed since that time, (July 1, 1879,) and 1,264 are now uncompleted. The aggregate grant to the company was 48,215,040 acres, of which amount 746,509 acres have been patented to the company.

Atlantic and Pacific—The granting act of July 27, 1866, required the completion of the main line on or before July 4, 1878. The act of April 20, 1871, authorized the company to mortgage its road, land, &c. Length of proposed road, 2,426 miles, of which 125 miles were completed at the time fixed for the completion of the entire line; 200 miles have been completed since, and 2,101 miles remain to be completed; 40,690,560 acres are embraced in the land grant, of which 526,992 acres have been patented.

Southern Pacific—The granting act of July 22, 1866, required the company to complete the entire road on or before July 4, 1878. The act of July 5, 1868, allowed the company until July 1, 1870, for the construction of the first 30 miles of the road. A joint resolution of June 28, 1870, authorized the issue of patents for lands lying along each section constructed. Length of proposed route, 512 miles, of which 232 miles were completed at the time required for completion of the entire line; 290 miles were uncompleted, and none have been completed since. Amount of land grants, 5,511,-264 acres, of which 1,034,910 acres have been patented.

California and Oregon, (now Oregon branch of Central Pacific,)—The granting act of July 25, 1866, required the completion of the entire line on or before July 1, 1875. The act of June 25, 1868, extended the time to July 1, 1880. The act of April 10, 1869, provided that the lands granted should be sold to actual settlers only, in quantities not greater than one quarter section to any one purchaser, and at a price not exceeding $2.50 per acre. Length of proposed line 280 miles, of which 152 were completed at the time acquired for the completion of the entire line, 128 being uncompleted, and none have been completed since. Amount of grant, 2,126,527 acres, of which 1,337,919 acres have been patented.

Oregon Central, (now Oregon and California) —The granting act of July 25, 1866, required the completion of the entire line on or before July 1, 1875. The act of June 25, 1868, extended the time for completion to July 1, 1880. The act of April 10, 1869, amended the granting act by providing that lands should be sold only to actual settlers, in quantities not greater than one quarter section to any one purchaser, at a price not exceeding $2.50 per acre. Length of proposed line, 315 miles, of which 197 were completed at the time required for the completion of the entire line, 118 remain uncompleted, and none have been completed since. Amount of grant, 3,701,760 acres, of which 322,062 acres have been patented.

Oregon Central Railway Company—The granting act of May 4, 1870, required the completion of the entire road within six years of the date of the act. Length of proposed road 144 miles, of which 47 miles were completed at the time required for the completion of the entire line; 97 were uncompleted, and none have been completed since; amount of grant, 1,130,880 acres; no lands have been patented.

Texas Pacific, (now Texas and Pacific.)—The granting act of March 3, 1871, required the completion of the entire road within 10 years of the passage of the act. The act of May 2, 1872, changed the name of the road, authorized the issue of construction bonds, and provided for the construction and operation of a road from the eastern terminus at Marshall, Texas, to Shreveport, La., and provided that the entire line be completed 10 years from the date of this act. The act of June 22, 1874, authorized the issue of one or more mortgages, and provided that the Southern Pacific and Southern Transcontinental Transportation Company, heretofore consolidated with this Company, under the laws of Texas, shall be deemed and taken as part of its road for all purposes. Length of proposed road, 1,483 miles, of which 181 miles have been completed and 1,202 miles are uncompleted. Amount of land grant, 14,309,760 acres, none of which have been patented. The report says: "It is understood that this Company has constructed and is now operating its road to the western boundary of Texas, but no proof of construction west of the 181 miles has been filed in this office. Proof of construction under the act of 1872 of a road from Marshall to the eastern boundary of Texas, a distance of 20 miles, has been filed. The Company has also filed maps showing 221 miles of branch lines in Texas, constructed or acquired under authority of the act of 1874."

New Orleans, Baton Rouge and Vicksburg, (now New Orleans and Pacific.)—The granting act of March 3, 1871, required the completion of the entire road within five years of the date of the grant. Length of the proposed road 318 miles, none of which has been completed; amount of land grants, 903,319 acres, none of which have been patented. The report adds: "This company has recently filed in this department proof of the completion of 130 miles of road, of which 60 were constructed by the New Orleans, Mobile and Texas Railroad Company, but this office has not been advised of the acceptance of any portions thereof."

The number of miles of railroad proposed to be built by these eight corporations was 7,748, of which 1,465 had been constructed at the time required for the completion of the entire lines. The amount of lands granted to these eight corporations was 116,589,008 acres, of which 3,971,391 acres have been patented to the several companies.

The railroad companies receiving the benefit of the lands granted to the ten States mentioned above are as follows: Gulf and Ship Island; Tuscaloosa and Mobile; Mobile and New Orleans; Memphis and Charleston; Mobile and Girard; Selma, Rome and Dalton, Savannah and Albany; Coosa and Tennessee; Elyton and Beard's Bluff; Atlantic, Gulf and West India Transit Company; Pensacola and Georgia, (from Lake City to Pensacola, Fla.;) Florida, Atlantic and Gulf Central (from Jacksonville to Lake City;) North Lousiana and Texas; Little Rock and Fort Smith; Iron Mountain; St, Louis, Iron Mountain and Southern; Detroit and Milwaukee; Port Huron and Milwaukee; Jackson, Lansing and Saginaw; Northern Central Michigan; Amboy, Lansing and Traverse Bay; Marquette, Houghton and Ontonagon; Ontonagon and State Line; Sioux City and St. Paul; West Wisconsin; North Wisconsin; Wisconsin Central; St. Paul, Minneapolis and Manitoba; Western Railroad Company (formerly Brainerd Branch of St. Paul and

Pacific;) Southern Minnesota Railway Extension; Lake Superior and Mississippi; Hastings and Dakota—in all 32 companies. Of these six have constructed no portion as yet of their proposed roads and nine have not had any of their lands patented. The number of miles of railroad proposed to be built by these 32 companies was 4,312 of which 1,665 miles were completed within the time required for the completion of the entire amount. The aggregate amount of their land grants was 21,292,349 acres, of which 10,902,106 have been patented. The grand totals of all the companies are as follows: Number of miles proposed to be constructed, 12,060, of which 3,130 had been constructed at the time the completion of the entire amount was required; amount of land grants, 137,881,357 acres, of which 13,873,497 have been patented.

The Berkshire Hills and the Housatonic Valley.

WITHIN the past few years the Berkshire Hills and the Housatonic Valley have grown greatly in popularity as summer resorts, and are now special favorites with New Yorkers desiring to secure healthful and pleasant homes in the country, on account of their accessibility and their numerous attractions. The Housatonic Railroad Co. have had much to do with making these resorts so popular and noted, having arranged their summer time tables with a special view to the convenience of the summer guests patronizing the resorts along the line of the road and in the vicinity of its terminus, and having provided liberal means for making the trip through this delightful valley and to the famous and charming sections of country in western Massachusetts, an easy and pleasant one. A finely illustrated descriptive book, entitled "Through the Valley of the Housatonic to the Hills and Homes of Berkshire" has been prepared for the Housatonic Railroad Co. by Mr. Clark W. Bryan, a well-known New England journalist and publisher, and will be sent free of charge by mail upon application to H. D. Averill, General Ticket Agent of the Housatonic Railroad, Bridgeport, Conn. It is a very interesting book, giving illustrated descriptions of many of the attractive spots in these localities, and will be appreciated by those making arrangements for their summer homes.

Western North Carolina Railroad.

A RALEIGH (N. C.) correspondent of the New York *Times*, in announcing that the Western North Carolina Railroad is nearly finished, gives his views in relation to that work as follows:—

"The Richmond and Danville Terminal Railway Company have at last completed the Western North Carolina Railroad to the Tennessee line. Within the next thirty days trains can pass from Morehead City, on the ocean, through the whole length of the State to the Mississippi River. There is less than one mile in Tennessee to be completed, which, although delayed by heavy rains, will be ironed before May 1. There is a short link that is under contract to be completed by July next that will bring about through connection from Chicago and Cincinnati over the Knoxville and Ohio and the Kentucky Central railroads to Paint Rock and on through North Carolina. This then will be the shortest possible line between the cotton States east of the Blue Ridge and the Great West. The chain of mountains extending from Lynchburg, Va., to Atlanta, Ga., a distance of 700 miles, cannot be crossed at any other points than down the French Broad River and through Paint Rock without tunneling, and that the cautious railroader is afraid to undertake. This makes the line of this great highway nearly 200 miles shorter than any other possible line, and promises benefits to the State which in the next few years may not be measured by seventy times the ten millions which the State spent upon it. Wonderful development is already shown along the line of the road in the production of bright tobacco, for which Buncombe and Madison counties are noted, the opening of mines, the starting of enormous lumber enterprises by companies from Cincinnati and Chicago, and the immense increase in the value of land, much of that on the line of the road having trebled in value. Consequently a new order of things now exists in the old North State. The same influences which have made the great West are beginning to show results here. The new activities of the day are impelling the people to measure all questions by their practical value to communities or to the State. The fact that the Richmond and Danville Terminal Railway Company now owns a property that cost them less than $1,000,000, and upon which North Carolina spent in vain more than $10,000,000, does not trouble the people at all in the light that this road, which has been on hand for thirty years, is now completed, and is a fixed fact in the railroad system of the State."

Change of Location.

ARTICLES of association were filed on the 26th of August, 1880, in the office of the Secretary of State at Albany, by the New York, Lackawanna and Western Railway Co., declaring its intention to construct a railroad from Binghamton to Buffalo, passing through Tompkins and Schuyler among other counties. The first survey, however, showed the route selected to be impracticable; hence a route was surveyed through Chemung county, and the proper certificates filed in that county. On January 20, 1881, notice of this filing was served upon the New York, Lake Erie and Western Railroad Company. On February 7, 1881, the Erie Company served notice of an application to change the route thus located through Chemung county, on the ground that the new road would be prejudicial to the Erie. On February 12, 1881, and before the application was heard, the New York, Lackawanna and Western road passed resolutions changing its route to Chemung county. This proposed route was affirmed both at Special and General Term. On April 25, 1881, the latter company filed another motion to change the route because of the omission of the county of Chemung from the articles of association at the time of the service of the notice. It was claimed that the company had no right to construct its road in the county of Chemung at all. This application was also denied. Then when application was made by the new road for the appointment of commissioners to locate the crossings of the roads, the Erie Company carried the questions involved through the various courts to the Court of Appeals, which last week gave its decision affirming the judgment below in favor of the New York, Lackawanna and Western Railroad Company.

Chief-Judge Andrews, who writes the opinion of the Court, cites the 23d section of Chapter 77 of the Laws of 1876, giving the directors of a railroad by a two-thirds vote and by filing the certificates and maps "in the proper county" power to change their route to an adjoining county. In amending as they did on February 12, 1881, the articles of association by omitting Schuyler and Tompkins counties and inserting instead Chemung county, Judge Andrews says that this was a valid exercise by the directors of the New York, Lackawanna and Western road of the authority conferred by this section. The directors were mistaken in supposing that an amendment of the articles of association was necessary; "but what they did was equivalent to a vote to change the location." "The rights of property owners or of third persons are not affected by the preliminary action under the twenty-third section. That action is taken ex-parte by the corporation. Its action becomes effectual without notice to third persons or confirmation by the Court or other authority, when the directors have by proper vote determined that the road shall be built upon a new route in a specified county that we think is a location within the section. The designation of the exact line is a subsequent proceeding, and when such designation is made those interested have a right to be heard and to apply for change of route."

St. Louis and San Francisco Railroad.

AT St. Louis, Mo., on the 25th ult., Mr. C. P. Huntington, in an interview regarding railroad affairs, is reported to have said that there would be no change in the policy of the St. Louis and San Francisco Railroad, and that the road would be extended as originally designed. He stated that he intends building a railroad from Eagle Pass, Texas, to the City of Mexico, and believes it will be the first one completed, as the route selected offers less engineering difficulties, and passes through a more productive country with populous towns, than any other. The Galveston, Harrisburg and San Antonio road will be placed in first class condition, thoroughly ballasted, and the present iron rails replaced by steel rails. He will also have the line completed from San Francisco to New Orleans and Galveston about September. Mr. Huntington expressed the opinion that the ownership in railroads means control, and that attempts to regulate freights by legislative action will lead to disaster. He favors laws to prevent freight discrimination, and he said it was always his policy to make uniform rates properly classified.

AN electric elevated road is to be built in Berlin, traversing the city from west to east. Instead of compelling passengers to climb stairs and wander over endless Chatham Square stations, the cars will be lowered at the stations to the street by means of Siemen's electric elevator.

The Stock Exchanges and Money Market.

New York Stock Exchange.

Closing Prices for the week ending Mar. 29.

	Th.23.	F.24.	Sat.25.	M.27.	Tu.28.	W.29.
Adams Express	145	144½	147	....	....	....
Albany and Susq.	..	....	....	....	....	....
1st mortgage	....	....	....	....	....	....
2d mortgage	....	....	....	....	....	....
American Express	....	94	93½	95	95¼	94
Atlantic & Pac. Tel.	....	....	....	....	....	....
Burl., C. R. & Nor.	....	....	....	....	....	....
1st mortgage 5s	99¾	....	99¾	99¾	100	100¼
Canada Southern	51⅞	51½	51½	52	53⅜	53
1st mortgage guar	....	94	....	94	94	94
Central of N. Jersey	83¾	84½	84½	85⅞	84⅞	86
1st mort. 1890	....	116½	....	....	....	....
7s, consol. ass	....	....	114	116	116	114¾
7s, convertible ass.	....	....	....	....	....	....
7s, Income	....	....	....	....	....	....
Adjustment	....	105¾	....	....	106	106
Central Pacific	91⅜	91⅞	91½	91⅞	92	91⅜
6s, gold	115	....	....	114¾	....	....
1st M. (San Joaq)	....	....	....	....	....	....
1st M. (Cal. & Or.)	....	....	104	....	....	....
Land grant 6s	....	106⅞	....	....	....	....
Chesapeake & Ohio	23	....	....	23½	23¾	23¼
1st pref.	....	33	33	34	33⅞	33½
2d pref	....	....	....	....	25	24
1st mort., series B	79⅜	....	....	....	....	....
Chicago and Alton	....	131	131½	131	132¾	132¼
Preferred	....	....	....	....	....	....
1st mortgage	....	....	....	....	....	....
Sinking Fund	....	....	....	....	....	114½
Chi,, Bur. & Quincy	133¾	133½	133¾	135	135½	135½
7s, Consol. 1903	126	....	126	....	....	126½
Chi., Mil. & St. Paul	112⅞	113¾	115¼	117⅛	116¾	117⅜
Prefered	....	123	124	125⅛	126	124½
1st mortgage, 8s	....	132½	....	....	....	....
2d mort., 7 3-10s	....	....	....	....	....	....
7s, gold	....	....	....	125½	....	....
1st M. (La. C. div)	119¼	119½	....	....	....	121½
1st M. I. & M. div.)	....	....	....	120½	....	....
1st.M. (I. & D. ext.)	....	....	120	120¼	....	121⅜
1st M. (H.&D. div.)	113⅞	....	114⅞	114⅞	115¼	....
1st M.(C. & M.div.)	..	....	....	121	....	....
Consolidated S. F.	119½	....	120	120¼	....	121½
Chi. & Northwestern	132	131⅞	132¼	132⅜	132½	132⅝
Preferred	140¼	140½	141¼	....	141¼	141¼
1st mortgage	107½	....	....	....	....	....
Sinking Fund 6s	....	....	....	....	....	107⅜
Consolidated 7s	....	....	....	....	....	....
Consol. Gold bo'ds	....	....	....	125½	....	....
Do. reg	....	....	....	....	....	....
Chi., R. Isl. & Pac.	132⅞	....	133½	....	133½	133¾
6s, 1917, c	....	....	....	....	127¾	....
Clev.,Col.,Cin.&Ind.	....	....	79½	....	79	....
1st mortgage	....	....	....	....	....	....
Clev. & Pittsburg gr.	....	137½	....	136¼	135	....
7s, Consolidated	....	....	....	127	127	....
4th mortgage	....	....	112	....	112	....
Col.,Chi.,& Ind. Cent.	13	13⅛	13½	14	13½	13⅜
1st mortgage	....	....	....	....	....	....
2d mortgage	....	....	....	....	....	....
Del. & Hud Canal.	105½	105¾	106¾	106⅝	106½	106¼
Reg. 7s, 1891	....	....	....	....	114½	....
Reg. 7s, 1884	....	....	....	....	....	....
7s, 1894	118	....	....	....	....	....
Del.,Lack.& Western	121½	122¼	124½	124⅞	124¼	125
2d mortgage 7s	....	....	....	....	....	....
7s, Consol. 1907	....	....	....	....	....	....
Erie Railway	....	....	....	....	....	....
1st mortgage	....	....	....	....	....	....
2d mort. 5s, ext.	....	....	....	....	....	....
3d mortgage	....	104½	104½	....	....	....
4th mort. 5s, ext.	....	108	....	....	....	....
5th mortgage	112	....	....	....	....	....
7s, Consol. gold	....	....	....	126½	....	....
Great West. 1st mort	....	....	108¾	....	....	....
2d mortgage	104¾	104	....	104½	104½	105
Hannibal & St. Jo.	....	....	....	....	....	....
Preferred	84	84	84	84¼	85	84
8s, Convertible	105½	....	104	....	....	....
Houston & Tex. Cen	68	....	71½	71	75	76
1st mortgage	....	112¼	....	....	....	....
2d mortgage	....	123¼	....	123	....	....
Illinois Central	136⅞	136⅜	136¼	136	136¾	137
LakeShore&MichSo	118½	119	119¼	119¾	119½	119⅞
Consol. 7s	....	....	....	....	....	....
Consol. 7s, reg	....	....	125	....	....	....
2d Consolidated	....	....	....	....	....	....
Leh. & W. B. 7s, Con	....	....	....	....	....	....
Long Dock bonds	....	....	....	....	....	....
Louisville & Nash.	76⅞	76½	77	78⅞	79¼	82½
7s, Consolidated	....	....	....	....	....	....
Manhattan	54	51¾	53	54	53¾	53½
1st pref.	....	....	....	....	....	....
Met. Elevated	89	88½	89	....	....	....
1st mortgage	100⅞	100¾	101	101½	....	....
Michigan Central	85⅝	84¼	86¾	86¾	87	86¼
7s, 1902	....	....	....	....	....	....
Morris & Essex	....	....	....	122½	123¾	124
1st mortgage	....	....	....	....	....	....
2d mortgage	....	....	....	....	....	....
7s of 1871	....	....	....	....	....	....
7s, Convertible	....	....	....	....	....	....
7s Consolidated	....	....	....	122¾	123	....
N.Y. Cen. & Hud. R.	132¾	133	133¼	133¾	133½	133½
6s, S. F. 1883	104	....	....	....	....	103¾
6s, S. F., 1887	....	....	....	....	....	....
1st mortgage	....	....	....	....	....	....
1st mortgage, reg	....	133½	....	....	....	....
N. Y. Elevated	....	....	....	....	....	....
1st mortgage	....	....	....	....	117	116¾
N. Y. & Harlem	....	....	....	....	....	205
Preferred	....	....	....	....	....	....
1st mortgage	....	132½	....	....	....	....
1st mortgage, reg	....	....	....	....	....	....
N. Y., Lake Erie & W	37½	36¾	37¼	37⅜	37¾	38
Preferred	75¾	74	74¾	76	76½	76½
2d Consolidated	95½	94	94¼	95	95	95¾
New 2d 5s fund	....	....	....	91¼	....	....
N.Y.,N.Hav'n&Hart	....	....	170	....	169	170
North Mo. 1st mort	....	....	....	....	....	....
Northern Pacific	34¾	35½	35¾	36¾	37	37½
Preferred	75¾	75¾	76½	78¼	78¾	79¼
Ohio & Mississippi	35¼	35	36¾	38½	39¼	37⅛
Preferred	....	....	....	....	110¾	....
2d mortgage	....	....	....	....	122	122
Consolidated 7s	....	....	....	....	....	....
Consol. S. Fund	....	....	118½	....	....	....
Pacific Mail S. S. Co	42¾	42¾	43	43¼	42¾	42⅛
Pacific R. R. of Mo.	....	....	....	....	....	....
1st mortgage	....	....	....	107	....	....
2d mortgage	....	....	....	....	....	112
Panama	193	....	....	....	....	....
Phila. & Reading	59	59¾	60½	60⅝	59½	61½
Pitts,Ft.W.&Chi.gtd	....	136½	....	....	....	....
1st mortgage	....	....	....	....	....	....
2d mortgage	....	....	....	....	....	....
3d mortgage	....	....	....	....	....	....
Pullman Palace Car	128½	127¼	128½	128	....	127½
Quicksil'r Min'g Co	....	....	....	....	....	12
Preferred	55	57	....	....	58	....
St. Louis & San Fran	41	40¼	40	40⅞	42½	41
Preferred	54¾	53½	54¾	55½	57	56
1st Preferred	90	93	93	94	95	....
St. L., Alt'n & T. H.	28½	27½	....	28	30¼	....
Preferred	....	....	....	....	72	....
1st mortgage	....	....	....	....	....	....
2d mort. pref	....	....	105¼	....	107	....
Income bonds	....	....	....	....	....	....
St. L., Iron Mt. & S	....	....	....	....	....	....
1st mortgage	115	....	....	115	....	....
2d mortgage	....	....	108	....	....	....
Toledo and Wabash	....	....	....	....	....	....
1st mortgage	....	....	....	....	....	....
2d mortgage	....	....	....	....	....	....
7s, Consolidated	....	....	....	101	....	....
St. Louis Division	....	....	....	....	....	....
Union Pacific	114	113½	113½	115	115¾	115⅞
1st mortgage	....	....	116	115¾	....	115¾
Land Grant 7s	....	....	....	....	....	....
Sinking Fund 8s	....	....	....	117¼	....	....
United States Ex	....	....	75	76	76	75
Wabash, St. L.& Pac	35½	35½	35¾	35	35¼	36⅛
Preferred	61⅜	60¾	60⅞	61¾	60¼	61¾
New mort. 7s	....	....	....	....	....	....
Wells-Fargo Ex	....	....	....	130	129	130¼
Western Pacific b'ds	....	....	....	110¾	....	....
Western Union Tel.	87	88¾	83½	91¼	91	91⅛
7s., S.F conv., 1900	....	....	....	....	....	....
FEDERAL STOCKS :—						
U. S. 4s, 1907, reg	117	117	118	....	....	118¾
U. S. 4s, 1907, coup.	118¾	118⅞	....	119¼	119⅜	....
U. S. 4½s, 1891, reg.	114¼	114½	....	114¾	....	....
U. S. 4½s, 1891, coup	....	....	....	....	....	....
U. S. 5s, 1881, reg	....	....	....	....	....	....
U. S. 5s, cont'd at3½	103	103½	103¼	103¼	103¾	....
U. S. 6s cont'd at3½	....	....	....	....	....	....
Dt. of Col. 3-65s, reg	....	....	....	....	....	....
Dt. of Col.3-65s,coup	....	....	....	....	....	....

Boston Stock Exchange.

Prices for the Week Ending Mar. 29.

	Th.23.	F. 24.	Sat.25.	M.27.	Tu.28.	W. 29.
Atch.,Top.&San.Fe.	95¾	96	87⅜	90⅞	91⅝	91¾
1st mortgage	119	....	118½	....	....	....
2d mortgage	....	....	....	....	....	....
Land Grant 7s	115½	....	....	....	....	....
Boston & Albany	163	....	166	166	167	167
7s reg	....	....	....	....	....	....
Boston and Lowell	....	....	....	101	101	....
Boston & Maine	140	140	142½	142¾	143	143
Boston& Providence	....	....	....	....	....	....
Bos'n,Hart.& Erie7s	52	51	....	53¾	54½	53½
Burl.& Mo.R.L.G.7s	....	....	....	....	....	....
Burl.& Mo.R.in Neb	....	....	....	....	....	....
6s, exempt	....	....	....	112	112	....
4s	....	....	....	....	....	....
Chi.,Burl. & Quincy	133½	133	134¼	135	135¼	135¾
Cin.,Sand&Clev($50)	....	24	27¼	27	27	26½
Concord ($50)	....	....	....	....	....	....
Connecticut River	....	....	....	....	....	....
Eastern	34	....	35	35	37	36¾
New 4½ Bonds	107	....	....	107	....	....
Fitchburg	....	125	....	....	....	....
N.Y. & New England	49	49¾	49½	50	51	51
7s	....	114	113¾	113¾	113¾	114
Northern N. H.	....	109	....	....	109	....
Norwich&Worcester	....	....	....	....	....	....
Ogden & Lake Cham	....	....	....	....	....	....
Preferred	....	....	....	....	....	....
Old Colony	130	130¼	130¼	130	130	130
Ph.,Wil.&Balt.($50)	....	....	....	....	....	....
Portl'd,Saco & Ports	....	....	....	....	....	....
Pueblo & Ark Val	....	....	....	....	....	....
7s	114½	114¾	....	116	....	115
Pullman Palace Car	130	128¾	127¾	....	129	128
Union Pacific	114¾	113	114	....	....	115⅝
6s	....	....	....	113¼	....	....
Land Grant 7s	....	....	....	....	....	....
Sinking Fund 8s	....	....	....	....	....	....
Vermont & Canada	....	....	....	....	....	....
Vermont & Mass	....	....	....	136	....	....
Worcester & Nashua	....	....	....	56	....	....
Cambridge (Horse)	....	....	....	....	....	....
Metropolitan(Horse)	....	....	....	....	....	....
Middlesex (Horse)	....	....	....	....	....	....
Cal.&Hecla Min'gCo	245½	....	....	240	245	245
Quincy	47	....	....	46	46	....

Philadelphia Stock Exchange.

Closing Prices for the Week Ending Mar. 28.

	W.22.	Th.23.	F.24.	Sat.25.	M.27.	Tu.28.
Allegh'y Val. 7 3-10s	....	....	....	....	....	....
7s, Income	56	56	....	55½	55½	....
Buff., Pitts & West.	17¾	17⅝	17½	17½	17½	17⅝
Camd'n & Am. 6s, '83	....	....	....	....	....	....
6s, 1889	....	....	....	....	....	....
Mort. 6s, 1889	....	114½	114½	114½	....	....
Camden & Atlantic	....	....	....	....	....	....
Preferred	....	....	....	....	....	....
1st mortgage	....	....	....	....	....	....
2d mortgage	....	....	....	....	....	....
Catawissa	....	22	22	....	22	....
Preferred	....	....	....	....	....	54½
7s, new	....	....	....	....	....	....
Del. & Bound Brook	....	....	....	....	....	....
7s	....	....	....	....	....	....
Elmira&Williamsp't	....	....	....	....	....	42½
Preferred	....	....	....	....	....	....
Hunt. & B. Top Mt.	....	....	12½	....	....	....
Preferred	26¼	....	....	....	....	26¼
2d mortgage	....	....	....	....	....	....
Lehigh Navigation	41½	41	41	40⅞	41	41
6s, 1884	....	....	103½	....	....	....
Gold Loan	....	....	....	111¾	....	111⅞
Railroad Loan	....	....	....	....	....	....
Conv. Gold Loan	109	....	....	....	....	....
Consol. Mort, 7s	....	....	....	....	....	....
Lehigh Valley	61	61	60¾	60⅞	....	61
1st mort. 6s, coup	....	....	....	....	....	....
1st mort. 6s, reg	....	....	....	....	....	....
2d mort. 7s	....	....	....	....	....	....
Consol mort. 6s	....	120½	....	....	....	....
Consol.mtg.6s,reg	120¾	....	121	....	....	....
Little Schuylkill	....	....	....	....	57½	....
Minehill&Sch.Hav'n	....	62	62	62	62	....
North Pennsylvania	....	....	63¾	....	....	63½
1st mortgage 6s	....	....	....	....	....	....
2d mortgage 7s	....	....	....	....	....	....
Genl. mtg.7s,coup	....	....	....	....	....	....
Genl. mtg. 7s, reg	....	....	....	....	....	....
Northern Central	49⅞	50	....	50	50	50
5s	....	96¾	....	....	....	....
Northern Pacific	35½	34⅝	35	35½	36½	36¾
Preferred	75⅞	75½	75¾	75⅞	78⅜	78⅝
Pennsylvania R. R.	63⅝	63⅝	63⅝	63⅝	63⅜	63½
1st mortgage	....	....	....	....	....	....
Gen'l mort	....	....	....	....	125	....
Gen'l mort reg	....	....	....	....	....	....
Consol. mort. 6s	....	117½	....	....	....	....
Consol. mort. reg	117½	....	....	....	....	....
Pa. State 5s, new	....	....	....	....	....	....
do 4s, new	....	....	....	....	....	....
Phila. & Reading	30	29¾	30	30½	....	29⅞
1st mortgage 6s	....	....	....	....	....	....
7s of 1893	....	....	....	....	....	120¾
7s, new convert	....	74½	75	....	75	75
Consol. mort. 7s	....	125	....	....	....	....
Consol. mort. reg	....	....	....	....	....	....
Gen'l mort. 6s	95	95	94¾	95	95½	95¼
Philadelphia & Erie	116	16¼	....	16	....	....
1st mortgage 5s	....	....	....	....	....	....
2d mortgage 7s	....	....	....	....	....	....
Pittsb.,Cin.&St.L.7s	....	....	....	....	....	....
Pitts.,Tit.&Buff. 7s,	95	....	95	....	....	....
Schuylkill Navi't'n	....	....	....	....	....	....
Preferred	....	13	....	....	....	....
6s, 1872	....	....	....	....	....	....
6s, 1882	....	93	....	....	....	91
United Co. of N. J.	184	184½	184¾	....	185	185
Hestonville, (Horse)	....	....	....	....	....	....
Chestnut&Wal.(do)	....	....	....	....	....	....
Green & Coates (do)	....	....	....	....	....	....

Baltimore Stock Exchange.

Closing Prices for the Week Ending Mar. 28.

	W. 22.	Th.23.	F. 24.	Sat.25.	M.27.	Tu.28
Baltimore & Ohio	....	....	....	....	....	193
6s, 1880	....	....	....	....	....	....
6s, 1885	....	....	108	....	....	108¼
Central Ohio ($50)	....	....	....	....	....	....
1st mortgage	108	108	....	....	....	....
Marietta & Cincin'ti	....	....	....	....	....	....
1st mortgage, 7s	124	....	....	124	122	123½
2d mortgage, 7s	....	104	104	104¾	....	104
3d mortgage, 8s	55⅞	56¾	56	57½	57½	57
Northern Cen. ($50)	....	50	....	50¼	....	49¾
2d mort., 6s 1885	106	....	....	....	....	107
3d mort., 6s, 1900	....	....	....	....	....	....
6s, 1900, gold	114⅞	....	....	115¾	115½	....
6s, 1904, gold	112⅝	....	....	....	....	....
Pitts.& Connellsv.7s	....	....	....	....	....	....
Virginia 6s, Consol	....	65	63¾	69	69	68
Consol. coupons	....	....	....	....	60	61
10-40 bonds	41¾	41½	43	43¼	43	....
Def'd Certificates	....	....	....	....	....	....
Western Maryland	....	....	....	....	....	....
1st M.,end.by Balt	114¾	....	....	....	....	....
2d M. do	....	....	....	....	....	....
3d M., do	....	....	....	....	....	....
1st M.,unendors'd	....	....	....	....	....	....
2d M.,end.WashCo	....	....	....	....	....	....
2d M., preferred	....	....	....	....	....	....
City Passenger R R	....	....	....	....	....	....

London Stock Exchange.

	Closing Prices — Mar. 10.		Mar. 17.	
Baltimore & Ohio (sterling)	111	113	111	113
Central of N. J., $100 shares	93	98	93	98
Do. consol. mort	113	115	112	114
Do. Adjustment Bonds	104	109	104	109
Do. Income Bonds	102	105	102	105
Det., G'd Haven & Mil. Equip bds	112	114	109	111
Do. Con. M. 5p.c., till '83 aft'r 6p.c	110	112	108	111
Illinois Central $100 shares	137	139	137	139
Lehigh Valley Cons. mortgage	118	122	118	122
Louisville & Nashville mort 6s	97	100	98	101
Do. Sink. Fund bds (S. & N. Ala)	97	100	96	98
Do. capital stock $100 shares	75	77	75	77
N. Y. Cent. & Hud. R. mt. bds	134	137	133	136
Do. $100 shares	133½	134½	133½	134½
Do mort. bonds (stg.)	118	120	118	120
N.Y., Lake Erie & West., $100 shs	36½	37	37¼	38
Do. 6 p. c. pref. $100 shares	72	74	76	78
Do. 1st Con. Mort. bds (Erie)	127	129	127	129
Do. do. Funded Coupon bds	122	125	123	125
Do. 2d Consol Mort. bonds	95	97	96	97½
Do. do. Funded Coupon bds	90	95	93	96
Do. Gold Income bonds	88	92	88	92
N.Y., Pa. & Ohio 1st mort. bonds	47	48	47	48
Do. Prior Lien bds (sterling)	101	105	101	105
Pennsylvania, $50 shares	61½	62½	63	64
Do. Con. Sink Fund Mort	115	117	116	118
Philadelphia & Reading $50 shs	29¼	29¾	29¼	29¾
General Consol Mortgage	115	117	115	117
Do. Improvement Mortgage	103	105	104	106
Do. Gen. Mtg. '74, ex-def'd coup.	96	98	96	98
Do. Scrip for the 6 def. ½ coup.	96	99	96	99
Pittsb., Ft. W. & Chi. Eq. bds	104	106	104	106
St. L. Bridge 1st mort. gold b'd.	125	127	122	124
Do. 1st pref. stock	94	98	95	100
Union Pa. Land Grant 1st. mtg.	116	118	113	115
Wabash, St. L. & P. $100 shs	32	34	32	35
Do. $100 pref. shares	57	59	58	60
Do. gen. mort. bonds	84	86	84	86

AMERICAN RAILROAD JOURNAL.

Financial and Commercial Review.

THURSDAY EVENING, March 30, 1882.

CALL loans on stocks were easy this morning at 4 to 6 per cent, and on Governments at 2@3 per cent. Time money was offered at 4 per cent on stocks for 30 days, and 5 per cent for six months. Prime mercantile paper was 5@6 per cent. In the afternoon the quotation for call loans on stocks was 4½ per cent, and at the close 2@3 per cent.

The actual rates for sterling exchange were 4.85¾@4.86¼, and 4.89@4.89¼ with cable transfers 4.90@¼, and prime commercial bills 4.84½ @4.85. The actual rates for continental bills are as follows: Francs 5.15@5.14⅜ and 5.18¾@ 5.18⅛. Marks 94 13-16@15-16 and 15⅜@⅝, and guilders 40⅛@40⅝.

The report of the Grand Trunk Railway Company of Canada for the half year ending January 31, 1882, shows how the directors are able to announce a full dividend on second preference stock, although the net revenue statement seemed to indicate a deficit. Of the balance of £8,122 brought into the half-year, only £498 is carried forward now. The item of interest on capital temporarily employed shows an increase of £8,088. Nearly £16,000 of this fund has been applied to meet the second preference interest, which, without these special aids, would scarcely reach the rate of four per cent for the half-year. Some approaches, it is understood, have been made with a view to an arrangement averting needless competition between the Grand Trunk and Great Western Railway companies.

In the United States Circuit Court, Philadelphia, on the 27th ult., the equity suit of the Messrs. McCalmont, to prevent the carrying out of the deferred bond scheme of the Philadelphia and Reading Railroad Company, was withdrawn. The court made an order dissolving the injunction, but it coupled with an order to the receivers to pay back to the subscribers the money already paid for the installments on these bonds. They are to pay to the company such moneys as had been received by them from the company, and to the individual subscribers such moneys as had been received direct from them. In making this order Judge McKennan, in the preliminary discussion, also made the significant announcement that the court still held its original opinion, that the deferred bond issue was illegal, and would hold this opinion until reversed by the United States Supreme Court. The order issued in the case was decided upon after agreement to its form by the counsel on both sides.

The gross earnings of the Philadelphia and Erie Railroad for the month of February, 1882, were $246,245.81, the expenses $182,568.63, and the net earnings $63,677.18, against $65,604.70 for the month of February, 1881, a decrease of $1,927.52. The net earnings of the two months ending with February, 1882, were $149,918.38, against $125,673.36 for the corresponding two months of 1881, an increase of $24,246.02.

The Trustees of the Memphis and Little Rock Railroad Company have paid to the State treasurer at Little Rock, Ark., $240,000 to satisfy judgment recently obtained by the State as against the company for money loaned in 1861. This stops the proposed sale of the road under the decree.

From the report of the directors of the Pittsburg, Cincinnati and St. Louis Railway Co., presented at the annual meeting of the stockholders held in Columbus, Ohio, on the 21st ult., we learn that the gross earnings for the year ending December 31, 1881, were $4,069,053.77, the expenses, $2,759,740.18, and the net earnings, $1,309,313.59; received for rents of equipment and interest on investments, $22,669.89—total revenue, $1,331,983.48. Payments: interest on bonds, $846,769.09; other payments, $221,360.91—total, $1,068,130. Profit for the year on the main line, $263,853.48; loss in operating Little Miami Railroad, $267,467.41; loss on Cincinnati and Muskingum Valley railway, $81,724.49—total losses on leased lines, $352,191.93; to which add one-half loss on St. Louis, Vandalia and Terre Haute railroad, $170,445.35—making the total losses outside of main line, $522,637.25; from which deduct profit on main line, $263,853.48, leaving net loss on all lines for the year, $258,783.77.

A mortgage of $250,000, given by the Buffalo Creek Railway Company to the Providence Life and Trust Company, of Philadelphia, was filed in the Erie County Clerk's office at Buffalo, N. Y., on the 28th ult.

The Managers of the Philadelphia and Reading Railroad Company, in the matter of the issue of the deferred income bonds, have called in the additional installments. Three dollars on each $50 bond has heretofore been paid by some one of the subscribers, and $12 are yet due, which is called in—$2 for April 25, $5 for June 20, and $5 for July 25. A discount at the rate of 5 per cent per annum is allowed on anticipated payments. In cases where the first installment of $3 has not yet been paid it is called in upon April 25. There are the usual penalties of forfeiture notified in cases where the installments are not paid on the dates mentioned. This notice is issued by the Managers of the Railroad. The Receivers, under the order of the Court, are to dispose of the installments paid to them by subscribers direct, in accordance with the order of said subscribers or assignees. The Receivers are said to hold a fund of about $1,000,000 on account of deferred income bond installments paid them.

The following quotations of sales of railway and other securities, for the week, are in addition to those given elsewhere in our columns:

New York.—Atlantic and Pacific 1st, 97; Am. Dock and Imp. Co., 5s, 97; Boston and New York Air Line pref., 65; Boston, Hartford and Erie 1st, 53¼; Belleville and Southern Ills., 1st, 120; Chicago and Northwestern Interest bonds, 105½; Chicago, St. Paul, Minneapolis and Omaha, 38⅞; do. pref., 105¼; do. consol., 100⅝; Columbia and Greenville pref., 85; Central Iowa, 33¾; Cedar Falls and Minnesota, 91; Chesapeake and Ohio cur. int., 47; do. 1st, Series A, 103; Chicago, Milwaukee and St. Paul, S. M. div. 1st, 104⅜; do. Chicago and Pacific div. 1st, 108½, do., do., West div. 1st, 94; do. South West div. 1st, 105½; do. La C. and Dav. div. 1st, 92¾; Cairo and Fulton 1st, 108½; Columbus, Chicago and Indiana Central inc., 55; Denver and Rio Grande, 67½; do. 1st, 113¾; do. 1st consol., 104½; Delaware and Hudson 1st, extended, 116; East Tenn., Virginia and Georgia, 13⅜; do. pref., 23; do. inc., 53; do. Divisional 5s, 76; Evansville and Terre Haute 1st, 94; Green Bay, Winona and St. Peter, 12½; do. pref., 21; do. 1st, 83½; do. inc., 25½; Houston and Texas Central 1st, Western div., 107¾; Indiana, Bloomington and Western, 44¾; do. 1st, 90; do. 2d, 76; International and Great Northern 1st, 107; do. coupon 6s, 84; Indianapolis, Decatur and Springfield 1st, 103¾; Keokuk and Des Moines, 19; do. 1st, 104½; Kansas Pacific 6s, 111; do. 1st consol., 104; do. 6s, Denver div. ass., 109; Louisville and Nashville, N. O. and Mobile div. 1st, 95; do. Evansville, Henderson and Nashville 1st, 98; do. Cecilian Branch 1st, 104; Louisiana and Missouri River, 23; Long Island, 55; Lake Erie and Western, 34½; do. 1st, 103½; do. inc., 55; Louisville, New Albany and Chicago, 67; do. 1st, 103; Lafayette, Bloomington and Muncie 1st, 103; Lehigh and Wilkesbarre consol. ass., 105½; Manhattan Beach, 33¾; do. Imp. 7s, 85; Mobile and Ohio, 28½; do. 1st deben., 82½; do. 2d deben., 50; Missouri, Kansas and Texas, 35⅞; do. gen'l mort. 6s, 80⅜; do. consol. 7s, 104½; do. 2d, 68; Missouri Pacific, 99⅜; do. 3d, 110½; do. consol., 102½; Memphis and Charleston, 58; Milwaukee, Lake Shore and Western, 50; do. 1st, 100; Marietta and Cincinnati 1st pref., 13½; Minneapolis and St. Louis pref., 61; do. 1st, 115½; do. Iowa ext., 112½; Metropolitan Elevated 2d, 94; New Orleans Pacific 1st, 88; Nashville, Chattanooga and St. Louis, 70; do. 1st, 115⅛; New York, Ontario and Western, 28⅝; do. pref., 88; Norfolk and Western pref., 54¾; Northern Pacific 1st coupon, 99⅜; Ohio Southern 1st, 87; do. inc., 34½; Ohio Central, 17½; do. 1st, 96; do. inc., 39; Oregon Railway and Nav., 138½; do. 1st, 107; Oregon Transp., 72½; Peoria, Decatur and Evansville, 33½; Pittsburg, Bradford and Buffalo 1st, 95½; Rochester and Pittsburg, 33; do. 1st, 101; do. inc., 46; Richmond and Alleghany, 23½; do. 1st, 93½; Richmond and

Danville, 149½; do. West Point, 156; do. 1st, 100; Rome, Watertown and Ogdensburg, 1st consol., 90; St. Paul and Duluth, 31½; do. pref., 75; St. Paul, Minneapolis and Manitoba, 119½; do. 1st, 109; do. 2d, 107¾; do. Dakota Ext. 1st, 106½; St. Louis and San Francisco 2d, Class A, 100; do. B, 92; do. C, 91½; South Carolina 1st, 100; do. 2d, 88; do. inc., 48; St. Louis, Kansas City and Northern, Omaha div. 1st, 113; do. R. E. 7s, 1895, 106; St. Paul and Sioux City 1st, 112½; St. Louis, Jacksonville and Chicago 1st, 118½; St. Louis, Iron Mountain and Southern, Arkansas Branch 1st, 110; do. 5s, 81; Southern Pacific of California 1st, 105; Toledo Delphos and Burlington, 15; do. inc., 22; Texas and Pacific, 45⅞; do. inc. L. G., 69; do. Rio Grande div. 1st, 83; Toledo, Peoria and Western 1st, 111¾; Texas Central 1st, 108¼; Utah Southern Gen'l mort. 7s, 105; Union Pacific S. F. reg., 118½; Wabash, St. Louis and Pacific, Gen'l mort. 6s, 83¾; Winona and St. Peter 1st, 109½; do. 2d, 121; Warren R. R. 2d 123; Arkansas 7s, M., O. & R. R., 25; Alabama Class C, 84½; Georgia 7s, gold, 108½; Louisiana consol. 7s, 64½; Missouri 6s, 1887, 109¼; do. H. & St. J. issue, 1887, 106½; North Carolina 6s, S. T., 3d class, 7½; do. 4s, consol. 80; Ohio 6s, 1886, 111; Tennessee 6s, new, 49¼; Virginia 6s, deferred, 14½; do. 6s, consol., 90; Am. Dist. Tel., 52; Northwestern Tel. 7s, 105; Sutro Tunnel, ¾; Canton Co. 60; Colorado Coal and Iron, 53½; do. 6s, 93½; Cam. Coal, 27½; Consolidation Coal, 30; New Central Coal, 16; Central Mining, ⅞; Excelsior, 2½; Homestake, 17⅞; Little Pittsburg, 2¼; Ontario, 35; Robinson, 3½; Standard, 16½.

Baltimore.—Atlanta and Charlotte, 75; do. 1st, 108; Atlantic Coal, 1.30; Baltimore City 6s, 1890, 115½; do. 6s, 1884, 104; do. 6s, 1886, 108; do. 6s, 1893, 115; do. 5s, 1916, 122½; do. 4s, 1920, 112; Columbia and Greenville 1st, 100½; do. 2d, 91; City Passenger R. R., 19; Maryland Defense 6s, 103¾; Norfolk Water 8s, 131; Ohio and Mississippi, Springfield div. 1st, 121; Parkersburg Branch, 9½; Richmond and Danville gold, 100; Virginia Peelers coup., 36; Virginia Midland old, 115; do. new, 60; do. pref., 130; do. 5th mort., 92⅝; do. inc. 76; Wilmington, Columbia and Augusta, 99½.

Boston.—Atchison, Topeka and Santa Fe mort. 5s, 99½; Atlantic and Pacific blocks, 112½; do. 6s, 95; do. inc. 6s, 30; Boston and Lowell, 7s, 120; Boston, Clinton, Fitchburg and New Bedford; 50½. do. pref., 130; Boston Land, 8; Boston Water Power, 5¾; Burlington and Missouri River Railroad in Nebraska 6s, non-exempt, 103¼; California Southern blocks, 120; do. 6s, 85; Connotton Valley, 5¾; do, 7s, 50; do. Straitsville div, 7s, 30; Central of Iowa, 34¾; Chicago, Burlington and Quincy 4s, old, 86⅝; do. 5s, 1901, 102¼; do. 4s, Denver ext., 84¼; Chicago, Milwaukee and St. Paul, Wisconsin Valley div. 6s, 96; do. Dubuque div. 6s, 103½; Chicago and West Michigan, 76; Flint and Pere Marquette, 25⅜; do. pref., 97; Fort Scott Branch, 7s, 109; Iowa Falls and Sioux City, 80; Ionia and Lansing, 8s, 110½; Jackson, Lansing and Saginaw, 8s, green, 112½; Kansas City, Fort Scott and Gulf, 75; do. pref., 122; do. 7s, 114½; Kansas City, St. Jo. and Council Bluffs 7s, 75, 114½; Kansas City, Lawrence and Southern 5s, 103¾; Louisiana and Missouri River 21; do. pref., 34; Little Rock, and Fort Smith, 53¼; do. 7s, 109; Mexican Central, 46; do. 7s, 85; do. blocks, new, 104¾; Massachusetts Central, 12½; do. 6s, 61; Marquette, Houghton and Ontanagon, 71; do. pref., 119½; Mad River R. R. 6s, 101; Michigan Central, 85½; Northern Pacific 6s, 98¼; New Mexico and Southern Pacific 7s, 112⅝; New York and New England 6s, 104½; Nashua and Lowell, 150; Oregon, Short Line Subscriptions, 111; do. 6s, 101; Old Colony 6s, 116½; Rutland, 4; do. pref., 24½; do. 6s, 100; Sonora block, No. 3, 577; do. 7s, 106¾; Summit Branch, 11½; Toledo, Delphos and Burlington, 7⅜; do. income 6s, 22; do. Southeast div. 6s, 72; do. inc. 6s, 18; do. Cincinnati and St. Louis, div. 6s, 63½; do. inc., 18; Wisconsin Central, 18½; do. 2d. 7s, 44; Atlantic Mining Co., 13¾; Allouez, 2½; Brunswick Antimony, 12; Copper Falls, 3½; Franklin, 10½; Harshaw, 2¼; Huron, 1½; National, 2⅛; Napa Quicksilver, 6½; Osceola, 34; Pewabic, 12¼; Phœnix, 2½; Sullivan, 1½; Silver Islet, 18.

Philadelphia.—Central Transportation, 34½; Cincinnati 7.30s, M. & N., 130; Catawissa new pref., 54; Connecting R. R. 6s, 116; Harrisburg and Lancaster 6s, 102¾; Nesquehoning Valley, 54½; New Orleans Pacific 6s, 88; Pennsylvania and New York Canal 7s, 126½; Pennsylvania Company 4½s, 95⅞; Philadelphia, Wilmington and Baltimore 4s, 94; Philadelphia and Reading R. R. scrip, 82½; Pennsylvania Canal 6s, 95; St. Paul and Duluth pref., 77; Schuylkill Nav. Imp. 6s, 70; Texas and Pacific consol. mort. 6s, 99; Union and Titusville 7s, 100; West Jersey and Atlantic 6s, 109. The latest quotations are: City 6s, 108@118; do. free of tax, 128@132; do. 4s, new, 108@113; Pennsylvania State 5s, new loan, 117@118; do. 4s, old, 110@112; do. 4s, new, 114@114½; Philadelphia and Reading R. R., 29⅝@29⅞; do. consol. mort. 7s, reg., 125¼@126; do. mort. 6s, 119@120; do. gen'l mort. 6s, coupon, 95¼@95¾; do. 7s, 1893, 120¼@121; do. new, conv., 75@76; United New Jersey R. R. and Canal, 185@185½; Buffalo, Pittsburg and Westtern, 17½@17⅝; Pittsburg, Titusville and Bufffalo 7s, 94½@95½; Camden and Amboy mort. 6s, 1889, 114@114¾; Pennsylvania R. R., 63⅛@63⅜; do. general mort. 6s, coupon, 125@125½; do. reg., 125@125½; do. consol. mort. 6s, reg., 119@120; Little Schuylkill R. R., 57@58; Morris Canal, 65@69; do. pref., 165@169; Schuylkill Navigation, 5@6; do. pref., 12¾@13; do. 6s. 1882, 91@92; do. 1872, 104½@106; Elmira and Williamsport pref., 58@60; do. 6s, 115½@116½; do. 5s, 95@102; Lehigh Coal and Navigation, 40⅝@40⅞; do. 6s, 1884, 102¾@104; do. R. R. loan, 115@117; do. Gold Loan, 111½@112; do. consol. 7s, 116½@117¼; Northern Pacific, 36¾@36⅞; do. pref., 78⅛@78⅜; North Pennsylvania, 63¼@63¾; do. 6s, 105½@106; do. 7s, 119@120; do. General mort. 7s, reg., 120@122; Philadelphia and Erie, 15½@16¼; do. 7s, 114@115; do. 5s, 104½@105½; Minehill, 62@62½; Catawissa, 21¾@22¼; do. pref., 54@55@; do. new pref., 53¼@54¼; do. 7s, 1900, 116½@—; Lehigh Valley 60¾@61; do. 6s, coupon, 121½@123; do. reg., 122@123; do. 2d mort. 7s, 130½@133; do. consol. mort. 120@121; Fifth and Sixth streets (horse), 152@155; Second and Third, 109@115; Thirteenth and Fifteenth, 70@72; Spruce and Pine, 46@47; Green and Coates, 79@81; Chestnut and Walnut, 90@92; Germantown, 70@80; Union, 110@115; West Philadelphia, 105@108; People's 12¾@13¼; Continental, 100@102.

Immigration Movements.

STATISTICS have been forwarded to the Secretary of the Treasury showing the immigration into the United States during February, 1882, and during the eight months ended February 28th, 1882, as compared with previous corresponding periods. During last February, 28,247 immigrants arrived in the customs districts of Baltimore, Boston, Detroit, Huron, New Orleans, New York, Passamaquoddy, Philadelphia and San Francisco. Of this number 3,037 came from England and Wales; 1,464 from Ireland; 501 from Scotland; 698 from Austria; 8,626 from Germany; 193 from Norway; 431 from Sweden; 3,771 from the Dominion of Canada; 3,389 from China, and 6,137 from all other countries. In every case there was an increase, which was very large in some instances, and comparatively small in others. The number of arrivals from China increased from 304 in February, 1881, to 3,389 in February, 1882. The total immigration during February, 1881, was 15,075. During the eight months ended February 28th, 1882, the total immigration was 375,091, against 306,475 during the previous corresponding period. There was a decided increase in the immigration from most countries, but a falling off in the arrivals from Ireland and from the Dominion of Canada.

The Dangers of Railway Running.

I THINK the dangers of handling railway trains can be made less than they are, if railway companies would consent to submit to the cost. When the legislature looks into this matter more fully, as it will yet do, I think the companies will be forced to submit to the cost, willing or unwilling.

Human life is too precious a thing, and human fingers, hands and arms are too valuable to be thrown away for the mere sake of making the cost of management less, and the percentage of dividends to the shareholders more.

A very slight investigation will discover the dangers to which brakemen, especially of freight trains, are exposed, through the want of a more perfect system of coupling the cars. It seems to me this can be greatly improved upon, in the direction both of convenience and safety. There was a time when those large square blocks of wood at the ends of freight cars, called *dead-woods*, were much thicker than now. It was a very common thing then for men to lose their arms when coupling, by having them crushed between these, and a change was made in them. Since then this kind of accident very seldom occurs.

It never seems to have entered into any one's mind until quite lately, that the frogs of the road could be so improved as to prevent those terrible accidents such as have recently happened to brakemen in coupling, whereby the poor men were torn into shreds beneath the wheels. If you examine the draw-bar-heads of a long freight train made up of cars from different parts of the continent, you will observe a variety of design in their construction. Some are in the form of a pair of open jaws. When the man guides the connecting link into the socket so as to drop into it the coupling pin,

his hand can slide into these open jaws and is safe from being crushed. Even this form however does not obviate all danger. The most common form of draw-bar-head is a constant source of danger to the man's fingers and hands. Even suppose he becomes ever so expert at pulling away his hand the moment the link enters the socket, in very frosty weather he is liable to be caught through his woolen mitten or his sweaty fingers sticking to the link, and it is but the work of a moment to maim the poor man for life.

Now do you think it is a matter of no importance to me whether that poor man loses his hands or not?

I think I have so much sympathy with those who suffer physical pain that I would be glad to rise at midnight and preach a sermon two hours' long if it would prevent the crushing of a finger, but when I think, not of a finger merely, but of a right hand and perhaps of a wife and little children dependent on that right hand for their daily bread, I must have my say in this matter, whoever may object.—*Rev. D. V. Lucas in Railway Sermons.*

A Sweeping Injunction in Favor of Express Companies.

THE form of the final decree to be entered in the cases of the express companies against the railroad companies was approved by Judges McCrary and Treat in the United States Circuit Court, St. Louis, on the 24th ult. It is a sweeping injunction, providing for the carrying of express matter, in charge of the messenger or agent, on all passenger trains. The railroad companies cannot open or inspect the packages, nor demand a knowledge of their contents. Railroad officials are not allowed to interfere in any way with the express matter or messengers. The express companies are to keep an account of their carrying service, and to make a settlement on the 15th of each month preceding. The rate is to be not exceeding fifty per cent more than the prescribed rates for the transportation of ordinary freight, and not exceeding the rate charged by the railroad companies for any other express company. All previous excess of rates or unjust discriminations are to be investigated by a Master in Chancery. The injunction is perpetual.

Exports and Imports.

THE Chief of the Bureau of Statistics, in his eighth monthly statement for the current fiscal year of the imports and exports of the United States, reports that the excess of imports or of exports of merchandise was as follows: Month ended February 28, 1882 (excess of imports), $2,387,629; month ended February 28, 1881 (excess of exports), $19,975,314; two months ended February 28, 1882 (excess of exports), $5,584,835; two months ended February 28, 1881 (excess of exports), $48,768,468; eight months ended February 28, 1882 (excess of exports), $70,924,473; eight months ended February 28, 1881 (excess of exports), $210,481,170; twelve months ended February 28, 1881 (excess of exports), $120,156,021; twelve months ended February 28, 1881 (excess of exports), $225,546,777. The excess of imports or of exports of gold and silver coin and bullion was as follows: Month ended February 28, 1882 (excess of exports), $7,684,051; month ended February 28, 1881 (excess of exports), $462,775; two months ended February 28, 1882 (excess of exports), $8,299,501; two months ended February 28, 1881 (excess of imports), $3,820,168; eight months ended February 28, 1882 (excess of imports), $18,217,293; eight months ended February 28 1881 (excess of imports), $72,078,164; twelve months ended February 28, 1882 (excess of imports), $37,207,779; twelve months ended February 28, 1881 (excess of imports), $72,604,663.

The Coal Trade.

THE leading coal-carrying companies make the following reports of their tonnage for the week ending March 18th, and for the year to same date, compared with their respective amounts carried to the same time last year:—

	Week.	1882.	1881.
Reading Railroad	111,842	2,026,290	1,988,870
Schuylkill Canal	.....	27,655	.....
Lehigh Valley	97,684	1,589,717	1,526,990
Delaware, Lackawanna and Western	61,064	757,318	864,982
Shamokin	11,481	179,067	199,272
Central R. R. of New Jersey	59,209	681,782	814,402
United R. R. of New Jersey	27,657	306,753	333,976
Pennsylvania Coal	12,071	168,707	218,147
Delaware and Hudson Canal	47,157	596,243	764,274
Huntingdon and Broad Top Mountain	10119,	135,325	96,805
Penn. and New York	22,093	421,518	371,268
Clearfield, Pa.	59,306	537,403	418,845

The total tonnage of anthracite coal from all the regions for the week ending March 18, as reported by the several carrying companies, amounted to 391,875 tons, against 520,025 tons in the corresponding week last year, a decrease of 129,150 tons. The total amount of anthracite mined for the year is 4,616,540 tons, against 5,265,523 tons for the same period last year, a decrease of 648,983 tons. The quantity of bituminous coal sent to market for the week amounted to 85,707 tons, against 111,525 tons in corresponding week last year, a decrease of 25,818 tons. The total amount of bituminous mined for the year is 1,031,770 tons, against 869,559 tons, for the corresponding period last year, an increase of 162,211 tons. The total tonnage of all kinds of coal for the week is 477,582 tons, against 631,550 tons in corresponding week last year, a decrease of 153,968 tons, and the total tonnage for the coal year is 5,648,310 tons, against 6,135,082 tons to same date last year, a decrease of 486,772 tons. The quantity of coal and coke carried over the Pennsylvania Railroad for the week ending March 18 was 211,868 tons, of which 147,375 tons were coal and 686,475 tons coke. The total tonnage for the year thus far has been 2,290,551 tons, of which 1,604,076 tons were coal and 686,475 tons coke. These figures embrace all the coal and coke carried over the road east and west. The shipments of bituminous coal from the mines of the Cumberland coal region for the week ending March 18 aggregated 22,321 tons, of which 18,232 tons were by the Baltimore and Ohio Railroad, 450 tons by the Chesapeake and Ohio Canal, and 3,443 tons by the Pennsylvania State Line Road. The Reading Railroad shipment for last week, ending March 25, was 115,200 tons, of which 17,500 tons were sent to and 23,300 tons shipped from Port Richmond, and 8,000 tons sent to and 9,100 tons tons shipped from Elizabethport.—*Phil. Ledger, March* 27.

A Car for Huntsmen.

THE Pullman Palace Car Company has recently placed upon the Pennsylvania Railroad a hunting car, specially constructed for the uses of huntsmen desirous of reaching their destination without suffering the inconveniences incident to such excursions. The car, which resembles an ordinary baggage car in outward appearance, is fitted up with conveniences for dogs, baggage and other sporting paraphernalia, while a portion has been partitioned off for sleeping apartments, cooking and other homelike comforts for the hunters. The kennels set apart for the dogs are arranged in tiers around the sides of the car, and they have been built with a view of giving the best possible attention to the occupants.

Pennsylvania Railroad.

THE statement of the business of all the lines of the Pennsylvania Railroad Company east of Pittsburg and Erie for February, 1882, as compared with the same month in 1881, shows

An increase in gross earnings of	$211,136
An increase in expenses of	289,619
A decrease in net earnings of	$78,483

The two months of 1882, as compared with the same period in 1881, show

An increase in gross earnings of	$395,243
An increase in expenses of	606,320
A decrease in net earnings of	$211,077

All lines west of Pittsburg and Erie for the two months of 1882 show a deficiency in meeting all liabilities of $111,566, being a decrease as compared with the same period in 1881 of $657,795.

COUPONS OF THE CENTRAL PACIFIC RAILROAD Company (San Joaquin Valley Branch) and of the LAND BONDS, due April 1, 1882, will be paid at the Banking House of FISK & HATCH, No. 5 Nassau street, New York.

C. P. HUNTINGTON, Vice-President.

COUPONS OF THE FIRST MORTGAGE BONDS OF the SOUTHERN PACIFIC RAILROAD COMPANY (of California), due April 1, 1882, will be paid at the office of the Company, Nos. 9 Nassau and 11 Pine streets, New York.

J. L. WILLCUTT, Secretary.

THE LAKE SHORE AND MICHIGAN SOUTHERN RAILWAY COMPANY.

TREASURER'S OFFICE, GRAND CENTRAL DEPOT, NEW YORK, March 28, 1882.

The Board of Directors of this company have this day declared a dividend of TWO per cent upon the capital stock, payable on MONDAY, the 1st day of May next, at this office.

For the purposes of this dividend, and also for the annual meeting of the stockholders for the election of directors, etc., which is to be held on the 3d day of May next, the transfer books will be closed at 3 o'clock P. M. on Saturday, the 1st day of April next, and will be reopened on the morning of Friday, the 5th day of May next.

E. D. WORCESTER, Treasurer.

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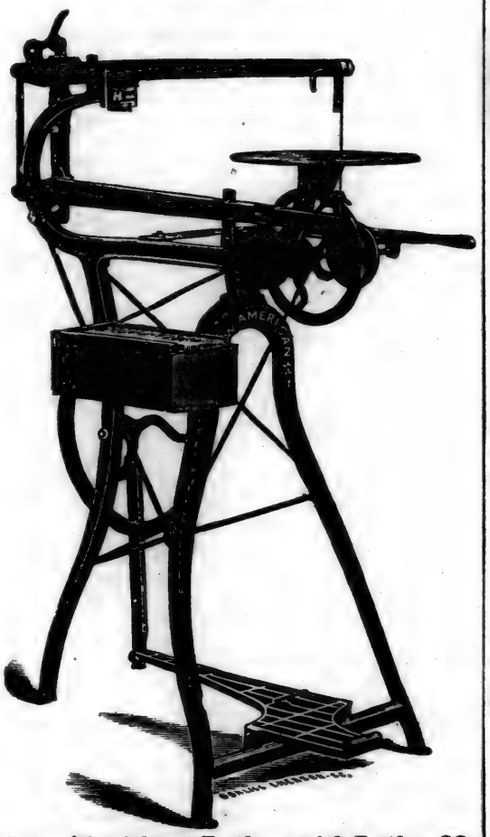
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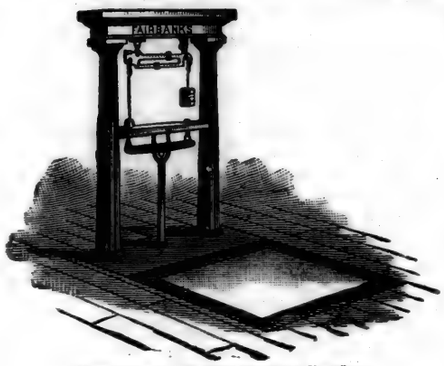
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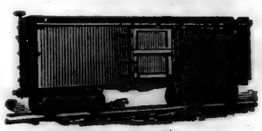
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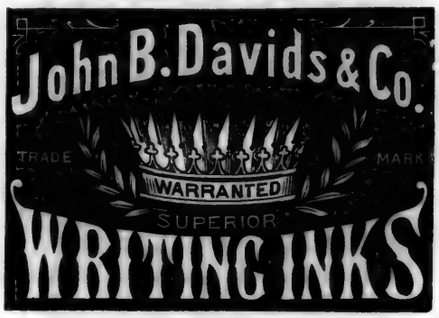
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American Railroad Journal.

ESTABLISHED 1831.

Steam Navigation, Commerce, Finance, Banking, Machinery, Mining, Manufactures.

SECOND QUARTO SERIES.—VOL. XXXVIII., No. 14.] NEW YORK, APRIL 8, 1882. [WHOLE No. 2,398.—VOL. LV.

The First Passenger Cars.

A VERY interesting picture of the Baltimore and Ohio Railroad and one of its horse cars appears in "Goodrich's American Geography," written in 1831, and published in Boston by Waitt & Dow. The following reference to the road appears on page 36, immediately above a arefully engraved illustration: "The most interesting thing at Baltimore is the railroad, which is to extend from Maryland to Ohio. Here is a picture of one of the cars on this railroad." The outside passengers reached the top of the car by climbing upon one of the forward wheels of the car, thence over the driver's seat, as in gaining the top of the old-fashioned stage coach. Entrance to the interior of the car was made through a door at the rear of the vehicle, as in the present omnibus admission. Curtains protected passengers from rain or wind, and these fixtures were adjustable, as we now observe them upon the open cars of modern horse railroads and the popular "barges" used during the summer about our large New England towns and villages. The cars of the Baltimore and Ohio Railroad were moved by horse power during a considerable period before the experiments with steam engines were successful upon that line.

The Mississippi Inundations.

THE distinguished German engineer and traveler, Chevalier Ernst von Hesse Wartegg, in referring to the recent Mississippi River overflows, says that levees on the Mississippi will be money thrown away, and that $100,000,000 already spent in that way has been totally ineffective. He says the way to make the Mississippi behave is to help it in the effort it is making to shorten itself toward the Gulf. In 1721 the distance from Cairo to New Orleans was 1,215 miles, and to-day it is 210 miles less than that, or only 974 miles. He says Red River ought to be drawn off from the Mississippi, and allowed to run to the gulf through the Calcasion River, which would be only eighty miles instead of 500 miles it has to run through of the Mississippi. Both the Ohio and the Red rivers are a barrier to the rapid current of the Mississippi. The Wachita ought to be connected with the Atchafalaya, and let off to the gulf that way, instead of embarrassing the Mississippi. The Mississippi ought to be connected with Lake Borgne, as proposed by Captain Cowden, which would draw off one-tenth of the whole body of water. He said that the River Po, in Italy, which has magnificent levees, is regularly inundated, and that the tendency of these levees is to raise the bed of the river by depositions in it; so that the Po, the Mississippi and many other streams with artificial banks really run on a high ridge of land, from which they inevitably overflow the surrounding country. He says levees from Cairo to New Orleans would cost $100,000,000, and would meet with the same fate as the others, and that artificial means cannot keep the tremendous river within bounds, and the only way to do it is to aid nature to find the straightest way to the gulf.

Restaurant Cars.

THE Pennsylvania Railroad will shortly add a new feature to its limited express running between New York and Chicago. Samuel H. Carpenter, General Eastern Passenger Agent of the road, said that the company was building a number of restaurant cars especially for this train, and it would not be long before they would be put in operation. The coaches will be fitted up for the sole purpose of dining-cars, and meals will be served table d'hote at 75 cents each. They will not be run as part of the train, but will be attached at meal hours, and will be detached when the passengers conclude eating. The cars will stand at designated stations with the meals prepared, and it will only be necessary, after they are coupled on, for passengers to step from the regular coaches into them and take their seats at the table. Besides affording immunity from eating-houses, the long stops for refreshments will be avoided and much better time can be made. Hitherto when meals have been served on trains on the line, cars put to other uses as well have been used.

Importing Locomotives to the United States.

THE Philadelphia *Record* says that three locomotives have been imported from England by a firm in that city. They were consigned to Alfred Earnshaw, of Walnut Place, who stated to a reporter that they had been purchased as pattern stock, from which to manufacture others after their model, for use in the United States. They are small shifting engines of very simple construction, such as are used on the English roads, and it is the opinion of the importers that they can be manufactured here much cheaper than the ones now used by our railroad companies, while serving their purposes quite as well.

Railroad Taxation in Maine.

BY virtue of an act entitled "An act relating to the taxation of railroads," approved March 17, 1881, the Governor and Council have ascertained the amount of the excise tax for the year 1882 which the several railroad corporations in Maine must pay for the privilege of exercising their respective franchises to be as follows: Grand Trunk, $12,095.56; Bangor and Piscataquis, $250.49; Boston and Maine, $18,626.62; Bucksport and Bangor, $49.50; European and North American, $4,713.92; Eastern Railroad, $18,652.86; New Brunswick and Canada, $40.65; Knox and Lincoln, $620.29; Maine Central, $28,156.18; Portland Horse Railroad, $958.14; Portland and Ogdensburg, $138.45; Portland and Rochester, $1,196.26; Rumford Falls and Buckfield, $100.15; Sandy River Valley, $34.63; Somerset, $67.20; St. Croix and Penobscot, $89.07; Old Orchard Beach, $9.77; New Brunswick, $20.12.

Fractional Currency.

EFFORTS have recently been made by the circulation of petitions, etc., in this city and elsewhere, looking to the restoration to circulation of fractional currency, and information received from Washington leads to the hope that there is a fair prospect of success. United States Treasurer Gilfillan says that there is a progressing need of fractional currency, demands for it in small quantities coming from all parts of the country. It is needed for transmission through the mails of sums less than one dollar and for certain classes of business that have been wholly destroyed for want of this medium of exchange. He advocates the issue and claims the right to do this, but an appropriation to pay expenses is first necessary. Business men will need no reminder of the inconvenience which has resulted from the substitution of coin for the fractional currency. Those engaged in certain retail lines have been bereft by the change of a large and lucrative trade through the mails, and the greater par of that retained has proved a nuisance because of postage stamps being used to pay bills. The stamps usually received are of denominations too large for letter postage, so that many firms have large quantities of them of all values above three cents on hand. The Government will not exchange or purchase these, so that this

form of receipts represents almost entirely dead loss. Many newspaper offices, especially the weeklies, are similarly afflicted.

The fractional currency was also popular with the people. The convenience with which the mails were formerly used for remitting for small purchases, etc., contrasted with the present impossible use of the coin for that purpose, is still appreciated. In ordinary use, the fractional currency was better than coin. When old or mutilated it could be conveniently exchanged. Counterfeiting was almost if not quite impossible. It was light in weight. On the contrary the subsidiary coin offers facilities for clipping, punching and other swindling mutilations. It is comparatively easy to counterfeit, and one or two dollars of it is as much as an able-bodied person cares to lug around habitually.

The petitions should be circulated again and a strong effort be made to persuade Congress to provide an appropriation such as Treasurer Gilfillan refers to. Blank petitions may be had by addressing D. A. Hopkins, *American Sentry*, New York City.

Trade with South America.

Information has reached this city from Rio de Janeiro that the steamship communication between the Amazon River and New York is to be opened this month by the Booth Steamship Company, a line of steamers which has been running in competition with the Amazon River Steamship Company. The first steamer will sail from Manaos, about 600 miles from the mouth of the Amazon, on April 30. The object is to develop the interior provincial trade, and stops will be made at Macapa, Obidos and Santaran. The line will be started with two steamers, which will make only four trips a year. They are of iron, of a capacity for a thousand tons of cargo, and will have accommodation for eighty passengers. The principal import from the Amazon is rubber, and it is believed that with four trips a year the line will be remunerative. It was recently stated by a Brazilian merchant that while the trade from the Amazon to the United States is small, there is a large export business from this country, and it is growing exclusively. Freight for the interior and on the river is landed at Para, where it is transshipped to the river steamers.

A French Opinion of American Railroads.

M. Simonin, a French engineer who traveled extensively in the United States, and who writes on engineering subjects in the principal French papers, wrote a recent article on "Railways in the United States." Speaking of "the security and comfort" of our lines, he says: "It would be erroneous to think that American railways were greatly deficient amidst this feverish building of new lines. There is a legend to the effect that the life and security of passengers are not taken into consideration in that country, and that whole trains are precipitated into rivers from bridges and embankments; but such accidents do not form nowadays even the exception. By comparing statistics, we find that, all things taken into consideration, there are fewer accidents in the States than anywhere else. We must only remember that the total length of railways in the States is about equal to that of the whole world besides, and that there is more traveling there than anywhere else. Let us add that nowhere has such care been given to the security and comfort of travelers. Who invented the train brake? Who thought of Pullman cars, bells, cow-catchers, snow-clearers, signal-cords and the house for the engineer?" After referring to the eternal progress which is the American characteristic, and describing the recent improvements on the New York Central, he says: "Why cannot we introduce these improvements into France? Because the French companies affirm that whatever is good in the American system is bad for the French."

Taxation of Telegraph Messages.

In the United States Supreme Court at Washington on the 3d inst., in the case of the Western Union Telegraph Company vs. the State of Texas, the question presented was the right of a State to impose a tax of 1 per cent each on telegraph message sent and received at all offices within its limits without making any discrimination between telegrams sent to points in the State and those sent to points out of the State, and without excepting from the operation of the tax messages sent by agents of the Government on Government business. The court held that a State may tax telegraph companies at its discretion, where such messages pass between points within the State limits, but that the taxation of messages which originate or go outside the State is a regulation of inter-State commerce, and as such is beyond the power of the State. The taxation of Government messages is also unconstitutional, for the reason that it is taxation by the State of the means employed by the Government of the United States to execute its powers. The judgment of the court below is reversed, with costs, and the cause remanded with instructions to reverse the judgment of the District Court of Travis county, and proceed thereafter as justice may require, not inconsistent with the opinion of this court. Opinion by Chief Justice Waite.

A Curious Clock.

Mr. S. Holton, a jeweller and watchmaker of Middlebury, has recently constructed a curious clock, which acts out to perfection the assassination of President Garfield. The machine is a common cuckoo clock, under which is a miniature depot. At one window is a ticket agent dealing out tickets, while at another a telegraph operator is seen busy at his work, and truckmen, porters, train dispatches, etc., are all flying around as natural as life. All of these figures are of wood, about two inches long. At the end of each hour the cuckoo announces the fact, and immediately Garfield appears on the platform on which the scene is enacted, accompanied by Mr. Blaine. Guiteau is seen to follow him, having just alighted from a truck wagon, and as he fires at the President the latter falls. Just then a train of cars comes dashing in, and in the confusion all the principal actors are carried into the depot out of sight. After the train dispatcher has given the signal and the train has gone, a small door at the left opens and a priest appears, book in hand, in the act of reading a funeral service, while at the same time another door at the right opens and Guiteau appears on the gallows. The priest retires and shortly after the gallows disappears with Guiteau, and the doors close. This is acted out at the end of each hour, and takes about three minutes. Mr. Holton is quite a noted inventor, but this seems to be his masterpiece, and has to be seen to be fully appreciated.

Legal Negligence.

In the case of the Lake Shore and Michigan Southern Railway Co. v. Bangs, Michigan Supreme Court, Jan. 18, 1882, 11 N. W. Rep. 276, it was held that it is negligent in a passenger to leap from a train moving six miles an hour, for the purpose of getting off at a station where the train should but does not stop, although he does so to save anxiety to his mother, who is expecting him, and although others have frequently jumped off trains going at that rate of speed. The court said: "We have reluctantly felt ourselves compelled to hold that in our judgment such conduct is, beyond any question, negligence, and that the jury should have been so instructed. The fact that many persons take the risk of leaving cars in motion does not make them any the less risks which they have no right to lay at the door of railroad companies. No company can use effectively coercive powers to keep passengers from doing such things. All persons of sound mind must be held responsible for knowledge of the usual risks of such traveling. Every one is supposed to know that in jumping from a vehicle running six miles an hour or much less he stands a good many chances of falling or being unable to fully control his movements, and that falling near a train is always dangerous. No doubt every one who tries such an experiment persuades himself that he will escape, but it is impossible to suppose that any one of common sense does not know that there is danger. It is true that there are circumstances where it is not negligence to take a choice of risks or where an act is done without freedom of choice. But the common sense of mankind teaches us that no one has a right to risk life or limb merely to avoid inconvenience. Upon the facts in this case no one can doubt that the railway agents were wrong in not stopping at the station. If put to any inconvenience by being carried further, Bangs had a legal remedy for it. No doubt the vexation and anxiety would lead to some trouble of mind, but they cannot be held sufficient to justify running into bodily danger. See "Boarding and Leaving Railway Cars in motion," 23 Alb. Law Jour. 124, and note, 37 Am. Rep. 384.

Several fast locomotives have recently been placed on the Bound Brook route between New York and Philadelphia. One of them, it is stated, made a twenty-five mile run at the rate of seventy miles an hour; another did the same distance at the rate of seventy-nine miles, and a third, with a light train and over a short and very level stretch of road, made two miles at the rate of eighty-four miles an hour.

AMERICAN Railroad Journal. ESTABLISHED 1832.

PUBLISHED WEEKLY BY THE

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MR. FREDERIC ALGAR, Nos. 11 and 12 Clements Lane, Lombard Street, London, E. C., England, is the authorized European Agent for the JOURNAL.

New York, Saturday, April 8, 1882.

Entered at the Post Office at New York City as Second-Class Mail Matter.

THE DEFEAT OF THE REAGAN BILL.

THE defeat of the act for the regulation of inter-State commerce, known as the Reagan bill, has been for some time a foregone conclusion. It first passed the House of Representatives in 1878, and since that time the question of regulating railroad transportion by federal and State authority has been discussed and rediscussed until the importance of the subject has become thoroughly recognized.

Out. of the vigorous threshing some few grains of wheat have resulted. The sum of the recent exhaustive hearings, given upon the subject by the Committee on Commerce, seems to be the resolve of the committee that some legislation on the matter of regulating inter-State commerce should be had. The Reagan bill, although generally adopted by political reformers, is now admitted to be inadequate to meet the requirements of the case. It is realized that all legislation touching inter-State traffic must be carefully studied and critically examined, not only by good lawyers, but by railroad experts as well.

The Reagan bill formulates the old cry of anti-discrimination. Its aim is to compel railroads engaged in inter-State commerce to make their charges the same to all customers for the service, to discriminate against nobody, never to charge more for a shorter than for a longer distance, to avoid all pools or combinations, and to have a fixed schedule of rates which could not be changed without due notice. The several provisions of the act relate mainly to the enforcement of these provisions, but strange to say no special agency is named to secure such enforcement.

The defects in the bill are not so much legal objections as common sense ones. Mr. McVEAGH's plea that railroads are purely private property, and as such not subject to legislative control, is too antiquated to deserve mention. It has been decided by nearly if not quite every State in the Union, that the privileges that have been granted to railroads have given them such a public nature that State or National government has ample authority to subject them to such regulations as may be necessary to protect the people at large.

Another legal objection advanced by Mr. McVEIGH, that the power to regulate inter-State commerce applies solely to transportation by canal and river, seems to us without much weight. He thinks that the intention of the framers of the constitution was to prevent the States from making unjust discrimination within their own borders. Granted that the constitutional provision was not designed with direct reference to railroads, it must have contemplated transportation from State to State, for without that there could be no inter-State commerce. But the constitutional provision has been distinctly held to apply to inter-State transportation by canal and by river, and it is difficult to see what different principle is to apply to railroads.

Mr. McVEIGH's suggestion, that mere publicity will rectify grievances, was simply ludicrous. A competent national commission is needed, but it can accomplish little, if anything, unless it has power to do something else besides investigating.

One legal objection to the bill that is fatal is that it proposes to deal simply with railroads, and to take no notice of transportation by canals and rivers. This objection could have been remedied by amendment, but Mr. BLANCHARD, of the Erie Railway, and commissioner, with no difficulty made it plain to the House Committee having the bill in charge that the prohibitions asked for in the bill were for the most part impracticable. The commissioner of the trunk lines put with great clearness the reasons that justify certain kinds of discriminations. The competition between long and short lines and between rail and water lines, often compels lower rates for through traffic than could be endured for local traffic. Again, the cost of service, quantity of freight carried, and convenience of delivery, fast or ordinary time freight, the make up of trains, the location of stations on the line, are factors that must be considered in estimating cost of carriage. The prohibition of pooling would ensure a war of rates that would eventually kill the smaller roads and throw the business into the hands of a few larger systems.

The Reagan bill after four years of discussion is undoubtedly dead. The necessity of some kind of legislation is apparent, and the most feasible plan that we have seen is that of Mr. CHAS. FRANCIS ADAMS, which provides for the appointment of a national commission, who are to investigate the matter thoroughly, and report from time to time such further bills as may become necessary. The evils must first be clearly pointed out, and then remedied as far as possible, due regar being paid to railroads and people alike.

National Bank Taxation.

A DECISION of considerable importance was rendered by the United States Supreme Court at Washington on the 3d inst., in the case of the Board of Supervisors of the county of Albany, New York, vs. Edward N. Stanley, error to the Circuit Court of the United States for the Northern District of New York. This action was brought by the defendant in error, a citizen of the State of Illinois, as assignee of certain stockholders of the National Albany Exchange Bank to recover taxes to the amount of $62,000, forcibly collected from said stockholders and paid into the treasury of the county of Albany upon assessments made in the years 1873 to 1878, both inclusive. It was maintained on behalf of the stockholders in the Court below that the taxes in controversy were illegally assessed and collected, because the law of the State of New York (chapter 761, of 1866) under which such assessment and collection were made, violated the restriction imposed on such assessment and taxation by section 5,219 of the United States Revised Statutes, in that it did not permit the shareholder to deduct the amount of his debts from the valuation of the shares of stock owned by him in ascertaining the amount for which the shares should be taxed. It was therefore void so far as related to shares of stock in national banks. This view of the case was sustained by the Court below and judgment was rendered in favor of the stockholders. The decision of the Court is as follows:—

This Court holds that the invalidity of a part of the State law does not necessarily invalidate it *in toto*; that if the valid and invalid parts of a statute are capable of separation only the latter are to be disregarded. In the present case the New York State law of 1866, as construed by the Court of Appeals, is in conflict upon a single point with a federal statute; as far as that point is concerned it is invalid, but in other respects it must be held to be operative. If the plaintiff in this case had asked to have his debts deducted from the assessed valuation of his bank shares in the computation of his tax, and if his request had been refused upon the ground that such deduction was prohibited by the State law of 1866, then he would have been entitled to relief, because his grievance would have been a direct result of the invalid provisions of the State act. That, however, is not the present case.

It does not appear from the findings that any shareholder for whose relief this suit is brought, with the exception of C. P. Williams, ever asked to have his indebtedness deducted from his assessment or had any such indebtedness to be deducted. Their cases, therefore, are covered not by the invalid, but by the valid part of the State law. It follows from these considerations:—

First—That the assessors had authority, under the valid part of the act of the New York Legislature of 1866, to assess national bank shares.

Second—That where no debts of the owners existed to be deducted the assessment was valid and the tax paid under it a valid tax.

Third—That the assessing officers acted within their authority in such assessment so long as they were not notified in some proper manner that the shareholder owed just debts which he was entitled to have deducted. If they then proceeded in disregard of the act of Congress the assessment would be erroneous, and the case of Williams vs. Weaver shows how the error might be corrected.

The judgment of the Court below is reversed and the cause remanded, with directions to enter a judgment upon the finding of facts for the plaintiff on the seventh count for the amount of the tax paid by Williams, with interest, and on all the other counts for the defendants. Opinion by Justice Miller.

CONSTRUCTION.

WORK on the Pemigewasset Valley Railroad in New Hampshire is progressing.

THE new Philadelphia and Reading Railroad branch line between Shamokin and Sunbury has been located by the surveying parties.

THE Montreal and Sorel Railway was completed on the 1st inst., and the event was celebrated by an excursion trip to Montreal.

THE Mexican Government has accepted the Mexican Central Railroad, extending from El Paso del Norte south to Chihuahua. The first locomotive for this road reached Celaya, Mexico, on the 3d inst.

MESSRS. Langdon & Shepard, the new contractors on the Canadian Pacific Railway, are making arrangements for the speedy prosecution of the work. Track-laying will be immediately resumed at Flat Creek, from which point it is expected that 50 miles of rail will be laid by the first of May.

THE completion of the Russian Railway for the trans-Caspian country is now looked upon as a question only of time. Some weeks ago in Moscow a meeting of leading merchants was held to consider the subject of the road, and it was the general sentiment that the advantages to be derived from it by the Russian trade would be immense.

WORK was commenced on the 31st ult., at Connellsville, Penn., putting in the slope stakes for the new Pittsburgh and Atlantic Railroad Company, which is designed to connect the coke region extension of the Pittsburgh and Lake Erie Railroad and the Reading Railroad. The work of grading will be commenced immediately.

THE Fitchburg Railroad Company has commenced the construction of a lumber storage shed, some 316x50 feet, upon the old State Prison land in the Charlestown District. It has also upward of 400 men at work upon the Vermont and Massachusetts Division, constructing second tracks, &c. The work of improving its freight terminals between the Lowell and Eastern railways in Somerville is also being pushed ahead vigorously.

THE contract for the new municipal loan of Havana, Cuba, and for the construction of the Water Works to supply the entire city with water was awarded on the 29th ult. to the firm of Lyles & Gibson of this city, and Daniel Runkle of New Jersey. The contract price is stated at $9,200,000. The works will be built on the aqueduct system and planned somewhat after the New York works. The water will be brought from mountain springs, about six miles from Havana, to a central reservoir, from which it will be distributed over the city.

A RAILROAD is now in course of construction in Brazil by French capitalists, who received from the Government concessions which are quite encouraging. They are guaranteed six per cent upon the cost of the road, and should the dividends exceed eight per cent, the amount in excess is to be divided between the company and the State until the latter is reimbursed for the guaranty it may have paid, but not until the dividends reach twelve per cent has the Government any right to regulate the rates charged for transportation. The right is reserved to take the railroad at a fair valuation at the expiration of thirty years.

ORGANIZATION.

THE directors of the American Steamship Company, elected in Philadelphia on the 3d inst., are: Henry D. Welsh, president; John Price Wetherill, D. B. Cummins, N. Parker Shortridge, Strickland Kneass, William D. Winsor, G. B. Roberts, Henry C. Butcher, J. N. DuBarry, Joseph W. Lewis and Edmund Smith.

AT a meeting of the stockholders of the Junction Railroad Company held in Philadelphia on the 3d inst. the following Board of Directors was elected: Isaac Hinckley, George B. Roberts, Henry M. Phillips, Samuel M. Felton and Franklin B. Gowen. Isaac Hinckley was elected president, John C. Sims, Jr., secretary, and W. C. Fraley treasurer.

THE following gentlemen were elected directors of the Denver and Rio Grande Railway Company, at the annual meeting of the stockholders held at Colorado Springs, Col., on the 3d inst., viz: William J. Palmer, William A. Bell, Charles T. Worishoffer, D. C. Dodge, Lyman K. Bass, H. A. Risly, A. Engler, C. B. Lambor, and J. W. Gilluly.

THE directors of the Cincinnati and Muskingum Valley Railroad Co., elected on the 28th ult., are: George B. Roberts, Philadelphia; D. S. Gray, Columbus, Ohio; Charles Moran, New York; Thomas D. Messler, Pittsburg; James Buckingham, M. Churchill and W. A. Graham, Zanesville, Ohio. The Board elected Thomas D. Messler, president and W. F. Black secretary.

THE directors of the Staten Island Railroad Company, elected on the 4th inst., are: Jacob H. Vanderbilt, Louis M. Myer, B. Kreischer, Joseph Britton, Charles A. Canavello, James McNamee, Nathaniel Marsh, William King, George P. Ockershausen, J. H. Vanderbilt, Jr., George F. Kreischer, John W. Merscreau and James J. Winant. Jacob H. Vanderbilt was elected president of the Board.

THE stockholders of the Chicago and Alton Railroad Company, at their annual meeting in Chicago on the 3d inst., elected the following directors to serve for three years: John Crerar, Lorenzo Blackstone and John K. Mitchell; and Morris K. Jesup was elected to fill a vacancy. At a subsequent meeting of the directors T. B. Blackstone was elected president, and Charles H. Foster secretary and treasurer.

THE following gentlemen were chosen directors of the Panama Railroad Company on the 3d inst.: T. W. Park, president; Charles G. Francklyn, J. G. McCullough, D. O. Mills, Joseph Ogden, William B. Dinsmore, Thomas Maddock, George Garr, R. W. Thompson, Jesse Seligman, E. P. Fabbri, J. W. Ellis, Theodore J. De Sabla. Messrs. Seligman, Fabbri, Ellis and De Sabla represent the Panama Canal Company.

AT the annual meeting of the St. Louis, Jacksonville and Chicago Railroad Company, held in Chicago on the 3d inst., the following directors were elected: George Strout, T. B. Blackstone, John Crerar, Charles D. Hodges, Josiah Sawyer, N. W. Green and L. E. Worcester. The officers are: President, George Strout; secretary, W. J. Bryson; treasurer, T. B. Blackstone. John Crerar was also elected president of the Chicago and Joliet Railroad and the Mississippi River Bridge companies.

THE directors of the Mexican Central Railroad Company, elected at the annual meeting of the stockholders held in Boston on the 3d inst., are: Thomas Nickerson, William Rutch, Charles J. Paines, Frank Morrison, Royal M. Pulsifer, Theodore Nickerson, Albert W. Nickerson, Levi C. Wade, A. B. Lowrie, Benjamin B. Cheney, Isaac T. Bert, Thomas Dana, Robert E. Symon and Frederick L. Ames, of Boston; Rudolph Pink, Sebastian Comacho and Ramon G. Guzeman, of Mexico; for the Mexican Government, Felip Beriozabal and Miguel Auza of Mexico.

INCORPORATION.

A CHARTER has been filed at Austin, Texas, by the El Paso and White Oak Railroad Company, capital stock $500,000, to build and operate twenty miles of road between El Paso and some points on the boundary line between Texas and New Mexico.

THERE has been a company formed, and it has been granted a charter, to run street cars through McKeesport, Penn. We are informed that they will run from Means-town, on Fifth street to Market, and further on Market to Edgehill. The surveyers are already at work laying out the proposed route.

ARTICLES of incorporation have been filed by the Marshall & Northwestern Narrow-gauge Railroad Company at Austin, Texas; capital stock, $665,000, with right to increase. The road is to run from Marshall to Mt. Pleasant, through Harrison, Morris, Camp and Titus

counties, and tap the Texas and St. Louis road.

THE Wheeling, West Va., Register says that the South Pennsylvania Railroad is to run from Harrisburg via Bedford, West Union, Connellsville and Waynesburg to Wheeling. Articles of association have been filed with the Secretary of State of West Va, and will be filed with the clerks of the various counties. Fourteen corps of engineers are at work, and another corps started from Wheeling on the 1st inst.

THE Kentucky Legislature has passed a bill chartering a company to build a canal around the entire city of Louisville, a distance of over six miles. There will be a fall of thirty feet the whole way, thus affording an unsurpassed water power for the driving of machinery, which will afford superior advantages and safety for transportation purposes. The authorized capital of the company is $6,000,000, but $1,000,000 will be sufficient for an organization. Hons. E. D. Standiford, Proctor Knott, Isaac Caldwell, and Mr. S. T. Suit are among the corporators.

THE Mexican International Railway Company was incorporated at Hartford, Conn., on the 30th ult. The corporators named are Oliver Hoyt, A N. Hawley, Henry B. Plant, Charles Crocker, Benjamin Clark, Thomas W. Pierce, R. T. Colburn, E. H. Pardee, Frank Storrs, and James B. Haines. The Company is authorized to build, lease, and operate railroads and steamboat lines anywhere in the world outside of the State of Connecticut. The capital stock is $10,000,000 divided into 100,000 shares, and may be increased or diminished at will. Organization may be made and business begun whenever $1,000,000 has been subscribed and $10,000 paid in. The Company, although prohibited from owning or leasing any railroad within the State, is required to keep an office in New Haven. It is said to be formed for construction purposes in connection with certain pending Mexican railway schemes. A mate to this bill is the Plant Investment Company, also of New Haven, and also incorporated on the 30th ult. It is allowed a capital of $10,000,000 and is authorized to build and equip railroads and telegraph and telephone lines outside the State.

CONSOLIDATION.

THE Toronto and Nipissing Railway has been amalgamated with the Midland Railway system.

THE Lehigh and Hudson River Railroad and the Warwick Valley Railroad have consolidated, and will hereafter be operated as one road under the name of the Lehigh and Hudson River Railroad.

THE sale of the North Shore Railroad of Long Island to the Long Island Railroad Company has been completed, the price paid being $61,250. Trains will begin running through to Great Neck in two or three days.

THE Chicago, Milwaukee and St. Paul Railway Company has just absorbed the Hastings and Stillwater, the Illinois and Wisconsin, the Rockford, Beloit and Iowa, and the Eastern railroads. All are short lines, but their value is over $1,000,000.

AT a meeting of the directors of the Memphis and Charleston Railroad Company a plan for consolidation with the East Tennessee, Virginia and Georgia Railroad Company was favored, and the stockholders have been called to meet on June 22 to confirm the proposed consolidation.

PERSONAL.

D. H. CONKLIN has been appointed receiver of the Illinois Midland Railroad.

M. HARJES, of the banking firm of Drexel, Harjes & Co., Paris, has been decorated with the cross of the Legion of Honor by the French Government.

WE give elsewhere from the Steubenville *Republican* a touching poem entitled "Only a Brakeman." It was written on the occasion of the death of a brother of the author, and is worthy a place in every scrap-book in the land.

AT the annual meeting of the stockholders of the International and Great Northern Railway Company, held at Palestine, Texas, on the 3d inst., the following officers were elected: Jay Gould, president; R. S. Hayes and T. W. Pearsall, vice-presidents; D. H. S. Smith, secretary and treasurer; H. M. Hoxie, general manager.

THE officers of the St. Louis and San Francisco Railway Company, elected on the 4th inst., are: President, Edward F. Winslow; vice-president and general manager, Charles W. Rogers; second vice-president, James D. Fish; treasurer and secretary, T. W. Lillie; assistant treasurer, Geo. Butler.

Bituminous and Anthracite Products in Pennsylvania.

HON. MILES S. HUMPHREYS, Chief of the Bureau of Labor Statistics, has issued his report for 1881. The following is a recapitulation of the bituminous tables :—

Total number of colleries	382
Average number of days worked during the year	217.07
Total number of persons employed	35,530
Total amount paid in wages during the year	$14,540.057 50
Total product of bituminous coal for the year ending December 31, 1881 (tons)	15,692,923.12
Total number of coke ovens	6,640
Total production of coke for the year (tons)	2,176,403.08
Average amount per ton paid in wages	$0 92.05
Average amount of coal produced to each employe	442.47

The anthracite business is recapitulated as follows :—

Total number colleries	319
Average number of days worked during year	275.01
Total number employes	75,159
Total amount paid in wages during year	$27,454,781 36
Total production anthracite for 1881 (tons)	27,929,128.10
Average amount per ton paid in wages	1.0655
Average amount coal produced per employe	373.1/4

THE steamer which is being built at the yards of the Harlan & Hollingsworth Co., Wilmington, Del., to run from Chestertown, Md., to Baltimore, via Chester River, will be completed in a few weeks. The Avalon, which was recently launched, is receiving her machinery, and will be completed about the 1st of May. The ferry-boat Baltimore, built for the Pennsylvania Railroad, is receiving her machinery in New York, and another boat for the same Company and on the same model as the Baltimore is being built at the Harlan & Hollingsworth Company's yards.

Only a Brakeman.

BY EVERETT A. BUDD.

Only a brakeman! killed by the train;
Only a brakeman! by accident slain.
Onward, rush onward, no time for delay:
Blow the shrill whistle and hasten away.

Only a brakeman! cries the wild throng;
Only a brakeman! been called by Death's gong.
Why should the eye glisten? Why should the heart ache?
'Tis only a brakeman who's set his last brake.

Only a brakeman! is flashed through the air;
Only a brakeman! for his body prepare;
On the morrow 'tis shipped as poor common freight—
As only a brakeman who has gone to his fate.

Only a brakeman! the editors write;
Only a brakeman! 'twas late in the night,
He was doing his duty—the train broke in two,
When down to his death, the brakeman fell through.

Only a brakeman! but the pride of some heart;
Only a brakeman! but in some busy mart
Are eyes that are weeping, and homes that are hushed,
Because a poor brakeman was yesterday crushed.

Only a brakeman! but a true-hearted boy,
Only a brakeman! but some mother's joy,
For whom there's no muffle for the coarse iron wheel
That grinds on her heart as on the grooved steel.

Defince, Ohio.

CLARA LOUISE KELLOGG will not sing any more after she gets married. She will, however, lecture occasionally.

THERE are only six charcoal furnaces is Great Britain, and they all belong to one firm. The annual yield of charcoal iron is about 3,000 tons.

WOOD piled in a tank and covered with quicklime which is gradually slacked with water is said to acquire great hardness and consistency after the lime has acted upon it for a week or more.

IN consequence of the stringency in the money market a great many eggs, which were being held for better prices, have been sold, causing a break in prices. The hens, who had been bulls for some months back, watched the thing for a time, hoping for an appreciation in values, but finally, becoming panicky, commenced unloading rapidly, causing a still further depreciation.

THE result of the winter's hog-packing in the West shows a total of 5,747,760 hogs, of an average net weight of 210 1-6 pounds, and an average yield of lard of 36.44 pounds. The gain over last year in the average net weight per hog is 2.45 pounds and in lard 4.09 of a pound. The decrease in the number packed was 1,171,696, or nearly 17 per cent, while the decrease in the aggregate weight was nearly 16 per cent.

THE Louisville and Nashville Railroad Company have received seventy-five new fruit cars, combining in their construction all modern improvements. They are models in their way, with perfect ventilation in sides, end and top. These cars are to run on fast freight and, if necessary, on passenger trains between New Orleans, Pensacola, Mobile and Cincinnati, bringing to market the earliest fruits and vegetables from the far sunny South, in the quickest time and in fresh condition.

The Debt Statement.

Mr. John M. Carson, clerk of the Committee on Ways and Means, has prepared an analysis of the debt statement for March for the use of the committee, of which the following are the material parts:—

The statement of the public debt for March shows a decrease for the month of $16,462,947, and for the nine months of $114,332,290. In September last the reduction was $17,500,000 in round numbers, but with this exception the reduction for March is the largest monthly reduction we have had for several years. Since March 1 the interest-bearing debt has decreased $19,372,900 over all. Of the $20,000,000 bonds included in the 107th call about $5,500,000 have not yet been presented for payment. During the next six weeks three other calls, aggregating $35,000,000 will mature, and it is probable that the Secretary will call for the surrender of another $20,000,000 within a few days.

On August 31, 1865, the interest-bearing debt of the United States was at the highest point—viz, $2,381,830,295, and the annual interest charge thereon was nearly $151,000,000. The interest-bearing debt is now $1,514,752,700, and the annual interest charge about $61,000,000. Thus in a period ot sixteen years we have reduced the bonded debt $866,787,595, effecting thereby an annual saving in the interest charge of about $90,000,000. In the same period there was a reduction in the non-interest-bearing debt, represented mostly by United States currency, of $163,377,564, making the aggregate reduction since August 31, 1865, over $1,000,000,000, the exact figures being $1,030,065,149. The number of days, including Sundays, embraced within the period from August 31, 1865, to April 1, 1882, is 6,056, and the regularity and extent of the reduction in the public debt during the period named will be more fully appreciated when it is known that the decrease has averaged over $142,000.

The Treasurer's statement of assets and of liabilities for the month shows a net increase in silver dollars over February of about 3,750,000, or nearly 500,000 in excess of the number of these pieces coined during March. The outstanding silver certificates show a decrease of $319,000 and the Treasury of course gained that amount of this form of currency. The number of standard silver dollars now on hand is 78,178,588, and against this amount there is outstanding $59,234.40 in certificates, which leaves the Treasurer the actual owner of 18,755,143 of the silver dollar pieces now on hand.

The fractional silver coin shows an increase of about $300,000 during the month. In gold coin and gold bullion there is a decrease of about $7,000,000 compared with March 1, which is accounted for by the disbursements during the month on account of called bonds and interest. There is also a decrease of nearly $3,500,000 in the amount of United States and national bonds and notes on hand, but this is more than balanced by a decrease of $5,400,000 in the liability of outstanding drafts and transfer checks.

The available cash balance shows an increase of about $1,100,000, the amount of this fund being $155,147,339, against $154,038,382 on March 1.

The total receipts for March show an increase of about $4,300,000 over the corresponding month of last year, as will be exhibited by the following table:—

	March, 1881.	*March*, 1881.
Customs	$18,549,755	$21,034,413
Internal revenue	10,111,514	10,001.916
Miscellaneous	1,113,572	2.993,227
Totals	$29,764,841	$34,029,556
Expenditures	17,073,142	11,827,856
Surplus	$12,701,699	$22,201,700

In March, 1881, there was disbursed for pensions about $8,000,000. The payment of pensions this year was made in February and March, which will explain the apparently large discrepancy between the ordinary expenditures of the two months compared. These amounts do not include interest on the debt. The increase of nearly $2,000,000 in miscellaneous receipts is explained by the fact that the accumulated profits on coinage for the past several months were covered into the Treasury last month.

Locomotive Building.

Mr. Burnham, of the Baldwin Locomotive Works, Philadelphia, having been interviewed, is reported to have said that business with them continues brisk, and that they are turning out work at the rate of fifty engines a month. On the first of the present year they had on their books orders for more than eight hundred locomotives, but the number has since been decreased by deliveries and by orders countermanding and deferring their construction. He regarded the situation as healthful, and thought that business, particularly in their line, is assuming a conservative and better condition. The number of countermanded and deferred orders is not large, and is not more than had been anticipated.

Everything "boomed" about 1877 or 1878, and the business of the building of locomotives became immense, for the railroads were in great need of engines. With the prosperous times, occasioned greatly by the large crops in this country and their failure in Europe, at least $200,000,000 found their way into this country. New roads were projected and built, and others placed in a condition for the movement of the large increase in the freight business. There was a large amount of idle capital which was invested in railway enterprises, and, taking everything into consideration, the tendency was to "boom" the business of building locomotives. Iron is easier than it was four months ago, and may be said to be on the retrograde, but labor is high. The business with them continues, the works being run on full time, with the full complement of men.

Mr. Burnham stated in conclusion that he saw nothing discouraging in the future, but thought that everything is settling down to a solid business basis. Some of the orders countermanded and those deferred he felt assured would be made good. Last year the firm built 550 engines, and with the other work that they did, it would be safe to say the number exceeded 600. Speculation having ceased to a great extent is, perhaps, one of the causes for the settling down to sound business operations all around.

The Baldwin Locomotive Works will, on November 23 of this year, celebrate the fiftieth anniversary of the successful trial of their first locomotive. This was the "Old Ironsides," built by M. W. Baldwin, on Minor street, near Sixth and Chestnut streets and first tried on the Germantown Railroad. It is recorded that on its first trip it ran at the rate of a mile an hour, and had to be started by pushing. It was subsequently overhauled and slightly remodeled, and could then go thirty miles an hour. The works moved to their present location, at Broad and Hamilton streets, in 1835, and have grown into the largest establishment of the kind in the country.

Legal Right of Company to Issue Preferred Stock.

In view of the conflicting opinions expressed by the several judges respecting the legal question involved in the Philadelphia and Reading Deferred Bond scheme, it may be of interest to the profession to read the case of Kent v. Quicksilver Mining Co., 78 N. Y. 159, in which a somewhat similar question was involved. The company needing money, obtained it from stockholders by issuing to each one who would pay five dollars per share a certificate of preference entitling him to seven per cent on the sum so paid, annually, out of the earnings, the balance of the net earnings to be equally divided among all the stockholders. Upon the question whether the company had the right to make such an arrangement under its implied power to *borrow*, Folger, Justice, in delivering the opinion of the court, said:

"All the powers which that Company had were given to it by its charter (Laws of 1866, chap. 470, p. 1021), and by the Revised Statutes (vol. 1, pp. 599–600, §§ 1, 2, 3). Thereby it had the usual general powers of a corporation. (See Angel & Ames on Corporations, § 110). It had also the peculiar power of holding, improving and working mining lands in California and elsewhere, and of disposing of the product thereof. It had also the power to issue certificates of stock, representing the value of its property, in such form and subject to such regulations as it might from time to time by its by-laws prescribe; and to regulate and prescribe in what manner and form its contracts and obligations should be executed. It is claimed that it had also incidental and implied powers. So it had, as far as permitted by the Revised Statutes, which declare that, in addition to the powers therein enumerated and to those expressly given in its charter, it should not possess nor exercise any except such as should be necessary to the exercise of the powers so enumerated and given: 1 R. S., 600, § 3.

"Plainly a mining corporation, for the exercise of its power of mining in its lands, must have money. Hence, if it has it not, and cannot otherwise readily get it, it must, as necessary to the use of its corporate rights, have the power to borrow it, and in any way, and upon any obligation or security to be given by it, that is not unlawful: Curtis v. Leavitt, 15 N. Y. 9. It may borrow it from the stockholders in it, as well as from other parties, and it may

determine and agree to borrow from them only. This corporation was in need of money to carry on its authorized business. It did get money, for that purpose and because of that need, from some of the stockholders in it, and in that instance from some of them alone. If the mode by which that money was got was a borrowing, within the sense which the law and common acceptation give to that term, then the transaction so far would have been lawful, and it would have remained to inquire whether the obligation given was a lawful instrument. But it was not a borrowing. The idea of a borrowing is not filled out unless there is in the agreement therefor a promise or understanding that what is borrowed will be repaid or returned, the thing itself or something like it of equal value, with or without compensation for the use of it in the meantime. To borrow is a reciprocal action with to lend; and to lend or to loan, say the dictionaries, is the parting with a thing of value to another for a time fixed, or indefinite yet to have sometimes an ending, to be used or enjoyed by that other, the thing itself, or the equivalent of it to be given back at the time fixed, or when lawfully asked for, with or without compensation for the use as may be agreed upon. In this transaction with some stockholders that corporation had not the right, nor was it under the liability to ever pay back the five dollars per share furnished by them to it; that was not named in the terms of the obligation given, nor was it contemplated in the negotiation and bargain. The stockholder had not, by the scope of his bargain, nor by the terms of the written evidence of it, any right ever to ask for repayment of the money furnished by him. In short, there was not formed thereby the relations of debtor and creditor. The stockholder parted forever with the money furnished, inasmuch as the charter of the Company is perpetual, and the Company made a perpetual charge upon its net earnings. Though there was a compensation fixed for the use of the money, and though it was to take the form of a yearly payment, and at a rate the same as the then lawful rate of interest, yet we cannot conceive that the transaction was a loan and borrowing of money with a compensation for the use of it. It it had been, though the compensation was great for the sum furnished, yet it was not a violation of the usury laws of which the corporation could avail itself (Laws of 1850, chap. 172); and the courts might not overhaul it, save, perhaps, as an unconscionable and extortionate agreement (1 Story Eq. Juris., §§ 246–331), as to which we will speak again before the close. The transaction is not to be looked upon as other than a preference of one class of stockholders to another, as giving to the first class a perpetual, inextinguishable prior right to a portion of the earnings of the Company before the other class might have anything therefrom. It was none other than the creation of a 'preferred stock.'"

Cows on the prairies get accustomed to the noise of locomotive bells and whistles, and do not always clear the track until thrown off by the cowcatcher. A patented device is described in the *Scientific American* for squirting hot water twenty rods ahead. It is calculated that this would stimulate the laziest into action.

Statement of the Public Debt of the United States, April 1, 1882.

DEBT BEARING INTEREST.

	Amount Outstanding.	Accrued Interest.
6 per cent loan, 1861-'81, continued at 3½ per ct.	$62,045,300 00	$542,896 37
6 per cent loan 1863-'81 continued at 3½ per ct	47,855,700 00	418,747 37
5 per cent funded loan of 1881	401,503,900 00	2,342,106 08
4½ per cent funded loan of 1891	250,000,000 00	937,500 00
4 per cent funded loan of 1907	738,805,450 00	7,388,054 50
4 per cent refunding certificates	542,350 00	5,423 50
3 per cent navy pension fund	14,000,000 00	105,000 00
Aggregate of debt bearing interest	$1,514,752,700 00	$11,739,717 82
Interest due and unpaid		1,408,663 40

DEBT ON WHICH INTEREST HAS CEASED SINCE MATURITY.

	Amount Outstanding.	Interest due & unpaid.
4 to 6 per cent. old debt, 1837.	$57,665 00	$64,174 81
5 per cent. Mexican indemnity stock, 1846	1,104 91	85 74
6 per cent. bonds, 1847	1,250 00	22 00
6 per cent. bounty land scrip, 1847	3,275 00	213 06
5 per cent. Texas indemnity bonds, 1850	20,000 00	2,945 00
5 per cent. bonds, of 1858	8,000 00	....
5 per cent. bonds, of 1860	10,000 00	600 00
6 per cent. 5-20 bonds, 1862, called	370,550 00	8,402 19
6 per cent. 5-20 bonds, June 1864, called	58,650 00	170 95
6 per cent. 5-20 bonds, 1865, called	71,050 00	18,712 88
5 per cent. 10-40 bonds, 1864, called	439,900 00	108,843 67
6 per cent. Consol. bonds, 1865, called	390,100 00	14,729 86
6 per cent. Consol. bonds, 1867, called	1,035,250 00	198,188 24
6 per cent. Consol. bonds, 1868, called	294,850 00	23,305 62
6 per cent. loan, Feb. 8, 1861, matured Dec. 31, 1880	90,000 00	5,190 00
5 per cent. funded loan 1881, called	1,883,750 00	36,983 35
Oregon War Debt, March 2, 1881, matured July 1, 1881.	122,650 00	5,227 50
6 per cent loan of July 17 and Aug. 5, 1861, matured June 30, 1881	762,150 00	21,732 00
6 per cent loan of July 17 and Aug. 5, 1861, continued at 3½ per cent, matured Dec. 24, 1881, and Jan. 29, 1882, called	6,238,200 00	38,676 11
6 per cent. loan of March 3, 1863, matured June 30, 1881.	245,450 00	4,740 00
1-10 to 6 per cent. Treasury notes, prior to 1846	82,525 35	2,668 06
1-10 to 6 per cent. Treasury notes, 1846	6,000 00	206 00
6 per ct. Treasury notes, 1847.	950 00	57 00
3 to 6 per cent. Treasury notes, 1857	1,700 00	99 00
6 per ct. Treasury notes, 1861.	3,000 00	364 50
7 3-10 per cent. 3 years' Treasury notes, 1861	16,300 00	1,104 43
5 per cent. 1 year notes, 1863	42,305 00	2,127 35
5 per cent. 2 year notes, 1863.	33,950 00	1,707 30
6 per ct. compound interest notes, 1863-64	222,930 00	45,516 05
3-10 per cent. 3 years' Treasury notes, 1864-65	140,150 00	4,590 50
6 per cent. certificates of indebtedness, 1862-63	4,000 00	253 48
4 to 6 per cent. temporary loan, 1864	2,960 00	244 19
3 per cent. certificates, called.	5,000 00	394 31
Aggregated of debt on which Interest has ceased since maturity	$12,665,615 26	$612,275 15

DEBT BEARING NO INTEREST.

Demand notes, 1861-62		$59,875 00	
Legal tender notes, 1862-63		346,681,016 00	
Certificates of Deposit		11,140,000 00	
Coin certificates, 1863		5,166,920 00	
Silver certificates, 1878		68,355,370 00	
Unclaimed interest			6,536 51
Fractional currency, 1862, 1863 and 1864	$15,440,832 67		
Less amount estimated as lost or destroyed, act of June, 21, 1879	8,375,934 00		
		7,064,898 67	
Aggregate of debt bearing no interest		$438,468,039 67	$6,536 51

RECAPITULATION.

	Amount Outstanding.	Interest.
Debt bearing interest in coin, viz:		
Bonds at 6 per cent., continued at 3½ per cent.	$109,901,000 00	
Bonds at 5 per cent, continued at 3½ per cent.	401,503,900 00	
Bonds at 4½ per cent.	250,000,000 00	
Bonds at 4 per cent.	738,805,450 00	
Refunding certificates	542,350 00	
Navy pension fund, 3 p.c	14,000,000 00	
	$1,514,752,700 00	$13,053,017 48
Debt on which interest has ceased since maturity.	12,665,615 26	612,275 15
Debt bearing no int., viz:		
Old demand and legal-tender notes	$346,740,851 00	
Certificates of deposit	11,140,000 00	
Coin & silver certificates.	73,522,290 00	
Fractional currency	7,064,898 67	
	$438,468,039 67	
Unclaimed interest		6,536 51
	$1,965,886,354 93	$13,671,829 14
Total debt, principal and interest to date, including interest due and unpaid	$1,979,558,184 07	

AMOUNT IN TREASURY.

Interest due and unpaid	$1,313,299 66
Debt on which interest has ceased	12,665,615 26
Interest thereon	612,275 15
Gold and silver certificates	73,522,290 00
U. S. notes held for redemption of certificates of deposit	11,140,000 00
Cash balance available March 1, 1882	154,038,281 65
	$253,291,761 72
Debt, less am't in Treas'y Mar. 1, 1882	$1,726,266,422 35
Debt, less am't in Treasury Feb. 1, 1882	1,742,729,369 10
Decrease of debt during the month	$16,462 00
Decrease of debt since June 30, 1881	$16,462,946 75

BONDS ISSUED TO THE PACIFIC RAILROAD COMPANIES, INTEREST PAYABLE IN LAWFUL MONEY.

	Amount Outstanding.	Accrued Interest not paid.
Central Pacific bonds, 1862-64	$25,885,120 00	$388,276 80
Kansas Pacific bonds, 1862-64	6,303,000 00	94,545 00
Union Pacific bonds, 1862-64	27,236,512 00	408 547 68
Cent. Branch Union Pacific bonds, 1862-64	1,600,000 00	24,000 00
West'n Pacific Bonds, 1862-64	1,970,560 00	29,558 40
Sioux City & Pacific bonds, 1862-64	1,628,320 00	24,424 80
Totals	$64,623,512 00	$968,352 68

Interest paid by the United States, $53,405,977.38; interest repaid by transportation of mails, &c., $14,887,476,95; interest repaid by cash payments: 5 per cent. net earnings, $655,198.87; balance of interest paid by United States, $37,863,301.56.

The foregoing is a correct statement of the public debt, as appears from the books and Treasurer's returns in the Department at the close of business, March 31, 1882.

CHARLES J. FOLGER,
Secretary of the Treasury.

ACCORDING to the *Evening Post*, the State of New York is fast becoming the chief petroleum producing center of the country. The product of her oil fields is now 20,000 barrels per day. Alleghany produces 16,000 barrels and Cattaraugus county 4,000 barrels. The production of the State is one-third of the total oil product of America. About one year ago New York produced about one-sixteenth. The putting down of new wells is carried on at a lively rate. There are now 875 wells in the Alleghany field, and it is believed the number will reach 1,600 by the 1st of July.

A CONGRESSMAN not long since introduced a Bill in the U. S. Congress providing for uniformity in the height and position of the couplers and buffers of freight cars. Nothing could possibly be brought into use on railroads that would be more acceptable to train employes and of greater benefit. No less than 2,800 men are reported to have been fatally crushed or seriously crippled in coupling cars during the past year in America.

The Stock Exchanges and Money Market.

New York Stock Exchange.

Closing Prices for the week ending April. 5.

	Th.30.	F.31.	Sat.1.	M.3.	Tu.4.	W.5.
Adams Express	.....	140	141	143¾	140	142
Albany and Susq.	..	....	.....	.....	.....	.....
1st mortgage	.....	.....	.....	.....	.....	.....
2d mortgage	.....	109	.....	106½x	.....	.....
American Express	.....	94	94½	94	94	95
Atlantic & Pac. Tel.	.....	.....	.....	.....	.....	.....
Burl., C. R. & Nor.	..	.....	.....	.....	80¼	.....
1st mortgage 5s	100⅜	100⅜	100⅜	100	99⅞	100¼
Canada Southern	55¾	53	53¼	52	52½	51¾
1st mortgage guar	94	94	94	.....	94	94
Central of N. Jersey	84½	82⅞	82	80⅞	83½	82⅜
1st mort. 1890	.....	.....	.....	.....	116	.....
7s, consol. ass	.....	.....	.....	.....	116½x	.....
7s, convertible ass.	.....	116½	.....	.....	117	119
7s, Income	97	.....	96	.....	.....	.....
Adjustment	106	.....	106	.....	106⅛	.....
Central Pacific	92	91¾	91½	90⅝	91¼	91
6s, gold	115	115	114¾	.....	.....	115⅛
1st M. (San Joaq)	.....	.....	.....	.....	.....	.....
1st M. (Cal. & Or.)	.....	.....	105	.....	.....	.....
Land grant 6s	.....	107¼	.....	.....	104½	104⅜
Chesapeake & Ohio.	24	.....	22¾	.....	22½	22⅛
1st pref.	.....	.....	32½	.....	32½	.....
2d pref	.....	.....	.....	.....	.....	.....
1st mort., series B	80½	80½	80⅜	80½	81¾	82
Chicago and Alton	.....	131½	131⅛	131½	132	131½
Preferred	.....	.....	.....	.....	.....	.....
1st mortgage	.....	.....	.....	.....	.....	.....
Sinking Fund	.....	.....	.....	.....	.....	.....
Chi,, Bur. & Quincy	134¾	134¼	134⅛	134	133½	133⅛
7s, Consol. 1903	126½	126¼	.....	.....	.....	.....
Chi., Mil. & St. Paul	113⅞x	113⅜	113½	112	113¼	112¾
Prefered	122x	..	.....	120	120¼	120¼
1st mortgage, 8s	.....	.....	.....	.....	.....	.....
2d mort., 7 3-10s	.....	.....	.....	.....	.....	.....
7s, gold	.....	.....	.....	.....	.....	.....
1st M. (La. C. div)	121½	.....	.....	.....	.....	.....
1st M. I. & M. div.)	.....	.....	.....	.....	.....	.....
1st. M. (I. & D. ext.)	.....	.....	.....	.....	.....	.....
1st M. (H.&D. div.)	.....	115	.....	.....	115	.....
1st M.(C. & M.div.)	..	.....	.....	.....	.....	.....
Consolidated S. F.	.....	.....	.....	.....	.....	.....
Chi. & Northwestern	131½	131½	131½	129¼	130¼	128¾
Preferred	140	.....	141	140	140	140½
1st mortgage	.....	.....	.....	.....	.....	.....
Sinking Fund 6s	.....	.....	.....	110	.....	.....
Consolidated 7s	.....	.....	.....	.....	133½	.....
Consol. Gold bo'ds	.....	.....	125	.....	.....	.....
Do. reg	.....	.....	.....	.....	.....	.....
Chi., R. Isl. & Pac.	133¾	132	131¾	....	131	131½
6s, 1917, c	.....	128	.....	.....	.....	.....
Clev.,Col.,Cin.&Ind.	79¾	.....	.....	75	77½	76
1st mortgage	.....	.....	.....	.....	.....	.....
Clev. & Pittsburg gr.	138	.....	.....	.....	.....	.....
7s, Consolidated	.....	.....	.....	.....	.....	.....
4th mortgage	.....	.....	.....	.....	.....	.....
Col.,Chi.,& Ind. Cent.	13½	13	13	12¼	12½	12½
1st mortgage	.....	.....	.....	.....	.....	.....
2d mortgage	.....	.....	.....	.....	.....	.....
Del. & Hud Canal.	106¼	106¼	.....	105⅞	105⅝	106
Reg. 7s, 1891	.....	115	.....	.....	.....	.....
Reg. 7s, 1884	.....	.....	.....	105½	.....	.....
7s, 1894	.....	.....	115x	.....	.....	.....
Del.,Lack.& Western	124¾	124⅝	125	124	124⅞	121⅞x
2d mortgage 7s	.....	.....	.....	.....	.....	.....
7s, Consol. 1907	.....	.....	.....	.....	.....	.....
Erie Railway	...	.....	.....	.....	.....	.....
1st mortgage	....	.....	.....	.....	.....	.....
2d mort. 5s, ext	..	.....	.....	.....	.....	.....
3d mortgage	.....	.....	.....	104	104	105½
4th mort. 5s, ext.	.....	.....	.....	.....	.....	.....
4th mortgage	.....	.....	.....	.....	.....	.....
5s, Consol. gold	.....	126¼	.....	....	126½	126¾
7s at West. 1st mort	.....	.....	109	...	.....	.....
5s 2d mortgage	.....	.....	105	105	.....	.....
annibal & St. Jo	.....	.....	.....	.....	.....	.....
Preferred	88	89½	92¼	90¾	91¼	91
8s, Convertible	105	105¼	105⅞	105½	...	105½
Houston & Tex. Cen	76½	77	.....	.....	71	73
1st mortgage	.....	.....	.....	.....	112	.....
2d mortgage	.....	.....	.....	.....	.....	.....
Illinois Central	136¼	136⅞	.....	136⅜	136⅛	136½
LakeShore&MichSo	119¾	119¾	118¼x	114	114	113⅜
Consol. 7s	.....	.....	.....	.....	.....	.....
Consol. 7s, reg	.....	.....	.....	.....	.....	.....
2d Consolidated	.....	.....	.....	.....	.....	.....
Leh. & W. B. 7s, Con	.....	.....	.....	.....	.....	.....
Long Dock bonds	.....	.....	.....	.....	.....	.....
Louisville & Nash.	80½	80⅜	81⅛	78⅜	80⅜	79¼
7s, Consolidated	.....	.....	.....	.....	.....	.....
Manhattan	53½	53¼	52¾	52¼	52	51
1st pref	.....	.....	.....	.....	91½	92
Met. Elevated	.....	88½	.....	.....	87½	87½
1st mortgage	101¾	101⅞	.....	101¾	101¾	102
Michigan Central	84⅞	84¾	85¾	83½	84¾	83
7s, 1902	.....	128½	.....	.....	127	.....
Morris & Essex	123½	124½	124	123½	122¼	127½
1st mortgage	.....	136½	.....	.....	.....	.....
2d mortgage	.....	.....	.....	.....	.....	.....
7s of 1871	.....	.....	.....	.....	.....	.....
7s, Convertible	...	.....	.....	.....	.....	.....
7s, Consolidated	..	.....	.....	.....	.....	.....
N.Y. Cen. & Hud. R.	133¾	133¼	133½	131⅞	132½	132
6s, S. F. 1883	.....	.....	.....	.....	.....	.....
6s, S. F., 1887	.....	.....	.....	.....	.....	.....
1st mortgage	133½	134	.....	.....	.....	.....
1st mortgage, reg.	...	.....	.....	.....	.....	.....
N. Y. Elevated	.....	.....	.....	.....	.....	.....
1st mortgage	117	.....	116½	117	117	117
N. Y. & Harlem	.....	.....	.....	.....	.....	.....
Preferred	.....	.....	.....	.....	.....	.....
1st mortgage	.....	.....	.....	.....	.....	.....
1st mortgage, reg	.....	.....	.....	.....	.....	.....
N. Y., Lake Erie & W	37⅞	37½	37⅞	36⅜	37⅝	36⅜
Preferred	77¾	.....	78	76½	75½	.....
2d Consolidated	96⅛	95¾	96	95	95	94⅞
New 2d 5s fund	.....	90½	.....	.....	.....	.....
N.Y.,N.Hav'n&Hart	.....	170	.....	170	.....	.....
North Mo. 1st mort	.....	.....	.....	.....	.....	.....
Northern Pacific	37⅜	38	40⅜	38⅞	41⅜	39⅜
Preferred	78⅞	79	80¼	78¾	80⅜	78⅞
Ohio & Mississippi	39	38¼	38⅛	38⅞	.....	38⅜
Preferred	.....	.....	.....	.....	.....	.....
2d mortgage	.....	.....	.....	120x	120	.....
Consolidated 7s	118	.....	.....	.....	.....	.....
Consol. S. Fund	118	118½	.....	.....	.....	.....
Pacific Mail S. S. Co	41¾	41½	42	41	42	41
Pacific R. R. of Mo.	.....	.....	.....	.....	.....	.....
1st mortgage	107½	...	.....	.....	107	.....
2d mortgage	.....	.....	.....	.....	.....	.....
Panama	.....	.....	.....	.....	.....	.....
Phila. & Reading	63	62⅞	64	62⅜	63⅜	63
Pitts,Ft.W.&Chi.gtd	.....	.....	.....	.....	.....	136
1st mortgage	.....	.....	.....	.....	.....	.....
2d mortgage	.....	.....	.....	.....	.....	.....
3d mortgage	.....	.....	.....	.....	.....	.....
Pullman Palace Car	.....	127½	.....	.....	126½	.....
Quicksil'r Min'g Co	.....	...	.....	.....	.....	.....
Preferred	57	.....	.....	.....	.....	56
St. Louis & San Fran	41½	40½	40	39¾	.....	38¾
Preferred	57	57	....	55¾	55	55½
1st Preferred	.....	94¼	...	.....	.....	.....
St. L., Alt'n & T. H.	.....	.....	.....	26¾	.....	.....
Preferred	68	.....	.....	67¾	.....	68
1st mortgage	.....	.....	.....	.....	.....	.....
2d mort. pref.	.....	.....	.....	105¾	.....	.....
Income bonds	.....	.....	.....	.....	.....	.....
St. L., Iron Mt. & S	.....	.....	.....	.....	.....	.....
1st mortgage	.....	115½	115¾	.....	115¼	.....
2d mortgage	109	109	109	.....	109	.....
Toledo and Wabash.	....	.....	.....	.....	.....	.....
1st mortgage	..	.....	.....	.....	.....	.....
2d mortgage	....	.....	105¼	.....	.....	.....
7s, Consolidated	100⅞	.....	100	99¾	100	99⅞
St. Louis Division	103½	.....	.....	.....	104½	.....
Union Pacific	115	115	115⅝	113⅜	114⅜	113⅜
1st mortgage	116	.....	117	.....	117	117
Land Grant 7s	116	116	.....	.....	.....	.....
Sinking Fund 8s	.....	117¼	117⅜	.....	.....	.....
United States Ex	....	.....	75½	.....	.....	.....
Wabash, St. L.& Pac	35¼	35	35⅜	34¼	34¾	34
Preferred	60¾	60¾	61⅛	59¾	60¾	58⅜
New mort. 7s	.....	100	.....	.....	.....	.....
Wells-Fargo Ex	.....	.....	.....	.....	.....	.....
Western Pacific b'ds	.....	.....	.....	.....	.....	.....
Western Union Tel.	90½	90½	90¾	87⅞	89½	87⅞
7s., S.F conv., 1900	.....	.....	.....	.....	.....	.....
FEDERAL STOCKS:—						
U. S. 4s, 1907, reg	.....	118¾	.....	118⅞	.....	.....
U. S. 4s, 1907, coup.	119⅝	119¾	.....	.....	118¾	118½
U. S. 4½s, 1891, reg.	115¼	.....	115¼	.....	115¼	115¾
U. S. 4½s, 1891, coup	.....	.....	115¾	.....	.....	115¼
U. S. 5s, 1881, reg	.....	.....	.....	.....	.....	.....
U. S. 5s, cont'd at 3½	.....	101½	.....	102½	102⅝	.....
U. S. 6s cont'd at 3½	.....	.....	101¾	.....	.....	102⅝
Dt. of Col. 3-65s, reg	.....	.....	.....	.....	.....	.....
Dt. of Col. 3-65s, coup	.....	106½	.....	.....	.....	.....

Boston Stock Exchange.

Prices for the Week Ending April 5.

	Th.30.	F. 31.	Sat.1.	M.3.	Tu.4.	W.5.
Atch.,Top.&San.Fe.	92¾	92	91⅝	91¼	91¼	91⅜
1st mortgage	.....	.....	118½	118¾	119	.....
2d mortgage	.....	.....	.....	.....	.....	.....
Land Grant 7s	114¾	.....	.....	.....	.....	.....
Boston & Albany	168	167½	168	168	167	168
7s reg	.....	.....	.....	.....	.....	.....
Boston and Lowell.	101	101	101¼	101	.....	.....
Boston & Maine	143½	144½	144½	145	.....	145
Boston& Providence	.....	.....	.....	163	.....	.....
Bos'n,Hart.& Erie7s	53¾	.....	.....	52	.....	52
Burl.& Mo.R.L.G.7s	.....	.....	.....	.....	.....	.....
Burl.& Mo.R.in Neb	.....	.....	.....	.....	.....	.....
6s, exempt	.....	.....	.....	.....	.....	.....
4s	.....	.....	.....	.....	.....	.....
Chi.,Burl. & Quincy	134½	134¾	134	133¾	133¼	133¾
Cin.,Sand&Clev($50)	.....	.....	.....	26	.....	.....
Concord ($50)	....	.....	.....	.....	.....	.....
Connecticut River	.....	.....	.....	.....	.....	.....
Eastern	37	37¾	38½	39½	42	43½
New 4½ Bonds	.....	106¼	106½	107	.....	107½
Fitchburg	126½	.....	125¾	126	126	126
N.Y. & New England	53¾	50¼	50	.....	49¼	49
7s	.....	114¾	114¾	114	114	114
Northern N. H.	.....	.....	109	.....	.....	.....
Norwich&Worcester	.....	.....	.....	.....	.....	.....
Ogden & Lake Cham	.....	.....	.....	.....	.....	.....
Preferred	.....	.....	.....	.....	.....	.....
Old Colony	.....	129¾	.....	129½	129½	130
Ph.,Wil.&Balt.($50)	.....	...	.....	.....	.....	.....
Portl'd,Saco & Ports	.....	.....	.....	.....	.....	.....
Pueblo & Ark Val	.....	.....	.....	.....	.....	.....
7s	.....	.....	.....	114¾	.....	.....
Pullman Palace Car	.....	....	126½	.....	127	126¼
Union Pacific	116	116	115	.....	114½	114½
6s	..	.....	.....	.....	114½	....
Land Grant 7s	...	.....	.....	...	..	.....
Sinking Fund 8s	117	117	117	117	.....	117
Vermont & Canada	.....	.....	.....	.....	.....	.....
Vermont & Mass	.....	.....	.....	.....	.....	.....
Worcester & Nashua	....	.....	.....	.....	...	.....
Cambridge (Horse)	.....	.....	.....	.....	.....	.....
Metropolitan(Horse)	.....	.....	.....	.....	.....	.....
Middlesex (Horse)	.....	.....	.....	.....	.....	.....
Cal.&Hecla Min'gCo	247	245	245	.....	245	245
Quincy	46	.....	45¾	46½	45⅝	.....

Philadelphia Stock Exchange.

Closing Prices for the Week Ending April 4.

	W.29.	Th.30.	F.31.	Sat.1.	M.3.	Tu.4.
Allegh'y Val. 7 3-10s	.....	122	.....	.....	.....	.....
7s, Income	.....	.....	52	48¼x	48½	.....
Buff., Pitts & West.	17½	18	18	18½	18	18⅞
Camd'n & Am. 6s, '83	.....	.....	.....	.....	.....	.....
6s, 1889	.....	.....	.....	.....	.....	.....
Mort. 6s, 1889	.....	.....	.....	.....	.....	.....
Camden & Atlantic.	.....	.....	.....	.....	.....	.....
Preferred	.....	.....	.....	35	.....	.....
1st mortgage	.....	.....	.....	.....	.....	.....
2d mortgage	.....	.....	.....	.....	.....	.....
Catawissa	.....	22½	22¾	24	24	.....
Preferred	.....	54	.....	.....	56	.....
7s, new	.....	.....	.....	.....	.....	.....
Del. & Bound Brook	.....	.....	.....	.....	.....	.....
7s	.....	.....	.....	.....	.....	.....
Elmira&Williamsp't	.....	.....	.....	.....	.....	.....
Preferred	.....	.....	.....	.....	58	.....
Hunt. & B. Top Mt.	...	.....	13	.....	.....	.....
Preferred	.....	26½	.....	.....	.....	.....
2d mortgage	.....	.....	.....	.....	.....	.....
Lehigh Navigation.	41	41¼	41¼	41¼	41¼	41¼
6s, 1884	103¾	.....	.....	103¾	.....	.....
Gold Loan	111½	112	.....	111½	112	111¼
Railroad Loan	.....	.....	.....	.....	.....	.....
Conv. Gold Loan.	.....	109	.....	.....	109	.....
Consol. Mort, 7s	.....	.....	.....	118	.....	.....
Lehigh Valley	61	61	61	61	60¾	61
1st mort. 6s, coup	.....	.....	.....	123	.....	.....
1st mort. 6s, reg.	.....	.....	.....	123½	.....	.....
2d mort. 7s	.....	.....	.....	.....	.....	.....
Consol mort. 6s	....	121	.....	120	.....	120¾
Consol.mtg.6s,reg	.....	.....	.....	.....	.....	.....
Little Schuylkill	.....	.....	.....	.....	57¼	.....
Minehill&Sch.Hav'n	62	.....	.....	.....	.....	.....
North Pennsylvania	63¾	.....	.....	64	64	64
1st mortgage 6s	.....	.....	.....	.....	.....	.....
2d mortgage 7s	.....	.....	.....	.....	.....	.....
Genl. mtg.7s,coup	.....	.....	.....	121	.....	.....
Genl. mtg. 7s, reg	.....	.....	.....	.....	.....	.....
Northern Central	.....	50	50½	.....	.....	50½
5s	.....	.....	.....	.....	96¾	97
Northern Pacific	37½	37⅜	38	40½	38¾	41¾
Preferred	79¼	78⅝	78⅞	80	78½	80½
Pennsylvania R. R.	63½	63½	63¼	63⅜	63¼	63¾
1st mortgage	.....	.....	.....	.....	.....	.....
Gen'l mort	.....	.....	.....	124½	.....	.....
Gen'l mort reg.	.....	.....	.....	.....	.....	.....
Consol. mort. 6s	.....	.....	.....	117½	117½	.....
Consol. mort. reg	.....	.....	.....	.....	118	...
Pa. State 5s, new	.....	120	.....	.....	.....	118
do 4s, new	.....	114	114	.....	.....	.....
Phila. & Reading	30⅜	.....	31½	32	31¼	32
1st mortgage 6s	.....	.....	.....	.....	.....	.....
7s of 1893	.....	...	.....	.....	.....	.....
7s, new convert	.....	76	77	77	78¾	79½
Consol. mort. 7s	125	125	.....	...	.....	.....
Consol. mort. reg.	.....	.....	.....	.....	.....	.....
Gen'l mort. 6s	95⅛	96	96	97¼	98¼	98¾
Philadelphia & Erie	.....	16¼	.....	.....	16	16¼
1st mortgage 5s	.....	.....	.....	.....	.....	.....
2d mortgage 7s	.....	...	.....	.....	.....	.....
Pittsb.,Cin.&St.L.7s	118¾	119	.....	119	.....	119
Pitts.,Tit.&Buff. 7s,	95	.....	95	.....	.....	.....
Schuylkill Navi't'n.	..	..	..	.....	.....	.....
Preferred	13	.....	13	.....	.....	.....
6s, 1872	.....	.....	.....	.....	.....	.....
6s, 1882	.....	.....	.....	92½	.....	93
United Co. of N. J.	184¾	184¾	185	184¾	.....	.....
Hestonville, (Horse)	.....	.....	.....	.....	.....	.....
Chestnut&Wal.(do)	.....	.....	.....	.....	.....	.....
Green & Coates (do)	.....	.....	..	....		

Baltimore Stock Exchange.

Closing Prices for the Week Ending April 4.

	W.29.	Th.30.	F.31.	Sat.1.	M.3.	Tu.4
Baltimore & Ohio	195	.....	198	. .	198	.....
6s, 1880	.....	.....	.....	.....	.....	.....
6s, 1885	.....	.....	.....	.....	.....	105
Central Ohio ($50)	46½	.....	47	.....	.....	.....
1st mortgage	.....	.....	.....	.....	.....	.....
Marietta & Cincin'ti	.....	.....	.....	.....	.....	.....
1st mortgage, 7s	.....	123	122	123	122½	123½
2d mortgage, 7s	.....	103¾	103	.....	102½	102¼
3d mortgage, 8s	57⅞	56¾	56	56¼	56	55⅝
Northern Cen. ($50)	50	50	50½	.....	.....	.....
2d mort., 6s 1885	.....	.....	.....	107½	.....	.....
3d mort., 6s, 1900	.....	.....	.....	.....	.....	.....
6s, 1900, gold	115½	.....	.....	.....	.....	115⅛
6s, 1904, gold	.....	.....	.....	.....	.....	.....
Pitts.& Connellsv.7s	123	.....	.....	.....	123½	.....
Virginia 6s, Consol.	65¾	.....	67	.....	65½	.....
Consol. coupons	..	.....	.....	.....	.....	.....
10-40 bonds	.....	42	42¾	.....	.....	.....
Def'd Certificates	.....	.....	.....	.....	.....	.....
Western Maryland	.....	.....	.....	.....	.....	.....
1st M.,end.by Balt	.....	.....	.....	.....	.....	.....
2d M. do	.....	.....	.....	.....	.....	.....
3d M., do	.....	.....	.....	.....	.....	.....
1st M.,unendors'd	.....	.....	.....	.....	.....	.....
2d M.,end.WashCo	.....	.....	.....	.....	.....	.....
2d M., preferred	.....	.....	.....	.....	.....	.....
City Passenger R R	....	.....	.....	....	.	....

London Stock Exchange.

	Closing Prices			
	Mar. 10.		Mar. 17.	
Baltimore & Ohio (sterling)	111	113	111	113
Central of N. J., $100 shares	93	98	93	98
Do. consol. mort.	113	115	112	114
Do. Adjustment Bonds	104	109	104	109
Do. Income Bonds	102	105	102	105
Det., G'd Haven & Mil. Equip bds	112	114	109	111
Do. Con. M. 5p.c., till '83 aft'r 6p.c	110	112	108	110
Illinois Central $100 shares	137	139	137	139
Lehigh Valley Cons. mortgage	118	122	118	122
Louisville & Nashville mort 6s.	97	100	98	101
Do. Sink. Fund bds (S. & N. Ala)	97	100	96	98
Do. capital stock $100 shares.	75	77	75	77
N. Y. Cent. & Hud. R. mt. bds.	134	137	133	136
Do. $100 shares	133½	134⅛	133½	134⅛
Do mort. bonds (stg.)	118	120	118	120
N. Y., Lake Erie & West., $100 shs	36½	37	37⅛	38
Do. 6 p. c. pref. $100 shares	72	74	76	78
Do. 1st Con. Mort. bds (Erie)	127	129	127	129
Do. do. Funded Coupon bds.	122	125	123	125
Do. 2d Consol Mort. bonds	95	97	96½	97½
Do. do. Funded Coupon bds.	90	95	93	96
Do. Gold Income bonds	88	92	88	92
N. Y., Pa. & Ohio 1st mort. bonds.	47	48	47	48
Do. Prior Lien bds (sterling)	101	105	101	105
Pennsylvania, $50 shares	61¼	62½	63	64
Do. Con. Sink Fund Mort.	115	117	116	118
Philadelphia & Reading $50 shs	29¼	29¾	29⅛	29¾
General Consol Mortgage	115	117	115	117
Do. Improvement Mortgage	103	105	104	106
Do. Gen. Mtg. '74, ex-def'd coup.	96	98	96	98
Do. Scrip for the 6 def. ½ coup.	96	99	96	99
Pittsb., Ft. W. & Chi. Eq. bds.	104	106	104	106
St. L. Bridge 1st mort. gold b'd.	125	127	122	124
Do. 1st pref. stock	94	98	95	100
Union Pa. Land Grant 1st. mtg.	116	118	113	115
Wabash, St. L. & P. $100 shs	32	34	32	35
Do. $100 pref. shares	57	59	58	60
Do. gen. mort. bonds	84	86	84	86

AMERICAN RAILROAD JOURNAL.

Financial and Commercial Review.

THURSDAY EVENING, April 6, 1882.

IN the money market this morning the quotation for call loans on stocks was 4@5 per cent, and on United States bonds 2@3 per cent. Prime mercantile paper was 5@6 per cent. In the afternoon the quotation for call loans at the stock exchange was 4@5 per cent. In the last hour, however, the rate advanced to 6 per cent, and at the close stood at 5@6 per cent.

The actual rates for prime bankers sterling were 4.86½@4.86¾, and 4.89¼@4.89¾ with cable transfers 4.90@½, and prime commercial bills 4.85¼@4.85½. The actual rates for continental bills are as follows: Francs 5.18¾@5.17½ and 5.15@5.14⅜. Marks 94⅞@95 and 95⅜@¾, and guilders 40⅛@40½.

B yreference to the Public Debt Statement in another column, it will be seen that the total debt of the United States on the 1st inst. was $1,979,558,184.07, less cash in the Treasury $253,291,761.72, leaving net $1,726,266,422.35. The debt has been reduced since the 1st of March $16,462,946.75, and since 1st of July last $114,332,389.63. Of the bonded debt $250,000,000 bears 4½ per cent interest, $739,347,800 bears 4 per cent, $511,404,900 bears 3½ per cent, and $14,000,000 bears 3 per cent. Interest has ceased upon $12,665,615, and $438,468,040 bears no interest, being in the form of currency notes, certificates of deposit, and gold and silver certificates. Of the cash in the Treasury $154,038,281.65 is in excess of current liabilities. In addition to the debt enumerated above there are outstanding $64,623,512 6 per cent bonds issued to the Pacific Railroads, and known as currency 6s.

The payments from the United States Treasury during March, exclusive of interest and principal of the public debt, were $5,014,332.73 on account of civil and miscellaneous; $3,248,090.72 war; $838,133.28 navy; $414,160.36 Indians, and $2,313,139.40 pensions—total, $11,827,856.49.

The Secretary of the Treasury issued on the 4th inst. the one hundred and twelfth call for the redemption of bonds of the loan of July 17 and Aug. 5, 1861, continued at 3½ per cent from July 1, 1881. The call is for $15,000,000, and the principal and interest will be paid at the Treasury on the 7th day of June next, and the interest will cease on that day. The following are the numbers of the bonds: $50, No. 2,251 to No. 2,465, both inclusive; $100, No. 15,701 to No. 17,750, both inclusive; $500, No. 11,101 to No. 11,960, both inclusive; $1,000, No. 53,501 to No. 55,950, both inclusive; $5,000, No. 17,101 to No. 17,580, both inclusive; $10,000, No. 36,671 to No. 38,810, both inclusive; total, $15,000,000.

From the report of the Comptroller we learn that the total funded debt of the City of New York on the 31st of March was $135,543,007.07, not including $6,121,729.40 revenue bonds issued in anticipation of taxes. The amount in the sinking fund for the redemption of the city debt on that day was $37,089,189.77. During the month of March warrants were drawn against the City Treasury to the amount of $1,998,221.05, making a total of $8,231,303.24 during the present year. During January, February, and March stocks and bonds amounting to $3,946,034.40 were issued. Of this sum $666,500 was for public works, street openings, and improvements, $205,000 was for Croton water purposes, $190,000 was for docks and slips, and $2,733,100 was for current expenses of the City Government.

The total values of the exports of petroleum products from the United States during February, 1882, were $2,680,861, and during February, 1881, $2,524,055. For the eight months ended February 28, 1882, $34,553,551, and for the same period the preceding year, $25,363,391.

The total exports from the Sandwich Islands in 1881 were $6,714,726, and the imports into the Kingdom $4,547,978. The imports of America goods reached $3,396,310.

The land sales of the Northern Pacific Railroad, Eastern Divisions, for March, 1882, amounted to 26,387 acres, for $106,203 an increase over the corresponding month of the previous year of 3,388 acres and $73,579. The average price this year is $4 per acre: last year, $2.51.

The Customs returns at Montreal for the month of March were $694,370, an increase of $104,343 over the corresponding month in 1881. Inland Revenue returns, $106,185, an increase of $18,369 over the month of March last year.

The annual report of the Sutro Tunnel Company shows that the total receipts for the year were $351,268.36. The balance on hand at the San Francisco office on March 1, 1882, was $122.57 and at the Nevada office on February 12, 1882, $1,879 55.

The gross earnings of the Eastern Railroad for the month of February, 1882, were $206,218.24 against $192,164 98 for the corresponding months in 1881, an increase of $14,053.26. For the five months ending February 28, 1882, they aggregated $1,259,792.54, or $133,237.35 more than for the corresponding five months last year.

The following quotations of sales of railway and other securities, for the week, are in addition to those given elsewhere in our columns:

New York.—Atlantic and Pacific 1st, 97; Am. Dock and Imp. Co., 5s, 97; Atchison, Colorado and Pacific 1st, 98; Boston and New York Air Line pref., 65; Buffalo, New York and Erie 7s, new, 119; Belleville and Southern Illinois 1st, 120; Cedar Rapids, Iowa Falls and Northern 1st, 102; Chicago, St. Paul, Minneapolis and Omaha, 37¾; do. pref., 101¾; do. consol., 102½; Cedar Falls and Minnesota, 20½; Central Iowa, 34; do. deben. certif., 74¾; do. 1st, 111; Chicago, St. Louis and New Orleans, 71; Columbia and Greenville pref., 86; Chesapeake and Ohio cur. int., 48½; do. 1st, Series A, 100; Chicago, Milwaukee and St. Paul, La C. and Dav. div. 1st, 94; do. Chicago and Pacific West div. 1st, 94; do. Chicago and Pacific div. 1st, 109; do. S. M. div. 1st, 104⅝; do. South West div. 1st, 105½; Cleveland and Toledo, new, 107; Columbus, Chicago and Indiana Central inc., 53; do. 1st, Trust Co. certif. ass. sup., 116; Chicago and Eastern Illinois 1st, 91; Cairo and Fulton 1st, 108⅝; Denver and Rio Grande, 65½; do. 1st, 113; do. 1st consol., 104½; Denver, South Park and Pacific 1st, 104; Detroit, Monroe and Toledo 1st, 121 East Tenn., Virginia and Georgia, 12½; do. pref., 21⅝; do. 5s, 75; do. inc., 49; Evansville and Terre Haute 1st, 95; Flint and Pere Marquette 1st, 111⅞; Green Bay, Winona and St. Peter, 11; do. do. 1st, 82½; Gulf, Colorado and Santa Fe 1st, 108½; Houston and Texas Central 1st, Western div., 108; Indiana, Bloomington and Western, 42; do. 1st, 89; Indianapolis, Decatur and Springfield 1st, 100½; International and Great Northern 1st, 106¾; do. coupon 6s, 84; Kansas Pacific 1st consol., 104; do. 6s, 111¼; do. Denver div. 6s, ass., 109¾; Keokuk and Des Moines, 18; do. 1st, 102; Lafayette, Bloomington and Muncie 1st, 103¾; Lehigh and Wilkesbarre consol. ass., 105; Long Island, 55; Louisiana and Missouri River, 20; do. 2d, 110; Lake Erie and Western, 33; do. 1st, 104; do. inc., 55; Louisville, New Albany and Chicago, 67; do. 1st, 103; Louisville and Nashville Gen'l mort. 6s, 100; do. St. Louis div. 6s, 105; do. N. O. and Mobile div. 1st, 95; do. Cecilian Branch 1st, 107; Manhattan Beach, 36; do. 7s, 85; Mobile and Ohio, 27; do. 1st, 110; do. 1st deben., 84: Missouri, Kansas and Texas, 33⅜; do. gen'l mort. 6s, 82; do. consol., 105; do. 2d, '65; Missouri Pacific, 96½; do. 3d, 114; Memphis and Charleston, 57; Marietta and Cincinnati 1st pref., 13; do. 2d pref., 8; Milwaukee, Lake Shore and Western, 50; do. 1st, 101; Minneapolis and St. Louis 1st, 115½; do. Iowa ext., 112; Michigan Southern S. F., 109; Metropolitan Elevated 2d, 94; Michigan Central 5s, 97; do. 8s, S. F., 105½; Nashville, Chattanooga and St. Louis, 68¾; do. 1st, 115¼; New York, Ontario and Western, 27¼; Norfolk and Western 20; do. pref., 53½; Northern Pacific 1st, 100½; New Orleans Pacific 1st, 86¾; Ohio Central, 17½; do. 1st, 96½; do. inc., 39; Ohio Southern, 18; do. 1st, 86; Oregon Railway and Nav., 145; do. 1st, 108; Oregon Transp., 74¾; Ohio and Mississippi, Springfield div. 1st. 120; Pennsylvania Co. 4½s, 95½; Peoria, Decatur and Evans-

ville, 32; do. inc., 74⅞; Quincy and Toledo 1st, 105½; Rome, Watertown and Ogdensburg, 1st consol., 98; Rochester and Pittsburg, 31; do. 1st, 100½; do. inc., 46½; Richmond and Danville, 145; do. West Point, 155; do. 1st, 100½; Richmond and Alleghany, 23; South Carolina inc., 49; do. 1st, 100; St. Paul and Sioux City 1st, 109; St. Paul, Minneapolis and Manitoba, 120⅜; do. 1st, 109½; do. 2d, 105½; do. 1st, Dakota Ext., 106; St. Louis, Kansas City and Northern, R. E. 7s, 1895, 106; St. Paul and Duluth, 31½; do. pref., 79½; 1st, 109½; Southern Pacific, of California 1st, 102½; South Pacific 1st, 104½; Scioto Valley 1st, 102; St. Louis, Alton and Terre Haute div. bonds, 37½; St. Louis, Iron Mountain and Southern, Cairo, Arkansas and Texas 1st, 107; do. 1st, pref. inc., 97; St. Louis and San Francisco 2d, Class B, 91; do. C, 92; Texas and Pacific, 43; do. inc. L. G., 66½; do. Rio Grande div. 1st, 82⅝; Toledo Delphos and Burlington inc., 20; Wabash, St. Louis and Pacific Gen'l mort. 6s, 82½; do. Chicago div. 1st, 82½; do. Iowa div., 92; Winona and St. Peter 1st, 109; do. 2d, 126; Alabama, Class A, 83½; do. C, 85½; Georgia 6s, 1886, 106¾; Louisiana 7s, consol., 63⅛; Missouri 6s, H. & St. J. issue, 1886, 106; do. 1887, 107; North Carolina 4s, consol., 82½; do. S. T. 3d class, 7½; South Carolina 6s, non-fund., 10; do. 6s, Brown consol., 103; Tennessee 6s, old, 49½; Sutro Tunnel, ¾; Consolidation Coal, 31; Colorado Coal and Iron, 51; Cam. Coal, 34¾; Maryland Coal, 17½; Central Mining, 1⅛; Excelsior, 2⅝; Homestake, 17¾; Ontario, 35¼; Robinson, 3¼; Standard, 19¾.

Philadelphia.—Am. S. S. Co. 6s, 104½; Belvidere Delaware 3d, 107; Catawissa 2d pref., 54; Central Transportation, 31; Elmira and Wiliamsport 6s, 116; Huntingdon and Broad Top Mt. consol. mort. 5s, 88½; New Orleans Pacific 6s, 87⅞; Nesquehoning Valley, 55; Oil Creek 1st, 103¾; Pittsburg, Cin. and St. Louis, 8; Philadelphia and Reading Coal and Iron deben. 7s, 70; Pennsylvania Canal 6s, 95; Philadelphia, Wilmington and Baltimore 4s, 94; Philadelphia and Reading scrip, 91½; do. deben. 6s, 63; St. Paul and Duluth pref., 79⅜; Susq. Canal 6s, 58; Steubenville and Indiana 6s, 104½; Texas and Pacific consol. mort. 6s, 99; Union and Titusville 7s, 100; West Jersey 6s, 116½. The latest quotations are: City 6s, 108@118; do. free of tax, 128@132; do. 4s, new, 108@113; Pennsylvania State 5s, new loan, 119@121; do. 4s, old, 110@112; do. 4s, new, 114@114½; Philadelphia and Reading R. R., 31⅞@32; do. consol. mort. 7s, reg., 125@126; do. mort. 6s, 119@120; do. gen'l mort. 6s, coupon, 98½@99; do. 7s, 1893, 121@122; do. new, conv., 79@80; United New Jersey R. R. and Canal, 184¾@185½; Buffalo, Pittsburg and Western, 18¼@18½; Pittsburg, Titusville and Buffalo 7s, 94¾@95¼; Camden and Amboy mort. 6s, 1889, 114@114¾; Pennsylvania R. R., 63¼@63⅜; do. general mort. 6s, coupon, 124@125½; do. reg., 124@125; do. consol. mort. 6s, reg., 117@118½; Little Schuylkill R. R., 57@58; Morris Canal, 65@69; do. pref., 165@169; Schuylkill Navigation, 5@6; do. pref., 13@13½; do. 6s. 1882, 92¾@93½; do. 1872, 104@106; Elmira and Williamsport pref., 58@60; do. 6s, 115¾@116; do. 5s, 95@102; Lehigh Coal and Navigation, 41¼@41½; do. 6s, 1884, 103@104; do. R. R. loan, 115@117; do. Gold Loan, 111½@112; do. consol. 7s, 117½@118½; Northern Pacific, 41¼@41⅜; do. pref., 80¼@80½; North Pennsylvania, 63¾@64¼; do. 6s, 105½@107; do. 7s, 120@121; do. General mort. 7s, reg., 120¾@121¼; Philadelphia and Erie, 16@16½; do. 7s, 114@115; do. 5s, 104½@105½; Minehill, 62@62½; Catawissa, 23¼@24; do. pref., 56@57; do. new pref., 53¾@54¼; do. 7s, 1900, 116½@—; Lehigh Valley 60¾@61; do. 6s, coupon, 122¾@123¼; do. reg., 123½@123⅜; do. 2d mort. 7s, 130½@133; do. consol. mort. 120½@121; Fifth and Sixth streets (horse), 152@155; Second and Third, 109@115; Thirteenth and Fifteenth, 70@78; Spruce and Pine, 45@48; Green and Coates, 75@76; Chestnut and Walnut, 90@92; Germantown, 65@80; Union, 110@115; West Philadelphia, 105@108; People's 12¼@12¾; Continental, 100@102.

Boston.—Atchison and Nebraska 7s, 117; Atlantic and Pacific 6s, 94⅜; do. inc. 6s, 31; Atchison, Topeka and Santa Fe 4½s, 88; Boston Water Power, 5¾; Boston Land, 7⅞; Boston, Clinton, Fitchburg and New Bedford 65; Burlington and Missouri River Railroad in Nebraska 6s, non-exempt, 103; Cheshire, 59; Chicago, Iowa and Nebraska, 145; Connotton Valley, 6½; do, 7s, 52½; do. 7s, Straitsville, div, 33; Chicago, Burlington and Quincy 125; do. 7s, do. 5s, 102, 102; do. 4s, Denver ext., 84⅛; Chicago and West Michigan, 71; California Southern blocks, 112½; do. 6s, 87; Chicago, Milwaukee and St. Paul, Wisconsin Valley div. 6s, 96; Flint and Pere Marquette, 25¼; do. pref., 96; Iowa Falls and Sioux City, 84; Kansas City, Topeka and Western 7s, inc., 108; Kansas City, St. Joseph and Council Bluffs 7s, 115; Kansas City, Lawrence and Southern 5s, 103¾; Kansas City, Fort Scott and Gulf, 77; Louisiana and Missouri River 19; do. pref., 36; Little Rock, and Fort Smith, 52¾; Marquette, Houghton and Ontanagon, 69; Massachusetts Central, 17½; do. 6s, 68½; Mexican Central, 7s, 87⅜; do. block, No. 2, 114½; do. block, new, 105; New Mexico and Southern Pacific 7s, 112½; New York and New England 6s, 104½; Northern Pacific 6s, 99¼; Oregon Short Line Sub., 112½; do. 6s, 105½; Portsmouth, Gt. Falls and Conway, 27; Rutland, 3¾; do. pref., 25; do. 6s, 100; Republican Valley 6s, 103½; Sonora 1st, 106½; do. blocks, No. 4, 425; do. No. 3, 575; Toledo, Delphos and Burlington, 7½; do. Southeast div. income, 6s, 18¼; Toledo, Cincinnati and St. Louis, 7⅜; do. 6s, inc., 18; Wisconsin Central, 19½; do. 2d series, 50; Allouez Mining Co., 2½; Atlantic, 14; Brunswick Antimony, 12; Central, 2½; Douglas, 50c.; Franklin, 10¾; Huron, 1⅛; Harshaw, 2½; Indian Queen, 2¾; Osceola, 37; Pewabic, 12; Phœnix, 2¾; Sullivan, 1½.

Baltimore.—Atlantic Coal, 1.10; Atlanta and Charlotte, 74½; do. 1st, 108; Baltimore City 6s, 1890, 116⅛; do. 6s, 1886, 109; do. 6s, 1884, 104; 5s, 1916, 122½; Columbia and Greenville 1st, 102; do. 2d, 92; Maryland Defense 6s, 103¾; Norfolk and Western pref., 55¾; Ohio and Mississippi, Springfield div. 1st, 120¾; Parkersburg Branch, 10; Richmond and Allegany, 23½; Richmond and Danville gold, 100⅞; Virginia and Tennesee 2d 6s, 101¾; Virginia Midland 5th mort., 98⅜; Virginia Peelers 36; do. coup., 38; do. black scrip, 35; Wilmington, Columbia and Augusta, 109⅞. The latest quotations are: Atlanta and Charlotte 1st, 108@108½; Baltimore City 6s, 1890, 116⅛@117; do. 5s, 1916, 122@122½; Baltimore and Ohio, 195@200; do. 6s, 1885, 104½@105½; Canton 6s, gold, 102½@—; Columbia and Greenville 1st, 101@102; Marietta and Cincinnati 1st, 123¾@123⅜; do. 2d, 102½@103; do. 3d, 55½@56; Northern Central, 49¾@—; do. 5s, 1926, 97½@96½; do. 6s, 1900, 115½@115½; Virginia Midland 5th mort., 94@95; do. inc., —@79; Virginia Consols, 65½@67; do. 10-40s, 41½@42½.

Resistance of Structures to Wind-pressure.

At a recent meeting in London of the Institute of Civil Engineers, a paper was read on "The Design of Structures to resist Wind-pressure," by Mr. Chas. B. Bender. It was observed that wind-pressure was as often over-rated as under-rated. Instruments to measure the velocity and force of the wind were not very reliable on account of the frequent change of direction of the wind, and of its action by sudden gusts and not by mere statical pressure. The most trustworthy experiments, made with falling plates by General Didion, yielded pressure of 40lb. per square foot on a test plate having an area of 10.76 square feet, for a velocity of 111 miles per hour. The size of the test plate was very material. Had Didion used plates twelve inches square, the pressure would have been only 32lb. The form of surface exposed to the wind was also of importance. Hollow cups experienced double pressures, cylinders only one-half of the test-pressure, and there were forms which reduced it to less than one-fourth of that on a flat plate. Since hurricanes generally acted with great lifting power, in calculating the wind-pressure upon a structure, the most dangerous direction of the wind must be considered. For bridge-floors, wind coming from below at an angle of about 25 deg. was the most trying. Now, assuming the wind to blow in this direction, and a little from the side, the total opposing surface of a structure, having regard to the size, position, and form of its members, and, in the case of railway bridges, carrying a light passenger train on the floor, must be considered. Engineering structures must be so built that there should not be any movement, either of shifting, turning on a pivot, or tilting of the whole structure. Further, lateral and transverse wind-bracing must not be strained beyond one-third of the calculated breaking strain. Since the horizontal wind-bracing might experience strains from the vertical loads, those strains must be deducted from the specified maximum; and it would be found that for short spans there would remain available for wind proper, five tons, and for large railway bridges six tons, per square inch of lateral wind-diagonals. The transverse bracing might be influenced by the vertical loads. The wind-pressure of the top lateral bracing of a bridge had to be carried to the lower floor, and each end must be sufficiently strong and stiff. As regarded details, it was essential to provide strong plates or pins for joint connections, so as to absorb additional or secondary strains upon the members. In the case of eccentric connections, the moments of flexure arising from the application of forces must not be neglected, and there should be members strong enough to transfer the wind-strains to the central joint. Iron piers, also long-span bridges, must be carefully examined as regarded tilting, and the danger must be met by giving a sufficient base, or by anchoring to heavy blocks of masonry, well proportioned and well executed, or by both of these methods. The consideration of the action of wind materially influenced the proportion of the width of a bridge to its

depth, and the latter was limited long before the maximum height was reached, as regarded vertical loads, in a bridge of most economical design. For instance, in a girder-bridge of 400ft. span and 18ft. wide, the truss could not with safety be deeper than 45ft.; if built 50ft. deep, a width of 21ft. was advisable. As the force of the wind upon a large railway bridge amounted to about the load of an ordinary train, it followed that its design for carrying vertical loads was only part of the problem to be solved. Bridges and similar structures, if equally well designed in both directions, horizontal as well as vertical, were satisfactory, and they would not be so unless this were done.

The second paper read was on "The Resistance of Viaducts to Sudden Gusts of Wind," by Professor Jules Gaudard. In order to ascertain the stability of a structure exposed to wind, it was necessary to find greater pressure to which it might be subjected by sudden squalls. The maximum wind-pressure in England had been stated by Rankine to be 55lb. on the square foot, but a pressure of 71lb. was observed at Liverpool in September, 1875. Tornadoes in America were reckoned to have exerted pressure of from 84lb. to 93lb., though allowance for pressures of only from 33lb. to 50lb. was made by American engineers in designing bridges. In order to procure more precise data, it was urged that suitable apparatus should be at once established, in various places, for recording the pressures attained during severe gales. Suspension bridges, owing to their flexibility, were most affected by wind, as evidenced by the injuries inflicted by gales on the Roche-Bernard and Menai bridges. This class of bridge has been stiffened by additional cables from the top of the piers to the roadway, by stays underneath, by cross-bracing between the suspension-rods, by stiffening the sets of chains themselves, or by spreading out the cables laterally at the tops of the piers. Thibault found that with two square screens placed at the distance apart of one of their sides, and one completely covering the other, the wind-pressure on the two screens was 1.7 of that upon the exposed screen. The pressure, however, upon two plate-girders connected by a platform was evidently less, and, when the roadway was at the top or bottom of the girders, might be reckoned as 1.2 of the pressure on the windward girder. In the case of trellis-girders, each opening might be regarded as an orifice with thin sides, in passing through which the stream of wind experienced a certain amount of contraction, which occasioned a somewhat greater resistance than the proportion of solid to open would indicate. An arch had the merit of opposing less surface to the wind in the central portion of the span; whereas the reverse was the case with a bow-string. Two narrow iron-arched bridges of large span at Oporto and Montereale had been secured against the wind by special contrivance—the first, by spreading out the iron ribs towards the springings, so that the ribs, though only placed 13ft. apart at the crown, were 49ft. apart at the springings; and the second, by placing side buttresses against the haunches of the arch, thus providing a wider base. Trains passing along a lattice-girder bridge increased the surface exposed to the wind. In the case of high viaducts, the greatest strain was thrown upon the anchorage of the piers. The strains upon the Bouble viaduct, having lattice-girders and braced iron piers 189ft. high were investigated, and it was shown that in the extreme case of a wind-pressure of 55.3lb. and a train on the viaduct, a strain of 24¾ tons would be thrown on the anchorage. The strain on the anchorage might be provided for, either by stays fastened near the tops of the piers and secured to the ground, or by widening out the base of the piers by buttresses. High timber stagings, with their broad surfaces, were specially exposed to damage from wind, but they might be effectually braced by iron-wire cables. The force of waves, beating against very exposed structures, appeared occasionally to have attained a pressure of about 6,000lb. per square foot, but in general the shock of waves was estimated not to exceed from 600lb. to 1,000lb. Even with this latter pressure, the blow of the waves against the lower portion of a lighthouse was more to be dreaded than the pressure of the wind above, unless the tower was exceptionally high. On the contrary, in the case of a high viaduct, the effect of the wind on the lofty superstructure was more dangerous than the beating of the waves against the narrow piers.

The Coal Trade.

THE leading coal-carrying companies make the following reports of their tonnage for the week ending March 25th, and for the year to same date, compared with their respective amounts carried to the same time last year:—

	Week.	1882.	1881.
Reading Railroad	117,585	2,143,866	2,082,685
Schuylkill Canal	2,769	30,424	4,070
Lehigh Valley	86,449	1,676,167	1,593,636
Delaware, Lackawanna and Western	66,033	823,351	925,017
Shamokin	14,338	191,408	220,794
Central R. R. of New Jersey	62,351	744,133	883,119
United R. R. of New Jersey	28,727	335,480	355,450
Pennsylvania Coal	17,837	186,544	235,091
Delaware and Hudson Canal	49,332	645,576	821,061
Huntingdon and Broad Top Mountain	4,901	140,226	108,868
Penn. and New York	22,171	443,690	397,065
Clearfield, Pa.	67,047	604,450	470,792

The total tonnage of anthracite coal from all the regions for the week ending March 25, as reported by the several carrying companies, amounted to 403,714 tons, against 375,360 tons in the corresponding week last year, an increase of 28,354 tons. The total amount of anthracite mined for the year is 5,020,251 tons, against 5,640,883 tons for the same period last year, a decrease of 620,632 tons. The quantity of bituminous coal sent to market for the week amounted to 94,989 tons, against 105,268 tons in corresponding week last year, a decrease of 10,289 tons. The total amount of bituminous mined for the year is 1,112,817 tons, against 968,893 tons, for the corresponding period last year, an increase of 143,924 tons. The total tonnage of all kinds of coal for the week is 498,693 tons, against 480,628 tons in corresponding week last year, an increase of 18,065 tons, and the total tonnage for the coal year is 6,138,063 tons, against 6,609,776 tons to same date last year, a decrease of 476,708 tons. The quantity of coal and coke carried over the Pennsylvania Railroad for the week ending March 25 was 226,913 tons, of which 163,595 tons were coal and 63,318 tons coke. The total tonnage for the year thus far has been 2,517,464 tons, of which 1,767,671 tons were coal and 749,793 tons coke. These figures embrace all the coal and coke carried over the road east and west. The shipments of bituminous coal from the mines of the Cumberland coal region for the week ending March 25 were 4,131 tons, of and for the year to that date 444,766 tons, an increase of 90,376 tons as compared with the corresponding period of 1881. The Cumberland coal miners' strike continues, but conferences are being conducted both at Baltimore and in Cumberland with a view to an adjustment of differences, though as yet no prospect of an early result is indicated. The Reading Railroad shipment for last week, ending April 1, was about 216,600 tons, of which 62,800 tons were sent to and 33,000 tons shipped from Port Richmond, and 18,500 tons sent to and 11,000 tons shipped from Elizabethport. Vessels are scarce at Port Richmond, and freights are quoted at $1.25@1.40 to Boston and $1.25@1.30 to Providence. There is some coal shipped from the ports in New York harbor, with freights quoted at $1@1.15 to Boston.—*Phil. Ledger, April 3.*

IN regard to the sizes of nails and the designation by the term "penny," such as "eightpenny," "ten-penny," &c., the *Journal of Commerce* says:—Nails were originally sold by the "score" and the "hundred," the latter being six score, or 120, and a "thousand" meant 1,200 nails. The words "four-penny," "ten-penny," &c., are a corruption of four-pounds, ten-pounds, &c., (which were first "four-pun" and then "four-punny, &c.), meaning that 1,000 (1,200) nails of this size weighed four pounds, ten pounds, &c., respectively.

ANOTHER member of the New York Legislature has sent his pass back to Vanderbilt. He sent it back to have it made out for his family, instead of himself alone.

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The Board of Directors of this company have this day declared a dividend of TWO per cent upon the capital stock, payable on MONDAY, the 1st day of May next, at this office.

For the purposes of this dividend, and also for the annual meeting of the stockholders for the election of directors, etc., which is to be held on the 3d day of May next, the transfer books will be closed at 3 o'clock P. M. on Saturday, the 1st day of April next, and will be reopened on the morning of Friday, the 5th day of May next.

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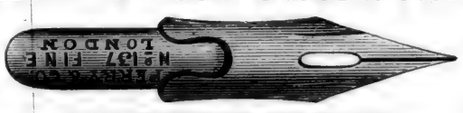
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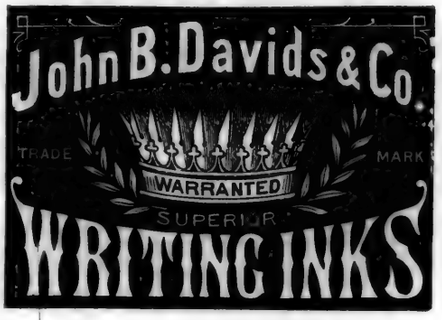
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AMERICAN Railroad Journal.

ESTABLISHED 1831.

Steam Navigation, Commerce, Finance, Banking, Machinery, Mining, Manufactures.

SECOND QUARTO SERIES.—VOL. XXXVIII., No. 14.] NEW YORK, APRIL 15, 1882. [WHOLE No. 2,399.—VOL. LV.

"Oil on the Troubled Waters."

IN October, 1861, the Coast Survey steamer Vixen was assigned to duty with the Port Royal expedition, then fitting out at Fortress Monroe, under the command of Flag Officer (afterward Admiral) Dupont. The Vixen was a small sidewheel steamer, built in 1846 for service in the Mexican war. She was a miracle of ugliness and was slow and difficult to handle in heavy weather, but she was strong and had weathered many severe gales. She was placed under the command of an old assistant in the coast survey, Mr. Boutelle, with a picked staff of reliable officers. For reasons not belonging to this narrative Flag Officer Dupont decided that Mr. Boutelle should accompany him in the flagship Wabash, and the Vixen went to sea with the fleet from Fortress Monroe in charge of her executive officer, Mr. Robert Platt, then of the Coast Survey and now of the United States Navy. The fearful storm the fleet encountered on the North Carolina coast south of Hatteras is a matter of history. On the morning after leaving Fortress Monroe the number of the fleet reported to the commander-in-chief as in sight was forty-nine. On the next morning the squadron had dwindled to its square root. Only seven were in sight. In the height of the gale the large and powerful frigate Wabash labored so heavily in the tremendous sea that the deadlights closing the windows of the flag officer's stateroom had been broken in and he had been driven to occupy a sofa in the main cabin. Many of the transports in the fleet were notoriously unfitted to encounter such a storm, and anxiety and fear for their safety prevailed. Few of the marine battalion who were upon the illfated steamer Governor will ever forget their awful experience, or their rescue, chiefly through the seamanship and pluck of Lieutenant (now Rear Admiral) Balch, then executive officer of the frigate Sabine.

Small hope was entertained that the little surveying steamer Vixen, with her decks hardly five feet above the water, had survived the gale, but as the flagship approached the rendezvous off Port Royal she was seen quietly at anchor, having reached there among the first of the squadron. The commander, Mr. Platt, in relating the experiences of the storm to his chief, Mr. Boutelle, modestly recounted that, when the storm grew too heavy for him to keep his course, he had brought the vessel's head to the sea and had put out a drag to assist him in keeping her in that position. As the storm reached its height and the huge waves frothed and combed they began to break on board and the vessel was in great danger. He then poured about a gallon of oil overboard, just abaft the lee paddle-box. It drifted with the vessel and soon formed an oily scum about her, after which not a sea combed or broke on board, and she rode out the gale in safety, arriving at the appointed rendezvous in advance of many vessels of enormously greater power and speed. Mr. Boutelle immediately reported the circumstances to his official superior, Professor A. D. Bache, superintendent of the Coast Survey. At any other period it would probably have been published and excited attention, but we were then in the midst of events of too great moment for so small a matter to attract general notice.

Electric Signaling and Interlocking on Irish Railways.

THE Dublin press was afforded an opportunity on Saturday last of witnessing, under the practical guidance of Mr. Hornsby, Deputy-Manager of the Midland Great Western Railway, Mr. Brush, C. E., superintendent of signals, and Mr. Chambers, an interesting series of railway signaling experiments connected with the present system of working both double and single lines, and of inspecting all the signal arrangements connected therewith at some of the most important junctions and extensions in the vicinity of this city; and also of witnessing some experiments of a system of electric working of single lines—always the most dangerous—by an invention just patented, but not as yet introduced into Ireland. It is called "Tyer's patent train tablet," and is scientifically known as "the electric interlocker." The two models of this system, at present at the Broadshire station here, are the only ones in this country. The value of the invention is, that the apparatus being interlocked, no second train tablet can by any means be issued until the previous one has been duly received and actually placed within the receiver at the distant station. Either station is then in a position to issue a tablet. Thus it can readily be understood that consecutive trains could follow each other from the same station into the same section as soon as the preceding tablet had arrived at the station in advance to which it was approaching, and automatically unlocked the apparatus, thereby enabling a new train tablet to be produced at the station in the rear for a succeeding train. In the event of the telegraph connections getting out of order, and the train-tablet instrument failing to work, arrangements are available for single-line working by red-cap pilotmen under the usual single-line rules.—*Herapath.*

The Sutro Tunnel.

ACCORDING to the report of the Sutro Tunnel Co. for 1881, "the financial condition of the company is as good as could reasonably be expected under all the circumstances." The president reports that the due date of the mortgage is January 1, 1891, and, with the advances secured by it, constitute the entire indebtedness of the company, amounting on March 1 to $946,922.52, exclusive of interest, which on January 1 amounted to $219,238.34. He makes the exceedingly commendable suggestion that "Some steps should be taken at an early day to increase the revenue of the company, which is small at this time, owing principally to the reduced ore product of the Comstock mines." He suggests to that end that the company explore some of its lands which bear indications of mineral value. This is also suggested in the report of the superintendent. There is the encouraging statement, however, that "the company's ranches have been worked at a profit during the past year, and its ponds have recently yielded a valuable supply of ice." The receipts for the year were $351,269.36, of which $120,167 was received under the mortgage of January 1, 1877, $550 from a temporary loan and $9,651 from rents and sales of land, hay, wood and vegetables. The disbursements were $349,267.24, leaving $2,002 cash on hand.

Southern Development.

NOT only in all sections of this country, but in Europe, too, the eyes of capitalists looking for great fields for large investments are turned toward the South. And, to those who are informed as to the vast and varied resources of the South, there is no reason for wonder that it is so. A stranger from any one of the old countries on the other side of the sea, in traveling through the South is doubtless astonished to see the woods and wilds that meet his gaze, even in districts of country which were among the earliest settlements in the colonies.

He is still more astonished, when, on inquiry and inspection of the mineral regions of the old States of the South, he learns that there are all sorts of mines, and of almost unlimited extent, lying there undisturbed, with a wealth within them that promises, and in the near future, a degree and a permanence of prosperity such as has not been witnessed in the world before. This long delay in Southern development is attributable to the fact that we have a vast territory with a sparse population, and to the fact that we have always been an agricultural and not a manufacturing people. The vocation of the farmer or planter is, of course, the one calling upon which all other callings are either directly or indirectly dependent. It has always been so—and it must ever continue to be so. But the mineral resources and manufacturing facilities of a country, especially in this age, afford means for making money and for circulating it among people of all classes and conditions, which give to trade and business of every description impulses and influences that show themselves in the shining lights of thrift and contentment in the lowest as well as the loftiest households in the land. Mining and manufacturing help agriculture in immeasurable degree. They attract population and put money into the hands of the people to buy the products of the farmer. They create railroads, and the railroads not only bring men and money along with them, but they furnish the farmer or planter with transportation to the markets of the world.—*Industrial South.*

Lumber Cut on the Kennebec.

From the Augusta (Me.) Journal April 5.

It is estimated that 100,000,000 feet of logs were cut on the head-waters of the Kennebec last winter, which, with the 15,000,000 feet of old logs "hung up" along the tributaries, will make a drive of 115,000,000 feet to be floated down the river. Last year the drive was the cleanest ever made, owing to the copious rains, and 150,000,000 feet of timber came down the Kennebec. Lumbering operations have this year been pursued under difficulties, owing to the long-delayed snow-fall, but a large amount of logs has been secured in the State. The drive will be started about the 1st of May, and the advance guard will reach Augusta in July or August.

The First Engine on the Pittsburgh Division of the Pennsylvania Railroad.

Richard Allen, familiarly known as "Dick," and who now serves in the capacity of constable for Deputy Mayor Porter, claims to have run the first locomotive on the Pittsburgh division of the Pennsylvania Railroad. He says the first locomotive was named "Indiana," and was brought here by canal-boat in 1852. It was built by Baldwin, of Philadelphia, came by way of the old Portage road, and was shipped from its terminus by canal, and was unloaded from the boat at what is now known as Eleventh street. The engine was not much like those in use to-day. The Pennsylvania Railroad was not much of an affair at that time. The Pittsburgh division ran to Brinton Station. There the passengers were transferred to a stage which took them to the train for Conemaugh. Here they took the bridge, crossed the river and got upon the Portage road. There was but a single track on this division, and but two trains, one known as the express, and the other one as the mail. They had forty minutes to make the run between this city and Brinton. There were but three stops on the route, the first at East Liberty, the second at Wilkinsburg, and the third at Brinton. Along the road there was nothing but a dense forest, and Pittsburgh wasn't much of a place either.—*Pittsburgh Post.*

An American Railway Engine on an English Railway.—The Lancashire and Yorkshire Railway Company have subjected to a trial on their line from Manchester to Leeds a new railway locomotive built on the American system. The manager of a vacuum brake company, it seems, has secured a concession from several English railway companies to run an engine on their lines, and the engine tried yesterday has been specially made for the purpose and brought to England, being put together at the Lancashire and Yorkshire Railway Company's works at Newton Heath, near Manchester. It made its first trip on Wednesday afternoon on an English railway. The engine is much larger than an English locomotive, being with its tender nearly as long again as the engine and tender we are used to in this country, and in addition, it is much wider. It is not claimed that the engine will exceed the ordinary English locomotive in speed, but it will, it is said, keep up a high rate of speed for a much longer time. An English locomotive used for the fast trains often runs more than a mile per minute, but 43 to 45 miles per hour is reckoned as a good average speed, but this engine will run 90 miles in an equal number of minutes, while it is capable of a greater strain, and will keep up this speed for some time.—*Daily Chronicle* of March 17.

Deafness in Railway Officials.—The *Lancet* say that Professor S. Moos, of Heidelberg, influenced, we presume, by the important results which have arisen from the attention of experts being directed to the color perception of railway officials and others whose actions are guided by colored signals, communicated to the *Zeitschrift fur Ohrenheilkunde* the results of his observations and reading in regard to the causes and effects of deafness in railway officials, to which, he points out, railway accidents may not unfrequently be attributed. Dr. Jacoby found that in the course of ten years and a half, no less than twenty out of a total number of eighty engine-drivers applied to him for affections of the organ of hearing; of these five had unilateral affection of the labyrinth, and fifteen lesions of the middle ear. Dr. Hartman, again, has found that the surrounding conditions have to be taken into consideration, drivers having sometimes to work their way through violent storms of wind, over ground that is hard frozen, and through long tunnels, and that under these conditions hardness of hearing, which, however, is often only transitory, is apt to be established. Professor Moos refers to the Canonbury railway accident, and to a singular case in which the engine and tender with a luggage-van entered the station at Provins in France, alone, the train having been unfortunately omitted to be coupled to the engine before starting, indicating, as Professor Moos remarks, that both engine-driver and stoker must have failed to miss the rumble of the ordinary train, owing to some defect of hearing. He records other cases, and he thinks that the hearing of drivers should be tested as carefully as their vision. — *London Railway Times.*

National Debts of the World.

Mr. Robert P. Porter's contribution to the United States Census Report on public indebtedness, which makes a quarto volume of over 600 pages, commences with an account of the national debts of the world. According to this statement the increase of the debt of the principal countries of the world was 36 per cent from 1848 to 1860, 65 per cent from 1860 to 1870, and 36 per cent from 1870 to 1880; the aggregate rising from $7,627,692,215 in 1848, to $23,286,414,753 in 1880. The following table shows the changes in the debts of the several countries from 1860 to 1880:—

Countries.	1860	1870.	1880.
France	$1,854,136,500	$2,777,522,000	$3,829,982,399
Great Britain	3,893,200,000	3,883,467,000	3,766,671,000
Russia	1,124,161,500	1,070,630,000	3,318,953,000
Spain	525,582,000	1,386,952,500	2,579,245,000
Italy	437,985,000	1,900,000,000	2,540,313,000
United States	64,842,288	2,480,672,428	2,120,415,371
Austro-Hungary	1,163,093,500	1,654,610,000	1,881,115,350
Turkey	160,594,500	603,446,000	1,376,486,500
Portugal	136,262,000	291,990,000	457,451,000
Australia	.....	180,060,500	442,851,500
Holland	442,850,500	369,854,000	389,320,000
Canada	.....	83,730,500	175,191,000
Roumania	.....	63,000,000	118,742,600
Sweden-Norway	.....	29,199,000	97,330,000
Greece	38,932,000	60,000,000	94,361,435
German Empire	494,436,400	720,242,000	49,317,598
Denmark	63,264,500	63,264,500	48,665,600

It is to be noted in this connection that the debt of the German Empire as given for 1880 does not include the debts of any of the States composing it, but only the Empire proper. The average yearly increase of indebtedness since 1848 has been $480,335,079. The State and local indebtedness of the United States is summed up as follows:—

State debt proper	$260,179,723	$234,436,261
County debt	125,471,555	123,877,686
Township debt	31,900,645	31,601,244
School district debt	17,507,411	17,507,411
Debts of cities and towns 7,500 inhabitants and over	710,535,924	593,344,418
Debt of municipalties less than 7,500 population	56,376,857	55,817,126
Total	1,201,981,115	1,056,584,146

The largest single item in this indebtedness is "railroad and other aid," $185,638,948; the next largest is for water-works, $146,423,565, and the next is for street improvements, $86,674,860. War expenses, public buildings, and parks and public places follow, in the order named. The lowest rate of interest is in North Carolina, which pays or promises to pay 2 per cent; about one-half of the aggregate debt pays 6 per cent interest, and on $23,370,864, 10 per cent is paid. Nevada pays 15 per cent on a part of her indebtedness, and 12 per cent on part; and Minnesota pays 12 per cent on $26,190. These are the highest rates anywhere paid.

The shad is described as "a fish that wears a fine comb for a backbone."

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CHINESE AND OTHER IMMIGRATION.

PRESIDENT ARTHUR has gratified and surprised the more thoughtful classes of the people, by his convincing and manly veto of the bill known as the Anti-Chinese Act, which, under the cover of the amended treaty, proposed to interdict the Chinese from coming to this country for a period of twenty years. To carry out the provisions of such a bill it was necessary to introduce the odious passport system, now fast dying out in Europe, and which is anti-American, and repugnant to the theory of our institutions. The whole truth has not been told about this shameful business. In the first place, the Commission sent to China, in order to negotiate the new treaty, was a piece of arrant humbug, assented to by President Hayes because he was led to believe that without some such "tub to the whale" the Pacific States would be lost to the Republican party. As it turned out the States were already lost to that party, and, as everybody might have foreseen, it never could have outbid the Democrats in concessions to the clamors of those voters who are most opposed to the coming of the Chinese.

On both sides the pandering to the prejudices of the lowest and most unreasoning class of voters is the most disgraceful demagogery. Fortunately there is now no hope of such a bill passing at this session; and by the next session, perhaps, new light and better counsels will have supervened. One thing is clear, that the Republican party, as a whole, is not to be switched about by the few Republicans of the Pacific coast into an indefensible policy merely to save the seats of a few men who have done nothing worthy to deserve them. The "tail will not wag the dog" in this instance; neither will the executive allow itself to be used by such men as Jones of Nevada, Page and Gorham of California, and others of that stripe. Let the country take notice that if they and their familiars undertake to trade on the President's favor they may be unable to deliver the goods.

Of course other bills of similar tenor have been offered at this session, and will be at the next. Perhaps it is as well this should be so. They cannot be urged without using arguments which reach further than the authors intend; and which bring up the whole question of immigration for review. The *Journal of Commerce* calls attention to the fact that scarcely a single argument has been advanced against the Chinese that cannot be brought with equal, or nearly equal, force against the other nationalities. If it is asserted that the coming Chinese reduce the general level of wages (which is only temporarily true) so do the coming Irish and Germans, and notably the Jews. If it is said they come to accummulate savings and return to their homes, so have the original American colonists and settlers for centuries. If it were true, it would advance nothing, as they leave behind them their work, which ought to be worth more than their wages. If it be said that their morals are bad, it is largely a question of different standards—while we, by forbidding them to bring their wives and sisters contribute to that end; but it is not true, and the contrary is notoriously the fact. Those who have tried them in either domestic service or outdoor labor express themselves as preferring them to any other nationality. For railroad construction they have proved themselves eminently docile, reliable and efficient. The Central and Southern Pacific railroads would not have been built as soon by years had it not been for the Chinese laborers. The Northern Pacific is now using all it can get, and the telegraph announces that two steamers have left Hong Kong for Victoria, B. C., with 3,000 on board, presumably for the Northern Pacific and Canadian Pacific Railroads. This event suggests another difficulty in the way of exclusion: Unless Canada and Mexico join with us in the embargo how are we to stop them from filtering over the borders? Mexico is reported to be demanding a supply to build her new system of railroads, and it will be easy to land them at Guayamas or Acapulco. The Chinese will be badly treated by our "hoodlum" population so long as they have no votes. The fact that they do not retaliate more against their persecutors is strong testimony in favor of their fitness to stay. It would not flatter our national vanity to say that the Chinese possess traits of character which we might study, or even imitate with advantage; but it is nevertheless true. China has the oldest and most stable government of which we have knowledge; they had a language, a literature, a polity and a civilization when Western Europe was half barbarous and benighted. The problem of raising the human offspring with a diminished mortality is still almost a secret with the Chinese and Japanese; as is also that of sustaining a dense population on a small area.

It is peculiarly and illustriously American doctrine that a citizen, or a subject, of one nation may expatriate himself. The attitude of some of our noisy politicians would seem to indicate a desire to revise that policy. Where shall the line be drawn? Shall it be that of color, or morals, or utility? There were landed at the port of New York in the first ten days of April nearly 20,000 immigrants from European shores, many of whom understand neither the language nor government under which they have chosen to live. Their advent is regarded, and properly so, as a national blessing, notwithstanding that for the first two or three generations they will help to fill our drinking-shops, prisons, asylums and infirmaries. The genius of our soil and government which can safely assimilate these can surely digest an equal number of practicable Chinese.

CONSTRUCTION.

THE construction of a new railway on the Island of Jamaica, W. I., was begun on the 8th inst.

THE Chicago and Alton Railroad Company has in contemplation the extension of its line to Peoria, Ills.

GROUND was broken at Jenkintown, Penn., on the 8th inst. for a branch of the Wharton Switch Company's Works.

FROM Victoria (B. C.) March 30th, we learn that Messrs. Dunsmir and Diggle, with whom are associated Messrs. Crocker and Stanford, of the Central Pacific Railroad Co., have secured,

so far as the Dominion Government, can grant it, the franchise to build a line of railway from Victoria to Naniamo within two years from the date of commencement. The consideration is a conveyance of the unoccupied portion of the coal belt lying between Victoria and Courtney, on the River Comox, with a possible money subsidy from the Dominion Government.

THE River Front Railroad in Philadelphia has been completed, and freights are being hauled over it. It was built by Wm. Wharton, Jr.

THE contract for the grading of the Knoxville and Cincinnati Southern Railway has been awarded to Condon Brothers, of Knoxville, Tenn.

BY the completion of the telegraph line between San Blas and Gaudalajara all the State capitals in Mexico are placed in communication with the City of Mexico.

THE Philadelphia and Reading Railroad Company has purchased the Welch charter for building a railroad from Riverside, Northumberland county, to Shamokin.

THE Quebec Legislative Assembly has ratified the sale of the Western Division of the Quebec Government Railway to the Central Pacific Railway syndicate by a vote of 45 to 14.

THE Chenango and Allegheny Railroad has been completed to Greenville, Penn., to which place trains are now run independent of the New York, Pennsylvania and Ohio Railroad.

THE Battle Creek (Mich.) *Journal* says that the Grand Trunk Railway is now all laid with steel rails between that city and Port Huron, except about 25 miles, and that the whole line will be steeled by by May 1st.

FIVE hundred men are now at work on the Pittsburgh, McKeesport and Youghiogheny Railroad, and by August 1 there will be 1,500. It is expected that cars will be running as far as McKeesport by November 1.

A DISPATCH from Victoria, B. C., of April 10th, confirms the report of the steamers Euphrates and Escambia sailing from Hong Kong, to arrive this month with 3,000 Chinese to work on the Canadian Pacific Railway.

THE seven-mile extension of the West Jersey Railroad, from Wenonah to Glassboro, has been completed. This extension gives the road a double track from Camden eighteen miles south to the junction of the Bridgeton and Cape May roads, at Glassboro.

A COMPANY proposes building a line of embankment for a railroad five feet above high water mark, running along the east side of the Mississippi River, from Memphis to Vicksburg, thus forming at once a levee and roadbed.

RAILS are now laid on fifty-one miles of the Manitoba and Southwestern Railroad. A permanent bridge at Headingly, over the Assiniboine River, is also completed. A ballast pit has been opened near the western end of the track with a view to beginning the ballasting of the line.

WORK has been commenced on the extension of the Pittsburgh, Virginia and Charleston Railway from Brownsville to Uniontown, sixteen miles, connecting at Hogsett station, on the southwest Pennsylvania Railroad, and follows the Redstone Creek from the Monongahela River to Uniontown.

THE Stockton (Cal.) *Independent* says that arrangements are being made to build a railroad from Stockton to tap the California and Sierra Nevada Railroad—now in course of construction—at Lockeford. Capital is already fully assured, iron has been engaged, and right of way is being obtained, and in a comparatively short time the Stockton and Amador Railroad, as it has been named, will be in running order.

A DISPATCH published in the Mexican Government's organ in Mexico states that a locomotive of the Mexican Central Railroad passed over the division between Celaya and Trapanto. The railroad between these points was formerly a narrow-gauge road, but it has been lately enlarged to the standard gauge. It was built by the State Government, and has been transferred to the Mexican Central Railway Company by purchase.

THE Marquette, Houghton and Ontonagon Railroad has been ordered to extend its line westward from L'Anse to connect with the eastern terminus of the Ontonogon and Brule River Railway, twenty miles from Ontonagon. This action was brought by reason of the people of northern Michigan petitioning for an order compelling the Marquette Co. to extend its road from L'Anse to Ontonagon. The line will be ready by June 1, 1883.

THE Chicago and Northwestern Railway Co. is preparing to build a line from Juneau to Beaver Dam, Dodge county, Wis., a distance of eight miles, that city having expressed a willingness to issue the necessary bonds ($25,000) that will procure the right of way. This, it is expected, will eventually result in an extension of the same road from Geneva Lake north, through Oconomowoc and Waukesha, to meet the extension at Juneau.

THE Red River and Lake of the Woods Railway Company has filed articles of association with the Secretary of State of Minnesota, with G. F. Copeland, Frank Ives, Arthur Yoernault and J. B. Copeland, of Crookston, and W. J. Ives, of McLeod county, as incorporators. The capital stock is $2,500,000, in $50 shares, and the projected line of road is from a point on Red River along Red Lake River to the mouth of Thief River and thence to the Lake of the Woods.

URIAH H. PAYNTER, vice-president of the Peninsula Railroad Co., says that the proposed railroad to the extremity of the Peninsula will be built this year. The line projected will be sixty-six miles long, and will have its terminus either at Cape Charles or at the lower end of Magothy Bay, opposite the cape. Of 195 persons whose land will be crossed by the new road 71 have already granted the right of way. When this road is completed it is possible to reach New York from the mouth of the Chesapeake bay in ten hours.

IT is stated on good authority that Thomas A. Reilly, of Pottsville, and William Nolan, of Reading, have been awarded the contract by the Philadelphia and Reading Railroad Company for building the Railroad from Shamokin to West Milton, Penn., by way of Sunbu y and Lewisburg. It will be one of the connecting links in the new line to Williamsport, Penn., and Buffalo, N. Y. It will be 38 miles in length and is to be finished in December. It will be built in pursuance of an agreement entered into on the 4th of February between the New York Central Railroad Company, the Fall Brook Coal Company, and the Jersey Shore, Pine Creek and Buffalo Railroad Company, by which it is agreed to form a through line from Philadelphia to Buffalo, to be called the "new line." This line will cross the Susquehanna River at Sunbury with a new iron bridge, and proceed thence up the west branch of the Susquehanna to West Milton. It will be double track with steel rails and completed by the first of January next.

WORK on the St. Louis and Texas Railroad between Pine Bluff and Camden, Ark., is going ahead rapidly and averages one mile per day. The road will be built to the Saline River, thirty miles south of Pine Bluff, by May 1, and to Camden some time in September, if not earlier. From Camden it will be pushed to Texarkana as speedily as money and men can build it. Work on the Texarkana end of the road towards Camden is reported progressing favorably, and the contractors say that when the Pine Bluff Division is built to Camden the Texarkana line will also be in running order to that place.

ORGANIZATION.

THE directors of the Allegheny Valley Railroad Company, elected on the 11th inst., are: John Scott, George B Roberts, D. A. Stewart, A. J. Cassatt, B. F. Jones, John F. Green, H. M. Phillips, Edmund Smith and J. N. Brady.

THE directors of the Atlantic City Street Railway Co., elected on the 10th inst., are: David C. Spooner, W. G. Bartlett, Ezra Bartlett, Thomas Wilson, A. H Boardman, G. W. Hinkle and George F. Currie. President, David C. Spooner; treasurer, W. G. Bartlett; secretary, Ezra Bartlett.

THE directors of the International and Great Northern Railroad Company, elected on the 3d inst., are: R. S. Hays, T. W. Pearsall, Samuel Sloan, Jay Gould, of New York; Russell Harding, of Trinity, Texas; A. H. Howard, of Palestine; Allen McCoy, of Galveston; J. A. Baker and F. A. Rice, of Houston.

THE following gentlemen have been elected directors of the Bald Eagle Valley Railroad Company for the coming year: L. A. Mackey, president; A. G. Curtin, J. N. Du Barry, James Duffy, James Gamble, John P. Green, John Irwin, Jr., Strickland Kneass, C. A. Mayer, Wistar Morris, G. B. Roberts, E. Blanchard and Edmund Smith.

AT a meeting of the Denver, Utah and Pacific Railway Company on the 11th inst., the following gentlemen qualified as directors: Edward Morgan, George Macculloch Miller, S. Babcock, William A. Street, Paul Lichtenstein and Joseph P. Hale, of New York, and Gov. H. A. W. Tabor, H. R. Walcott and E. F

Hallock, of Denver. George Macculloch Miller was elected president and George W. Carr secretary of the Company for the ensuing year.

At the annual meeting of the South Carolina Railway Company, held in Charleston, S. C., on the 5th inst., Percy R. Pyne, T. Baily Myers and Frederick Hardy, of New York, were elected directors, in place of E. E. Chase, J. H. Fisher and H. C. Hardy. Henry P. Talmadge, of the firm of Henry Talmadge & Co., of New York, was elected president.

The directors of the Reading and Chesapeake Coal and Railway Company, recently elected, are: S. H. Price, J. W. F. Swift, D. Bair, C. J. Rhoads, Dr. S. T. Davis, John H. Baumgardner, R. J. Evans and Henry Baumgardner. The building of the road to the Chesapeake will soon be commenced at Reading. The office of the Company is at Lancaster, Penn.

The full board of directors of the Chicago and Alton Railroad Company, as now constituted, are: T. B. Blackstone, Chicago; John B. Drake, Chicago; Morris K. Jesup, New York; John Crerar, Chicago; Lorenzo Blackstone, Norwich, Conn.; John J. Mitchell, St. Louis, Mo.; John T. Slater, Norwich, Conn.; George Straut, Chicago, and J. C. McMullin, Chicago.

At the annual meeting of the Baltimore and Ohio and Chicago Railroad Company, held at Chicago on the 6th inst., Bradford Dunham, of Ohio, Daniel A. Jones and Jno. Thomas, of Chicago, were elected directors. The directors then elected Mr. Dunham, president; J. Hope Sulor, of Ohio, secretary and treasurer, and James L. Randolph, of Baltimore, chief engineer.

The directors of the Cincinnati, Richmond and Fort Wayne Railroad—the Southern division of the Grand Rapids and Indiana Railroad—recently elected are: William Parry, of Richmond; A. Stone, of Winchester; Charles C. Binkley, of Richmond; Pliny Hoagland of Fort Wayne; John H. Moorman, of Richmond; David Stanbacker, of Decatur; Jacob N. McCullough, of Pittsburgh; F. H. Short, of Cincinnati; William O. Hughart, of Grand Rapids; William R. Shelby, of Grand Rapids, and William Thaw, of Pittsburgh.

At a meeting of the stockholders of the Ohio and Baltimore Short Line Railway Company held in Washington, Pa., on the 6th inst, the following persons were elected directors: J. B. Washington, W. W. Smith, Wm. Wohrman, Wm. C. King, Henry M. Dougan, Wm. Keyser, Samuel Spencer. At a subsequent meeting of the board the following officers were re-elected: J. B. Washington, president; W. W. Smith, secretary; W. H. Ijams, treasurer, and James L. Randolph, chief engineer.

The stockholders of the East River Rail road,a projected continuation of the New River Railroad extension of the Norfolk and Western Railroad, held a meeting at Philadelphia on the 10th inst., and adopted the surveys and locations of the line, as submitted by the chief engineer. The board of directors was authorized to accept or reject any legislation hereafter passed. The following board of directors was then elected: T. J. Kimball president; William G. MacDonald, treasurer; G. R. W. Armes, secretary; Thomas Graham and Clarence H. Clark, of Philadelphia, and Henry Fink, of Lynchburg, Va. The chief engineer is Thomas Graham, Jr., of Pearisburg, Va.

At the annual meeting of the stockholders of the Long Island Railroad Company held in Long Island City on the 11th inst., the following gentlemen were elected directors for the ensuing year: Austin Corbin, B. S. Henning, J. R. Maxwell, Henry Graves, H. W. Maxwell, Alfred Sully, Edward Tuck, John C. Townsend, D. C. Corbin, F. B. Wallace, F. W. Peck, Demas Barnes, and J. G. K. Duer. At the same time and place the shareholders of the Long Island City and Flushing Railroad Company elected the following board of directors: Austin Corbin, J. Rogers Maxwell, Henry Graves, B. S. Henning, Alfred Sully, Edward E. Sprague, Frederick W. Dunton, Charles Knoblauch, G. S. Moulton, William G. Wheeler, Carl Victor, Thomas F. Ward, and Elizur B. Hinsdale.

INCORPORATION.

The Chestnut Ridge and Clark Avenue Street Railroad Company, of Cleveland, Ohio, has been incorporated with a capital of $100,000.

A certificate of incorporation has been filed with the Secretary of State of Ohio of the Mt. Vernon, Coshocton and Wheeling Railroad Company; capital $100,000.

The Governor of Pennsylvania has issued a charter for the construction of the Parker and Cleveland Railroad, a twelve mile connecting link between the Shenango and Allegheny and the Allegheny Valley Railroad. The capital stock is $250,000.

A charter was issued at Harrisburg, Penn., on the 7th inst. to the Warren and Farnsworth Railroad Company to construct a three feet gauge railroad from Claronden, in Warren county, to Tionesta, in Forest county, a distance of 12 miles. The capital stock is $75,000.

Articles of incorporation for a new ferry company have been filed with the Queens county Clerk. The Company is to run a ferry between some point in Long Island City and some point between East Fourteenth street and East Fortieth street, New York. The incorporators are John Birdsall, Edward A. Moore, John Miller, Hugh Ferrigan, Randolph Martins, Charles Kelley, Richard F. Day, Peter A. Tabor, John E. Phelps and Myer Butzel.

The incorporators of the Anthracite Water Company are S. B. Whiting, Frank Carter, H. K. Nichols, J. P. Jones, J. H. Olhausen, John Veith, Thomas Doyle, James F. Jones, James Ellis and John F. Whalen, all of whom are in the employ of the Philadelphia and Reading Company. The object of the Company is to provide a supply of water for the colleries in the Mahanoy Valley, from the Knickerbocker colliery to Mahanoy Plane. These and other collieries were affected by the drought of the past summer. It is proposed to provide against drought in the future by building a dam on Broad Mountain, or enlarging one they already have at Waste House Run. The capital of the Company is $100,000, divided into 1,000 shares. The Company will be prepared to supply not only the collieries referred to but the towns through which their pipes will pass.

Articles of incorporation have been filed with the Secretary of State of Illinois by the Danville, Indiana and Michigan Railroad Company, which is to have a capital stock of $250,000. The incorporators and first Board of Directors are Joseph G. English, William E. Livengood, John H. White, Isaac Porter and H. W. Beckwith, all of Danville, where the principal office of the company is to be located. The object of this corporation is to connect at the Illinois and Indiana State line with the Michigan, Indiana and St. Louis Railroad, a company recently organized in Indiana to build a road from Sturgis, Mich., to Fowler, Benton county, connecting at Danville, Ill., with the Danville and East St. Louis Railroad, now being constructed southwest and intermediately between the Wabash and the Indianapolis and St. Louis railroads to St. Louis.

PERSONAL.

Ex-President Frank S. Bond, of the Philadelphia and Reading Railroad Company, is traveling in Europe.

George D. B. Keim will act as president of the Philadelphia and Reading Railroad Company during the absence of Mr. Gowen in Europe.

D. R. Patterson has been appointed Purchasing Agent of the Chicago and Eastern Illinois Railroad Company, with headquarters at Chicago.

Robert Surtees, City Engineer of Ottawa, Canada, has been elected a member of the American Society of Civil Engineers. Mr Surtees is, we believe, the second resident of Canada who has been thus honored.

J. L. Hinckley has been appointed superintendent of the roads operated by the St. Louis, Alton and Terre Haute, with headquarters at Belleville, Ill. He will have charge of the operating and maintenance of the road.

The reappointment of Hon. John Jay Knox to be Controller of the Currency is one for which President Arthur is entitled to unstinted praise. Mr. Knox has made the study of the national banking system the business of his life.

Robert E. Pettit has been appointed superintendent of the New York division of the Pennsylvania Railroad, in place of James McCrea, who has been appointed manager of the lines of the Pittsburgh, Cincinnati and St. Louis Railroad Company.

At a meeting of the directors of the Buena Vista and Gunnison Railroad Company of Colorado, in Philadelphia on the 5th inst. L. P. Rogers was elected president, and Ed. Herrick secretary and treasurer. Instructions were given to superintendent J. H. Archer to contract for the completion of the road.

L. P. Farmer, who was compelled a year since, owing to ill health, to resign the General Passenger Agency of the Pennsylvania Railroad Company, has almost entirely recovered his health, and has been appointed General Agent of the Pennsylvania Railroad Company for New England, with headquarters at Boston.

On the railroads of Continental Europe the introduction of mineral oil for lubricating purposes is proving both efficient and economical.

The Pennsylvania Railroad Company.

On April 13, 1846, the act incorporating the Pennsylvania Railroad Company was passed by the State Legislature. Many remember the struggles of the infant corporation. Though its projectors were enthusiastic believers in the ultimate success of the company that aimed to snatch the West from the wilderness and give it to civilization, there were good men and true who prophesied bankruptcy for those who had the boldness to invest their wealth in its bonds and stock. Rival corporations, already established, and depending for their revenue upon traffic between the well-settled portions of the East, looked askant upon it venture.

The Pennsylvania Railroad Company is now recognized as perhaps the greatest corporation of its kind in the world. Controlling, in one way and another, almost $400,000,000 of capital, operating 8,000 miles of track, with an annual freightage of 60,000,000 tons and carrying 30,000,000 passengers, earning $29,000,000 yearly over and above expenses, paying dividends equal to twelve per cent on its stock, with no floating debt and a surplus of $2,500,000 to the credit of profit and loss, its wonderful success is occasion of more than local pride.

It is well at this time to give due credit to those far-sighted men who dared the future by organizing the company thirty-six years ago.

The committee appointed upon the passage of the incorporation act in 1846 to solicit the aid of the citizens, consisted of the following gentlemen, most of whom are now deceased: Thomas P. Cope, David S. Brown, John Grigg, Thomas Sparks, George N. Baker, Richard D. Wood, James Magee and J. R. Tyson.

The first board of directors contained these additional names: S. V. Merrick, Robert Toland, Stephen Colwell, George W. Carpenter, Christian E. Spangler, Thomas T. Lea, William C. Patterson, John A. Wright and Henry C. Corbit.—*Record of Growth.*

Central Railroad of New Jersey.

Judge McKennan, of the United States Circuit Court and Judge Nixon, of the United States District Court of New Jersey, sat in Philadelphia on the 8th inst., to consider the petition of Edward C. Knight and others, holders of stock issued by the Central Railroad Company of New Jersey, for an injunction to restrain the directors from issuing stock under and by virtue of an act of the New Jersey Legislature, recently passed. Since the year 1877 the railroad has been under the direction and control of a receiver, whose appointment was due to the insolvent condition of the road It is now said to be solvent and that it is in contemplation to ask that the road shall be placed under the sole control of the board of directors to be elected in May next. The injunction was asked to remain in force only until that election takes place.

Counsel for the petitioners took the ground that the remaining members of the board, elected prior to the road being placed in the hands of a receiver, are not sufficient in number, according to the provisions of the charter, to carry into effect the law recently passed relating to an additional issue of stock. On the other hand the opinion was expressed that the present directors, in conjunction with the receiver, had full power to issue the stock.

The Court declined to interfere, saying that inasmuch as the directors had disavowed, in their affidavits, an intention to issue the stock, and the Court in Chancery had, upon granting the application for the appointment of a receiver, enjoined the directors against the discharge of any corporate duty, the necessity for an injunction at the present time was not apparent.

Wagner Sleeping and Day Coaches.

The Wagner Sleeping-Car Company has recently placed thirty-four new sleeping and day coaches on the line between New York and Chicago, which surpass anything it has heretofore run. They are from the shops of the Delaware Car Works, at Wilmington, and are finished in mahogany, with much marquetrie work, of the most delicate and tasteful description. The seats are upholstered in figured silk, old gold and dark brown, and the curtains are of the same style. The carpets, upholstery and wood finish harmonize, and produce the most pleasing effects. In the appointments for the comfort and convenience of passengers everything has been used which ingenuity can suggest, and the fitting and furnishing of berths are of the finest quality. The cars are severally named from the cities on the line, like Manhattan, Buffalo, Dunkirk, etc. The late lamented Senator made the order and approved the plans for them before his death. It may be added that the Hon. Augustus Schell and James D. Taylor, son-in-law of Senator Wagner, are now in immediate charge of the Wagner Company's business.

Debt of New York City.

The report of the operations of the Finance Department for the year 1881, and of the condition of the city debt, has been sent by Controller Campbell to the Mayor. The total funded debt of the city on December 31, 1881, was $134,400,507.07, and there was in the Sinking Fund $36,110,300.90, leaving the net debt $92,290,286.77. There was a decrease of $3,219,685.35 in the net funded debt, and an increase in the Sinking Fund of $3,117,276.90 for the year 1881. The following table shows the condition of the city debt for a peried of twelve years:—

	Total bonded debt exclusive of revenue bonds.	Amount of sinking fund for redemption of the city debt.	Amount of net debt.
1870.....	$79,523,246 51	$18.115,894 49	$61,407,354 02
1871.....	102,182,608 51	20,182,321 61	82,000,286 90
1872.....	110,701,032 27	23,348,074 89	87,352,956 38
1873.....	121,419,592 02	24,841,100 15	96,578,401 87
1874.....	139,092,557 24	26,823,788 01	112,268,796 23
1875.....	140,379,103 54	27,748,307 30	112,630,796 24
1876.....	143,244,859 16	26,296,247 40	114,948,611 76
1877.....	143,931,868 57	31,120,315 24	112,811,553 33
1878.....	140,715,540 78	32.143.787 83	108.571.752 95
1879.....	137.444.048 24	33,021.985 70	104.422.062 54
1880.....	134.502.915 56	32.993.024 00	101.509.091 56
1881.....	134.400.507 07	36.110.300 90	98.290.206 17
Increase in net bond debt, 1870 to 1876....			$53.541.259 70
Decrease in debt, 1876 to 1881.....			16.658.405 50

The amount of taxes collected during the year was $25,203,885, and at the close of the year there was $5,784,813 of the last tax levy unpaid. It is intended, now that the laws extending payment have expired, to hold tax rates annually for taxes remaining unpaid for three years. There are unexpected balances of appropriations for various city departments, which have accummulated for several years, amounting in the aggregrate to $5,282,000. The Controller asks for authority to cancel these accumulated balances.

The amount of unpaid personal taxes for the years prior to 1881 aggregates $13,800,000. The Controller believes that only a small part of this can ever be collected.

Liability of a Railroad Company.

The Supreme Court of Pennsylvania has just rendered a decision in the case of the Lombard and South Street Passenger Railway Company vs. Myer Steinhart. The suit was one brought by Steinhart, in a lower court, to recover damages for injuries sustained by him through the alleged negligence of the Railroad Company. The plaintiff, who was a boy of 6 years and 6 months of age, whilst performing an errand for his father, attempted to cross Lombard street near the corner of Sixth street, Philadelphia. He was struck by the horses attached to the car of the Railroad Company, thrown down and run over by the car, sustaining such injuries as to require the amputation of both of his legs. The jury rendered a verdict for plaintiff for $4,000, and the Company removed the case to the Supreme Court. The decision sets out:—

In view of the fact that the defendant had not reached an age to exercise discretion in avoiding the danger, he could not be held responsible for contributory negligence. The main question, then, was whether the negligence of the Railway Company caused the injury. While some of the evidence was conflicting, yet there was amply sufficient, if believed, to justify the jury in finding it as a fact. There was evidence that the driver of the car was intoxicated and driving at a rapid rate of speed without giving that attention to the observance of any object on the track which his duty required. The case was well submitted to the jury in a full and adequate charge. We adhere to our decisions as to the unconstitutionality of the act of 4th April, 1868, limiting the amount to be recovered ($3,000) as declared in Central Railroad Company of New Jersey, 1 W. N. C., 319, and Passenger Railway Company vs, Boudrou, 11 Norris, 475. Judgment affirmed.

Atlantic and Pacific Railroad.

Secretary Kirkwood has decided that the Atlantic and Pacific Railroad cannot maintain two east and west branches through the Indian Territory, both north of the Canadian. This will necessitate either the abandonment of the southern line, or a resurvey and relocation of it on the south bank of the Canadian, but the trouble is that in the meantime the Albuquerque Road has pre-empted the right of way for the one east and west road agreed to go through the Choctaw and Chickasaw country, and it looks as though the Atlantic and Pacific folks would have to walk up and settle with the new corporation. It all came of a blunder in locating the south branch of the Atlantic and

Pacific on the north bank of the Canadian, instead of the south bank, so as to carry out the treaty. As located, both the north branch of the road up the Cimoron Valley and the south branch on the Canadian go through the Creek and Cherokee country, and the agreement was that one branch was to go through the Creek and Cherokee, and the other through the Choctaw and Chickasaw, so each could have one east and west road, As fixed through error, the Creeks and Cherokees get two, the Chickasaws and Choctaws none, and the department goes back on the road.

Decrease in the Demand for Locomotives.

THE falling off in the demand for locomotives, says the Boston *Commercial Bulletin*, is credited to the low state of the railway stock market, which is perhaps one reason, but not the only reason. It appears that the most enterprising contractors of railway lines some weeks ago declared that it was not believed to be good policy to prosecute the construction of new lines this year. It was also stated by some of the most prominent constructors and managers at the same time that orders for a suspension of work on considerable lines had been issued. The business of railway building will this year be chiefly limited to the perfecting of trunk line connections, which involve, as a general thing, short distances, and do not necessarily call for any considerable increase of draft rolling-stock. If we take this into consideration, as well as the condition of the railroad stock market, the contemplated reduction of force in several of the large locomotive shops would seem to be eminently proper. Whether the movement will extend to all the locomotive works in the country depends somewhat upon the forwardness of work on contracts already entered into, as well as the ability of the contracting parties of the one part to pay cash on delivery. Like every other branch of production, locomotive building is controlled by the laws of trade.

Central Railroad of New Jersey.

A CIRCULAR signed by Messrs. Robert Garrett, E. C. Knight, Franklin B. Gowen, James R. Keene, and others, has just been issued to the stockholders of the Central Railroad Company of New Jersey soliciting their proxies at the annual election to be held on the 5th of May in opposition to the present management, and in the interest of the Philadelphia and Reading, the New York Central and Hudson River, and the Baltimore and Ohio Railroad companies. The subscribers say that the Central Railroad of New Jersey derived $1,133,000 last year from an interchange of business with the Philadelphia and Reading Railroad, a very large proportion of which was profit. The Northern, Western and Southern connections which are about to be made, this circular states, which will bring the Philadelphia and Reading in contact with the New York Central and Hudson River on the North and the Baltimore and Ohio on the south, are likely to greatly increase the traffic on the Central Railroad of New Jersey. H. S. Little, the present receiver, is the candidate of this party for the presidency of the Company.

Performance of Wootten Engines.

IN answer to a letter published under this title in the *Railroad Gazette* of March 17th, attention is called to the fact that the carrying capacity of cars on the Philadelphia and Reading Railroad has been increased, and, therefore, a less number of cars will now constitute a load equal to a larger number some time ago; also that cold weather and snowfalls necessitate a considerable reduction of loads during the winter months. He also offers to show that the loads hauled by the ten-wheeled engines on that road continue to be as heavy as, if not heavier than, at any time during their existence, even though the number of cars per train may be less, and that the loads hauled by the consolidation engines, or "dirt burners," as they are called, are nearly forty per cent greater with an expenditure of but little more fuel, costing but about one-eighth as much as that for the ten-wheeled engines.

THE new publication, "Through the Housatonic Valley to the Hills and Homes of Berkshire," a handsomely illustrated little *brochure* issued by the Housatonic R. R. Co., for distribution among those seeking a pleasant and healthy place for summer travel and vacation enjoyment, is now ready and will be sent *free* by mail to any address upon application to H. D. Avervill, Gen. Ticket Agt. Housatonic R. R. Co., Bridgeport, Ct.

SQUIRE LUFKINS, as he is known all along the line of the Philadelphia and Reading Railroad, has driven a passenger engine for that Company for thirty-two years. A party of railroaders recently amused themselves in calculating how many miles the Squire had driven his iron horse during his employ with the company. They found that he made 900 miles a week, on an average. At this rate he would travel 48,800 miles in a year, and as he has driven an engine for thirty-two years, at the above rate, he must have traveled 1,497,000 miles, or almost sixty times around the world.

THE Western Union Telegraph Company leases about one hundred private wires, and the Mutual Union about twenty. The cost of a private wire from New York to Philadelphia is $2500 a year, the Company furnishing nothing but the wire and the instruments at both ends of the line. To Boston it is $4,500 a year, and to Chicago $7,000 a year. The expense of an operator at each end adds about $1,500 a year to the total cost. There is a saving of money to concerns doing a large business, but the chief advantage is in the saving of time, especially to stock brokers, as minutes on the Stock Exchange sometimes represent fortunes.

ACCOUNTS from Oregon and Washington Territory indicate an immense yield of wheat and other grain. The outlook in Willamette Valley is much better than for several years, and east of the mountains the yield will be enormously increased. In one small locality over 25,000 acres of wheat are planted, where less than 1,000 were cultivated last year. The increased acreage over 1881 will be fully one-third, and the yield of wheat will be fully 20,000,000 bushels. Oregon alone last year raised 12,640,000 bushels, and its crop will be at least 16,000,000 bushels this year. The acreage of oats and barley is also increased proportionately.

THE Pittsburgh, McKeesport and Youghiogheny Railroad Company has given contracts for two bridges—one over the Monongahela, at City Farm, and the other over the Youghiogheny, at McKeesport. Coffrode & Sailor, of Philadelphia, will build the first, and Rust & Cooledge, of Chicago, the other. Two piers and one abutment have already been finished for the McKeesport bridge, and work is progressing on the abutments of the other. The latter will be one mile and 120 feet in length, and will require 2,500 tons of iron. It will be, it is claimed, the largest iron structure in the United States, and is to be completed by December 1st.

THE American bark Addie E. Sleeper, of Rockland, Maine, Captain Sleeper, has been chartered by the Mexican Central Railroad Company to carry a cargo of locomotives and freight cars and other railway supplies from Philadelphia to Vera Cruz, Mexico. The locomotives will be furnished by the Baldwin Locomotive Works and the cars and other supplies by W. P. Allison & Co. The entire lot will be taken apart and boxed, and put together in Vera Cruz. This vessel has just completed a year's charter with the Mexican National Railroad Company, whose headquarters are at Corpus Christi. Both of these railroads are American enterprises, and are a part of Jay Gould's through line to Patagonia.

A PATENT had just been granted for a main-line sounder, an instrument to be used on telegraph lines, which, it is claimed, will revolutionize the present method of receiving signals by a relay-sounder and local battery. Aside from the important factor of economy, this invention is admitted to be entirely outside the scope of the celebrated Page patent, which practically controls the whole field of telegraphy. Tests have been made between Washington and New York, Washington and Cincinnati and other distant points, in the presence of patent office and other electrical experts, which demonstrated that this invention accomplishes that which has been hereto claimed by electricians to be impossible.

MANY complaints appear in the English papers of the annoyance which people are forced to endure when riding in the street cars, and no wonder, if occurrences like the following are often repeated: A Sheffield street car, well filled with passengers, was stopped to admit a portly dame, who calmly entered, bearing in her arms a lively young pig, which forthwith began to squeal vociferously. This set a couple of roosters in the other end of the car to crowing after the manner of their kind, and the joint din of pig and roosters provoked a number of babies into screaming. Then the other passengers began protesting, and in the midst of the tumult the pig bit its mistress's finger to the bone, at which she uttered a yell which might have waked the dead; and all the time the conductor was adding his contribution to the universal uproar by declaring, in stentorian tones, that he really could not allow such "goings on."

The Stock Exchanges and Money Market.

New York Stock Exchange.

Closing Prices for the week ending April. 12.

	Th.6.	F.7.	Sat.8.	M.10.	Tu.11.	W.12.
Adams Express					140	141
Albany and Susq.						
1st mortgage						
2d mortgage						
American Express	94½			93	93½	94¼
Atlantic & Pac. Tel.						
Burl., C. R. & Nor.						
1st mortgage 5s	100					99¾
Canada Southern	51½		50¼	49½	51	50¾
1st mortgage guar	94¾		94		94½	94½
Central of N. Jersey	80⅜		80⅞	79⅞	78	74⅞
1st mort. 1890	115¼		115½		116	
7s, consol. ass	112½		112¾			
7s, convertible ass.	117					
7s, Income	95					
Adjustment	106½		106½	106¼	106	106½
Central Pacific	90½		90	90	90¼	89¾
6s, gold	115⅛		115¼		115¼	
1st M. (San Joaq)						
1st M. (Cal. & Or.)			104½			
Land grant 6s						
Chesapeake & Ohio			22	21⅜	22	
1st pref			31⅛			
2d pref	23½				23	
1st mort., series B	82			81	81½	82
Chicago and Alton				129½	129¾	129¼
Preferred						130
1st mortgage			128		122	
Sinking Fund						
Chi,, Bur. & Quincy			132	130¾	131¼	130⅜
7s, Consol. 1903			127		127	127¼
Chi., Mil. & St. Paul	111¾		111	110¼	111½	110⅞
Prefered	119½		119¾	119	120	
1st mortgage, 8s						133½
2d mort., 7 3-10s	119					
7s, gold			126			
1st M. (La. C. div)			121¾			
1st M. I. & M. div.)						119⅛
1st M. (I. & D. ext.)						
1st M. (H. & D. div.)			115		115½	
1st M. (C. & M. div.)						120¼
Consolidated S. F.				120½		
Chi. & Northwestern	128¾		128¾	123	127¾	126¾
Preferred			138⅛	137⅜		138
1st mortgage						
Sinking Fund 6s						
Consolidated 7s						132
Consol. Gold bo'ds	125½					125¾
Do. reg						
Chi., R. Isl. & Pac.	130		130	129¼	129	128
6s, 1917, c	128			127		
Clev.,Col.,Cin. & Ind.	75⅝			74	72	
1st mortgage						
Clev. & Pittsburg gr.	138¼			137		
7s, Consolidated			127½			127½
4th mortgage						
Col.,Chi.,& Ind. Cent.	12⅛		11⅞	12	12	12
1st mortgage						
2d mortgage						
Del. & Hud Canal.	105⅜		105¾	104⅞	105¼	105
Reg. 7s, 1891						
Reg. 7s, 1884	106					
7s, 1894	115½				115½	
Del., Lack. & Western	121¼		121	120¼	120⅜	119¾
2d mortgage 7s						
7s, Consol. 1907						
Erie Railway						
1st mortgage						
2d mort. 5s, ext.						
3d mortgage				104		104
4th mort. 5s, ext.						
5th mortgage					106	
6s, Consol. gold					125¾	126
Great West. 1st mort	105½					
2d mortgage				104		
Hannibal & St. Jo.						
Preferred	90		88	87	87	87
8s, Convertible	105½			106		106
Houston & Tex. Cen	69⅛			71	71	
1st mortgage						
2d mortgage			121			
Illinois Central	135¾		134½	133¼	134⅜	134⅜
LakeShore&MichSo	110½		107¼	109½	108⅛	107⅝
Consol. 7s			127¾			
Consol. 7s, reg						
2d Consolidated						
Leh. & W. B. 7s, Con						
Long Dock bonds						
Louisville & Nash.	77⅞		77	77	77⅜	73¾
7s, Consolidated	117¾					
Manhattan			51¼	51	51¼	51¼
1st pref						90
Met. Elevated	87½		87		87¼	87¾
1st mortgage	101½		101½		100½	101
Michigan Central	81½		80½	81⅝	81½	80½
7s, 1902				127¼		
Morris & Essex	123½		123		123	
1st mortgage						
2d mortgage	115¼					
7s of 1871					122½	
7s, Convertible						
7s, Consolidated						123½
N.Y. Cen. & Hud. R.	130¼		129	129⅝	129¼	128¾
6s, S. F. 1883				104		
6s, S. F., 1887					110	
1st mortgage				134	134	
1st mortgage, reg.			134			
N. Y. Elevated				117		
1st mortgage						
N. Y. & Harlem						
Preferred						
1st mortgage						
1st mortgage, reg						
N. Y., Lake Erie & W	36½		35⅝	35½	35⅞	35⅝
Preferred	74		73⅝	72½		72¾
2d Consolidated			93¾	93¾	93⅞	92¾
New 2d 5s fund	94⅛					
N.Y.,N.Hav'n&Hart	170		172	172	170½	171
North Mo. 1st mort						
Northern Pacific	40⅛		38	38¼	39⅝	39¼
Preferred	78¾		77½	77¾	78⅞	78¼
Ohio & Mississippi	36¾		37¼	37½	37½	37⅝
Preferred						98
2d mortgage						
Consolidated 7s						118¼
Consol. S. Fund						
Pacific Mail S. S. Co	39½		39¾	40	40¼	40
Pacific R. R. of Mo.						
1st mortgage						107
2d mortgage						
Panama				195	195½	
Phila. & Reading	62¼		58½	59¾	60¾	60⅜
Pitts,Ft.W.&Chi.gtd			134½			
1st mortgage	138			138		
2d mortgage					133	
3d mortgage						
Pullman Palace Car			125¾	125		125¾
Quicksil'r Min'g Co			115			
Preferred	57		56½		56½	
St. Louis & San Fran						38
Preferred			53½	53		52
1st Preferred				90½		
St. L., Alt'n & T. H.	25⅞					
Preferred			66½			
1st mortgage						
2d mort. pref						
Income bonds						
St. L., Iron Mt. & S						
1st mortgage	115¼					
2d mortgage	109¼		109¼	109½	110	
Toledo and Wabash.						
1st mortgage						
2d mortgage	104¼					
7s, Consolidated						
St. Louis Division						103¾
Union Pacific	113		112½	112	112½	111⅞
1st mortgage	117		117	116⅞	116¾	117¼
Land Grant 7s						
Sinking Fund 8s				117⅛	118¼	
United States Ex			74		74½	74
Wabash, St. L. & Pac	33¾		33	32	31½	31¼
Preferred	58½		58½	58¼	58⅝	58
New mort. 7s						
Wells-Fargo Ex	129				127½	
Western Pacific b'ds						
Western Union Tel.	86		83½	83⅛	83⅞	83
7s., S.F conv., 1900			119		119	119⅛
FEDERAL STOCKS:—						
U. S. 4s, 1907, reg	119				119⅝	119⅜
U. S. 4s, 1907, coup.	119⅜		119¼	119⅜	119⅛	120
U. S. 4½s, 1891, reg.	115½			115¾	115⅝	115⅝
U. S. 4½s, 1891, coup	115½				115¾	115¾
U. S. 5s, 1881, reg						
U. S. 5s, cont'd at 3½	103		102⅞	102⅛	102¼	102¾
U. S. 6s cont'd at 3½						101⅛
Dt. of Col. 3-65s, reg						
Dt. of Col. 3-65s, coup						

Boston Stock Exchange.

Prices for the Week Ending April 12.

	Th.6.	F.7.	Sat.8.	M.10.	Tu.11.	W.12.
Atch.,Top.&San.Fe				90	89	89	88¼
1st mortgage				119		119½	
2d mortgage							
Land Grant 7s						114½	
Boston & Albany				166	164	164	165
7s reg							
Boston and Lowell						101½	
Boston & Maine				146	145½		145¾
Boston & Providence							164
Bos'n,Hart.& Erie7s					50⅜	49	50¼	48½
Burl. & Mo.R.L.G.7s							
Burl. & Mo.R.in Neb							
6s, exempt					112	112		
4s							82	
Chi.,Burl. & Quincy					132⅜	131	131½	131¼
Cin.,Sand&Clev($50)							25¼	25
Concord ($50)								
Connecticut River								
Eastern					44½	42	42	42
New 4½ Bonds					107	107½	107½	107½
Fitchburg					126	126	125½	124¾
N.Y. & New England					48	47		
7s					114	114		114¾
Northern N. H.					110			
Norwich&Worcester							157	
Ogden & Lake Cham								
Preferred								
Old Colony					130	130⅛		
Ph.,Wil.&Balt.($50)								
Portl'd,Saco & Ports								115
Pueblo & Ark Val								
7s								115
Pullman Palace Car						127		126
Union Pacific					113¾	111¾	115¼	112
6s							115¾	
Land Grant 7s								
Sinking Fund 8s					117½	117	117½	117¾
Vermont & Canada								
Vermont & Mass								
Worcester & Nashua						57		
Cambridge (Horse)								
Metropolitan(Horse)								76
Middlesex (Horse)								
Cal. & Hecla Min'gCo							240	240
Quincy					45½	46	47	47

Philadelphia Stock Exchange.

Closing Prices for the Week Ending April 11.

	W.5.	Th.6.	F.7.	Sat.8.	M.10.	Tu.11.
Allegh'y Val. 7 3-10s	122					
7s, Income		49	49		49½	49	49
Buff., Pitts & West.	18¼	18			17⅛	17	17⅛
Camd'n & Am. 6s, '83					102		102
6s, 1889						108	
Mort. 6s, 1889			114				
Camden & Atlantic							
Preferred							
1st mortgage							
2d mortgage							
Catawissa				23¾		23	
Preferred	56		56½			56½	
7s, new							
Del. & Bound Brook							
7s	125				125½		
Elmira&Williamsp't							
Preferred							
Hunt. & B. Top Mt.	13					12½	12¾
Preferred						25½	
2d mortgage							
Lehigh Navigation	41¼	41½			41	40⅝	41⅛
6s, 1884			103⅜				
Gold Loan		111½					
Railroad Loan							116
Conv. Gold Loan							108½
Consol. Mort, 7s		118					
Lehigh Valley	61	61			61	61	60¾
1st mort. 6s, coup							
1st mort. 6s, reg							
2d mort. 7s							
Consol mort. 6s		121				120	
Consol.mtg.6s,reg							
Little Schuylkill	57¼	57½			57¼		
Minehill&Sch.Hav'n							
North Pennsylvania		63½			63¾	63¾	64
1st mortgage 6s							
2d mortgage 7s							
Genl. mtg.7s,coup							
Genl. mtg. 7s, reg							
Northern Central	50⅜	50¼					50⅛
5s		97¼					
Northern Pacific	39⅜	40			38⅜	38¼	39⅛
Preferred	78⅜	78⅞			77¾	77⅞	78¾
Pennsylvania R. R.	62⅜	62⅝				61⅝	62
1st mortgage							
Gen'l mort							
Gen'l mort reg							
Consol. mort. 6s							
Consol. mort. reg	119	119					119
Pa. State 5s, new					117		
do 4s, new							
Phila. & Reading	31¾	31				30	30¾
1st mortgage 6s							122
7s of 1893							
7s, new convert	79¾	79					
Consol. mort. 7s							125½
Consol. mort. reg							
Gen'l mort. 6s	98	98			97¾	97	97
Philadelphia & Erie		16			16	15¾	
1st mortgage 5s						102½	
2d mortgage 7s					114¾		115
Pittsb.,Cin.&St.L.7s							
Pitts.,Tit.&Buff. 7s	95	94			95		95
Schuylkill Navi't'n							106
Preferred	13¾	13¾			13¾	13¾	13½
6s, 1872							
6s, 1882							
United Co. of N. J.	184¾	185			185	185	185
Hestonville, (Horse)	16						
Chestnut&Wal.(do)							
Green & Coates (do)							

Baltimore Stock Exchange.

Closing Prices for the Week Ending April 11.

	W.5.	Th.6.	F.7.	Sat.8.	M.10.	Tu.11.
Baltimore & Ohio						
6s, 1880						
6s, 1885						105
Central Ohio ($50)	47					
1st mortgage						108¾
Marietta & Cincin'ti						
1st mortgage, 7s		122½				123	123¾
2d mortgage, 7s		101			101	100½	100
3d mortgage, 8s		55				54¼	53⅛
Northern Cen. ($50)					50	49¾	
2d mort., 6s 1885							
3d mort., 6s, 1900							
6s, 1900, gold		116					116
6s, 1904, gold							
Pitts. & Connellsv. 7s							
Virginia 6s, Consol.	66	67			67	67¼	66¾
Consol. coupons		60					60
10-40 bonds	43¼	43½				43	
Def'd Certificates							
Western Maryland							
1st M.,end. by Balt							
2d M. do							
3d M., do							
1st M.,unendors'd							
2d M.,end. WashCo							
2d M., preferred							
City Passenger R R.							

London Stock Exchange.

	Closing Prices — Mar. 24.		Mar. 31.	
Baltimore & Ohio (sterling)	112	114	114	116
Central of N. J., $100 shares	93	98	93	98
Do. consol. mort	112	114	113	115
Do. Adjustment Bonds	104	109	104	109
Do. Income Bonds	102	105	98	102
Det., G'd Haven & Mil. Equip bds	109	111	109	111
Do. Con. M. 5p.c., till '83 aft'r 6p.c	108	110	108	110
Illinois Central $100 shares	139	141	139	141
Lehigh Valley Cons. mortgage	118	122	118	122
Louisville & Nashville mort 6s	100	102	101	103
Do. Sink. Fund bds (S. & N. Ala)	97	99	98	100
Do. capital stock $100 shares	78	80	82	84
N. Y. Cent. & Hud. R. mt. bds	133	136	133	136
Do. $100 shares	135½	136½	136	137
Do mort. bonds (stg.)	120	124	120	124
N. Y., Lake Erie & West., $100 shs	38	38½	38¼	39
Do. 6 p. c. pref. $100 shares	77	79	78	80
Do. 1st Con. Mort. bds (Erie)	127	129	127	129
Do. do. Funded Coupon bds	123	125	123	125
Do. 2d Consol Mort. bonds	96⅛	97⅛	97½	98⅛
Do. do. Funded Coupon bds	95	97	95	97
Do. Gold Income bonds	88	92	88	92
N. Y., Pa. & Ohio 1st mort. bonds	48	49	49	56
Do. Prior Lien bds (sterling)	101	105	101	105
Pennsylvania, $50 shares	61⅛	65⅛	65	66
Do. Con. Sink Fund Mort	117	120	118	123
Philadelphia & Reading $50 shs	29½	30	32	32⅛
General Consol Mortgage	116	118	118	120
Do. Improvement Mortgage	106	108	106	108
Do. Gen. Mtg. '74, ex-def'd coup.	97	98	97	98
Do. Scrip for the 6 def. ½ coup.	97	100	97	100
Pittsb., Ft. W. & Chi. Eq. bds	104	106	104	106
St. L. Bridge 1st mort. gold b'd	123	125	123	125
Do. 1st pref. stock	97	100	98	102
Union Pa. Land Grant 1st. mtg	113	115	113	115
Wabash, St. L. & P. $100 shs	36	37	35⅛	36⅛
Do. $100 pref. shares	62½	63½	62	63
Do. gen. mort. bonds	85	87	85	87

AMERICAN RAILROAD JOURNAL.

Financial and Commercial Review.

THURSDAY EVENING, April 13, 1882.

CALL loans were easy throughout the day at 4@5 per cent on stocks, and 2@3 per cent on Governments. At the close the rate for call loans on stocks was 3@4 per cent.

The posted rates this morning for prime bankers sterling were 4.87@4.90. The actual rates were 4.86¼@4.86½ and 4.89@4.89¼; for cable transfers 4.89½@4.90; and for prime commercial bills 4.84¾@4.85. The rate for Continental exchange is 5.18¾@5.17½ for 60 day, and 5.15@5.14⅜ for short, and for Marks 95@¼ for 60 day, and 95⅝@⅜ for short, and for Guilders 40⅛ for 60 day, and 40½ for short date.

The "Reorganization First Lien Bonds" of the New York, Lake Erie and Western Railroad Company have been placed on the regular list at the New York Stock Exchange. These bonds are issued under and in pursuance of the plan and agreement of foreclosure of the Erie Railway Company, set forth in the certificate of incorporation of the New York, Lake Erie and Western Railroad Company, amounting in the aggregate to $2,500,000, bearing coupons at six per cent per annum, payable in gold coin or sterling money, in New York City or London. The bonds are dated October 5, 1878; principal payable December 1, 1908. The mortgage under which these bonds are created is subject to the existing prior liens of the first, second, third, fourth and fifth mortgages of the New York and Erie Railroad Company and the Buffalo Branch of the Erie Railway Company, and also the first consolidated mortgage of the latter-named Company and the coupon bonds issued to secure the deferred interest on said first consolidated mortgage bonds.

The Secretary of the Treasury will not call any continued 5 per cent bonds before the continued 6 per cents have been called. The last call for 6s may contain a call for some of the 5s. When the secretary made his first call there were outstanding of the issue of 1861 $127,597,200 and of the issue of 1863 $50,457,950, making in all $178,055,150. Of this amount about $12,000,000 of the 6s of 1861 and about $48,000,000 of the 6s of 1863 are still to be called. Future calls will be based upon figures received from different bureaus of the Treasury Department. It is anticipated that the surplus revenues from month to month will warrant the calling of $15,000,000 each month hereafter.

According to a statement prepared by the Third Assistant Postmaster-General, the number of postage stamps, cards and stamped envelopes issued during the nine months ending March 31, 1882, aggregated 1,299,982,627, valued at $30,697,114.07. This is an increase over the corresponding period of the previous year of 165,825,278 pieces, or 14.6 per cent, and in value of $4,666,915.72, or 18 per cent. The receipts from the sale of stamps for the last quarter ending March 31, 1882, aggregated $11,075,101.59. This is an increase over the previous quarter of $969,234.06, and over the corresponding quarter of 1881 of $1,693,948.65, or more than 18 per cent.

The comptroller of the currency has, with the approval of the Secretary of the Treasury, decided to issue $5 national bank notes upon a new plate, the principal features of which will be an engraved head of the late President Garfield, with the new charter numbers in various portions of the note, and particularly in the border, so that the identity of the note may be easily ascertained from any fragment. The other denominations of national bank notes of the series of 1882 will also be changed so that they can be readily distinguished from former issues.

The latest foreign mail has brought the text of the new arrangement as to discount on commercial sterling bills, which has been approved by the leading bankers there. It is proposed that from and after the 1st of July next the acceptors of bills payable in Great Britain and Ireland desiring to retire the documents hypothecated to secure the payment of the same at maturity shall be allowed a rebate of interest at the rate of one-half per cent per annum above the advertised rate of interest for short deposits allowed by the leading joint stock banks in London. This agreement is approved, among others, by Baring Bros. & Co., Brown, Shipley & Co., J. S. Morgan & Co., N. M. Rothschild & Sons, Morton, Rose & Co., Fred. Huth & Co., Seligman Brothers, C. M. Lampson & Co., Speyer Brothers, Mellville, Evans & Co., Bank of British North America, Bank of Montreal, Bank of British Columbia, German Bank of London, Anglo-Californian Bank, London and San Francisco Bank, London Bank of Mexico and South America, the Merchant Banking Company of London, International Bank of London, and Deutsche Bank (Berlin), London Agency.

The Boston *Post* says that attachment suits amounting to nearly $80,000 have been filed against the Chicago, Texas and Mexican Central Railroad recently by the local creditors at Dallas, Texas; that all the rolling-stock will be seized, also the lands and other property of the Company; that trains run between Dallas and Cleburn in charge of deputy sheriffs; and that the management have made an unsuccessful appeal to the creditors for further leniency.

A statement of the receipts and expenditures of the Post Office Department for the quarter ending Dec. 31, 1881, shows the revenues were $10,620,400, and the expenditures $9,941,976, leaving a surplus of receipts over expenditures of $678,424.20. This is the first quarter since 1865 that the revenues of the department have exceeded the expenditures. For the corresponding quarter of 1880 there was a deficiency of over $65,000.

The 4½ per cent 10-30 bonds, issued to adjust the old State debt of Minnesota, about which there has been so much controversy, having been declared legal by the State Supreme Court have now secured public confidence, and the State itself has invested $1,200,000 in them and will soon take more.

The territory of Dakota is now free from debt, and the treasury contains $33,500.

Mr. F. B. Gowan, President of the Philadelphia and Reading Railroad Company, before taking his departure for Europe on the 4th inst., issued an address to the stockholders of his Company in which he recites the history of his scheme for funding the bonded debt of the Company into securities bearing a lower rate of interest, and paying off its floating debt, which is now being carried into effect, and predicts that it will produce most favorable results. He had fully matured his plan in December, 1880, and a month later had successfully placed the entire issue of deferred income bonds, and was about to sell $40,000,000 5 per cent consols, the proceeds of which would have met all maturing obligations and left a surplus of several millions of dollars in the treasury of the Company for the purchase of six and seven per cent bonds, when he was interrupted by an injunction issued by the United States Circuit Court at the suit of the McCalmonts, which prevented all further action.

The legal obstacles to the consummation of the scheme having now been removed, the unpaid installments on the deferred income bonds (some $8,000,000) have been called in, and it is proposed to sell $40,000,000 of the consols immediately. The funded debt of the companies (the Reading Railroad and the Reading Coal and Iron Company) now is $94,177,194. Other obligations on account of leased lines and debts upon which interest is paid run the total up $151,509,449, upon which the fixed interest charge is $9,200,000. The proposed new mortgage will be for $160,000,000, and by retiring the old debt, which the new is intended to supersede, he expects to reduce the interest charge to $8,000,000 per annum. The net earnings last year were over $10,000,000, and Mr. Gowen predicts that before long they will be $12,000,000. This will leave a handsome surplus for dividends. Mr. Gowen earnestly advises all the Reading stockholders to purchase largely of deferred income bonds. He thinks that those who control the management of the Company ought to own its securities.

The stockholders of the Louisville, Evansville and St. Louis Railway Company, at a meeting held in Mount Carmel, Ill., March 22, au-

thorized the issuance of $1,000,000 of second mortgage bonds to raise funds to complete and equip that road.

The New York, Lake Erie and Western Railroad Company paid its State taxes on dividends on the 3d inst., amounting to $53,991.38.

The citizens of Smithtown, L. I., have voted by a large majority to pay the interest on the town bonds issued to build part of the Port Jefferson Railroad. The bonds bear 7 per cent interest.

The Long Island Railroad Company has purchased the branch railroad running from Pearsall's to Long Beach for $40,000.

The Treasury commenced on Saturday last the redemption of the $20,000,000 embraced in the 108th call. The calls not yet matured are for $5,000,000 due 3d of May; $5,000,000 due 10th of May, $5,000,000 due 17th of May and $15,000,000 due 7th of June—total, $30,000,000. The total amount of extended 6s issued was $178,000,000. The amount called and redeemed is $155,000,000, leaving $23,000,000 outstanding and uncalled.

The earnings of the Cincinnati, Richmond and Fort Wayne Railroad for the year ending December 31, 1881, were $407,447.51, which was sufficient to pay the interest on the bonds and leave a fair balance to be applied on other indebtedness.

The following quotations of sales of railway and other securities, for the week, are in addition to those given elsewhere in our columns:

New York.—Boston and New York Air Line pref., 64; Boston, Hartford and Erie 1st, 49; Buffalo, New York and Erie 1st, 1898, 125; Chicago, St. Paul, Minneapolis and Omaha, 35¾; do. pref., 99⅜; do. consol., 103; Central Iowa, 33½; Chesapeake and Ohio 6s, 1911, 100⅛; do. cur. int., 46½; Chicago, Milwaukee and St. Paul, Chicago and Pacific div. 1st, 93⅞; do. S. M. div. 1st, 106; do. La C. and Dav. div. 1st, 93; Cairo and Fulton 1st, 110; Chicago and Northwestern S. F. 5s, 99; Chicago, Burlington and Quincy 8s, 104¼; do. Iowa div. 4s, 85½; Cedar Falls and Minnesota 1st, 112; Columbus, Chicago and Indiana Central 1st, Trust Co. certif. ass. sup., 110; Chicago, St. Paul and Minn. 1st, 103; Central Pacific, State Aid, 103½; Clev., Col., Cin. and Ind. consol., 126; Denver and Rio Grande, 62¼; do. 1st, 114; do. consol., 104; Dubuque and Sioux City, 83; Detroit, Monroe and Toledo 1st, 91½ Denver, South Park and Pacific 1st, 104; East Tenn., Virginia and Georgia, 11⅜; do. pref., 20¼; do. inc., 47⅜; do. 5s, 74; Elizabeth, Lexington and Big Sandy 6s, 99½; Green Bay, Winona and St. Peter, 11⅜; do. 1st, 83; Houston and Texas Central 1st, Western div., 107⅝; Hudson River 2d, S. F., 110½; Indianapolis, Decatur and Springfield pref., 31; do. 1st, 100; Indiana, Bloomington and Western, 40½; do. 1st, 89; do. 2d, 73½; International and Great Northern 6s, 84½; do. 1st, 107; Kansas Pacific 1st consol., 104½; do. 6s, Denver div. ass., 110; Louisville and Nashville Gen'l mort. 6s, 99¾; do. N. O. and Mobile div. 1st, 95; Lake Erie and Western, 31; do. 1st, 104; Louisiana and Missouri River, 20; Louisville, New Albany and Chicago, 63; do. 1st, 103; Long Island, 55; Lehigh and Wilkesbarre inc., 80; do. consol. ass., 103¾; Manhattan Beach, 33¼; do. 7s, 90; Marietta and Cincinnati 1st pref., 9⅞; do. 2d pref., 5½; Mobile and Ohio, 25; do. 1st deben., 83; do. 2d deben., 50½; do. 1st mort., 110½; Missouri, Kansas and Texas, 31⅜; do. consol., 105; do. 2d, 64; do. gen'l mort. 6s, 82; Missouri Pacific, 92½; do. 1st consol., 105; do. 3d, 110½; Milwaukee, Lake Shore and Western, 48; do. 1st, 103; Memphis and Charleston, 54½; Minneapolis and St. Louis 1st, Iowa ext., 112; Michigan Cent. 5s, 98; Nashville, Chattanooga and St. Louis 60; do. 1st, 115½; Northern Pacific 1st, 100⅞; New York, Ontario and Western, 26⅜; Norfolk and Western pref., 51¼; New Orleans Pacific 1st, 85; New Jersey Southern 6s, guar., 87; Ohio Southern, 18; do. 1st, 87; do. inc., 32; Oregon Railway and Nav., 141¾; do. 1st, 109; Ohio Central, 16¾; do. 1st, 98; do. inc., 35; do. Terminal Trust 6s, 92¾; Oregon Transp., 72; Ohio and Mississippi, Springfield div. 1st, 120; Peoria, Decatur and Evansville, 29¾; Quincy and Toledo 1st, 106; Rochester and Pittsburg, 30; do. inc., 45; Richmond and Alleghany, 23½; Richmond and Danville, West Point, 152; do. 1st, 100¼; St. Louis, Alton and Terre Haute div. bonds, 37½; St. Paul, Minneapolis and Manitoba, 119⅜; do. 1st, 109½; do. 2d, 105⅛; do. Dakota ext. 1st, 107½; St. Paul and Duluth, 70; South Paclfic 1st, 105; St. Paul and Sioux City 1st, 110¼; South Carolina 1st, 98; Syracuse, Binghamton and New York 1st, 120½; St. Louis, Iron Mountain and Southern, Cairo, Arkansas and Texas 1st, 108; St. Louis and San Francisco 2d, Class B, 92; do. C, 91⅜; Scioto Valley 1st, 101¾; Southern Pacific of California 1st, 103½; St. Louis, Kansas City and Northern, R. E. 7s, 105; do. Omaha div. 1st, 110½; Toledo Delphos and Burlington, 15; Texas and Pacific, 39⅝; do. inc. L. G., 65; do. Ric Grande div. 1st, 81⅜; Toledo, Peoria and Western 1st, 110; Toledo and Wabash Equip., 50; Wabash, St. Louis and Pacific 6s, 81½; do. Iowa div. 1st, 92; Winona and St. Peter 1st, 109; Alabama, Class A, 82; do. C, 85⅜; Arkansas 7s, M. O. & R. R., 22½; Louisiana 7s, consol., 63; Missouri 6s, 1887, 110; South Carolina 6s, non-fund., 10; Tennessee 6s, old, 49⅞; Virginia 6s, def., 14; American District Telegraph, 50½; Canton Co., 60; Sutro Tunnel, ½; Colorado Coal and Iron, 53; do. 6s, 93; Maryland Coal, 16⅛; Pennsylvania Coal, 245; Excelsior, 2½; Little Pittsburgh, 1⅞; Ontario, 35¼; Standard, 18⅞.

Philadelphia.—Allegheny Valley scrip, 47; Central Transportation, 31½; Catawissa 2d pref., 55; Cincinnati 7.30s, 130; Norfolk and Western pref., 53½; Nesquehoning Valley, 55; New Orleans Pacific 6s, 85¼; Oil Creek 1st, 101; Pennsylvania Canal 6s, 95; Philadelphia and Reading R. R. scrip, 92; Philadelphia, Wilmington and Baltimore 4s, 94½; Susq. Canal 6s, 59; St. Paul and Duluth, 30½; do. pref., 80; Texas and Pacific 6s, Rio Grande div., 83¼; Union and Titusville 7s, 99; West Jersey consol. 6s, 112½. The latest quotations are: City 6s, 108@118; do. free of tax, 128@132; do. 4s, new, 108@113; Pennsylvania State 5s, new loan, 117@119; do. 4s, old, 110@114; do. 4s, new, 114@114½; Philadelphia and Reading R. R., 30¼@30½; do. consol. mort. 7s, reg., 125@126; do. mort. 6s, 119@120; do. gen'l mort. 6s, coupon, 97@97½; do. 7s, 1893, 117½@120½; do. new, conv., 74@76; United New Jersey R. R. and Canal, 184¾@185¼; Buffalo, Pittsburg and Western, 17½@17⅝; Pittsburg, Titusville and Buffalo 7s, 94¾@95¼; Camden and Amboy mort. 6s, 1889, 114¼@114¾; Pennsylvania R. R., 62@62⅛; do. general mort. 6s, coupon, 120@122; do. reg., 120@122; do. consol. mort. 6s, reg., 119@119½; Little Schuylkill R. R., 57¼@57¾; Morris Canal, 65@69; do. pref., 165@169; Schuylkill Navigation, 5@6; do. pref., 13¼@14; do. 6s. 1882, 92¾@93¼; do. 1872, 105¾@106¼; Elmira and Williamsport pref., 58@60; do. 6s, 115¾@116½; do. 5s, 95@102; Lehigh Coal and Navigation, 40⅞@41; do. 6s, 1884, 103½@105; do. R. R. loan, 116@117; do. Gold Loan, 111@112; do. consol. 7s, 117½@118½; Northern Pacific, 39½@39¾; do. pref., 78¾@78⅞; North Pennsylvania, 63¾@64¼; do. 6s, 106@107; do. 7s, 120@121; do. 7s, General mort. reg., 120¾@121¼; Philadelphia and Erie, 15½@16½; do. 7s, 114¾@115¼; do. 5s, 102¼@103; Minehill, 62@62½; Catawissa, 23@23½; do. pref., 56¼@57; do. new pref., 54¾@55¼; do. 7s, 1900, 118@—; Lehigh Valley 60½@60⅞; do. 6s, coupon, 121@123; do. reg., 123¼@123¾; do. 2d mort. 7s, 130½@133; do. consol. mort. 120@121; Fifth and Sixth streets (horse), 152@155; Second and Third, 109@115; Thirteenth and Fifteenth, 70@78; Spruce and Pine, 46@48; Green and Coates, 75@76; Chestnut and Walnut, 90@92; Germantown, 65@80; Union, 110@115; West Philadelphia, 105@110; People's 11½@13; Continental, 100@102.

Baltimore.—Atlanta and Charlotte, 74; do. 1st, 108; do. inc., 90; Atlantic Coal, 1.20; Baltimore City 6s, 1886, do. 6s, 107; 1890, 116½; do. 5s, 1916, 122⅜; do. 5s, 1900, 119; Columbia and Greenville 1st, 101⅜; Maryland Defense 6s, 103¾; North Carolina 4s, 82; Ohio and Mississippi, Springfield div. 1st, 120½; Virginia Midland 2d, mort., 107; do. 4th mort., 50½; do. inc., 96½; Virginia Peelers coup., 38; Virginia and Tennesee 2d, 101¾; do. 8s, 124. The latest quotations are: Atlanta and Charlotte 1st, 107½@109; Baltimore and Ohio, 195@200; do. 6s, 1885, 104; Baltimore City 6s, 1890, 116½@—; do. 5s, 1900,—@119½; do. 4s, 1920, 112@—; Columbia and Greenville 1st, 101@102; Central Ohio 1st, 108¾@109½; Canton 6s, gold, 102½@—; Marietta and Cincinnati 1st, 123@124; do. 2d, 100@101; do. 3d, 54½@54⅝; Northern Central, 50@50¼; do. 6s, 1885, 105½@—; do. 6s, 1904, gold, 112¾@—; do. 5s, 1926, 97@98; Pittsburgh and Connellsville 7s, 123½@—; Virginia Midland 5th mort., 93@95; Virginia Consols, 67@67½; do. 10-40s, 43@43⅛.

Boston.—Atlantic and Pacific 6s, 95; Atchison, Topeka and Santa Fe plain 5s, 88½; Burlington and Missouri River Railroad in Nebraska 6s, non-exempt, 103; Boston, Revere Beach and Lynn, 116; do. 6s, 112; Boston, Clinton, Fitchburg and New Bedford, 65; do. pref., 130; Boston Water Power, 5½; Boston Land, 7½; Chicago, Milwaukee and St. Paul, Dubuque div. 6s, 103; Connecticut and Passumpsic Rivers R. R., 91; Connotton Valley, 6⅝; do. 7s, 52; do. 7s, Straitsville div., 35; California Southern blocks, 120; Central of Iowa, 33¾; Chicago and West Michigan 5s, 95; Chicago, Burlington and Quincy 7s, 124; do. 4s, Denver ext., 83¾; Cincinnati, Sandusky and Cleveland 7s, 100; Detroit, Lansing and Northern 7s, 116½; Flint and Pere Marquette, 24½; do. pref., 97; Highland Street R. R., 131½; Iowa

Falls and Sioux City, 83; Kansas City, Topeka and Western 7s, 118½; Kansas City, St. Joseph and Council Bluffs 7s, 115; Little Rock and Fort Smith, 52; do, 7s, 108½; Mexican Central 7s, 84¾; do. block, No. 2, 108½; Marquette, Houghton and Ontanagon, 68; Massachusetts Central, 10; do. 6s, 68; New York and New England 6s, 104;¼ Oregon Short Line Sub., 113¼; do. 6s, 105; Rutland pref., 24; Republican Valley 6s, 103½; Summit Branch, 12⅜; Sonora 7s, 105; Toledo, Delphos and Burlington, 7½; do. inc. 6s, M. L., 23½; S. E. div. 6s, 72; do. inc., 18½; Toledo, Cincinnati and St. Louis, 7½; Wisconsin Central, 17½; Atlantic Mining Co., 14½; Franklin, 11⅛; Osceola, 34; Pewabic, 12; Silver Islet, 18; Sullivan, 1⅛.

The Coal Trade.

THE leading coal-carrying companies make the following reports of their tonnage for the week ending April 1st, and for the year to same date, compared with their respective amounts carried to the same time last year:—

	Week.	1882.	1881.
Reading Railroad	200,915	2,344,781	2,185,614
Schuylkill Canal	11,862	42,287	11,530
Lehigh Valley	143,838	1,819,966	1,666,958
Delaware, Lackawanna and Western	91,575	914,927	985,054
Shamokin	14,083	205,491	239,333
Central R. R. of New Jersey	96,237	840,371	940,005
United R. R. of New Jersey	41,828	377,308	377,564
Pennsylvania Coal	29,863	216,408	251,548
Delaware and Hudson Canal	96,412	741,988	870,745
Huntingdon and Broad Top Mountain	5,843	146,070	118,287
Penn. and New York	32,769	476,479	423,405
Clearfield, Pa.	68,452	672,902	519,706

The total tonnage of anthracite coal from all the regions for the week ending April 1, as reported by the several carrying companies, amounted to 611,569 tons, against 359,279 tons in the corresponding week last year, an increase of 254,290 tons. The total amount of anthracite mined for the year is 5,670,221 tons, against 5,998,160 tons for the same period last year, a decrease of 327,929 tons. The quantity of bituminous coal sent to market for the week amounted to 75,840 tons, against 58,114 tons in corresponding week last year, an increase of 17,726 tons. The total amount of bituminous mined for the year is 1,194,956 tons, against 1,069,953 tons for the corresponding period last year, an increase of 125,903 tons. The total tonnage of all kinds of coal for the week is 687,400 tons, against 415,393 tons in corresponding week last year, an increase of 217,062 tons, and the total tonnage for the coal year is 6,865,177 tons, against 7,067,213 tons to same date last year, a decrease of 202,036 tons. The quantity of coal and coke carried over the Pennsylvania Railroad for the week ending March 25 was 226,913 tons, of which 163,595 tons were coal and 63,318 tons coke. The total tonnage for the year thus far has been 2,517,464 tons, of which 1,767,671 tons were coal and 749,793 tons coke. These figures embrace all the coal and coke carried over the road east and west. The shipments of bituminous coal from the mines of the Cumberland coal region for the week ending April 1 were 5,237 tons, and for the year to that date 450,002 tons, an increase of 57,478 tons as compared with the corresponding period of 1881. All the coal was carried by the Baltimore and Ohio Railroad, whose shipments for the year aggregate 367,106 tons, an increase of 28,667 tons over 1881. The shipments to the Chesapeake and Ohio Canal for the year are 4,222 tons, a decrease of 3,178 tons. The Pennsylvania Railroad has carried 74,342 tons, an increase of 28,154 tons over last year. The Reading Railroad shipment for last week, ending April 8, was about 111,600 tons, of which 25,900 tons were sent to and 35,500 tons shipped from Port Richmond, and 7,900 tons sent to and 16,300 tons shipped from Elizabethport.—*Phil. Ledger, April* 10.

The Baggage Smasher.

WITH many a curve the trunks I pitch,
With many a shout and sally;
At station, siding, crossing, switch,
On mountain grade or valley,
I heave, I push, I sling, I toss,
With vigorous endeavor,
And men may smile and men may cross,
But I sling trunks forever.

The paper trunk from country town
I balances and dandles;
I turn it once or twice around,
And pull out all the handles,
And grumble over traveling-bags
And monstrous sample cases;
But I can smash the maker's brags
And plaster Paris vases!
They holler, holler, as I go,
But they can stop me never,
For they will learn just what I know—
A trunk won't last for ever!

New York and Brooklyn Ferry.

SEVERAL improvements have been commenced by the New York and Brooklyn Ferry Company on its lines to Williamsburg, and many more are promised for the accommodation of the public. All the employes are shortly to be presented with a neat uniform, at an expense to the Company of about $2,800. The boats are all to be refitted as rapidly as possible in the same style as the Alaska, now running, which consists of all the latest improvements for the ferry traffic. Life saving apparatus are conveniently placed at each end of the boat, on deck; extra lights in the midship house and cabins; stronger chains and at such elevations as to prevent teams getting overboard (gates being considered as encumbrances with these safeguards); large boxes on the main deck, with life preservers, in addition to those under each seat; and large ventilators twenty feet long over each cabin, affording light and air. The midship deck is also provided with similar ventilators. All the trimmings are painted to imitate black walnut, and with large mirrors and the substitution of black walnut for the unsightly iron arms subdividing the seats make the cabins handsome and commodious.

WHY is the discovery of the North Pole like an illicit whisky manufactory? Because it is a secret still.

WHAT makes a man's heart glad is to wake up on Sunday morning and find a drizzling rain falling, just enough to prevent his wife from going to church and to make the fishing good.

A RUSSIAN officer, says the *Nature*, has invented a very ingenious apparatus for ascertaining the depth of the sea, without the use of a costly and heavy line. Indeed, no line at all is used. The instrument consists of a piece of lead, a small wheel with a contrivance for registering the number of revolutions, and a float. While the apparatus sinks, the wheel revolves, and the registered revolutions indicate the depth. When the bottom is reached the lead becomes detached, the float begins to act, and the machine shoots up to the surface, where it can be easily fished up by a net and the register read off. But this contrivance is hardly new, and accuracy its is very questionable.

M. CORNU holds that steel plates cannot at present and as a general rule be depended upon in boiler-making. More care is required in their manipulation than the most of manufacturers seem disposed to bestow; and the more rapid corrosion of steel plates, taken in connection with their thinness increases, the risk of disaster.

VERY little coal is found in Italy. Anthracite is to be had in the Valley of Aosta, but on good authority the annual output is said not to exceed 2,000 tons. Lignite exists in larger quantities, being found in Tuscany, Sardinia, Liguria, near Vicenza, and in Lombardy. The extent of the measures is about 33,000 acres, yielding annually only 100,000 tons, and bringing an income of a little over $2 a ton. Mining is in a very primitive condition, and it is difficult to obtain engineers, as there is no school of mines. Iron ore is worked in Lombardy, Piedmont, Sardinia, and Elba, the latter place giving nearly 130,000 tons annually. There are in all Italy about 65 iron mines actually worked.

THE LAKE SHORE AND MICHIGAN SOUTHERN RAILWAY COMPANY.
TREASURER'S OFFICE, GRAND CENTRAL DEPOT,
NEW YORK, March 28, 1882.

The Board of Directors of this company have this day declared a dividend of TWO per cent upon the capital stock, payable on MONDAY, the 1st day of May next, at this office.

For the purposes of this dividend, and also for the annual meeting of the stockholders for the election of directors, etc., which is to be held on the 3d day of May next, the transfer books will be closed at 3 o'clock P. M. on Saturday, the 1st day of April next, and will be reopened on the morning of Friday, the 5th day of May next.

E. D. WORCESTER, Treasurer.

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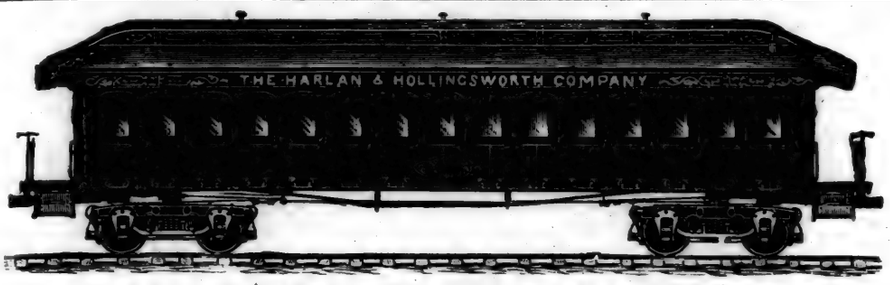
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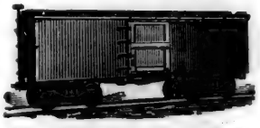
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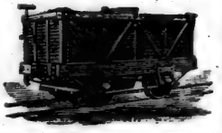
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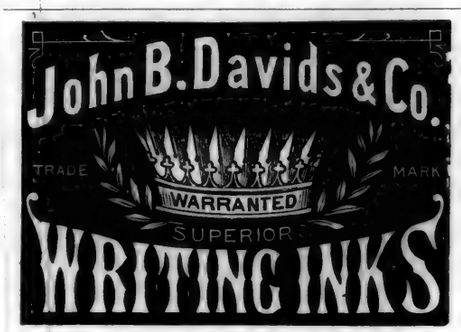
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SECOND QUARTO SERIES.—VOL. XXXVIII., No. 15.] NEW YORK, APRIL 22, 1882. [WHOLE No. 2,400.—VOL. LV.

Spain and the Straits of Gibraltar in 1881.

AT a meeting of the American Geographical and Statistical Society held in Chickering Hall, this city, on the 13th inst., the President, Chief Justice Daly, read a paper on "Spain and the Straits of Gibraltar in 1881," in which he stated that Spain until recently was less visited than any of the large European countries, for traveling there was attended by many inconveniences, and was not wholly free from peril. People traveling by private coach or upon a mule are obliged to carry their own provisions with them, for the Spanish inn usually furnishes nothing but beds of straw to lie on and provender for the animals. He remarked that he had selected Spain for his subject because it was different from any other European country. It is the oldest of the civilized countries of Western Europe. Cadiz was in existence before Rome was founded, and Malaga is nearly as old as Cadiz. It was in Spain that Mohammedanism made its furthest advances and secured its firmest footing during a dominion and occupation of more or less of the country for eight centuries. Spain is a country of especial interest to Americans, being the mother land of Central and South America, and where Columbus received that recognition and assistance that "enabled him to confer the greatest boon upon the human race that was ever bestowed by a geographical discoverer." He described at some length the geographical formation of the country, the soil, the climate, and the means of communication. The seat of the central authority is Madrid. It is the residence of the sovereign and where the two legislative chambers of the nation, or the Cortes, sit. Madrid, however, is not Spain in the sense in which London or Paris reflect England or France. It is, in fact, less Spanish than any other part of the kingdom. It is without commerce, without manufactures, and surrounded by a great tract of country destitute of agriculture. There are fine promenades, many theatres, and numerous gorgeously decorated cafes. In general terms it is a city of pleasure, where the morals are lax and the means of amusement abundant.

A notable feature of the geography of Spain is the nature of the water supply for the purposes of agriculture. There are 230 rivers in the country, and yet many districts suffer from want of water. Spain is rapidly changing in many ways. A continuous chain of railroad over the whole country has brought about greater and more rapid intercommunication, in consequence of which greater community of interest and greater uniformity in dress and manners is appearing. What was once picturesque in the dress, in the manners, and in the customs of the people is fast disappearing and will soon have passed away altogether. If one would see the national dances, the bolero, the fandango, or the cachuca, they are to be seen only at the theatres. Gay, indolent Seville has now its factories and its line of steamships on the Guadalquiver.

Barcelona is not a decaying, struggling place, but a fine city, expanding in every direction and full of commercial life and activity. Even Saragossa, one of the most sombre-looking of Spanish cities, has waked up to activity. Signs of progress were visible in every city that the speaker passed through except Toledo. Spaniards are a people that are easily misunderstood by foreigners, and have consequently been much misrepresented. They are not themselves partial to foreigners, but to strangers passing through the country they are courteous and kindly. They are a most independent people in all classes. The Spaniard is temperate both in eating and drinking. The young ladies are healthy, well-formed, graceful, and vigorous, and they generally manage their own love affairs. In political affairs in Spain there is a good deal of earnest and eloquent discussion, but practical legislation moves slowly. Persistent attempts have been made to establish the Protestant religion in Spain, but it has met with but little success.

A Locomotive Left Without Water.

SINCE the breaking up of the ice-bridge the inhabitants of Longueuil have been coming to this city *via* St. Lambert, on the Montreal & Sorel Railway. Previous to the opening of the line an arrangement was made by which the Municipal Council of Longueuil expressed their willingness to grant the locomotives belonging to the Montreal and Sorel Railway water free of charge, provided they would run a train twice a day in connection with the suburban train from St. Lambert to this city, the charge for the trip to and from Longueuil each day to be 15c, or 10c per single trip.

The arrangements appeared to work well until yesterday morning, when a respectable inhabitant, who, having no ticket, offered to pay the conductor the amount agreed upon, was refused, the conductor saying that he would stop the train, which was then on the way to St. Lambert, and put off the Longueuiler if he did not give the amount demanded, which was 25c. The Mayor of Longueuil was consulted and consented to the payment of the amount, remarking, at the same time, that when they reached St. Lambert he would send a telegram to Longueuil ordering the water supply to be cut off until the original agreement is carried out. The result is that the train did not run this morning and several of the Longueuilers had to walk to St. Lambert.

On inquiry at the head office in this city, this morning, the passenger agent says the matter is now settled, as it would have been without any trouble had the party that felt aggrieved come to headquarters instead of having the water supply stopped. It appears the additional demand made was in order to put a stop to the paying of fares on the trains, a plan which has been in force on all well-regulated railways for some time back.—*Montreal Witness, April*, 12.

A Steam Whistle on a Bender.

ON Thursday night last an incident occurred at the Car Works quite amusing enough to put on record. It appears that the rope attached to the valve of one of the engines at the upper works passes, a short distance of its course, outside of the building, above the roof. The rain of the evening gradually tightened this rope, and so by degrees opened the valve, allowing the steam to escape. At first it was "but a little one," and made a noise like the low crooning of a love-sick fellow on his way home after finding that another has stepped in half an hour ahead and proposed to his girl. But the rope gradually became tighter, till the crooning was forgotten, and anxious people were hurrying to and fro to see what they could do to alleviate the troubles of what everybody believed to be a dying calf. And the rope tightened on, raising a bellow which would make the loudest kind of a calf expire with envy—increasing and ever increasing, till the whole town was agog with the shriek; and the most phlegmatic procrastinator believed the end of all things had come. People rushed to the Grand Trunk expecting to find half a dozen engines on their backs and the station withered to a fish-pole with escaping steam. But the trouble wasn't there,—and the carnival still

went on. At length, when the thing had been howling for a full half hour, and a crowd had gathered about big enough to throw the works bodily into the lake, somebody who "understood the rope" quietly stepped on the scene, liberated the valve and shut off the steam and the uproar at one pop. Natural causes, you see, natural causes. How many thousands of people have gone wild over results which they did not understand, produced by the most simple of all simple natural causes!—*Cobourg World.*

Relics of Columbus.

Judge Daily, in the course of his address before the American Geographical and Statistical Society at Chickering Hall, this city, on the 13th inst., an epitome of which is given on another page, said:

"While I was in Madrid I had made a copy of what I consider the most reliable portrait of the great discoverer, after a very full examination of all that can now be examined, and which I take occasion to present to the society. (Applause.) I also had the good fortune to become the purchaser, from a lateral descendent of the great discoverer in Valladolid, of a small box which belonged to Columbus. It is of silver and contains his name, and the three caravels that made the discovery of America are worked in the old fashioned *repousse* style of the beginning of the fifteenth century. I consider it the most valuable relic of Columbus that I saw in Spain, and I saw all that are publicly preserved."

Before visiting Spain, Judge Daily had posted himself largely, as he thought, from books and other sources of information, upon all matters pertaining to the history, manners and traditions of the people; but he found upon his arrival there that a great change had come over the land as described by writers of even a comparatively recent period. With the building of railroads and telegraphs all the picturesque and peculiar phases of life were fast disappearing. With these, however, and the press, was being introduced a higher degree of general intelligence; and so far as he could judge the country is coming more and more fully into the hands of what is called the common people; and that fact gave promise of freedom and progress.

Praying in China for Snow.

It appears that the temperature has been so abnormally high and the weather so uniformly mild in northern China, as well as in Europe, throughout the last winter season, that not a single snow-fall occurred during the months of December and January in regions usually visited by frequent and heavy snow-storms at that time of year. The inhabitants of those districts, apprehensive that a spring and summer drought might result from the absolute dearth of snow in its customary places of winter storage, petitioned the Emperor to intercede in person on their behalf to the supernatural authority whose special business it is to regulate the annual distribution of frozen liquid to the inhabitants of the Flowery Land. On receipt of this application, the Brother of Moon straightway betook himself to the Temple of the Snow God and fervently entreated that deity to favor the suffering people with a first-class snow-fall at his earliest convenience. As no immediate result accrued from this supplication, his Imperial Majesty repeated his visit to the temple, evening after evening, 35 times in succession, renewing his request for snow upon each occasion with a pertinacity that did him honor. At the expiration of the fifth week, however, finding the Snow God still insensible to his prayers, the Emperor gave up personal intercession as a bad job, and resolved, as Mrs. Glasse has it, to "try another way." By imperial decree, signed with the Vermillion Pencil, and published in the Pekin *Gazette*, he commanded a certain number of Princes of the blood and military commanders to form a deputation and convey to the recalcitrant deity an address setting forth the miseries entailed upon northern China by his unaccountable reluctance to dispense the usual dose of snow. "The Emperor," so runs the decree's concluding sentence, "ventures to hope that the pleadings of so illustrious and distinguished a deputation will have more weight than his own with the Sublime Kwang-foo."

Petroleum for Locomotives.

An European journal says that the locomotives upon the Balachanskio Railway are heated with crude naphtha, which is introduced into the tender as it comes from the wells, and there have been no accidents resulting from its use. All the ships upon the Caspian Sea are heated exclusively with the liquid combustible, the cost being only half as great as that of coal. Experiments which have been made upon some of the railways show that a kilogramme of naphtha is equivalent to 8½ kilogrammes of wood, although the theoretic heating power is only three times as great. The use of petroleum with injectors for introducing it into the furnaces is very convenient—the combustion can be regulated with the greatest ease, the furnaces last much longer on account of the absence of sulphur, there are no cinders, smoke or sparks, and the work of the stokers is greatly simplified.

Iron and Metal Exchange.

The directors of the projected Iron and Metal Exchange have issued a circular to the trade, inviting them to become "associate members" of the institution by the payment of $75 before the 1st of May. The non-receipt of written acceptance by the 22d inst. is to be construed as a declination of the offer. As soon as the time for acceptance has expired, the board will secure such rooms for an Exchange as will accommodate the particular number of associates that may have accepted. The parties under whose auspices this Exchange is organized are as follows: J. B. & J. M. Cornell, Naylor & Company, the Burden Iron Company, the Thomas Iron Co., Cooper, Hewitt & Co., National Tube Works Co., Wm. H. Wallace & Co., Witherbees, Sherman & Co., Albany and Rensselaer Iron and Steel Co., E. S. Wheeler & Co., O. E. Schmidt & Co., Lackawanna Iron and Coal Co., B. F. Judson, J. R. Thompson & Co., Crocker Bros., Port Henry Iron Ore Co., David Thomson & Co., Manhattan Iron Works Co., Catasauqua Manuf. Co., T. J. Pope & Bro., Joliet Steel Co., Geo. A. Evans, A. S. Patterson, Jas. Williamson & Co., and Phelps, Dodge & Co.

On the railroads of Continental Europe the introduction of mineral oil for lubricating purposes is proving both efficient and economical.

The French Government is disposed to foster the various systems of the application of electricity to railroad purposes in order to obviate as far as possible the dangers of travel.

Varnish for writing on glass may be made of 500 grains ether, 30 grains sandarac, and 30 grains mastic. Dissolve and add benzine until the varnish imparts to glass a roughened appearance. Use cold.

The Mexican *Diario* states that a locomotive has reached Lampassas, on the Texas-Mexican Railroad, 100 miles south of the Rio Grande, and that Monterey will probably be reached in September next.

Roman railroads are now to be under State control. They are to be administered by a council, whose decisions on all matters of importance will be subject to review by the Minister of Public Works.

Among the cargo brought over by the steamship Grecian, of the Allan Line, from Glasgow, were two locomotives and tenders for the Chesapeake and Ohio Railroad, built by Hudswell, Clarke & Co., Leeds, England.

A new method of tempering steel has been published by M. Clemandot. The metals are heated to a cherry red and then compressed strongly until they are cool. The result is great hardness and an exceedingly fine grain. Steel thus treated makes excellent permanent magnets.

It is stated that the Belgian Government is engaged upon a scheme for promoting street railways throughout the country as feeders for the railroads, the work to be done by the various communes interested, either singly or in combination, and assisted when necessary by subventions from the State.

The official return of the United States Consul at Sheffield of the exports to the United States during the quarter ending March 31 shows an increase in the total value of £53,344, as compared with the corresponding quarter in 1881. The improvement is chiefly in steel and steel rails.

The largest bloomer roll ever cast in this country was turned out of the Bush Hill Iron Works, at Sixteenth and Buttonwood streets, Philadelphia, on the 8th inst. It was the first of the six to be made for the Bethlehem Iron Works. It weighed 67,730 pounds, or nearly thirty-four tons. It was shipped by the North Pennsylvania Railroad. It took forty horses to draw the truck on which the rail lay. The truck, which weighed forty tons, was made specially for the occasion. It was lifted to the tracks at Twenty-first and Hamilton streets by the large crane recently erected at that point by the Philadelphia and Reading Co.

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THE INUNDATED MISSISSIPPI VALLEY.

THE experience of this spring throws new light upon the great Interior Basin and its drainage system. From last autumn until this date there has been a succession of floods, high water, and damage by inundations; now in one place, now in another, and the last end of the great down-pour is now finding its way to the Gulf of Mexico by what is virtually a delta of the Mississippi extending from Lake Borgne on the east to Berwick's Bay on the west. When we consider the enormous extent of the watershed of the Mississippi and its characteristics, extending from the heart of Montana, by the northern part of Minnesota, skirting south of the great chain of lakes, around by Western New York, Pennsylvania, Virginia, Tennessee, and so on round the head waters of the Red River and Arkansas in the Indian Territory and close up to Colorado, it is not a matter for surprise that it should be subject to occasional overflow, and naturally also to periods of great drouth or low water. Whatever other reasons there may be, besides those of alternating high and low streams, it is historically true that the great enduring civilizations of the world, the aggregations of populations, wealth and industry, have been along the coast lines, generally along the broken coast lines, of the continents, or on the subjacent islands. The great interior basins have been either sparsely populated, or inhabited by nomadic tribes, whose chief industry has been herds and flocks of cattle. The great interior steppes of Asiatic and part of European Russia tell the same story as the interior plains of the North American continent, and the South American also.

Archæological speculation has long been puzzled as to the uses of some colossal artificial mounds found along the banks of the Mississippi and in Louisiana. The present season enables us to guess their purpose. It is found in Illinois as well as in Louisiana that the tops of these peculiarly shaped mounds are above the high water level. Not only do the surrounding inhabitants, but also the deer and other wild animals and even vermin flock to the mounds for safety; and this was probably their original design. We may infer from this that in prehistoric ages the floods at these points were liable to reach about the same height as now, and that the maximum flood line did not cover these human contrivances. Nothing on this continent has yet been discovered more interesting in this connection than the homes of the "cliff dwellers" in Colorado, New Mexico and Arizona, a bare remnant of which have survived to our own times. Had these people been able to have preserved an unbroken chronicle of their possession of the heart of North America, what a thrilling story it would have been! It might have illuminated this very question why we found the rich soil of the interior valley peopled by a few roving Indians and the herds of bison.

It is coming to be recognized that the Mississippi Basin is subject to extreme and sudden fluctuations of temperature. The summer heats are intense and from the low general level are depressing; while the cold blasts rushing across the low Canadian border from the Arctic Circle carry suffering, death and desolation far toward the Gulf. The Gulf winds are surcharged with that moisture in summer which, acting on the decomposing vegetable and animal matters, set free myriads of parasitic organisms to be inhaled, or imbibed, into the human system, commonly styled "malaria," and hence fever in all its severest varieties and bilious disorders abound, intensified no doubt by the dietetic errors of the inhabitants. In the winter the currents are at times so keen and penetrating that nothing short of a hairy hide or several coverings of wool will turn it. In Kansas and Northern Texas it is called simply a "Norther," a cold wind which is sometimes very fatal to the cattle and sheep; but further north it occurs in its original arctic character of a "blizzard," when, beside the intense cold (which of itself is a foe to all but the most robust life), the air is filled with particles of fine ice grains, and all locomotion must be suspended and shelter instantly found or animation must cease.

One of the reasons why the great plains, as they were (by which we mean the prairie lands east of the Mississippi, as well as the bare slopes on the west), have not heretofore sustained a heavier fauna, of either men or brute animals, is undoubtedly to be found in the denudation of the natural forests by extensive fires. Long ages ago doubtless a dense vegetation covered this vast area, and the channels we find may then have been sufficient to carry off the surplus water without serious overflow. These forests have been burned off without new ones having taken their place. It was the custom of the wild Indian to burn over the forests in which he hunted every year, for two reasons: first, to secure his supply of game; and, second, to prevent the greater uncontrollable fires of accumulated years of deciduous matter. However the case may have been in the far past, it is certain that the removal of the dense brush of the forest from the surface of the earth has tended to precipitate the floods into the streams, and at the same time intensified the drouth and heat. It will be the wiser part of mankind now to replant and foster this forest growth and thus promote the habitable conditions; and to this end it is important that the destruction of forests for "clearing" purposes, or even for fencing, which has aggravated the former injury, should stop at once. All that part of the lower valley subject to injurious inundations should for the same reason be left to grow up in useful timber under some general intelligent natural plan. The greed for increased acreage of cotton in days prior to 1861 induced this mistake among others, and it needs more than the average commercial wisdom to undo it.

Congress is about to appropriate some six millions or more to the purposes of doing something to the Mississippi River—just what, is not precisely determined. The light thrown upon the subject by the last flood ought to suggest the true remedy, but none of

schemes current in the newspapers look to an adequate one, all of which suggest the curious fact that the United States at this time lacks something more than it lacks money. In addition to what has been above suggested there should be the aids of (1) storage reservoirs at suitable places on the tributary streams as auxiliaries, the feasibility of which was demonstrated by eminent civil engineers fifty years ago; (2) new outlets into Lake Ponchartrain and into the Atchafalaya, as proposed; (3) and last of all, the system of embankments now so much in favor, but which by themselves are totally unreliable, if indeed they do not heighten the danger, and call for an ever-increasing appropriation in the effort to outrun natural forces. It is not at all discernible that the jetties erected by Capt. Eads have any appreciable thing to do with the matter, or that their removal could remedy the danger a particle.

What is to be the future of the great expanse of country west of the west line of Ohio, say a longitudinal belt of 500 miles east of the Mississippi River, and 1,000 miles west of it? It has an important significance for the future, not only of our settlements and Government, but also for our industry and transportation plans as to how that great funnel-shaped declivity is to be affected by the forces of Nature. The elements of both air, water, earth and fire seem to have free play in this continental theatre, and have much to do in determining the career of man. It is a momentous question whether the cities, towns, villages and farms now growing up across the vast expanse are to survive as long as the race, or are to succumb to the rigors of an inclement climate and natural forces. A vast amount of capital is being embarked in railroads and other improvements without a thought as to the possibilities of future decay. Notably a prodigous movement of migration is going on from England and from Canada to Manitoba and the Hudson's Bay country; will these settlers and their descendants remain there, or will they become disheartened in their ceaseless struggle with harsh Nature and make a fresh migration to the more congenial plains of Texas, Mexico, California and British Columbia? No tempering Gulf stream flows by those shores to moderate the seasons as in Norway, Sweden and Lapland; the only comparison is with Asiatic Siberia, where for at least half the year a scanty vegetation is locked in icy embrace.

Employes Relief Association.

The Baltimore and Ohio Railroad Company's Employes' Relief Association now has an active membership of nearly 15,000. One of its chief promoters speaks of the association as follows: "It continues to be in a most prosperous condition, and is meeting the highest expectations of its founders in the magnitude and ramifications of its usefulness. In England these railway benevolent organizations are repeatedly the recipients of large bequests and annual contributions from leading, influential and opulent citizens, and it is noteworthy in this connection that the first donation has been made to the Relief Association of the Baltimore and Ohio Company. This is but the beginning of what may yet develop into great dimensions. Railway operatives, as a class, are a worthy and deserving body, and the purely benevolent character of this organization will doubtless attract to it, as is general in England, liberal bequests from our wealthy citizens."

CONSTRUCTION.

Work on the Columbia, (S. C.) canal has been commenced.

Surveys are now in progress for the new Midland Railway line between Hamilton and Toronto, Canada.

The city council af Newark, Ohio, have voted $11,950 to aid the construction of the Newark and Edgewood Railway Company.

The West Jersey Railroad is extending its double track one and a half miles below Glassboro, to prevent a blocking of trains at that place.

Rails are now laid on 51 miles of the Manitoba and Southwestern Railroad. A permanent bridge at Headingly, over the Assiniboine River, is also completed.

The Mexican government has approved forty more kilometres of the Grant-Degress Railroad from Laredo south, making a total of 100 kilometres so far approved.

The *Diario*, the official organ, says that the Acambaro division of the Mexican National Railway west from Mexico will be completed in October, leaving only a gap of 470 miles unfinished.

The London, Ontario, *Free Press* says it is currently reported that the Grand Trunk Railway link between Paris and Galt is to be constructed at once, and completed by the end of the year.

About four miles of track are laid on the Uniontown end of the Redstone branch of the Pittsburgh, Virginia and Charleston Railroad, and the tracklayers are moving slowly toward Brownsville.

Engineers are now at work locating the route of a new railroad from Jacksonville to Tallahassee, Florida, which is to be built by Hamilton Disston and the Gordon syndicate of Alabama and Georgia.

New cross-ties are being laid along the line of the Annapolis and Elkridge (Md.) R. R., and will be placed in position as rapidly as possible. President Wm. H. Bians intends relaying with steel rails that portion of the road not already so provided.

E. Aylmour left Winnipeg on the 13th inst. in charge of a large Canadian Pacific Railway survey party for Bismarck, whence they will proceed up the Missouri to Benton, then overland to Fort Garry, to survey from the latter point through the Rocky and Selkirk ranges to Kamloops, British Columbia.

The Wheeling *Intelligencer* says that Senator Camden, who has just returned from New York, has made all arrangements for the money necessary to build the "River Railroad" from Wheeling to Charleston, W. Va. The enterprise now awaits only the completion of the rights of way, most of which have been secured.

Captain Lull, of the United States Navy, who recently visited Nicaragua, states that he has secured a modification of the concession granted to Mr. A. G. Menocal for the construction of an inter-oceanic canal through that Republic. The time for beginning the work has been extended until the 30th of September, 1884.

The concession granted to Gen. Daniel Butterfield, of New York, for the construction of a railway from the capital to the Gulf of Fonseca has been approved by the Salvador Congress. Three railways have been projected, of which this one, to be known as the Central Railway, is the chief. It will pass through the center of the State.

The Cambria, Penn., *Herald* says that the Baltimore and Ohio Railroad Company have a corps of engineers engaged surveying a line for a railroad up the Blacklick, and that it is the intention of that Company to extend their road from Johnstown, northward, crossing the Indiana pike one mile and a half west of that place, the work to commence early this summer.

The Baltimore and Ohio Railroad Company will receive proposals until the 25th inst., for the graduation and masonry on the branch road which is to be built into the Company's property at Curtis' Creek, Anne Arundel county. The branch is to be 4½ miles long, and will connect with the main tracks at Camden Junction, near the coal shutes, beyond the city limits.

Construction is now progressing on both termini of the Sabine Pass and Northern Railroad. The line is completed and cars running from Sabine Pass to Neches River, seventy miles, while the road is graded, ready for ties and rails north from Marshall to Sabine River. The Company are determined on completing the entire line, if possible, in time to move the next cotton crop.

The Omaha *Bee* says that the Union Pacific Railroad will probably have 700 miles of its extension completed before the end of the year. The work will be on the following-named extensions: Oregon Short Line, 300 miles; Utah Northern, 75 miles; Greely, Salt Lake and Pacific, 85 miles; Black Hills branch, 25 miles; Denver and South Park extensions, 100 miles; Nebraska and Kansas lines, 100 miles; total, 685 miles.

Arrangements are in progress for the construction of the Cincinnati and Ohio River Railroad as soon as the rights of way are completed and the requisite local stock subscriptions are made up. This will be a railroad of low grade, and laid with steel from Cincinnati to Symmes Creek coal fields, a distance of 251

miles, and will connect with the Chesapeake and Ohio at Huntington, the Ohio Central at Point Pleasant Bridge, the Ohio Valley from Bellaire, and the new railroad up the Kanawha Valley, now under construction.

THE stockholders of the Bangor and Piscataquis Railroad Company, at their meeting in Bangor, Me., on the 12th inst., voted to extend their road to Moosehead Lake, and also to authorize the issue of a second mortgage upon the entire road to secure funds to complete the extension. It is understood that the city of Bangor is to purchase the new bonds authorized, and that the work of construction upon the extension will be commenced as soon as practicable.

THE Waynesboro' Railroad, a branch of the Baltimore and Cumberland Valley Railroad, about one mile in length, intersecting the latter road at a point about one-half a mile south of the depot, was completed and opened for business on the 14th inst. The road was built and is owned entirely by Daniel Geiser, president of the Geiser Manufacturing Company of this place, and will be used principally for delivering freight to the Geiser Company's works, which are located at the east end of the town, nearly a mile from the freight depot.

THE first division of the Baltimore and Delta Narrow-Gauge Railway, between Baltimore and Towsontown, a distance of seven miles, was formally opened on the 17th inst. This is the first steam narrow-gauge railroad built in Maryland, and will run from Baltimore to Delta, in York county, Pennsylvania, forty-four miles. The first seven miles, the most costly section, has been completed at a cost of $20,000 per mile. The road will run through Baltimore and Harford counties, Maryland, and thence into Pennsylvania. It is built entirely by home capital.

THE new route of the Pennsylvania Railroad between Long Branch and Philadelphia was opened for travel on the 17th inst. The trains run over the New York and Long Branch Railroad to Bay Head Junction, below Point Pleasant, and from there over the Philadelphia and Long Branch Railroad and the Pemberton and Sea Shore Railroad, new branches of the Pennsylvania Railroad, passing through Sea Side Park, Barnegat, Island Heights and Lavalette City. It will be under the direction of I. S. Buckelew, superintendent of the Amboy Division of the Pennsylvania Railroad, and J. F. Randolph, superintendent of the New York and Long Branch Railroad.

New Orleans Consolidated Bonds.

A DECISION was rendered in the Supreme Court of the United States at Washington on the 17th inst., in the case of the State of Louisiana ex rel, the Southern Bank, plantiff in error, vs. Edward Pillsbury, Mayor of New Orleans, et al., in error to the Supreme Court of Louisiana. This was a petition of the Southern Bank of New Orleans for a writ of mandamus to compel the municipal authorities of that city to levy a special tax for the purpose of paying the interest and ultimately the principal of a certain series of bonds issued by the city under the authority of an act of the State Legislature in 1852 and known as the "consolidated bonds of 1852." There are about $4,000,000 of these bonds now outstanding, and of this amount the relator (the Southern Bank) holds $600,000. The interest on these bonds was paid for a time, but in 1876 the Legislature of the State passed an act known as the "Premium Bond act," which prohibited the levying of any tax for the payment of any other bonds than those therein provided for, and which forbade the courts of the State from issuing writs of mandamus to enforce the collection of any such prohibited tax. This act put a stop to the payment of interest on the consolidated bonds of 1852, and the Southern Bank, a large holder of these bonds, instituted the present action to test the constitutionality of the "Premium Bond act," to have their "consolidated bonds of 1852" declared valid obligations against the city and to enforce payment.

DECISION OF THE COURT.

This Court, in a long and carefully prepared opinion by Justice Field, holds that the act of 1852 constitutes a valid and binding contract between the State and the holders of bonds issued under that act, which subsequent legislation cannot be permitted to annul, and that the Premium Bond act of 1876 is the most remarkable piece of legislation ever presented to this Court for consideration, amounting, as it does, to the open repudiation of the city's debt. Legislation of a State thus impairing the obligation of a contract made under its authority is null and void, and the courts, in enforcing the contract, will pursue the same course and apply the same remedies as though such invalid legislation had never existed. The act of 1876 cannot be permitted to control the power of the city authorities to levy the tax stipulated by the act of 1852. It is the judgment of this Court, therefore, that the judgment of the Supreme Court of Louisiana should be reversed, and that a mandamus should issue commanding the city of New Orleans, by its proper authorities, to carry out and fulfil, as near as may be under the altered circumstances, the provisions of the 37th section of the act of the Legislature of the State of Louisiana of February 23, 1852, and numbered 71, and also the act of the same date, numbered 72, in relation to the levying of a special tax to pay the interest and ultimately the principal of the remaining consolidated bonds authorized to be issued by said act: that is to say, commanding them to raise annually, commencing immediately, by a special tax in the manner, as near as may be, prescribed by the said 37th section of act 71, if not provided in some other manner, the sum of $650,000, to be appropriated:—

First—To the payment of the current year's interest accruing on said bonds.

Second—To the payment of the interest in arrears, and

Third—After all the accrued interest shall be fully paid, then to the purchase from the lowest bidder of such bonds issued under the said acts and still outstanding as have the shortest period to run.

IT is said that the Ohio Falls Car Works, of Jeffersonville, has secured contracts with Eastern railroads for new cars to the amount of $400,000.

Imports of Dry Goods at New York.

The Imports of Foreign Dry Goods at New York for the month of March, were :—

ENTERED FOR CONSUMPTION.

	1880.	1881.	1882.
Manufs. of wool....	$1,983,007	$1,708,581	$1.934,245
Manufs. of cotton...	2,517,589	2,235,289	2,400,579
Manufs. of silk.....	3,157,151	2,526,807	3,277,286
Manufs. flax.....	1,753,656	1,236,087	1,287,591
Miscell. dry goods...	963,193	986,890	966,578
Total ent. for consumption.....	$10,374,596	$8,693,654	$9,866,279

WITHDRAWN FROM WAREHOUSE.

	1880.	1881.	1882.
Manufs. of wool.....	$535,790	$859,651	$675,661
Manufs. of cotton...	202,014	388,152	297,364
Manufs. of silk.....	472,776	468,740	485,681
Manufs. of flax.....	383,916	531,983	376,223
Miscell. dry goods..	226,366	243,702	262,820
Total withdr'n from warehouse.....	$1,820,862	$2,492,228	$2,097,749
Add ent. for con....	10,374,596	8,693,654	9,866,279
Total thrown on the market.....	$12,195,458	$11,185,882	$11,964,028

ENTERED FOR WAREHOUSING.

	1880.	1881.	1882.
Manufs. of wool....	$468,156	$722,143	$629,605
Manufs. of cotton..	184,088	382,787	246,211
Manufs. of silk.....	467,462	514,857	382,507
Manufs. of flax....	508,609	344,461	277,439
Mis. dry goods.....	235,439	321,133	195,637
Total ent. for warehouse	$1,862,755	$2,285,381	$1,731,399
Add entered for consumption	10,374,596	8,693,654	9,866,678
Total ent. at port...	$12,238,350	$10,979,035	$11,597,279

The Imports of Dry Goods at New York during the first quarter of the year :—

Jan.....	$5,987,719	$10,714,881	$10,128,486	$12,326,440
Feb.....	12,589,363	15,691,575	13,085,295	16,604,077
Mar.....	8,613,592	12,238,350	10,979,035	11,597,678
Total....	$27,190,674	$38,644,806	$34,192,819	$40,528,195

The Imports of Foreign Dry Goods at New York for three months from January 1, were:—

ENTERED FOR CONSUMPTION.

	1880.	1881.	1882.
Manufs. of wool...	$6,421,101	$5,423,105	$7,099,380
Manufs. of cotton	8,036,824	7,579,895	8,595,763
Manufs. of silk....	9,371,417	7,631,013	10,541,139
Manufs of flax....	5,548,704	3,480,955	4,464,663
Mis. dry goods....	2,921,571	2,689,693	2,999,216
Total entered for consumption ...	$32,299,617	$26,804,661	$33,700,161

WITHDRAWN FROM WAREHOUSE.

	1880.	1881.	1882.
Manufs. of wool..	$1,846,196	$2,412,115	$2,003,919
Manufs. of cotton.	1,110,575	1,982,926	1,496,062
Manufs. of silk....	1,465,503	1,701,996	1,636,016
Manufs. of flax...	1,361,669	1,958,328	1,402,678
Mis. dry goods....	653,157	787,727	867,435
Total withdrawn from warehouse.	$6,437,100	$8,843,092	$7,406,110
Add entered for consumption ...	32,299,617	26,804,661	33,700,161
Total thrown on the market.....	$38,736,717	$35,647,753	$41,106,271

ENTERED FOR WAREHOUSING.

	1880.	1881.	1882.
Manufs. of wool...	$1,657,114	$1,990,100	$2,007,694
Manufs. of cotton.	910,586	1,576,907	1,426,467
Manufs. of silk....	1,247,836	1,482,679	1,345,989
Manufs. of flax....	1,831,369	1,411,586	1,243,296
Mis. dry goods....	968,284	917,886	804,588
Total entered for warehouse	$6,345,189	$7,388,158	$6,828,034
Add entered for consumption ...	32,299,617	26,804,661	33,700,161
Total ent. at port.	$38,644,806	$34,192,819	$40,528,195

THE Secretary of the Treasury decided that "hoop iron cut to lengths, punched and splayed to fit the barrel, are dutiable as hoop iron."

A LARGE English steamship has been chartered in this city to load general railway supplies in Philadelphia for Honolulu, Sandwich Islands. The cargo is intended for a railroad now being constructed to carry sugar to the seaport towns for shipment principally to the United States, where it is admitted free of duty.

Anthracite Coal Tonnage.

THE following is an official statement of anthracite coal tonnage for the month of March, 1882, compared with the same month in 1881 :—

	1882.	1881.
Reading Railroad	491,933	495,835
Lehigh Valley Railroad	445,326	442,059
Central Railroad of New Jersey	313,372	337,753
Delaware, Lackawanna and Western	348,285	362,899
Delaware and Hudson Canal	253,416	291,600
Pennsylvania Railroad	144,494	143,498
Pennsylvania Coal Co.	97,283	109,443
New York, Lake Erie and Western Railroad	13,932	42,751
Total	2,108,042	2,225,842

The following is the statement for the year 1882, compared with the year 1881 :—

	1882.	1881.
Reading Railroad	1,264,587	1,324,409
Lehigh Valley Railroad	1,142,294	1,194,635
Central Railroad of New Jersey	806,889	897,777
Delaware, Lackawanna and Western	900,741	992,352
Delaware and Hudson Canal	663,156	764,280
Pennsylvania Railroad	446,517	441,079
Pennsylvania Coal	260,308	286,432
New York, Lake Erie and Western Railroad	46,417	115,694
Total	5,530,912	6,016,661

The stock of coal on hand at tide-water shipping points, March 31, 1882, was 666,318 tons; on February 28, 1882, 546,315 tons—increase, 120,003 tons.

Chicago, Burlington and Quincy Connections.

FOLLOWING out the policy of the past few years in extending their operations, an arrangement has been made between this Company and the Wabash Railway Company by which the construction of two competing roads through the southern counties of Iowa was avoided, and only one was commenced, called the Humeston and Shenandoah Railroad, which Company agreed to lease and has leased its road in perpetuity to the Chicago, Burlington and Quincy and Wabash companies as tenants in common. By this arrangement the Wabash Company secures a connection through, and the local business of the Humeston and Shenandoah Railroad is equally divided between the two lessee companies. The construction of this road is progressing, and it is expected to be open for business by the 1st of July, 1882.

Another movement resulted in securing control of the Burlington and Southwestern Railroad, which has been satisfactorily accomplished, though no formal transfer has yet taken place.

The control of the St. Joseph and Des Moines Railroad has also been obtained. This is a narrow-gauge road, 50 miles in length, extending from St. Joseph, Mo., to Albany, in the same State, where connection is made with the Leon, Mt. Ayr and Southwestern Branch. Ultimately the gauge of the St. Joseph and Des Moines Railroad will be changed, giving a new through line to St. Joseph.

The directors report an agreement for the lease to this Company, subject to the approval of the stockholders, of the St. Louis, Keokuk and Northwestern Railroad, extending from Mount Pleasant, Ia., on the north, through Keokuk, Hannibal and Louisiana on the Mississippi River, to Dardenne, where it joins the Wabash Railway, about 30 miles from St. Louis, using the Wabash track thence into the city. They have bought most of the securities of this Company. The three last-named roads and the Kansas City, St. Joseph and Council Bluffs Railroad continue for the present to be operated as separate organizations, and their earnings, expenses and mileage are not included in the report of the Chicago, Burlington and Quincy Railroad Co.

Illinois Central Railroad.

DURING the month of March, 1882, the traffic on the lines operated by this Company was (estimated):—

In Illinois	$537,338 00
In Iowa (leased lines)	158,033 00
Total	$695,371 00

The traffic for the same month in 1881, on the same mileage, was (actual):—

In Illinois	$449,963 10
In Iowa (leased lines)	107,825 60
Total	$557,788 70

During March, 1882, the land sales were 679.72 acres for $3,676.60, and the cash collected on land contracts was $5,343.32.

L. A. CATLIN, *Secretary.*

Gambling in Stocks.

Gambling contract in stocks not intended to be delivered but settled for only in differences—Such a contract between joint principals, collateral to that with the broker, is equally incapable of enforcement.

SUR Exceptions to Adjudication.

Opinion by HANNA, P. J. April 1st, 1882.

The claim of exceptant is in effect an action of assumpsit to recover upon an account stated between himself and decedent the amount of a loss arising out of a joint speculation in the purchase and sale of stocks. The claimant advanced the funds required, cash and railway bonds and stock, and the purchases were made by a broker employed, neither claimant nor decedent being members of the Stock Exchange. Objection is made to the claim upon the ground that it is based upon an illegal consideration, and therefore not recoverable. That it arose out of gambling contracts in stocks never intended to be delivered, but settled for only in differences, and, according to the law in this State, the claimant has no right of action.

If this were a suit between a broker and his principal the claim would clearly fall within the line of cases beginning with Brua's Appeal, 5 P. F. Smith, 294, and ending with Dickson v. Thomas, 1 Outerbridge, 278, which in Biddle on the Law of Stock Brokers, page 308, are said to be of doubtful "authority outside of Pennsylvania, or any length of time in that State, being opposed in principle to all the decisions both of the English courts, and of every court of every State in the Union." But it originated in consequence of a contract or agreement, not with the broker, but between the parties who, as to him, were joint principals. Their contract with each other was collateral to that with the broker. Now, while it may be considered as settled that the contract with the broker was illegal and void, does it follow that the collateral contract, for the same reason, would be equally incapable of enforcement? The promise of decedent was to pay his copartner in the ventures one-half of the loss resulting.

From the cases referred to, whenever it appears that no shares of stock ever actually passed, nor were intended to be delivered, and the purchases and sales were fictitious, being represented by differences settled through the medium of the Clearing House, such transactions are but mere wagers, and will not be recognized by the courts. Here the parties were engaged in dealings, although not prohibited by statute, and therefore *ipso facto*, void, but which are held to be contrary to public policy, immoral and mischievous in their results, and consequently illegal. We are therefore unable to discover the distinction urged between this case and the cases covered by the authorities thought to be inapplicable, and accordingly dismiss the exceptions.

Adjudication confirmed.—*Legal Intelligencer.*

SINGLE furnaces at the Lochial Iron Works, Harrisburg, Penn., are being made into double furnaces, and the capacity of the works is thus to be doubled.

THE steamship *Alaska*, of the Guion Line, has proved herself to be the fastest steamer afloat, having crossed the Atlantic in 7 days 6 hours and 43 minutes actual time. The previous best run was made by the *Arizona*, of the same line.

GROUND was broken on the 4th inst. for the branch on the Virginia Midland Railway from Orange Courthouse, Va., to Meadow Farm, where rich iron ore has recently been found in large quantities. The road will be 4½ miles long, and the work will be completed in about one month.

ON the first of June the Cleveland Rolling Mill Company expect to have completed and ready for "blowing in" the largest iron furnace in the world, the capacity of which will be two hundred tons per day. Immediately after it is completed another furnace of the same proportions will be begunand work upon it will be pushed forward as rapidly as possible.

THE Boston *Transcript* says a smokeless and sparkless locomotive was recently tested on the Fitchburg Railroad. The run was to Waltham and back, a distance of 20 miles, with a consumption of 273 pounds of Cumberland coal for the round trip. The average consumption of coal for a 20-mile trip with an ordinary engine is about 1,000 pounds, thus showing a very large saving in fuel, besides the stopping of a long felt nuisance in railroad traveling—smoke and cinders.

THE highest mine in the United States, and probably in the world, is the Present Help, situated on Mount Lincoln, in the main range of the Rocky Mountains, in Park county, Colorado. According to Professor Hayden, Mount Lincoln has an altitude of 14,297 feet. The Present Help boarding-house, built alongside of the entrance to the main drift, is about 200 yards away from the extreme summit of the mountain and 140 feet lower down. This leaves it 14,157 feet above sea level, and it is undoubtedly the highest inhabited house in the world.

How Paper Car Wheels are Made.

THE Allen Paper Car Wheel Works are located at what is now the northern extremity of Pullman, Ill., though the Union Foundry and Car Wheel Company is building a large foundry and dwelling-houses about half a mile north of this point, which will doubtless become a part of Pullman at an early day. The buildings of the Allen Company are two parallel structures, extending 370 feet north and south by 150 feet, connected in the center by an annex. The rear building is used for a foundry, and in the front building the paper car wheels are made and fitted into their casings. On the second story are the offices of the Company. Above the center floats a flag bearing the words, "The Allen Paper Car Wheel Company." The *Western Paper Trade Journal* says:—

"Entering the office, the visitor is conducted to the point on the first floor where the straw board is received, at present at the rate of about a car load a week. It is the ordinary straw board of commerce, which until recently had been purchased at the Rockton Mills, in this State, but is now made at the Allen Company's mill at Morris, Ill., where it is cut by machinery into circular disks, with a hole in the center for the hub of the wheel. These disks are a little larger than the sizes required for the wheels, which are 26, 33, and 42 inches. Three of these are fastened together with ordinary flour paste, applied by hand with a brush, and the triple sheets are piled together to the thickness of three or four feet. Then the mass is placed in a hydraulic press and subjected to a pressure of about 650 tons for three hours. When removed from the press each three sheets is found incorporated into a single solid board. These boards are sent up-stairs to the heating-room and subjected to a temperature of 120 deg. Fah. for two weeks, or until every drop of moisture has been extracted. They are then sent down-stairs and pressed again to straighten them, and pasted together, dried and pressed again and again, until they are of the thickness required for the wheels, having to undergo hydraulic pressure three days, and to remain in the drying and seasoning rooms some six weeks, or even more.

"When the paper material for the wheels is prepared, it varies from four to five inches in thickness, according to the size of the wheel, and is as solid as the hardest wood. One hundred and seventeen sheets of ordinary straw board contribute to the paper structure of a 42 inch wheel, and one hundred sheets to a 26 inch wheel. After being thoroughly dried the paper block is carried to the trimming-room and placed upon a lathe, the tender of which is given a steel tire to which the block is to be fitted, and it is turned to the required size, which is always a little larger than the interior of the tire that is to cover the edges of the paper. Then the block is handed over to the painter, who treats it to two coats, consuming about a quarter of a pound of brown mineral paint, and it is then ready to be fitted into the tire. It is again removed to the ground floor, and forced into the tire by hydraulic pressure, applied at the rate of 3,000 pounds to the square inch, so that the paper block fits as closely as possible into the rim of the wheel, the whole structure forming a very compact mass. The hub is then forced into its place, and heavy iron plates fastened upon either side of the wheel by strong bolts extending through it. The wheel is then ready for use. A 42 inch wheel will weigh about 1,115 pounds, divided as follows: Paper 185 pounds; tire, 560 pounds; side plates, 140 pounds; hub, 200 pounds; bolts, 50 pounds. The tires are of the best German steel, made at the Krupp Works in Prussia; the wrought iron plates, hubs, and bolts are of American material, the castings being made at Pullman. American tires are not used, it is stated, because they are not yet made in sufficient numbers to supply the demand.

"About eighty men are now employed in the Allen Works here, and the company have a factory of about the same capacity at Hudson, N. Y. More men will be required here, however, when the new machinery, now making, is completed. At present twenty-four to twenty-six wheels a day are made, but it is expected to increase this number 25 per cent within a short time. The cost of a 33 inch paper wheel is about $80, and of an iron wheel of the same size not far from $15, but it is claimed that the paper wheel will outlast and outwear the iron wheel to an extent that renders the former a decided economy. A distance of 100,000 miles is about the maximum service to be obtained from axles with iron wheels, while on various roads the axles used with paper wheels have averaged over 400,000 miles each. This difference is accounted for on the ground that the paper centers intercept or absorb all vibration occasioned by contact between the tire and the rail, while with iron wheels this vibration is submitted to the axle, thereby causing a more rapid wearing of the journal, and the disintegrating of the axle.

"The paper wheel is practically indestructible, and can be used indefinitely. When the steel tire wears out a new tire can be placed over the paper, and when a breakage occurs these wheels are sent back to Pullman to be repaired. The danger from accidents by their use is said to be reduced to a minimum. The Pullman Palace Car Company have used the paper wheels for about ten years, and according to Mr. A. B. Pullman's statement, "have never had an accident caused through broken wheels or axles with any cars having paper wheels under them. While the present style of wheel has been in service we never had a paper wheel fall *en route*. This is another tribute to paper as an element to civilization. The man would have been considered a "crank" who, fifteen years ago, had predicted that paper car wheels would outwear and be safer than iron wheels. The first paper car wheels were made by Richard Norton Allen, in Brandon, Vt., in 1869, and these wheels were first used on a Pullman sleeping-car in 1871."

THE Lebanon (Penn.) *Courier* says that there are now being taken out of the Cornwall ore hills 27,000 tons of ore per month. Most of this is manufactured into pig iron in that locality. The Anthracite furnace, the Bird Coleman furnace, the North Cornwall furnace, the Donaghmore furnace, the Colebrook furnace, the North Lebanon furnace, Meily's furnace, and the charcoal furnace at Cornwall are all now in blast, and are all doing remarkably well. The Bird Coleman furnace, which was blown in a few weeks ago, made 305 tons in a week, and the North Cornwall, the same week, did nearly as well. This 27,000 tons of ore produces about half that quantity of pig iron.

Central Railroad of New Jersey.

THE following report of Hon. H. S. Little, Receiver of the Central Railroad Company of New Jersey, was filed in the Court of Chancery at Trenton, New Jersey, on the 14th inst.:—

To his Honor Theodore Runyon, Chancellor of the State of New Jersey:—

I, Henry S. Little, Receiver for the creditors and stockholders of the Central Railroad Company of New Jersey, respectfully report that I have made the inquiry which by the order of the court, dated March 6, 1882, I was directed to make in reference to the report of the late Receiver as to the solvency of the Company, which report was contained in his answer to the petition of the Company for an order requiring the delivery to them of the property and assets held by him, and that I am unable for the reasons hereafter given, to make a definite report on the subject. The assets are very numerous and of various characters. Those applicable to the payment of the unfunded debt consist, speaking generally, of three or four classes—one immediately available for the purpose without disadvantage to the Company or its business; another consists of assets which, though immediately available for the purpose, it would be disadvantageous, in some degree at least, to the interest or business of the Company in connection with which they have been obtained, to dispose of now; and another consists of assets the value of which depends on different considerations, such as the market value of the property pledged for their payment. Some of them are very large interests in coal lands. To force these assets to sale now obviously would be, to say the least of it, extremely injudicious. There are considerable assets whose essential and main value is in the business which they either control or secure. Reference is now made to branch roads built to attract and secure important and lucrative business for the main line, in which point of view they are very desirable investments. There are also other real estate assets than those above mentioned (for instance, property of the American Dock Company, the stock of which Company is owned by the Central Railroad Company), which are exceedingly valuable, especially for terminal and other like purposes, by reason of their location and character. The availability of these for the payment of the unfunded debt depends on the opportunity for advantageous sale. It would manifestly be in the highest degree unwise to press them upon the market. While I have refrained from expressing an opinion as to the value of the property and assets of the Company for the reasons given, yet I see no reason to doubt that if they are properly managed and administered, the Company in a brief period could pass out of the control of the court.

Respectfully submitted this 14th day of April, 1882. H. S. LITTLE, Receiver.

MORRIS, TASKER & Co., of Philadelphia, are furnishing the iron work for a large artificial-ice company, known as the Smith Transparent Ice Manufacturing Company, of West Washington, D. C.

The Stock Exchanges and Money Market.

New York Stock Exchange.

Closing Prices for the week ending April. 19.

	Th.13.	F.14.	Sat.15.	M.17.	Tu.18.	W.19.
Adams Express	.....	.....	140	.....	142	140
Albany and Susq.	..	....	.....	.....	133	.....
1st mortgage	.....	113½	.....	.....	....	.....
2d mortgage	.....	.....	105½	.....	.....	.....
American Express	93½	.....	92½	.....	.....	94
Atlantic & Pac. Tel.	.....	.....	.....	.....	.....	.....
Burl., C. R. & Nor	.....	.....	72½	.....	.....	.....
1st mortgage 5s	100½	100½	101¼	101	102¾	102
Canada Southern	49	49	49¾	47¾	46½	48¾
1st mortgage guar	94½	95	95	95⅜	95⅛	.....
Central of N. Jersey	75⅛	76¼	76⅜	74½	71⅛	71⅜
1st mort. 1890	.....	.....	....	.....	.....	.....
7s, consol. ass	110½	.....	.....	111	.....	.....
7s, convertible ass	.....	.....	.....	.....	.....	.....
7s, Income	.....	.....	.....	.....	.....	.....
Adjustment	107	106½	106½	.....	.....	106½
Central Pacific	89	89½	89½	88¾	88½	88⅝
6s, gold	116	116¼	.....	.....	.....	116
1st M. (San Joaq)	.....	.....	.....	.....	.....	.....
1st M. (Cal. & Or.)	.....	104½	.....	.....	.....	.....
Land grant 6s	.....	104¾	.....	105	104¾	105
Chesapeake & Ohio	21¼	22	.....	21	19⅞	21
1st pref	.....	.....	31	30	27¼	.....
2d pref	.....	.....	.....	.....	21½	.....
1st mort., series B	.....	.....	82½	83	81¾	81
Chicago and Alton	129⅝	.....	.....	129¼	129	129½
Preferred	.....	.....	.....	.....	.....	.....
1st mortgage	.....	.....	.....	.....	.....	.....
Sinking Fund	.....	.....	.....	114½	.....	115
Chi,, Bur. & Quincy	129	130	129½	129⅝	129	129⅜
7s, Consol. 1903	127½	.....	.....	.....	128¼	.....
Chi., Mil. & St. Paul	110½	110¼	110¼	109⅝	109⅝	110⅜
Prefered	119¼	119	120	119	118¾	119
1st mortgage, 8s	133½	.....	.....	.....	.....	.....
2d mort., 7 3-10s	.....	.....	.....	.....	.....	120
7s, gold	.....	.....	.....	.....	125	.....
1st M. (La. C. div)	.....	.....	.....	119¼	118¾	.....
1st M. I. & M. div.)	120	.....	.....	.....	.....	.....
1st.M. (I. & D. ext.)	.....	.....	.....	.....	.....	119
1st M. (H.&D. div.)	116	.....	.....	115⅝	.....	116⅜
1st M.(C. & M.div.)	.....	124	.....	.....	.....	.....
Consolidated S. F.	120	.....	121	.....	121½	121⅜
Chi. & Northwestern	126½	128	127¾	126½	126½	127⅜
Preferred	137½	138½	139	.....	137¼	.....
1st mortgage	.....	.....	.....	.....	.....	.....
Sinking Fund 6s	.....	.....	.....	.....	110	107
Consolidated 7s	.....	.....	.....	.....	.....	132¾
Consol. Gold bo'ds	.....	125½	.....	127	.....	126
Do. reg	.....	.....	.....	.....	.....	.....
Chi., R. Isl. & Pac.	126¼	126⅜	128¾	126⅜	127	127
6s, 1917, C	127⅛	.....	.....	127	.....	.....
Clev.,Col.,Cin.&Ind.	72	71¾	73½	.....	68	69¾
1st mortgage	.....	.....	.....	.....	.....	.....
Clev. & Pittsburg gr.	.....	136	.....	.....	.....	137
7s, Consolidated	127¼	127¾	127⅛	.....	.....	.....
4th mortgage	.....	.....	.....	.....	.....	.....
Col.,Chi.,& Ind. Cent.	12	11¾	.....	12	11¼	.....
1st mortgage	.....	.....	.....	.....	.....	.....
2d mortgage	.....	.....	.....	.....	.....	.....
Del. & Hud Canal.	104½	105	105	.....	103¾	104½
Reg. 7s, 1891	.....	115	115½	.....	.....	.....
Reg. 7s, 1884	.....	.....	106½	.....	106½	.....
7s, 1894	.....	.....	.....	.....	.....	.....
Del.,Lack.& Western	118⅜	119¾	119¾	117⅞	117¾	118
2d mortgage 7s	.....	.....	.....	.....	.....	.....
7s, Consol. 1907	.....	.....	.....	.....	.....	.....
Erie Railway	.....	.....	.....	.....	.....	.....
1st mortgage	.....	.....	.....	.....	.....	.....
2d mort. 5s, ext.	.....	.....	.....	.....	.....	.....
3d mortgage	.....	104¼	.....	.....	.....	.....
4th mort. 5s, ext.	.....	.....	.....	.....	.....	.....
5th mortgage	.....	.....	.....	.....	.....	.....
7s, Consol. gold	126¼	126½	.....	....	.....	126¼
Great West. 1st mort	.....	.....	.....	.....	.....	.....
2d mortgage	.....	.....	.....	.....	.....	.....
Hannibal & St. Jo	.....	.....	.....	.....	.....	.....
Preferred	85½	86	86½	88	85	85
8s. Convertible	.....	105	.....	.....	...	.....
Houston & Tex. Cen	70	.....	75	.....	71	....
1st mortgage	.....	.....	.....	112½	.....	113
2d mortgage	.....	.....	.....	.....	.....	.....
Illinois Central	134¾	134	134¼	135	134	134¼
LakeShore&MichSo	106¾	108	107¾	104¾	102¼	103⅛
Consol. 7s	.....	.....	.....	.....	.....	.....
Consol. 7s, reg	.....	.....	.....	.....	.....	.....
2d Consolidated	.....	.....	.....	.....	.....	.....
Leh. & W. B. 7s, Con	.....	.....	.....	.....	.....	.....
Long Dock bonds	.....	.....	.....	.....	.....	.....
Louisville & Nash.	73½	75½	74⅝	73⅝	74½	74⅝
7s, Consolidated	.....	.....	117¾	.....	.....	117¾
Manhattan	.....	50	50	50½	48½	48½	47⅜
1st pref	.....	91	.....	.....	.....	90	.....
Met. Elevated	.....	87	.....	87¼	.....	....	87¼
1st mortgage	.....	.....	101½	.....	.....	101½	102
Michigan Central	78¼	79½	79⅞	78½	78⅜	78⅞
7s, 1902	128	.....	.....	.....	.....	127	.....
Morris & Essex	124	.....	.....	.....	.....	124	.....
1st mortgage	.....	.....	.....	136½	.....	.....	.....
2d mortgage	115	.....	.....	.....	116	.....	.....
7s of 1871	121¼	.....	.....	122	.....	122½	.....
7s, Convertible	...	...	...	.....	.....	.....	.....
7s, Consolidated	123½	123¾	123½	.....	.....	.....	.....
N.Y. Cen. & Hud. R.	127⅞	128¾	128¼	126⅛	125⅝	126⅜
6s, S. F. 1883	.....	104½	.....	.....	.....	.....	.....
6s, S. F., 1887	.....	.....	.....	.....	.....	.....	.....
1st mortgage	.....	.....	.....	.....	135	134½	134½
1st mortgage, reg.	...	133⅞	133⅞	.....	.....	.....	.....
N. Y. Elevated	.....	.....	...	.....	.....	105	.....
1st mortgage	116¾	.....	.....	.....	117	.....	.....
N. Y. & Harlem	.....	.....	.....	.....	.....	.....	.....
Preferred	.....	.....	.....	.....	.....	.....	.....
1st mortgage	.....	.....	.....	.....	.....	.....	.....
1st mortgage, reg	.....	.....	.....	.....	.....	.....	.....
N. Y., Lake Erie & W	35	35¾	36⅛	35⅜	35¾	36⅛
Preferred	71¾	72½	73	74	73¾	.....
2d Consolidated	92⅞	93½	93½	93¾	93¾	93¾
New 2d 5s fund	.....	.....	.....	89¾	.....	.....
N.Y.,N.Hav'n&Hart	.....	.....	.....	175	.....	.....
North Mo. 1st mort	...	.....	121	.....	.....	.....
Northern Pacific	38½	39⅛	39	38	37⅜	38⅛
Preferred	76⅞	78¼	78¼	78¾	77	77⅜
Ohio & Mississippi	37	37	37	.....	36⅝	37
Preferred	98	.....	.....	.....	.....	.....
2d mortgage	120	120	.....	....	.....	120
Consolidated 7s	.....	.....	.....	.....	.....	.....
Consol. S. Fund	.....	.....	.....	.....	.....	.....
Pacific Mail S. S. Co	39	39⅜	39¼	39	39⅜	39½
Pacific R. R. of Mo.	.....	.....	.....	.....	.....	.....
1st mortgage	107½	...	.....	.....	.....	107¾
2d mortgage	.....	.....	114	.....	.....	.....
Panama	.....	.....	.....	.....	.....	.....
Phila. & Reading	59¾	60	58⅛	55⅝	56¼	57⅛
Pitts,Ft.W.&Chi.gtd	135	.....	.....	135	.....	.....
1st mortgage	.....	.....	.....	.....	.....	.....
2d mortgage	.....	.....	.....	.....	.....	.....
3d mortgage	.....	.....	.....	.....	.....	.....
Pullman Palace Car	.....	.....	125½	125½	125¼	.....
Quicksil'r Min'g Co	12	12⅞	12⅜	12⅞	.....	.....
Preferred	.....	.....	.....	.....	.....	.....
St. Louis & San Fran	38	.....	.....	.....	38	.....
Preferred	52½	52½	53½	.....	53	.....
1st Preferred	90	.....	...	.....	88	.....
St. L., Alt'n & T. H.	27	24¼	.....	.....	.....	23¾
Preferred	.....	62½	62	61	59⅞	.....
1st mortgage	.....	.....	.....	.....	.....	.....
2d mort. pref	.....	.....	.....	.....	.....	.....
Income bonds	.....	.....	.....	.....	.....	.....
St. L., Iron Mt. & S	.....	.....	.....	.....	.....	.....
1st mortgage	.....	115⅛	116	.....	.....	.....
2d mortgage	110¼	.....	110½	.....	110	109¼
Toledo and Wabash	....	.....	.....	.....	.....	.....
1st mortgage	...	...	.....	.....	111	.....
2d mortgage	104	.....	105	.....	.....	.....
7s, Consolidated	99	.....	...	.....	.....	.....
St. Louis Division	.....	103	103	103½	.....	.....
Union Pacific	110¾	112	111¾	110	109⅞	110¼
1st mortgage	117	.....	117½	117⅜	117½	117⅜
Land Grant 7s	.....	.....	.....	.....	.....	.....
Sinking Fund 8s	118	118¼	.....	118⅛	.....	118⅛
United States Ex	75	.....	.....	.....	.....	.....
Wabash, St. L.& Pac	29¾	30¼	31	29¾	29⅛	29⅜
Preferred	54¾	56	56¼	55⅞	55	54¾
New mort. 7s	.....	.....	.....	.....	.....	...
Wells-Fargo Ex	....	.....	.....	.....	.....	.....
Western Pacific b'ds	.....	.....	.....	.....	.....	.....
Western Union Tel.	82	83⅞	83½	82½	81½	81⅞
7s., S.F conv., 1900	.....	.....	.....	.....	.....	119½
FEDERAL STOCKS :—						
U. S. 4s, 1907, reg	120½	120⅜	120½	.....	121⅛	121½
U. S. 4s, 1907, coup	120⅝	120½	120½	121	121½	121¼
U. S. 4½s, 1891, reg	....	116½	.....	116¼	116¼	116¼
U. S. 4½s, 1891, coup	.....	116	.....	116¼	116¼	.....
U. S. 5s, 1881, reg	.....	.....	.....	.....	.....	.....
U. S. 5s, cont'd at 3½	102¼	102	101¾	.....	102	102
U. S. 6s cont'd at 3½	.....	.....	.....	.....	.....	.....
Dt. of Col. 3-65s, reg	.....	.....	.....	.....	.....	.....
Dt. of Col.3-65s,coup	.....	.....	.....	.....	.....	.....

Boston Stock Exchange.

Prices for the Week Ending April 19.

	Th.13.	F.14.	Sat.15.	M.17.	Tu.18.	W.19.
Atch.,Top.&San.Fe	87½	88	88⅝	88¼	87⅛	86¾
1st mortgage	119	.....	119	.....	.....	.....
2d mortgage	.....	.....	.....	.....	.....	.....
Land Grant 7s	.....	114	.....	.....	.....	.....
Boston & Albany	163	164	164¼	165	165	.....
7s reg	.....	.....	.....	.....	.....	.....
Boston and Lowell	101¼	.....	.....	102	102	101
Boston & Maine	.....	146	.....	.....	145½	.....
Boston & Providence	.....	.....	.....	.....	.....	.....
Bos'n,Hart.& Erie7s	48	.....	49¾	.....	.....	.....
Burl.& Mo.R.L.G.7s	.....	.....	.....	.....	.....	.....
Burl.& Mo.R.in Neb	.....	.....	.....	.....	.....	.....
6s, exempt	.....	.....	111	111	.....	.....
4s	.....	82	.....	.....	.....	81⅝
Chi.,Burl. & Quincy	129	129⅜	130	129¼	129	129⅜
Cin.,Sand&Clev($50)	....	.....	25½	26	.....	25
Concord ($50)	.....	.....	.....	100½	.....	.....
Connecticut River	.....	.....	.....	.....	.....	.....
Eastern	39	40	40	39¾	38½	37½
New 4½ Bonds	.....	.....	107¼	107	.....	107
Fitchburg	124¾	.....	125	125½	125¼	.....
N.Y. & New England	46	.....	47	47	47	46½
7s	.....	114	114	114½	.....	114¾
Northern N. H.	.....	.....	.....	109	.....	.....
Norwich&Worcester	.....	.....	.....	.....	.....	.....
Ogden & Lake Cham	.....	.....	.....	.....	.....	.....
Preferred	.....	.....	.....	.....	.....	.....
Old Colony	130	128¼	.....	131	129½	129½
Ph., Wil.&Balt.($50)	.....	...	.....	.....	.....	.....
Portl'd,Saco & Ports	.....	.....	.....	.....	.....	.....
Pueblo & Ark Val	.....	.....	.....	.....	.....	.....
7s	.....	.....	.....	.....	.....	.....
Pullman Palace Car	.....	.....	.....	.....	125¾	.....
Union Pacific	.....	111¾	112	112	110	110⅜
6s	.....	115¼	.....	115⅜	.....	116
Land Grant 7s	...	.....	.....	.....	.....	.....
Sinking Fund 8s	117½	.....	117¾	117½	.....	117¾
Vermont & Canada	.....	.....	.....	.....	.....	.....
Vermont & Mass	.....	.....	.....	.....	.....	.....
Worcester & Nashua	....	.....	.....	.....	.....	60
Cambridge (Horse)	.....	.....	.....	.....	.....	.....
Metropolitan(Horse)	.....	75	.....	.....	75	.....
Middlesex (Horse)	.....	.....	.....	.....	.....	.....
Cal.&Hecla Min'gCo	.....	.....	.....	230	230	233
Quincy	46	46	45¾	46	46¾	40¼

Philadelphia Stock Exchange.

Closing Prices for the Week Ending April 18.

	W.12.	Th.13.	F.14.	Sat.15.	M.17.	Tu.18.
Allegh'y Val. 7 3-10s	.....	.....	122½	.....	.....	.....
7s, Income	48	49	.....	49½	.....	52½
Buff., Pitts & West.	17⅜	17⅛	17	17	16½	16⅜
Camd'n & Am. 6s, '83	.....	.....	.....	.....	.....	.....
6s, 1889	.....	.....	.....	.....	.....	.....
Mort. 6s, 1889	114½	.....	.....	.....	.....	114⅜
Camden & Atlantic	.....	.....	.....	.....	.....	.....
Preferred	.....	.....	.....	.....	.....	38
1st mortgage	.....	.....	.....	.....	.....	.....
2d mortgage	.....	.....	.....	.....	.....	.....
Catawissa	.....	.....	22½	.....	.....	.....
Preferred	.....	.....	.....	56½	.....	.....
7s, new	.....	.....	.....	.....	.....	.....
Del. & Bound Brook	.....	.....	.....	.....	.....	.....
7s	.....	.....	.....	.....	.....	.....
Elmira&Williamsp't	.....	.....	.....	.....	.....	.....
Preferred	.....	.....	.....	.....	.....	.....
Hunt. & B. Top Mt.	....	13	12¾	.....	.....	.....
Preferred	.....	.....	.....	25¼	25¼	25
2d mortgage	.....	.....	.....	.....	.....	.....
Lehigh Navigation	40¾	40⅜	.....	40⅞	40	39¾
6s, 1884	104½	.....	.....	.....	.....	104
Gold Loan	111⅜	111⅜	111½	.....	112	112
Railroad Loan	116	...	...	.....	.....	117
Conv. Gold Loan	108½	.....	.....	.....	109	.....
Consol. Mort, 7s	118½	.....	.....	118	...	118¼
Lehigh Valley	60⅞	61	61	61	61	61
1st mort. 6s, coup	.....	.....	.....	.....	.....	.....
1st mort. 6s, reg	.....	.....	.....	.....	.....	.....
2d mort. 7s	.....	131	.....	.....	.....	.....
Consol mort. 6s	.....	.....	.....	121	121	.....
Consol.mtg.6s,reg	.....	.....	121	.....	.....	121
Little Schuylkill	57¼	.....	57	.....	.....	57¼
Minehill&Sch.Hav'n	.....	.....	.....	.....	.....	.....
North Pennsylvania	64	63¾	64	64	64	.....
1st mortgage 6s	.....	.....	.....	.....	.....	.....
2d mortgage 7s	.....	.....	.....	.....	.....	.....
Genl. mtg.7s,coup	.....	.....	.....	.....	.....	.....
Genl. mtg. 7s, reg	.....	.....	.....	.....	.....	.....
Northern Central	.....	.....	.....	.....	.....	50
5s	.....	.....	97⅛	.....	.....	.....
Northern Pacific	39	38¾	39	39	38	37¼
Preferred	78	77¾	78¼	77⅞	76¾	76¾
Pennsylvania R. R.	62½	62¾	62⅛	62⅜	62	61¾
1st mortgage	.....	.....	.....	.....	.....	.....
Gen'l mort	.....	.....	.....	.....	.....	.....
Gen'l mort reg	.....	.....	.....	.....	.....	.....
Consol. mort. 6s	.....	118	.....	.....	118¼	118
Consol. mort. reg	.....	.....	.....	.....	.....	.....
Pa. State 5s, new	.....	.....	117½	118	118	...
do 4s, new	.....	.....	.....	.....	.....	.....
Phila. & Reading	30⅛	29⅞	30	29¾	27⅞	28⅛
1st mortgage 6s	122	.....	.....	.....	.....	.....
7s of 1893	120	.....	.....	.....	.....	.....
7s, new convert	75	79½	.....	.....	.....	.....
Consol. mort. 7s	.....	125	125½	.....	.....	.....
Consol. mort. reg	.....	.....	.....	.....	.....	.....
Gen'l mort. 6s	97¼	98	97	97¼	96¾	96¼
Philadelphia & Erie	16¼	.....	.....	.....	.....	.....
1st mortgage 5s	.....	102½	.....	.....	.....	.....
2d mortgage 7s	.....	.....	.....	.....	.....	.....
Pittsb.,Cin.&St.L.7s	.....	.....	.....	.....	.....	.....
Pitts.,Tit.&Buff. 7s,	.....	.....	.....	.....	.....	.....
Schuylkill Navi't'n	..	..	..	.....	.....	.....
Preferred	.....	.....	13½	.....	.....	.....
6s, 1872	.....	.....	.....	.....	.....	.....
6s, 1882	93	.....	.....	91	.....	.....
United Co. of N. J.	186	..	186½	187	187	.....
Hestonville, (Horse)	.....	.....	.....	.....	.....	.....
Chestnut&Wal.(do)	.....	.....	.....	.....	.....	.....
Green & Coates (do)	.....	.....	.....	..	....	. .

Baltimore Stock Exchange.

Closing Prices for the Week Ending April 18.

	W.12.	Th.13.	F.14.	Sat.15.	M.17.	Tu.18.
Baltimore & Ohio	.....	.....	.....	.....	.....	.....
6s, 1880	.....	.....	.....	.....	.....	.....
6s, 1885	.....	105⅛	.....	.....	.....	.....
Central Ohio ($50)	...	.....	.....	.....	.....	.....
1st mortgage	.....	.....	109	.....	109⅛	.....
Marietta & Cincin'ti	.....	.....	.....	.....	.....	.....
1st mortgage, 7s	122½	.....	122¾	.....	.....	.....
2d mortgage, 7s	98¾	.....	.....	.....	.....	.....
3d mortgage, 8s	53⅛	.....	.....	54¼	.....	.....
Northern Cen. ($50)	50	.....	.....	.....	.....	50
2d mort., 6s 1885	.....	.....	.....	.....	.....	.....
3d mort., 6s, 1900	.....	.....	.....	.....	.....	.....
6s, 1900, gold	.....	.....	.....	116¾	.....	.....
6s, 1904, gold	114	.....	.....	.....	.....	.....
Pitts. & Connellsv.7s	.....	124	.....	.....	.....	121
Virginia 6s, Consol.	.....	66½	67	67⅜	68	66½
Consol. coupons	.....	60	.....	.....	62	62¼
10-40 bonds	43¾	44	43¾	44	44½	44
Def'd Certificates	.....	13	.....	.....	.....	.....
Western Maryland	.....	.....	.....	.....	.....	.....
1st M.,end.by Balt	.....	.....	.....	.....	.....	.....
2d M. do	.....	.....	.....	.....	.....	.....
3d M., do	.....	.....	.....	.....	.....	.....
1st M.,unendors'd	.....	.....	.....	.....	.....	.....
2d M.,end.WashCo	.....	.....	.....	.....	.....	.....
2d M., preferred	.....	.....	.....	.....	.....	.....
City Passenger R R.	.....	.....	.....	.....	.....	.....

London Stock Exchange.

	Closing Prices			
	Apl. 6.		Mar. 31.	
Baltimore & Ohio (sterling)	114	116	114	116
Central of N. J., $100 shares	93	98	93	98
Do. consol. mort.	114	118	113	115
Do. Adjustment Bonds	104	109	104	109
Do. Income Bonds	98	102	98	102
Det., G'd Haven & Mil. Equip bds	111	113	109	111
Do. Con. M. 5p.c., till '83 aft'r 6p.c	110	112	108	110
Illinois Central $100 shares	139	141	139	141
Lehigh Valley Cons. mortgage	118	122	118	122
Louisville & Nashville mort 6s.	101	103	101	103
Do. Sink. Fund bds (S. & N. Ala)	98	100	98	100
Do. capital stock $100 shares.	81	83	82	84
N. Y. Cent. & Hud. R. mt. bds.	135½	136½	133	136
Do. $100 shares	135	136	136	137
Do mort. bonds (stg.)	122	125	120	124
N. Y., Lake Erie & West., $100 shs	37½	38	38½	39
Do. 6 p. c. pref. $100 shares	77	79	78	80
Do. 1st Con. Mort. bds (Erie)	127	129	127	129
Do. do. Funded Coupon bds.	123	125	123	125
Do. 2d Consol Mort. bonds	97	98	97½	98¼
Do. do. Funded Coupon bds.	95	97	95	97
Do. Gold Income bonds	..	..	88	92
N. Y., Pa. & Ohio 1st mort. bonds.	48½	49½	49	56
Do. Prior Lien bds (sterling)	101	105	101	105
Pennsylvania, $50 shares	64	65¼	65	66
Do. Con. Sink Fund Mort.	118	120	118	123
Philadelphia & Reading $50 shs	32¼	32¾	32	32¼
General Consol Mortgage	118	120	118	120
Do. Improvement Mortgage	103	105	106	108
Do. Gen. Mtg. '74, ex-def'd coup.	99	101	97	98
Do. Scrip for the 6 def. ⅛ coup.	99	101	97	100
Pittsb., Ft. W. & Chi. Eq. bds.	104	106	104	106
St. L. Bridge 1st mort. gold b'd.	124	126	123	125
Do. 1st pref. stock	98	100	98	102
Union Pa. Land Grant 1st. mtg.	113	115	113	115
Wabash, St. L. & P. $100 shs	35	36	35½	36¼
Do. $100 pref. shares	59¼	60¼	62	63
Do. gen. mort. bonds	84	86	85	87

AMERICAN RAILROAD JOURNAL.

Financial and Commercial Review.

THURSDAY EVENING, April 20, 1882.

THE quotations for call loans to the stock-brokers on stocks this forenoon were 3½ to 5 per cent, and on United State bonds 2@3 per cent. In the afternoon the rate at the Stock Exchange was 3½ per cent, falling in the last hour to 3 per cent, although at the close the rate was 4 per cent.

The posted rates this morning for prime bankers' sterling were 4.87@4.87½ and 4.90. The actual rates were 4.86¼@¾ and 4.89@½, with cable transfers 4.89¾@4.90¼, and prime commercial bills 4.85¼@¾. The actual rates for Continental bills are as follows: Francs, 5.18⅛@¾ and 5.15; Marks 85@⅛ and 95⅝@¾; and Guilders, 40⅛ and 40¼.

An agreement has just been entered into among the leading bankers here, respecting the new arrangement as to the ratio of discount to be allowed the acceptors of documentary bills in London. It is of sufficient interest to the business community to copy entire:—

"It is proposed that from and after the 1st of July next the acceptors of bills payable in Great Britain and Ireland desiring to retire the documents hypothecated, to secure the payment of the same at maturity, shall be allowed a rebate of interest at the rate of one-half of one per cent per annum above the advertised rate of interest for short deposits allowed by the leading joint-stock banks in London.

"Referring to the foregoing, which has been agreed to by the leading banks and bankers in London, we, the undersigned, hereby express our approval of the same, and, in order to carry it out, agree to have inserted in the letters of hypothecation accompanying documentary bills the following clause:—

"It is understood that in the event of the bill being paid under discount, rebate of interest shall be allowed at the rate of one-half of one per cent per annum above advertised rate of interest for short deposits allowed by the leading joint-stock banks in London.

"The said revised form of letters of hypothecation is to be required by us on after the 15th day of June next: Brown, Bros. & Co., Drexel, Morgan & Co., Kidder, Peabody & Co., August Belmont & Co., Morton, Bliss & Co., The Bank of Montreal, The Canadian Bank of Commerce, J. & W. Seligman & Co., Bank of New York, N. B. A., Heidelbach, Ickelheimer & Co., Jesup, Paton & Co., The Nevada Bank of San Franaisco, Blake Brothers & Co., M. Morgan's Sons, Knoblauch & Lichtenstein, Schultz & Ruckgaber, Eugene S. Bellin & Co., Eugene Kelly & Co., Speyer & Co., Hallgarten & Co., John Munroe & Co., Merchants' Bank of Canada, Plock & Co., J. & J. Stuart & Co., Kuhn, Loeb & Co., Baltzer & Lichtenstein, Maitland, Phelps & Co., Bank of British North America, J. S. Kennedy & Co., Hilmers, McGowan & Co."

The Colorado Coal and Iron Company has a capital stock of $10,000,000 and a bonded debt of $3,500,000. Its property consists: (1) of coal lands, which amounted at the commencement of the present year to 16,741 acres; (2) of iron mines, embracing the Calumet, Smithfield, Hecla, Hot Springs, Placer and Grape Creek, all of which yield ore adapted to the making of iron and steel; (3) of coking establishments; (4) of two blast furnaces, one of which is complete and the other in course of construction; (5) of flooming and rail mills and steel and nail works; and (6) of about 300,000 acres of land, on part of which the town of Pueblo is situated. The earnings of the Company last year, which were derived chiefly from coal and coke products, amounted to $1,551,940, the expenses to $1,148,786, and the net earnings to $403,154, being $238,614 in excess of the amount required to pay interest on the bonds; in addition to which the land sales amounted to $121,206.

The earnings of the Buffalo, Pittsburgh and Western and New Castle and Oil City Railway for the month of March, 1882, were $61,544; the expenses $27,743, and the net profits $33,801; for the month of March, 1881, the earnings were $51,863, the expenses $33,968, and the net profits $17,895—showing an increase in earnings of $9,681, with a decrease in expenses of $6,225, making an increase in the net earnings of $15,906. For the first three months of 1882, the earnings were $181,754, the expenses $85,240, and the net profits $96,514; for the corresponding period of 1881 the earnings were $142,576, the expenses $112,029, and the net profit $30,547—showing an increase in earnings of $39,178, a decrease in expenses of $26,789, and an increase in net profits $65,967.

The Massachusetts State Senate, on the 17th inst., passed to be engrossed the bill authorizing the Eastern Railroad Company to issue preferred stock in exchange for certificates of indebtedness.

On Saturday last the Cincinnati, New Orleans and Texas Pacific Railway Company paid to the trustees of the Cincinnati Southern Railway the second quarterly payment under the lease, amounting to $200,000, which sum was paid into the city treasury on the same day by the trustees. The gross approximate earnings of this road for the second quarter, covering the months of January, February and March, were $554,500. For mail, express, etc., estimated, $30,000; interest on bonds in the hands of the sinking fund, $10,000. Total moneys on deposit, $594,500. Taking the operating expenses of the first quarter as a basis of calculation, which were 53 per cent, would make the earnings $284,615; deduct rental, $200,000. Net earnings for quarter ending March 31, $84,615; and surplus from last quarter, $35,000—total, $119,615.

The mortgage of $10,000,000 from the Louisville and Nashville Railroad Company to John A. Stewart and Edward H. Green, both of this city, trustees, to secure the payment of the issue of forty-year "trust bonds" put on the market by that Company a few weeks ago, is being recorded along the line of the road. Bonds to the amount of $9,633,000, and stocks to the amount of $18,529,700, were pledged for the redemption of the "trust bonds," besides roads, rolling-stock contracts, rolling-stock, and other considerations, to the aggregate value of $30,681,235.

The decision of the Supreme Court of the United States, given on another page, adversely to the "premium bond" issue, and establishing the validity of the "consolidated bonds" of New Orleans, caused great excitement in that city when it became known. The "premium bonds," it is said fell twelve points inside of an hour, from 82 to 70, while the consolidated bonds correspondingly advanced. It will make necessary an entire revision of municipal finances, and changes the basis and increases largely the amount of taxation.

The following quotations of sales of railway and other securities, for the week, are in addition to those given elsewhere in our columns:

New York.—Albany and Susq. consol., 126; Buffalo, New York and Erie 1st, 1916, 128½; do. 1st, 1898, 128; Chicago, Burlington and Quincy 8s, 104½; Charlotte, Col. and Aug. 1st, 108; Chicago and Milwaukee 1st, 121; Chicago and Northwestern S. F. 5s, 99½; Chesapeake and Ohio cur. int., 45¾; do. 1st, Series A, 100½; Chicago and Alton Inc., 101; Cairo and Fulton 1st, 110; Chicago, St. Paul, Minneapolis and Omaha, 35½; do. pref., 99; do. consol., 102¾; Cedar Falls and Minnesota, 18; Chicago, St. Louis and New Orleans, 75; Central Iowa, 83; Columbus, Chicago and Indiana Central 1st, Trust Co. certif. ass. sup., 115; do. inc., 50½; Cleveland and Toledo S. F., 109; Chicago, Milwaukee and St. Paul, Chicago and Pacific div. 1st, 110; do. La C. and Dav. div. 1st, 95; do. S. M. div. 1st, 107½; do. Chicago and Pacific West div., 91½; do. Mineval Point div., 93½; Denver, South Park and Pacific 1st, 104½; Dubuque and Sioux City, 84; Denver and Rio Grande, 61½; do. 1st, 114; do. consol., 105¼; Delaware and Hudson Canal 1st, Penn. div., reg., 125½; Detroit, Monroe and Toledo 1st, 122; East Tenn., Virginia and Georgia, 11; do. pref., 20½; do. inc., 47½; do. 5s, 74¾; Elizabethtown, Lexington and Big Sandy 6s, 99. Green Bay, Winona and St. Peter, 10¼; Illinois and Southern Iowa 1st, 100; Indianapolis, Decatur and Springfield pref., 31; do. 1st, 101; Indiana, Bloomington and Western, 39½; do. 1st, 89; International and Great Northern 1st, 107; do.

6s, 84½; Keokuk and Des Moines, 17; do. 1st, 104; Kansas Pacific 1st consol., 105½; do. 6s, 1896, 112; do. Denver div. ass., 111; Lehigh and Wilkesbarre consol. ass., 103; Louisiana and Missouri River, 17; Louisville, New Albany and Chicago, 60; Lake Erie and Western, 29; do. 1st, 101¾; Long Island, 54; do. consol. 5s, 98½; Louisville and Nashville Gen'l mort. 6s, 99; do. N. O. and Mobile div. 6s, 94¾; Lafayette, Bloomington and Muncie 1st, 102½; Missouri, Kansas and Texas, 30¼; do. consol., 105; do. 2d, 63¾; do. gen'l mort. 6s, 82; Milwaukee, Lake Shore and Western, 48; do. 1st, 102¾; do. inc., 79; Marietta and Cincinnati 1st pref., 10; do. 2d pref., 4½; Memphis and Charleston, 53; Manhattan Beach, 33½; Michigan Southern S. F., 110; Minneapolis and St. Louis, 19¼; Mobile and Ohio, 24; do. 1st deben., 82½; do. 1st, 110½; Michigan Central 5s, 98; Missouri Pacific, 89⅝; do. 1st 103½; do. 3d, 110½; Nashville, Chattanooga and St. Louis 60; do. 1st, 115½; New York, Ontario and Western, 25⅜; Norfolk and Western pref., 50½; do. Gen'l mort., 103¾; New Orleans Pacific 1st, 86½; Northern Pacific 1st, 101⅜; New York City and Northern Gen'l mort., 65; New Jersey Southern 6s, guar., 95½; Ohio Central, 15½; do. inc., 36; do. 1st, 98; Oregon Transp., 68½; Oregon Railway and Nav., 141; Ohio and Mississippi, Springfield div. 1st, 120⅜; Ohio Southern 1st, 86; do. inc., 32; Peoria, Decatur and Evansville, 29; do. 1st, 105; Quincy and Toledo 1st, 106; Richmond and Danville, 120; do. West Point, 115; do. 1st, 99½; Rochester and Pittsburg, 30½; do. 1st, 101; Rome, Watertown and Ogdensburg, 1st consol., 89; Richmond and Alleghany 1st, 90⅜; South Carolina 1st, 98; St. Louis, Kansas City and Northern, R. E. 7s, 103; do. Omaha div. 1st, 109½; Scioto Valley 1st, 100; Southern Pacific of California 1st, 103; St. Paul, Minneapolis and Manitoba, 119½; do. 1st, 110; do. 2d, 107½; do. 1st, Dakota ext. 108¼; St. Paul and Duluth pref., 70; Syracuse, Binghamton and New York 1st, 121; St. Louis and San Francisco 2d, Class A, 100½; do. B, 92; do. C, 90; St. Louis, Iron Mountain and Southern, Cairo, Arkansas and Texas 1st, 109; Toledo Delphos and Burlington, 15; Texas and Pacific, 39; do. inc. L. G., 64; do. Rio Grande div. 1st, 82¼; Texas Central 1st, 108½; Utah Southern Gen'l mort. 7s, 105; Union Pacific Collateral Trust, 106; Wabash, St. Louis and Pacific Gen'l mort. 6s, 79¾; do. Iowa div. 1st, 92; Winona and St. Peter 1st, 109¾; Alabama, Class A, 85⅜; Louisiana 7s, consol., 63⅝; Missouri 6s, 1887, 110; North Carolina Special Tax 3d class, 7¼; South Carolina 6s, Brown consol. 103½; Tennessee 6s, 56; Virginia consol. 6s, 96; do. 6s, def., 15; Sutro Tunnel, ⅝; Canton Co., 60; Colorado Coal and Iron, 50¾; do. 6s, 93; Consolidation Coal, 31; Maryland Coal, 15; Central Mining, ⅞; Excelsior, 2; Homestake, 17¾; Ontario, 35; Standard, 18.

Philadelphia.—Allegheny Valley income scrip, 48; Am. S. S. Co. 6s, 104; Catawissa 2d pref., 53½; Central Transportation, 32; Erie and Western Transp., 51½; Huntingdon and Broad Top Mt. consol. mort. 5s, 87½; Oil Creek 6s, 100½; Philadelphia and Newtown 1st, 82; Pennsylvania Company 6s, 106; do. 4½s, 95⅞; Philadelphia, Wilmington and Baltimore 4s, 95; Philadelphia and Reading R. R. scrip, 92; do. income 7s, 97; Philadelphia, Germantown and Norristown, 110; Susq. Canal 6s, 59¾; Schuylkill Nav. 6s, 1895, 66; Sunbury, Hazleton and Wilkesbarre 5s, 95; Texas and Pacific consol. mort. 6s, 98¾; do. 1st mort. 6s, 106½; do. Rio Grande div., 6s, 82⅜; Union and Titusville 7s, 99; Union Pass. R. W. 6s, 10$½; West Jersey div. scrip, 80; Western Pennsylvania 6s, Pittsburgh Branch, 106. The latest quotations are: City 6s, 108@118; do. free of tax, 128@132; do. 4s, new, 108@113; Pennsylvania State 5s, new loan, 117@119; do. 4s, old, 110@112; do. 4s, new, 114@114½; Philadelphia and Reading R. R., 28@28⅛; do. consol. mort. 7s, reg., 125½@126; do. mort. 6s, 120@121; do. gen'l mort. 6s, coupon, 96@96¼; do. 7s, 1893, 116@117; do. new conv., 78@80; United New Jersey R. R. and Canal, 186½@187½; Buffalo, Pittsburg and Western, 16⅜@16⅞; Pittsburg, Titusville and Buffalo 7s, 94¾@95¼; Camden and Amboy mort. 6s, 1889, 114¾@115; Pennsylvania R. R., 61¾@61⅞; do. general mort. 6s, coupon, 124@125; do. reg., 124@125; do. consol. mort. 6s, reg., 119@120; Little Schuylkill R. R., 57@57½; Morris Canal, 65@69; do. pref., 165@169; Schuylkill Navigation, 5@6; do. pref., 13¼@13½; do. 6s. 1882, 91@91½; do. 1872, 105½@106¼; Elmira and Williamsport pref., 58@60; do. 6s, 115⅜@116½; do. 5s, 95@102; Lehigh Coal and Navigation, 39⅞@40; do. 6s, 1884, 103@105; do. R. R. loan, 116¾@117¼; do. Gold Loan, 111¾@112¼; do. consol. 7s, 118¼@118¾; Northern Pacific, 37⅛@37¼; do. pref., 76⅞@77; North Pennsylvania, 63½@64½; do. 6s, 105@106½; do. 7s, 121@121½; do. 7s, General mort. reg., 120¾@121¼; Philadelphia and Erie, 15@16¼; do. 7s, 115@115¾; do. 5s, 102@103; Minehill, 62@62½; Catawissa, 21@23; do. pref., 56¼@57; do. new pref., 51¼@53¾; do. 7s, 1900, 118@—; Lehigh Valley 60¾@61; do. 6s, coupon, 121@123; do. reg., 123¼@123¾; do. 2d mort. 7s, 132¾@133¼; do. consol. mort. 120@121; Fifth and Sixth streets (horse), 152@155; Second and Third, 109@115; Thirteenth and Fifteenth, 70@78; Spruce and Pine, 45@47; Green and Coates, 75@76; Chestnut and Walnut, 90@91; Germantown, 65@80; Union, 110@115; West Philadelphia, 105@110; People's 11½@12½; Continental, 100@102.

Baltimore.—Atlantic Coal, 1.30; Atlanta and Charlotte, 1st, 107¾; Baltimore City 6s, exempt, 122; do. 6s, 1890, 117¼; do. 6s, 1900, 128; do. 5s, 1894, 114; do. 5s, 1900, 117¾; Canton Co. 6s, gold, 105¾; Columbia and Greenville 1st, 101½; do. 2d, 88; Maryland Defense 6s, 103¾; Marietta and Cincinnati 1st Trust certificate, 124¾; do. 2d do. 100; do. 3d do., 54; Northern Central 5s, 97⅛; Ohio and Mississippi, Springfield div. 1st, 120; Richmond (Va.) City 8s, 1907, 130; Sutro Tunnel, 0.62½; Virginia Peelers, 36; do. coup., 37; Virginia Midland 2d mort., 107; Wilmington, Columbia and Augusta, 108; Winchester and Potomac, 15. The latest quotations are: Atlanta and Charlotte 1st, 107⅝@107¾; Baltimore and Ohio, 195@200; do. 6s, 1885, 105@105½; Baltimore City 6s, 1886, 108@—; do. 6s, 1890, 117@117½; do. 6s, 1900, 128@—; do. 5s, 1916, 120@—; Canton 6s, gold, 105@105¾; Columbia and Greenville 1st, 101@102½; Central Ohio 1st, 109@109½; Marietta and Cincinnati 1st, mort., 124½@124⅞; do. 2d, 100@100⅛; do. 3d, 54@54¼; Northern Central, 49¾@49⅞; do. 6s, 1900, gold, 115½@—; do. 5s, 1926, 97@@—; do. 6s, 1885, 105½@—; Norfolk Water 8s, 132@—; Ohio and Mississippi, Springfield div. 1st,—@120¼; Pittsburgh and Connellsville 7s, 124@—; Virginia Midland 5th mort., 92@93¼; Virginia Consols, 68⅛@68¾; do. 10-40s, 44@44¼; Wilmington and Weldon 7s, guar., 115@—.

Boston.—Atlantic and Pacific 6s, 94¼; do. blocks, 102½; do. inc., 29; Atchison, Topeka and Santa Fe 5s, 89; Boston Land, 7⅝; Boston Water Power, 5¼; Burlington and Missouri River Railroad in Nebraska 6s, non-exempt, 103¼; Boston, Clinton, Fitchburg and New Bedford, 65; Cincinnati, Sandusky and Cleveland 7s, 103¼; Chicago, Burlington and Quincy 4s, 86¾; do. 4s, Denver ext., 83½; Connotton Valley, 6¾; do. 7s, 50, do. 7s, Straitsville div., 33; California South'n blocks, 110; do. 6s, 85; Cent. of Iowa, 33½; Chicago, Milwaukee and St. Paul, Dubuque div. 6s, 102⅞; Connecticut River R. R. pref., 165; Connecticut and Passumpsic Rivers R. R., 91; do. 7s, 114; Cedar Rapids and Missouri River R. R., 105½; Flint and Pere Marquette, 24⅛; do. pref., 96; Highland Street R. R., 135; Iowa Falls and Sioux City, 81; Kansas City, Fort Scott and Gulf, 7s, 110½; Kansas City, St. Joseph and Council Bluffs 7s, 115; Kansas City, Lawrence and Southern 5s, 103⅝; Louisiana and Missouri River R. R. pref., 32½; Little Rock and Fort Smith, 49½; Lincoln and Northwestern 7s, 116½; Massachusetts Central, 13; do. 6s, 63; Michigan Central, 70; Mexican Central 7s, 83½; do. rights No. 3, 105; do. blocks, No. 2, 109; Maple River 7s, 105; Marquette, Houghton and Ontanagon, 64; Maine Central, 50; New York and New England 6s, 104½; Oregon Short Line 6s, 109; do. Subscriptions, 113; Rutland, 4½; do. pref., 24; Sonora 1st, 103¾; do. blocks, No 4, 450; Toledo, Delphos and Burlington, 7¼; do. inc. 6s, 23½; Southeast div. 6s, 71; do. inc. 6s, 19; Wisconsin Central, 17⅛; do. 7s, 1st series, 76; do. 7s, 2d series, 76; Atlantic Mining Co., 14½; Brunswick Antimony, 11; Franklin, 10¾; Huron, 1½; Osceola, 33½; Pewabic, 11; Phœnix, 2½; Sullivan, 1⅜; Silver Islet, 17½.

"My wife's a good expressman!" said an acquaintance the other day, and the crowd laughed at the idea of a woman being an *expressman*, forgetting that Eve, in Paradise, was Adam's express *company*.

The claim is now made that nine ladies in ten do return thanks for car seats given to them by gentlemen, and that the reason assigned by selfish men, who wish to excuse their want of gallantry, is a feeble one.

In a railroad car on the Pittsburgh and Lake Erie Railroad the seats were all full except one, which was occupied by a pleasant-looking Irishman, from Wampum, and at Beaver a couple of evidently well-bred and intelligent young ladies came in to procure seats. Seeing none vacant, they were about going into the next car, when Patrick arose hastily and offered them his seat with evident pleasure. "But you will have no seat for yourself," responded one of the young ladies with a smile, hesitating, with true politeness, to accept it. "Niver mind that!" said the gallant Hibernian, "I'd ride upon the cowcatcher to New York for a smile from such jintlemanly ladies.

The Coal Trade.

THE leading coal-carrying companies make the following reports of their tonnage for the week ending April 8th, and for the year to same date, compared with their respective amounts carried to the same time last year:—

	Week.	1882.	1881.
Reading Railroad	113,933	2,453,774	2,296,269
Schuylkill Canal	7,894	50,181	17,579
Lehigh Valley	79,280	1,889,215	1,771,956
Delaware, Lackawanna and Western	63,848	978,775	1,045,070
Shamokin	12,310	217,802	258,888
Central R. R. of New Jersey	76,146	916,518	993,241
United R. R. of New Jersey	29,169	406,477	401,365
Pennsylvania Coal	21,487	237,890	272,846
Delaware and Hudson Canal	42,424	784,414	915,651
Huntingdon and Broad Top Mountain	4,553	150,623	126,491
Penn. and New York	21,011	497,490	449,837
Clearfield, Pa.	59,726	732,628	573,762

The total tonnage of anthracite coal from all the regions for the week ending April 8, as reported by the several carrying companies, amounted to 400,077 tons, against 401,562 tons in the corresponding week last year, a decrease of 1,485 tons. The total amount of anthracite mined for the year is 5,968,298 tons, against 6,399,722 tons for the same period last year, a decrease of 431,424 tons. The quantity of bituminous coal sent to market for the week amounted to 71,432 tons, against 106,161 tons in corresponding week last year, an increase of 34,729 tons. The total amount of bituminous mined for the year is 1,266,388 tons, against 1,175,215 tons for the corresponding period last year, a decrease of 91,173 tons. The total tonnage of all kinds of coal for the week is 471,509 tons, against 507,723 tons in corresponding week last year, a decrease of 36,214 tons, and the total tonnage for the coal year is 7,234,686 tons, against 7,574,937 tons to same date last year, a decrease of 522,597 tons. The quantity of coal and coke carried over the Pennsylvania Railroad for the week ending April 1 was 231,789 tons, of which 170,142 tons were coal and 61,647 tons coke. The total tonnage for the year thus far has been 2,749,253 tons, of which 1,937,813 tons were coal and 811,440 tons coke. These figures embrace all the coal and coke carried over the road east and west. The shipments of bituminous coal from the mines of the Cumberland coal region for the week ending April 8 were 5,000 tons, and for the year to that date 455,002 tons, an increase of 22,649 tons as compared with the corresponding period of 1881. All the coal was shipped by the Baltimore and Ohio Railroad, the shipments by which show an increase of 3,589 tons over 1881. The canal shipments for the year have been 4,222 tons, a decrease of 8,777 tons as compared with 1881. The Pennsylvania R. R. shipments for the year have been 74,842 tons, an increase of 24,094 tons over last year. The Reading Railroad shipment for last week, ending April 15, was about 192,000 tons, of which 57,500 tons were sent to and 30,000 tons shipped from Port Richmond, and 16,000 tons sent to and 6,300 tons shipped from Elizabethport.—*Phil. Ledger, April* 17.

Overcoming the Dangers of Railway Travel.

Two inventions are announced, the use of which, it is claimed, will considerably lessen the danger of railroad travel. One of these is a brittle metallic tube, which is to be made to project from the cab of a locomotive, being connected with the brake-pipe of the air-brake apparatus, whether Eames or Westinghouse. When a switch or drawbridge is misplaced wires fastened to it will operate two arms at some distance in either direction so as to break this tube on approaching locomotives. In the Eames air-brake system, while the brakes are not in use a vacuum is maintained in the pipes; in the Westinghouse system a continuous pressure of air is maintained. In either case the breaking of the tube will at once set the brakes. The other invention provides for the immediate extinction of stove fires if the stove should upset in a railroad car. This is done by means of an elongated water reservoir suspended along the side of the car and operated by a rope attached to a valve.

Passenger Alarm on Steamers.

THE Memphis *Appeal* thinks it practicable to have an electric bell wire from the pilot-house and clerk's office attached to a bell in each stateroom on a steamboat. In case of a disaster like that of the Golden City a second of time counts for life or death. A sudden alarm to rouse all the sleeping passengers at once on the first discovery that the steamer is on fire would give the passengers a chance for their lives. There is always more or less dangerous delay when a messenger undertakes to awaken the sleepers by knocking on the cabin doors, and there is the risk of the messenger looking out for his own safety instead of the passengers. People who travel on the river are canvassing their chances to escape in case of fire, and it would be well for owners of steamers to provide all measures within their power to secure safety for their passengers. The same precautionary plan of simultaneously and suddenly awakening the sleeping guests of a hotel could also save precious time in case of fire.

Opening the Car Window.

MAYBE a man feels happy and proud and flattered and envied and blessed among men when he sees a pretty girl trying to raise a window on a railway car, and he jumps and gets in ahead of the other boys and says, "Allow me!" oh, so courteously. And she says, "Oh, if you please; I would be so glad." And the other male passengers turn green with envy and he leans over the back of the seat and tackles the window in a knowing way with one hand, as if peradventure he may toss it airily with a simple turn of the wrist, but it kind of holds on and he takes it in both hands, but it sort of doesn't let go to any alarming extent, and he pounds it with his fist, but it only seems to settle a "little closer into place," and then he comes around and bows up his back and tugs and pulls and sweats and grunts and strains, and his hat falls off and and his suspender buttons fetch loose, and his vest buckle parts and his face gets red and his feet slip and people laugh, and irreverent young men in remote seats grunt and groan every his collar at the forward button, and the time he lifts and cry out, "Now then, all together," as if in mockery, and he bursts pretty young lady, vexed at having been made so conspicuous, says in her iciest manner, "Oh, never mind, thank you; it doesn't make any difference," and then calmly goes away and sits down in another seat, and that wearied man gathers himself together and reads a book upside down. Oh, doesn't he feel good, just? Maybe he isn't happy, but if you think he isn't, don't be fool enough to extend any of your sympathy. He doesn't want it.—*Burlington Hawkeye.*

THE LAKE SHORE AND MICHIGAN SOUTHERN RAILWAY COMPANY.

TREASURER'S OFFICE, GRAND CENTRAL DEPOT,
NEW YORK, March 28, 1882.

The Board of Directors of this company have this day declared a dividend of TWO per cent upon the capital stock, payable on MONDAY, the 1st day of May next, at this office.

For the purposes of this dividend, and also for the annual meeting of the stockholders for the election of directors, etc., which is to be held on the 3d day of May next, the transfer books will be closed at 3 o'clock P. M. on Saturday, the 1st day of April next, and will be reopened on the morning of Friday, the 5th day of May next.

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New Saddle Tank Locomotives, 6 to 12 tons, delivery 60 to 90 days.
New Box, Flat, and Gondola Cars, Standard and Narrow Gauge, early delivery.
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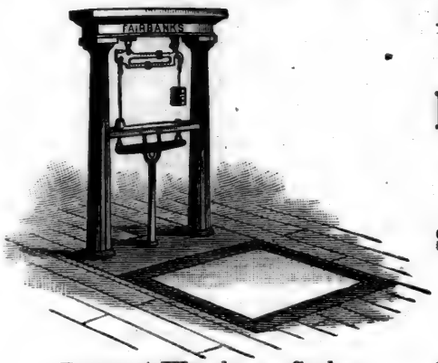
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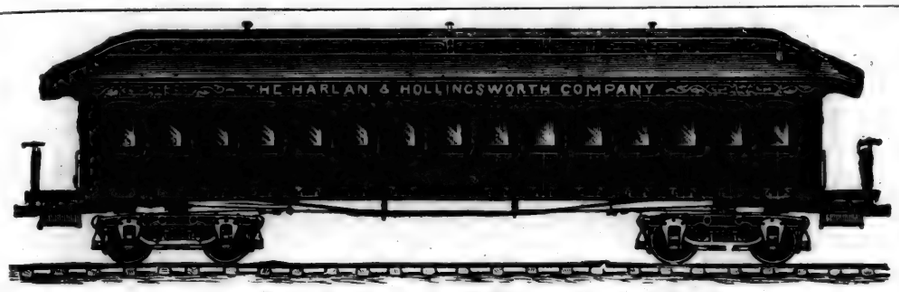
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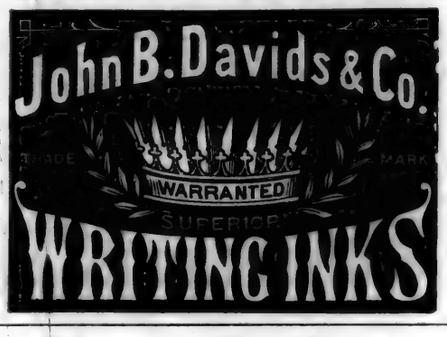
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AMERICAN Railroad Journal.

ESTABLISHED 1831.

Steam Navigation, Commerce, Finance, Banking, Machinery, Mining, Manufactures.

SECOND QUARTO SERIES.—VOL. XXXVIII., No. 16.] NEW YORK, APRIL 29, 1882. [WHOLE NO. 2,401.—VOL. LV.

Mahogany.

THE mahogany-tree was discovered just a little before the year 1600, and not till nearly a century later was it brought into European use. The first mention of it is that it was used in the repair of some of Sir Walter Raleigh's ships, at Trinidad, in 1597. Its finely variegated tints were admired; but in that age the dream of El Dorado caused matters of more value to be neglected. The first that was brought to England was about the beginning of the last century, a few planks having been sent to Dr. Gibbons, of London, by a brother who was a West Indian Captain. The doctor was erecting a house, and gave the planks to the workmen, who rejected them as being too hard. The doctor then had a candle-box made of the wood, his cabinet-maker also complaining of the hardness of the timber. But, when finished, the box became an object of general curiosity and admiration. He had one bureau, and Her Grace of Buckingham had another, made of this beautiful wood; and the despised mahogany now became a prominent article of luxury, and at the same time raised the fortunes of the cabinet-maker (Wollaston) by whom it had been at first so little regarded. Since that time, rivaling and almost displacing all other ornamental woods, mahogany has become everywhere indispensable, and is, all over the world, converted into whatever of useful or beautiful may promote the convenience and comfort, or delight the taste, the caprice, or the religious sentiment, of civilized man.

The mahogany-tree is found in Florida, and may thus be claimed as indigenous to the United States; and there is no reason to doubt that it may and hereafter will be planted and cultivated to great advantage. But hitherto it has been cut chiefly in the native forests of the Bahamas, the West India Islands, Honduras, and Yucatan.

Full grown it is one of the monarchs of the forests of tropical America. Its vast trunk and massive arms, rising to a very lofty height, and spreading with graceful sweep over immense spaces—covered with beautiful foliage, bright, glossy, light and airy, clinging so long to the spray as to make it almost an evergreen—present a rare combination of loveliness and grandeur. The leaves are very small, delicate, and polished like those of the laurel. The flowers are small and white, or greenish yellow. The fruit is a hard, woody capsule, oval, not unlike the egg of a turkey in size and shape, and contains five cells, in each of which are inclosed about fifteen seeds.

A few facts will furnish a tolerably distinct idea of the size of this splendid tree. The mahogany lumbermen, having selected a tree, surround it with a platform about twelve feet above the ground, and cut it above the platform. Some dozen or fifteen feet of the largest part of the trunk are thus lost. Yet a single log not unfrequently weighs from six or seven to fifteen tons, and sometimes measures as much as seventeen feet in length, and four and a half to five and a half feet in diameter, one tree furnishing two, three, or four such logs. Some trees have yielded 12,000 superficial feet, and at average piece prices have sold for $15,000. Messrs. Broadwood, London, pianoforte manufacturers, paid £3,000 for three logs, all cut from one tree, and each about fifteen feet long and more than three feet square.

In low and damp soils its growth is rapid; but the most valuable trees grow slowly among rocks on sterile soil, and seem to gather compactness and beauty from the very struggle which they make for an existence. In the Bahamas, in the most desolate regions, once flourished that curiously veined and much esteemed variety once known in Europe as "Madeira wood," but which has long since been exterminated. Jamaica, also, which used to be a fruitful source of mahogany, and whence in 1753 not less than 521,000 feet were shipped, is now almost depleted. That which is now furnished from there is very inferior, pale, and porous, and is less esteemed than that of Cuba, San Domingo, or Honduras.

An Automatic Air Railway Signal.

A PUBLIC exhibition of the McLeod Automatic Air Railroad Signal was given on the 21st inst. at Inventors' Institute, Cooper Union. It is represented as an ingenious device by which the approach of a train is announced by visible and audible signs. The tread of the forward car wheel passing over an incline bar depresses it, and throws an actuating lever, which at the bellows is caught up and held by a catch-lever. A spring is then compressed, and gradually pressing against the movable part of the bellows forces the air to a set of expansion valves and sets the signals. Experiments have shown that in one second after the actuating lever has been raised the air moves the valves a third of a mile away, and in three seconds the gong is sounded and the visible signals are dropped.

English and American Driving-Wheels.

WHILE English blacksmiths greatly excel their fellow-craftsmen on this side of the water, it is universally conceded that American founders and machinists are much more skilled than their English cousins. We have brought the art of casting iron to such a degree of perfection that our work is not only generally admired, but we use cast iron successfully in places where the English engineer would never dream of employing that material. Our success with cast iron no doubt accounts in some measure for our deficiency in the art of blacksmithing. On the other hand, the English have been obliged to carry their blacksmithing to a high degree of perfection because they possess no convenient substitute for wrought iron work. A case will serve to illustrate this: The driving-wheels on American locomotives are cast, while the corresponding members upon English engines are made entirely of wrought iron. The finish imparted to the wrought work by machines and tools specially devised for the purpose conceals its actual character, and the casual observer accustomed to American methods would never dream of the methods of manufacture. What we may call in familiar terms the hub is first fashioned under the steam hammer and by means of dies, so as to be ready to receive the inner ends of the arms or spokes. These are in turn welded in position, and after all are placed, a final heat is given to the parts, in order to give the whole a finish, under a drop in which are placed suitable dies. The rim of the wheel is of wrought iron, and is formed of the proper size and welded. A heat is then taken upon it, and also upon the ends of the several arms or spokes, when the two parts are brought together in proper position by means of suitable apparatus, and the several welds necessary to complete the wheel are made. The very best facilities for the purpose are, of course, provided, and the workmen employed know just how to proceed. They therefore accomplish very readily what most American blacksmiths would fear to undertake. After the rim has been thus joined in position the surplus iron in the angles between the arms and the rim is carefully shaped and trimmed, imparting a grace and beauty to the wheel which would scarcely seem possible in such a heavy

piece of wrought iron work. We know of no other single piece of work used on both sides of the Atlantic in which there is so great a difference in methods of manufacture.—*Blacksmith and Wheelwright.*

Indian vs. Chinese Teas.

WHAT chance has India in the race with China? Indian teas have always sold at higher prices than Chinese, and one reason is that Indian goes further. Very little tea is now sold in the United Kingdom of which one quarter at least is not Indian. Were the Indian supply to cease to-morrow the public would quickly perceive how weak their teas had become. By the said mixture with China teas the public have, little by little, been educated to appreciate the Indian flavor. In Ireland, for example, it has gone further—there Indian teas to a great extent are drank pure. The advocates of the Indian produce say that many discard Chinese for our Eastern teas, but never the reverse. Anyhow, it is a fact that the consumption has increased enormously (as shown in spite of the yearly largely increased imports by the small stocks now on hand). There is another point in favor of Indian teas—they are known to be pure and unadulterated, and so much cannot always be said for the Chinese. Some teas are yearly officially condemned, but we believe that this has never once occurred in the case of Indian teas. As the imports of Indian teas have increased yearly since 1850 (they were merely nominal then) to 52,000,000 pounds this year (that was the estimate; the amount available, due partly to weather, partly to the largely increased exports to Australia, will not exceed 48,000,000 pounds), and as the stocks, now near the end of the year, are far less than usual, it is evident that the statistical position is satisfactory. Machinery is now largely used in the manufacture of tea in India. A well-appointed Indian tea factory shows a steam-engine of perhaps 20-horse power, working rollers, driers, equalizers, shifters, and what not. The Chinese have been making tea for a thousand years, and yet the rule there is hand-made tea. In India the industry dates back some forty years, and all is done by machinery. This gives the Indian planter a great advantage in his race with China. As with all industries, so with tea; the work is done more regularly, better, in a more cleanly way, and far more economically by machines than by hand. If India ever vies with China in the aggregate of her tea exports, it will be due mainly to the use of machinery in manufacture, for labor would fail otherwise.—*London Daily News.*

Nova Scotia Railways.

THE Nova Scotia Government went to great trouble and expense, including the consumption of a large portion of the time of the last session of the Legislature, to procure a company and provide it with a charter for taking over all the railways in which the Province had more or less direct interest, and for completing unfinished and building certain projected lines. It is now reported from Ottawa that the scheme has met with an obstruction in the refusal of the Windsor and Annapolis Railway Company to surrender its running powers over the Windsor Branch. It is a matter for surprise that all possibilities of such an obstacle as is now met with had not been foreseen and averted before ratification of the scheme was sought. The case is something like this:—

The railway line from Halifax to Annapolis is about a hundred and twenty miles long. The first thirteen miles, to Windsor Junction, is part of the Intercolonial main line. Then there are some thirty miles, from the Junction to Windsor, called the Windsor Branch, which was given as a subsidy for the building of the Western Counties Railway, but over which the Windsor and Annapolis Railway Company, owning the line from Windsor to Annapolis, have sustained their claim to running powers before the Judicial Committee of the Privy Council. The last-named company refuses to surrender the running powers mentioned, and as the company has heretofore paid the interest regularly upon a loan of fifty thousand pounds at six per cent guaranteed by the Government, it is doubtful if the latter has any means of forcing a solution of the difficulty. The refusal of the privilege in question would seem to imply that at the Windsor and Annapolis Railway Company also refuses to sell out its own line of over eighty miles, unprofitable though it is said to have proved, which would enlarge the impediment to the Provincial scheme.

AN æsthetic train—the 2:02.—[First Exchange. The locomotive is also æsthetic—it has a toot, too.—[Second Exchange. Don't forget the engineer, as he sometimes has orders to run Wilde.—[Third Exchange. And remember the truly beautiful 'Os-car conductor.

SOME time ago a contract was made to transport by rail 70,000 tons of pig lead from Eureka, Nev., to the Gulf of Mexico, via the Central Pacific Railroad, and Southern Pacific Railroad. Allowing ten tons to the car, it will take 7,000 cars to carry the lead, and they will make a train, if all in one, about forty-two miles in length. Formerly Eureka lead all went east via the Central Pacific Railroad and Union Pacific Railway.

THE "Chinese bill" had a curious effect at Olympia. So soon as it passed, all Chinese employed in households struck for higher wages. Whereupon the housekeepers held a mass meeting and adopted a schedule of prices they would pay, and no more. Before the Chinese could reply to the manifesto, the "veto" came, and that settled the trouble without further parley being necessary.

FOR nine years a Sacramento Mayor failed to pay the interest on the city debt. A member of a banking firm in that city, taking advantage of the depreciation caused by the failure to pay interest, bought $146,000 of city bonds at 18 cents on the dollar. The Mayor, on some pretext, cashed $35,000 of bonds belonging to himself out of the treasury, and the banker sold his bonds in Germany at 56 cents on the dollar. The net result of failure to pay the interest: $28,000 profit to the Mayor, $55,000 profit to the banker and an increase of $600,000 city debt.

Commerce of New York.

THE foreign imports at New York for the month of March, are officially stated as follows:—

	1880.	1881.	1882.
Ent. for cons.....	$25,443,771	$21,166,592	$24,077,792
Do. for warehousing	10,115,827	8,449,640	8,552,410
Free goods.....	9,244,529	11,652,397	11,471,813
Specie and bullion..	794,602	7,312,131	481,369
Total ent. at port....	$45,598,729	$48,580,761	$45,383,384
Withdrawn from warehouse.....	7,545,317	7,813,347	7,085,090

The foreign imports at New York for three months from January 1, were :—

	1880.	1881.	1882.
Ent. for cons.....	$66,124,600	$54,341,210	$69,936,736
Do. warehouse....	25,021,653	20,579,920	22,352,069
Free goods.....	32,872,800	31,275,623	32,562,983
Specie and bullion.	2,642,214	12,626,630	1,081,415
Total ent. at port..	$126,661,267	$118,823,383	$125,933,203
Withdrawn from warehouse	21,441,451	22,205,211	22,336,742

The foreign imports at New York for nine months ending March 31, were :—

	1880.	1881.	1882.
Six months ending January 1.....	$266,228,601	$280,770,515	$252,275,460
January.....	40,897,154	36,085,359	40,135,673
February.....	40,165,384	34,157,263	40,414,146
March.....	45,598,729	48,580,761	45,383,384
Total nine mos....	$392 889,868	$399,593,899	$378,208,663
Deduct specie.....	81,385,385	83,221,166	27,369,713
Total mdse.....	$311,504,483	$316,372,732	$350,838,950

The duties received at the port of New York for the nine months ending with March are as follows :—

	1880.	1881.	1882.
6 mos.ending Jan. 1.....	$59,271,080 94	$69,593,542 80	$75,083,478 15
In Jan	11,960,677 78	10,572,559 15	13,387,515 96
In Feb.....	12,254,602 24	11,217,766 87	13,585,053 25
In March...	14,469,557 65	13,122,964 03	13,999,138 76
Total 9 mos.	$97,955,918 61	$104,506,832 85	$116,055,186 12

The exports from New York to foreign ports for the month of March, were :—

	1880.	1881.	1882.
Dom. produce.....	$33,086,477	$34,492,683	$24,689,145
For. free goods.....	216,068	1,250,188	278,801
Do. dutiable.....	323,914	547,814	620,947
Specie and bullion...	1,612,713	1,304,122	4,339,698
Total exports.....	$35,239,172	$37,594,807	$29,928,591
Do. exclusive of specie.....	33,626,459	36,290,685	25,588,893

The exports from New York to foreign ports for three months from January 1, were :—

	1880.	1881.	1882.
Dom. produce.....	$81,164,711	$90,083,991	$76,056,644
For. free goods.....	822,302	3,240,988	1,506,432
Do, dutiable.....	1,007,160	1,366,928	1,609,608
Specie and bullion.	3,037,654	3,523,079	13,858,000
Total exports.....	$85,971,827	$58,214,986	$93,030,684
Do. exclusive of specie.....	82,934,173	94,691,907	79,172,684

The exports (exclusive of specie) from New York to foreign ports for nine months ending March 31, were :—

	1880.	1881.	1882.
Six months ending January 1.....	$197,760,586	$220,839,350	$187,136,859
January.....	25,416,566	30,264,919	27,848,734
February.....	23,891,148	28,136,303	25,735,057
March.....	33,626,459	36,290,685	25,588,893
Total produce....	$280,694,759	$315,531,257	$266,309,543
Add specie.....	6,370,720	8,172,480	20,129,049
Total exports.....	$287,065,479	$323,703,737	$286,438,592

GEN. C. B. COMSTOCK, Corps of Engineers, in charge of the lake survey, says that there has been, so far as appears from his records, no appreciable change in the mean level of Lake Erie and Lake Ontario other than those to be expected from the variations in rain-fall and evaporation in different years and series of years. He also says that the data of the lake survey give, in his judgment, no evidence of underground discharge of water from either Huron or Erie into the lakes below them.

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CONGRESS AND RAILROAD MANAGEMENT.

CONGRESS has been, through one of its committees, considering the question of what has come to be called inter-State commerce; which term, as now used, means regulation by law of the rates of compensation to be received by railroad companies for the earnings of passengers and freights. It is a question akin to that under consideration by the Legislatures of many States, and which is resulting in a fashionable experiment of creating what are styled railroad commissions, some of them with great powers, others with less. Mr. REAGAN, of Texas, has heretofore stood forward as the champion of Federal intervention, but has nowhere given any very cogent reasons for the constitutional warrant for his plans. The attempt to have Congress prescribe or fix the rates directly had to be given up, as it had not friends enough to succeed; but at a late session of the Committee on Commerce, JUDGE REAGAN offered a resolution that the session should not be allowed to pass without some measure being presented to the House for its action and decision thereon.

Mr. MCDILL, of Iowa, has recently offered a new Bill, which is probably that which the committee are to report in some shape. It proposes a commission of three members appointed by the President, with salaries of $6,000. Its duty is to "supervise" traffic passing from one State or Territory to another; to investigate complaints of discrimination or unfair devices presented to it; to hear and sift such testimony as it can get hold off; to report its conclusions to the President of the United States, and to recommend such further Legislation as may be necessary. Penalties are prescribed for failure to appear and answer.

This is, in substance, the plan of C. F. ADAMS, it is in essence a "smelling committee," and it is not to be doubted that three men can be found to undertake the duties and receive the salary; but whether such men would be able to deal intelligently with the subjects complained of is not as clear.

All of these attempts in Congress to meddle with transportation are supposed to derive their sanction from that clause in the organic act which confers upon Congress the power to "regulate commerce" between the several States. It requires only a slight familiarity with the origin and history of the Constitution to show that the "regulation" here and now attempted is not the sort of regulation contemplated by the framers. As all the world knows, the theretofore independent States had not been unanimous in their views of tariffs, imposts, custom-house and navigation laws and requirements, and it was proposed simply in these respects to subordinate all of them to the federal authority. Railroads and steamships were not in existence; canals had practically no inter-State character or function. The ordinary intercourse between States, or rather crossing State boundaries, as then carried on by sailing-vessels, or by vehicles on common roads, was not thought of—or at least the rates of hire or compensation for the transportation were not supposed to be the subject of legislation; it was quite a different branch of commerce, and its purpose was: that no State should be at liberty to put artificial or obstructive barriers to such commerce by charges of tolls or imposts, and such prohibition then appeared necessary. So much for the authority of law for these railroad commissions.

The question recurs: What power has Congress in the matter of railroad or transportation charges? It has none that are not distinctly national in character. It cannot interfere where the State authority is equal to the occasion. And here it may be as well to admit that there is this limit to the immunity of railroad property (in common with all other property), that it shall be held and used for the benefit of the whole community and not for its injury; but inasmuch as what injures one class or person may, and frequently does, benefit another, it opens up a complicated question as to what is to be deemed an injury to the community, and at what degree the right of the sovereign authority to interfere arises. A man's house may be taken and destroyed—to stay a conflagration; his farm—to stay the ravages of a flood; but he must be entitled to compensation for the loss: on this point the Constitution is clear and specific. So if there is a limit when railroad property may be taken (or what is the same thing, its service taken and given to the public for less than the demanded price), the railroad owner is entitled to have his losses made good out of the public treasury. This none of these Granger Bills propose.

Because the Nation may, in cases of supreme necessity, require private property to be subordinated to public uses, it does not, therefore, follow that it should do so. In the cases of railroads it is better that it should pursue the "let alone" policy. Until it can be shown that railroad companies are impoverishing or otherwise irreparably injuring the fortunes, welfare and industries of the whole community (not a mere fraction) there is no occasion for national interference. Nothing of this kind is pretended now; on the contrary the railroads are by far the most beneficent agencies of any magnitude now among us. They confer twenty-fold more benefits than injuries. The nearest approach to a national grievance existing is the result of the intemperate competition of long through lines for business, whereby merchandise is hauled to the seaboard ports 1,000 to 1,500 miles for less than the charge from points only half or one-third the distance on the same routes. Yet even this the proposed legislation cannot remedy, without introducing a class of evils tenfold worse than it proposes to stop, even if it could stop them. The railroad companies themselves can voluntarily stop this cause of complaint, if they will, and as we have before said they should do so.

The cure for minor ills of the law of free competition is not to abolish competition, or put statute limits to it. The pending bill, therefore, will be merely machinery for ventilating grievances; and its natural effect will be to magnify them out of all proportion to the general well-working of free-play. It is too

much to expect that the commissioners will recommend anything which shall take the power out of their own hands, or to advise Congress against the exercise of assumed or doubtful powers.

But in fact, the reform that is needed is one to be initiated by the railroad companies themselves, and is very simple; but it may be necessary to inflict upon them some such plague as that now proposed. All that is requisite is for the railroad companies to start a Court of Arbitration, of say eleven persons:—three of them being appointees of the railroads, in such groups as they could agree upon; two others by the water lines; two by the produce interests (one each from New York and Chicago); one by the cotton, and one by the coal and iron interests; two for the people at large, one of which should be President—and ask from Congress the power to compel attendance and the sanction of a court of law for its decisions. It would satisfy public clamor and prevent gross discriminations among the different lines and their customers. The trouble with Mr. McDill's bill is that it is political in origin; it will be filled by politicians; its recommendations would decide nothing and only pave the way for further mischievous tinkering. The New York Chamber of Commerce has such a Court of Arbitration for its members, whose powers are derived from and sanctioned by the State of New York. Why not have a similar court of experts qualified to deal with the transportation subject for the whole country? We have law enough now; the common carrier law forbids "unjust discrimination;" but what is needed is a skilled and trustworthy tribunal to determine what are necessary and wholesome, and what are arbitrary and on the whole unwholesome discriminations.

A Palace Car for Piscatorial Purposes.

A PALACE car for the transportion of young fish from the government hatching houses to the rivers and creeks which are to be stocked, in various parts of the country, is now being built at the Mount Clare shops of the Baltimore and Ohio Railroad Company for the United States fish commission. In its exterior structure it is simply a palace car, 52 feet in length, with two extra trusses supporting the floor to give it greater strength. At one end there is an apartment fitted up with luxurious appointments of a drawing-room car for the use of the experts in charge of the fish, and at the other end is a kitchen in which the cooking and other household operations are carried on. The middle section of the car, 35 feet in length, is set apart for the fish, whose comfort and existence depend upon a plentiful supply of cool, fresh water during the journey.

On each side of the aisle is a double row of iron tanks or buckets—80 in all—about 16 inches in depth and of the same diameter. Each of these tank sections are traversed by an iron pipe leading from an upright compartment at the end, which is simply a refrigerator surrounded by a water tank. About fifteen hundred pounds of ice will be put into a galvanized iron chest in the center of the compartment, and then all the unoccupied space surrounding it will be filled with water, which will flow by gravity through the supply pipe on either side of the aisle. This pipe is perforated at intervals of 16 inches, and a small stream will pour continuously into every bucket. The overflow will run along the floor and fall into an ice tank at the other end, and from there will be carried back by means of a pump to the supply tank, and thus a constant circulation of ice-cold water will be kept up. The same operation will go on in both tank sections at the same time, there being a supply tank and a receiving tank at the end of each section. The pump will be worked by a pulley and belt attached to the axle of the car. The two supply tanks will be filled from the top of the car, and wherever there is a water station for supplying the locomotives, a new stock of water for the fish can be taken in without any further trouble than stopping the train so as to bring the fish car within reach of the flexible tube through which the engine takes its periodic allowance.

The buckets in which the young fish are to disport themselves while being transported by rail are only sixteen inches high, and when the tank spaces in which they stand are closely covered, and tufted cushions with velvet coverings are laid on top, the middle section of the car might be taken for a drawing-room for the use of the passengers, with two luxurious sofas thirty-five feet in length on either side. Four sleeping-berths of the ordinary Pullman pattern are attached to the sides of the car, and when not in use fold up against the ceiling. The bottom of the car is tightly packed between the frames and under the floor with pieces of cork, and the walls of the ice compartments and the sides of the car along the tank sections are filled with cork shavings. This is done to keep the interior as cool as possible, cork being a very poor conductor of heat.

The transportation of young fish in this way is something of an experiment, but everything has been done to make it a success, and while the primary object is to make the journey agreeable to the fish, due attention has been paid to the comfort, the wants, and the æsthetic tastes of the scientific gentlemen who are to accompany them.

IN the case of the Pullman Palace Car Company vs. the Texas and Pacific Railway Company, lately argued in New Orleans, La., before Judge Pardee, of the United States Circuit Court, his decision just filed establishes the disputed contract of the Pullman Company with the Railway Company as a valid and binding contract upon the Railway Company for its unexpired term of nine years. The remedy for a violation of contract should be by action at law for damages.

INCORPORATION.

THE Queen Locomotive Works, of Schenectady, N. Y., have filed articles of incorporation, with a capital stock of $300,000. The works are to be located near the crossings of the New York Central and Delaware and Hudson Canal Co.'s tracks.

ARTICLES of association have been filed in the office of the Secretary of State of Wisconsin, of the Beaver Dam and Northwestern Railway Company. It is the intention of the Company to construct a line from Juneau, in Dodge county, northwest 22 miles to Fox Lake. The capital stock is $300,000.

ARTICLES of incorporation of the Michigan, Indiana and St. Louis Railroad, capital stock $2,000,000, were filed with the Secretary of State of Indiana, on the 20th inst. The road is to run from Sturges, Mich., to Danville, Ills. The incorporators are A. H. King, Thomas H. Wilson, and Henry McTighe, of New York, and John Lee, of Crawfordsville.

A CHARTER has been filed with the Secretary of State of Kansas of the Kansas and Missouri Railway to run from a point on the line of the Fort Scott, Southwestern and Memphis Railroad, at Arcadia, Crawford county, Kan., to a point at or near Cherokee, a distance of sixty-seven miles. Capital stock, $1,000,000. Directors: George H. Nettleton, Wallace Pratt, Joseph S. Ford and Watson J. Ferry, of Kansas City, Mo.; O. E. Leonard, of Lawrence; Ira Harris, of Rosedale; C. W. Blair, of Fort Scott.

THE Sulphur Mines Company of Virginia has been chartered at Richmond to deal in mines of all descriptions in Virginia, and to produce for manufacture or market all proceeds of the same of every kind, for which purpose all facilities of every kind were granted, either by sale or barter, operations to be in any part of Virginia from which profit may be derived. Capital stock $100,000, with right of increase to $2,000,000. C. M. Frey, Eugene Kelly and other New York millionaires are among the incorporators.

THE Ohio and West Virginia Construction Company, capital $250,000, with headquarters in Columbus, Ohio, was incorporated on the 19th inst. by Robert Codderington, Hugh H. Edward, and David P. Sickles, of New York; Levi J. Burgess, of Logan; Wm. C. Mahohn, of Newark; F. B. Sprague, of Delaware, and Brant G. Smythe, of Newark. It is organized to construct the Cincinnati, Shawnee and Wheeling Railway, the Newark, Delaware and Northwestern Railway, and the Toledo and and Detroit Air Line Railroad and others.

THE Milford, Franklin and Providence Railroad Company has been chartered under the general railroad law of Massachusetts. The new road is to be about 4¾ miles in length, and to run from the Milford and Woonsocket Railroad in Bellingham to the New York and New England Railroad in Franklin, and will form the connecting link in a through line from Ashland on the Boston and Albany Railroad to Providence. The principal incorporators are the Messrs. Ray and Draper of Franklin, and the capital stock is fixed at $100,000.

A CERTIFICATE of incorporation was filed on the 13th inst. with the Secretary of State of Ohio of the Columbus and Cincinnati Railroad Company, capital $2,000,000, by Daniel McLean, M. J. Williams, Mils Gardner, M. Pavey, J. D. Stuckey, C. A. Palmer, George Melvin, C. H. Brownell, Charles M. Stimson, James Pursell and M. Willard. The termini are Columbus and the intersection with the Marietta and Cincinnati Railroad in Clinton county, between New Lexington, in Highland county, passing through Franklin, Madison, Fayette and Clinton counties.

THE Seattle, Walla Walla and Baker City Railroad Company has been organized for the purpose of building a narrow-gauge railroad from Seattle to Baker City in Oregon. The incorporators are H. G. Struve, Thomas Burke, J. R. Lewis, H. L. Yester, John Leary, G. W. Harris and H. B. Bagley. The road will run through the Shoquaime Pass and Yakima Valley. At Baker City this road will connect with the Union Pacific branch road, commonly called the Oregon short line, thus obtaining through connection East. The capital stock of the Company has been put at $3,500,000.

ARTICLES of association have been filed incorporating the Milwaukee and Lake Winnebago Railroad Company. This line is a continuation of the Wisconsin Central road, and will extend from Neenah along the west shore of Lake Winnebago, running nearly parallel with the Chicago and Northwestern line to Oshkosh and Fond Du Lac, and thence southward to Schleisingerville, in Washington county, on the northern division of the Chicago, Milwaukee and St. Paul Company's road, using the last-named line the remainder of the way into Milwaukee. The Company has already contracted for 6,000 tons of steel rails for this extension.

ARTICLES incorporating the Beardstown, Fort Madison and Dakota Railroad Company were filed with the Secretary of State of Illinois, on the 19th inst. The railroad is to run from Beardstown, Ill., to Fort Mason, Iowa, via Rushville, and Macomb, and thence to Dakota by the best route. It is to have a branch from Beardstown to Jacksonville, Ill. The capital is $3,000,000. The first boar l of directors is composed of Thomas H. Carter, Wm. H. McCormick, John C. Bagley, Louis D. Erwin, Wm. H. Neece, Charles V. Chandler, Leonard F. Ferris, Charles A. Gilchrist, Joseph B. Morrison, Otway Cutter, A. C. Roberts, Charles H. Peters, and Joseph A. Smith. The road is intended as an extension of the Ohio and Mississippi Railway.

THE articles of association of the Atlantic and Pacific Interocean Railroad Company were filed with the Secretary of State of New York on the 18th inst. The railroad and telegraph lines are to extend from a point on the Bay of Honduras near Port Cortes in the Republic of Honduras to a point on the Bay of Fonseca on the Pacific coast; and the shipping lines are to connect the various ports of the United States with those of Honduras and other points in Central America. The capital stock is $7,000,000 divided into shares of $100 each. The directors are John I. Waterbury, Joseph L. Hance, Charles J. Canda, Henry W. Curtiss, Washington S. Valentine, George W. Smith, Eugene T. Lynch, Conrad N. Jordan, Nathaniel P. Banks, John J. Kiernan and John B. Woodward.

ORGANIZATION.

AT the recent annual meeting in Cleveland, Ohio, J. H. Wade, S. T. Everett and D. L. King were re-elected directors of the Cuyahoga Valley Railway Co. J. H. Wade was re-elected president.

THE stockholders of the Pueblo and Arkansas Valley Railroad Company, at their recent annual meeting, elected the following directors: W. B. Strong, C. C. Wheeler, I. P. Burr, B. P. Cheney, E. Wilder, L. M. Sargent, M. D. Thatcher, C. H. P. Baxter, and James Clelland. The officers are: President, W. B. Strong; general manager, C. C. Wheeler; treasurer and secretary, E. Wilder; assistant treasurer, George L. Goodwin.

THE directors of the Sinaloa and Durango Railroad Company, incorporated March 1, 1882, under the laws of Massachusetts, are: Thomas N. Hart of Boston, William H. Hill, Jr., of Boston, Robert R. Symon of New York, James H. Cumston of Boston, S. W. Richardson of Boston. The officers are: Thomas N. Hart of Boston, president; Robert R. Symon of New York, vice-president; Spencer W. Richardson of Boston, treasurer; Frank E. James of Boston, clerk.

THE directors of the projected Fort Wayne, Lafayette and St. Louis Railroad Co., elected at the recent meeting of the stockholders in Peru, Ind., are: A. N. Duke, J. G. Stevens, G. Conrad, Jesse S. Zern, E. H. Shirk, James O. Cole, D. Bearss, D. L. Sherer and James M. Brown, of Peru; C. B. Knowlton and James S. Wilson, of Logansport; Alvah Taylor and Calvin Cowgill, of Wabash. President, A. N. Duke; vice-president, Calvin Cowgill; secretary, C. O'Donnell. The road when completed will extend from Fort Wayne to Terre Haute along the line of the old Wabash and Erie Canal.

THE Union Railroad Co. of Baltimore was re-organized at a meeting of the directors held for that purpose on the 21st inst., by the election of George Small, Harry Walters, Bernard Canton, B. F. Newcomer and Oden Bowie, all representing the Northern Central Railway Co. The directors holding over are Walter B. Brooks and George S. Brown to represent the interests of the Canton Company, and L. W. Gunther and Wm. G. Harrison on the part of the city. B. F. Newcomer was elected president. This re-organization of the board which officially consumates the transfer of the property from the Canton Co. to the Northern Central Railway Co., was confirmed at the annual meeting of the latter company in March.

AT the meeting of the stockholders of the Atlantic and George's Creek Consolidated Coal Co., held in Baltimore on the 20th inst., the following directors were elected: Simon Rosenberg, Louis Adler, Edward S. Myers, Milton M. Wheat, Philip Hamburger, Philip Joseph and Charles D. Blake. This is a new board, and the vote was nearly 70,000 out of the total 100,000 shares. Simon Rosenburg, of the banking firm of Frank, Rosenburg & Co., will be the new president, with George Stearns, secretary. The company was incorporated in 1864, and at present operates mines in Allegany county, Md. Its new mining property in the Elk Garden region of Mineral county, W. Va., it is announced, will be opened during the summer, and both properties are to be operated vigorously.

AT a meeting in this city on the 20th inst. of the stockholders of the Continental Railway, the following board of directors was elected: General W. C. Kibbe, of Brooklyn; W. H. Smith, Urbana, Ills.; Milton Weston, of Chicago; Thos. P. Johnston, of New Jersey; George H. Ely, of Ohio; W. M. Barnum, of Connecticut; C. C. Deming, C. W. Ramsey, Willoughby Weston, C. B. Hotchkiss and R. N. Funkhouser, of New York, and D. Messmore, of New Jersey. Messrs. Smith and Johnston were in the old board, and the following directors hold over: Geo. E. Yarrington, of Massachusetts, R. S. Dwiggins, of Indiana, and S. D. Cousins, Wm. Thorp, A. G. Day and J. B. Stewart, of New York. At a meeting of the directors on the 21st inst. the following officers were elected: Milton Weston, Chicago, president; Wm. H. Smith, Urbana, Illinois, vice-president; Austin G. Day, New York, treasurer; Thomas P. Johnston, New Jersey, secretary. Executive Committee—Milton Weston, W. H. Smith, Austin G. Day, W. C. Kibble, New York, and Willoughby Weston, New Jersey.

CONSTRUCTION.

A BELT railroad must run around the waste places of a city.

WORK has been resumed on the Lake Superior branches of the St. Paul and Omaha Railroad.

THE new line for the Midland Railway of Canada between Toronto and Buffalo, via Hamilton, is being surveyed.

THE Pennsylvania Railroad Company is having constructed for Barnum's monster elephant Jumbo, a special car, to cost $1,700.

IT is expected that the Norfolk and Western and the Shenandoah Valley railroads will be united at Roanoke by the 15th of June.

THE citizens of Framingham and South Framingham, Mass., have in contemplation the construction of a street railway between those places.

THE first train over the Missouri Pacific Railroad in Nebraska was the special train of Jay Gould and party, who arrived at Omaha on the 21st inst.

THE Northern Pacific Railroad Company expects to reach Bozeman August 1, 1882, and to connect with the Oregon Railway and Navigation lines by August, 1883.

THE extension of the Sharpsville and Oakland Railroad is now graded to New Wilmington, Pa. The rails will be laid within two weeks, and this new route to the Shenango Valley will be opened for traffic by May 13.

A DISPATCH from the City of Mexico, dated April 21, says that an extension of one year has been granted on the concession for extending the Morelos Railway from Cuantla to Aca-

pulco, on the condition that the Company begins work within four months.

THE Rio Grande and Pecos Railroad will extend from Brownsville to Laredo and will be finished within a year. Steel rails have been purchased for the first twenty miles of the road. A large number of men are grading from Laredo.

SEVERAL of the American railroad companies, operating in Mexico, finding the Mexican peons indolent and quarrelsome, have introduced a force of about 2,000 negroes to work on their lines. Thereupon the Mexican press breaks out, and follows the example of the California papers, and protests against the new importations upon race grounds.

A ROUTE for a new railroad from Gainesville to Tallahassee, Fla., is now being located. It is to be extended northward to Columbus, Ga. It is projected and will be built by a company composed of Hamilton Disston and others, and the Gordon syndicate of Alabama and Georgia, and will control much of the travel and traffic between South Florida and the entire Northwest.

BY the completion of the cable between Emden, a seaport town of Hanover, and the Island of Valentia, on the west coast of Ireland, where it connects with the Anglo-American system, America has been brought in direct telegraphic communication with Germany. The new line was formally opened on the 22d inst., and congratulatory messages were exchanged between Emperor William and President Arthur.

THE Illinois Central Railroad Company has, it is said, made an agreement with the Texas and St. Louis for an interchange of traffic and for the establishment of a through line, including the Illinois Central, the Texas and St. Louis and the Alton and Terre Haute, the latter for its St. Louis short line. The Texas and St. Louis road will, it is expected, be completed from Cairo into the heart of Texas by next October.

SURVEYS have been commenced on the branch railroad which is to connect Franklin Falls with the Boston, Concord and Montreal Railroad at Tilton. The distance is about four miles along the Winnipiseogee River. Work on the roadbed will commence at once. When completed Franklin Falls will be connected with Concord by two lines of rail, and north over the Boston, Concord and Montreal Railroad as far as it extends. The branch road is a private enterprise.

THE Eastville (Md.) *Herald* learns from U. H. Painter, vice-president, that the Peninsula Railroad extension from Pocomoke City to the southern end of the Peninsula will be built this year. It is to be 66 miles long, and will have its terminus either at Cape Charles or at the lower end of Magothy Bay, opposite the Cape. The capital has been subscribed for the grading and tieing of the roadbed, and the rails and rolling-stock will be secured by the issue of bonds. When this road is completed it will be possible to reach New York from the mouth of the Chesapeake Bay in ten hours.

IT is stated that the Washington and Ohio Railroad, which was sold several months ago, but the sale of which fell through owing to the purchasers not meeting the conditions, will be purchased by a syndicate composed of Mr. Blaine, Gen. Ewing, and Senator Davis of West Virginia. The track has been laid from Alexandria about 20 miles out, and the road is fairly stocked. The route for which the charter was obtained passes through the coal and timber lands of West Virginia, in which Mr. Davis, Mr. Blaine and other public men are largely interested. The plan of purchase of course implies that the road will speedily be completed under its prospective management.

IT is stated that the Gulf, Colorado and Santa Fe Railway will be completed to Lampasas, fifty miles northwest of Belton, by the 1st of May and opened for general traffic to that point by the 15th. Work will then cease on the main line, and the entire construction force of the company will be concentrated on the branch from Brenham to Navasota, connecting at the latter point with the Navasota and Montgomery road, recently purchased by the Gulf, Colorado and Santa Fe Company, and which will intersect the International and Great Northern at or near Willis, and be extended to some point in the pineries of Southeast Texas. When this line is completed work will be resumed on the main line northwest from Lampasas.

THE *Ohio Valley News* says that the grading on the Wheeling and Lake Erie Railroad is completed from Norwalk to Toledo. Tracklaying is progressing rapidly from east to west and from west to east. The bridge over the Portage River at Oak Harbor, and the one over the Maumee, are about completed. The Company are preparing to commence work between Bowerstown and Sherodville; grading north of the latter place is about finished. The contract for grading from Massillon to Zoar has been let. The commission of U. S. engineers have fully approved the plan of the Company for a bridge over the Ohio, and granted the Company the privilege of choosing three locations pointed out to the engineers. The road is in full operation between Massillon and Norwalk, is in good condition, and the earnings are unexpectedly large.

THE Columbus, Hocking Valley and Toledo Railroad Company now operate a line from Toledo, O., through Columbus to Athens, 200 miles; the Ohio River division, from Logan to Pomeroy, 83 miles; the Straitsville branch, from Logan to Straitsville, 13 miles; the Monday Creek branch, from Nelsonville to Monday Creek Junction, 17 miles, the Snow Fork branch, from Snow Fork Junction to Orbiston, 3 miles; a total of 316 miles, of which 310½ miles are owned, and the use of 5½ miles, from Toledo to Wallbridge, leased from the Pennsylvania Company. In 1880 the road was under three separate organizations—the Columbus and Hocking Valley, the Columbus and Toledo, and the Ohio and West Virginia, which were in 1881 consolidated into the present company. The Ohio and West Virginia was only partly completed in that year.

H. C. NUTT, president of the Atlantic and Pacific Railroad Company, who has just returned to Chicago from an inspection of the line in New Mexico and Arizona, and of the Atchison, Topeka and Santa Fe Railroad, says that the track-laying is completed to Canon Diablo, 311 miles west of the Rio Grande. A viaduct is being built over the canon 525 feet long and 254 feet high, to be completed by May 25, at a cost of $250,000. The track will be pushed west to the Colorado River, 250 miles, at the rate of two miles a day. One hundred miles of that distance is graded, and steel rails for 200 miles are delivered. Plans are just completed for a bridge across the Colorado River, to cost $250,000. He will also extend the Central Division 100 miles west from Vinita, Indian Territory. The president says that the road will expend this year $6,600,000 in construction.

THE Boston *Journal* says that the surveys for the Newton Circuit Railroad are rapidly progressing, that the Boston and Albany Railroad Company is actively engaged in extending third and fourth tracks upon its main line out as far as Riverside, where the Circuit Road will make its connection with the Boston and Albany, and that the question of the New York and New England Railroad's selling a portion of its Woonsocket Branch (from Brookline to Newton Highlands) to be utilized by the Circuit Road has advanced so far that the parties in interest have agreed to leave the question of the price of the transfer to arbitration, and that the arbitrators have already been selected. Upon the consummation of the sale it is expected that the New York and New England will at once proceed to connect the remaining portion of the Woonsocket Branch with its main line, thus concentrating its Boston termini at the Summer street station.

CONSOLIDATION.

THE New Castle and Oil City and the Oil City and Chicago Railroad companies have been consolidated under the name of the "Oil City and Chicago Railroad Company." The directors of the new corporation are: Clarence H. Clark, George F. Tyler, Edward A. Rollins and B. K. Jamison, Archer N. Martin, Isaac N. Seligman, C. H. Allen, Giles E. Taintor and Edward L. Owen, of New York; Foster W. Mitchell, of Oil City, and William Patterson, of New Castle. John W. Jones, president of the Buffalo, Pittsburgh and Western, is president; Archer N. Martin, vice-president, and Joseph R. Trimble, secretary and treasurer. The new Company has 40,000 shares of $50 each par value, 20,000 of them preferred. The common stockholders of the New Castle and Oil City get 3,000 shares of this new common stock, and the Oil City; and Chicago stockholders get 17,000 shares of common and 11,000 shares of preferred, the remaining 9,000 of preferred going to the holders of New Castle and Franklin preferred stock; all in proportion to their holdings and on surrender of the certificates thereof. The consolidated Company, after the stockholders of both companies have adopted the agreement, is to have the right to issue its bonds to an amount not exceeding $1,600,000, secured by a general mortgage upon all its property, privileges and franchises. The articles of consolidation bear the date of March 28, 1882.

Canadian Railways.

THE total mileage of the Railways of the Dominion of Canada on the 30th of June, 1881, according to the last annual report made to the Government by the Engineer-in-Chief, was as ollows: Railways in operation, 7,260 miles; under construction, on which track was laid, 335 miles; under construction, 2,910 miles. As compared with the previous year this showed an increase of 369 miles in operation; a decrease of 3 miles under construction on which track was laid, and an increase of 1,832 miles under construction. Of the total mileage under construction, 2,358 miles are on the Canadian Pacific line. Under the terms of the contract entered into with the Canadian Pacific Railway Company, which was ratified by act of Parliament on the 15th of February, 1881, the government undertook to construct the line between Prince Arthur's Landing on Lake Superior and Red River and between Savona's Ferry, at the foot of Lake Kamloops, and Port Moody, in British Columbia; the Company having undertaken to construct, within a stipulated time, the line between Callander Station, their eastern terminus at the east end of Lake Nipissing, to a point of junction with the line from Prince Arthur's Landing to Red River, and between Red River and Savona's Ferry, the whole line to be the property of the Company and to be maintained and operated by them. The length of the various sections are estimated follows: From Callander Station to Prince Arthur's Landing, 650 miles; from Prince Arthur's Landing to Red River, 412 miles; from Red River to Savona's Ferry, 1,350 miles; and from Savona's Ferry to Port Moody on the Pacific coast, 217 miles, a total length of 2,629 miles. Under the terms of the contract with the government the Canadian Pacific Railway Company also received the Pembina Branch line from Emerson to Selkirk, 86 miles, and the line from Selkirk to Telford, 73 miles, which lines were transferred to the Company under an order in Council dated 9th April, 1881.

On the 9th of June last the Canadian Pacific Railway Company acquired, by purchase, all the rights of the Canada Central Railway, and incorporated its works with their own. The mileages thus secured were as follows,—The line from Ottawa to Carleton Place, 29 miles; from Carleton Place to Pembroke, 76½ miles; from Pembroke to Callander Station (Canadian Pacific Railroad Junction), 130 miles; and the branch line from Carleton Place to Brockville, 45½ miles—making a total mileage of 281 miles. By this arrangement the main line of the Canadian Pacific Railway has been extended eastward from Callander Station to Ottawa, making the total length from Port Moody, on the Pacific coast, to attain 2,864 miles. The 5 feet 6 inches gauge appears to have been practically abandoned on Canadian railways, there only being now some sixty miles in operation. Of the 4 feet 8½ inches gauge there are 6,529 miles in operation, an increase of 613 miles over the year 1880. There are also 2,910 miles of this gauge under construction.

The nominal capital of Canadian railways on the 3d of June, 1881, was $371,051,192, an increase of $18,234,507 over the previous year. This capital was made up as follows: Ordinary share capital, $128,061,520; preference share capital, $71,466,460; bonded debt, $84,891,313. In addition to this $104,866,406 has been received as loans and bonuses from the Dominion and provincial governments and municipalities. Of this amount the sum of $80,133,248 was in the form of aid from the Dominion government. The capital per mile of railway completed and under construction is, therefore: Ordinary share capital, $12,189.35; preference do., $6,802.44; bonded debt, $8,080.28; government and municipal aid, $9,922.69; other sources, $53.49. Total, $37,048.25 per mile.

The amounts paid and still to be paid by the Dominion and provincial governments and by municipalities to railways on their completion are as follows:—

	Total Subsidy.	Paid.	To be paid.
Dominion.....	$118,864,862	$80,133,248	$38,731,614
Ontario	4,288,037	2,666,537	1,621,500
Quebec.....	13,313,242	11,612,399	1,700,842
New Brunswick.	2,183,000	1,574,000	609,000
Nova Scotia.....	1,849,420	823,330	1,026,090
Municipalities ..	12,217,244	7,494,944	4,722,299
Totals.....	$152,715,806	$104,304,457	$47,411,347

The total train mileage for the year was 27,301,306 miles, an increase of 4,873,857 miles or 21.7 per cent over the previous year. The number of passengers carried was 6,943,671, an increase of 480,722 or 7.46 per cent.

The amount of freight handled was 12,065,323 tons, against 9,938,558 tons during 1880, an increase of 2,126,465 tons or 21.39 per cent.

The gross earnings of all the Canadian railways during 1880-81 amounted to $27,987,509, against $23,536,639 during 1879-80, an increase of $4,450,770. The gross earnings per mile of railway under traffic during 1880-81 was $3,859 against $3,405 during the previous year, an increase of $454 per mile.

The cost of operating during 1880-81 was as follows: Maintenance, $4,115,098; working and repairs to engines, $5,975,720; working and repairs to cars, $2,065,214; general working expenses, $7,747,511. The working expenses, $20,121,418, an increase of $3,280,713 over the previous year. The earnings per mile (as above) exceeded those of the preceding year by $454 and the expenses by $331.

The business of the two years compares as follows:—

	1880-'81.	1879-'80.
Receipts.....	$27,987,509	$23,561,447
Expenses.....	20,121,418	16,840,705
Net profits.....	$7,866,091	$6,720,742

The percentage of expenses to earnings was 71.89 in 1880-'81, against 71.47 in 1879-'80. The share and bonded liability per mile of railway completed and under construction is $27,072. Total capital liability for shares and bonds of railways in operation is $281,146,094. The net earnings of the year would thus be equal to the payment of a dividend of 2.79 per cent upon the share and bonded liability, leaving nothing for government and municipal aid.

NEW repair shops are to be established by the New York, Lake Erie and Western Railroad Co. at Garfield Station, on the Bergen short-cut, to relieve the overcrowded shops at Jersey City. The plans are ready for the buildings, which will be commenced at once. They will be situated on a plot of two acres. About 100 men will be employed at first in the new shops.

The Song of the Brakeman.

OH listen to the brakeman through all the live-long day,
As the rattle of the wheels bears the train away.
How cheerily he bangs the door when anybody leaves;
How cheerfully into the ditch the lazy tramp he heaves,
And when you reach the station, how lustily he screams;
"Lone Spar!" is what he says, but "Logansport" he means.
The burning cinder in your eye awakes you from your nap,
And "Cedar Rapids" must be nigh; you hear him shout "Ce-rap!"
His merry shout flows on and on, and near the break of day
You slow into "Batavia," and hear him shriek "B'tay!"
And when at noon he hollers "K'loo!" you think it's some place new;
But when you reach the station, it's only "Kalamazoo."
Oh, you bet your bottom dollar, in all this broad, fair land,
No matter what the brakeman says, you will not understand.
"Apple!" he shrieks for "Hannibal:" and when he hollers "'sville!"
You have to guess if it's "Hopkins-" or Crawsfords-" or "Titus-ville."
"Tsbur! Chay cah! Pass' goinnest hav' twent' min't f' din!"
How do you know, from what he says, its Pittsburgh that you're in?
Oh, the wasted English language that he slays without a sigh!
Oh, the stations where you want to stop, but where you're carried by!
"Dah!" he calls at "Oneida;" and when they hear his shout,
The passengers for "Buda" in haste go scrambling out;
And then to the conductor, in accents plain and clear,
From his station at the steps he shouts distinctly, "ALL RIGHT HERE!"

BURDETTE.

THE Janney coupler, used on all Pennsylvania railroad lines, is being introduced extensively on Southern railroads.

IT is stated that the Chemin-de Fer du Midi, in France, which has already ordered sixty locomotives from the Austrian States Railway Company's engine shops, is in negotiation for a like supply of similar quality during the next ten years.

IT is announced that after seven years' labor the tunnel under the Severn has at last practically been made. The workmen are said to have met in the middle of the channel and joined the two paths of communication from the English and Welsh sides, so that, unless some most unlikely interruption or disaster should now occur, there remains nothing but to enlarge the passage, wall it in and lay the lines of rail.

THE ground at Locust Point, Baltimore, Md., on which the works of the Walker Horseshoe Company are to be constructed, was broken on the 17th inst. preparatory to erection of the buildings. The first structure to be finished is the shop where horse and mule shoes are to be manufactured. It will be 60 feet wide and 180 feet deep, built of red brick and granite, with truss roof covered with corrugated iron. The contract for the work has been awarded to Mr. Charles Dunn, and will be carried out according to the plans prepared by Charles L. Carson, architect. This is the first of a series of buildings that is to be erected by the same Company.

The Stock Exchanges and Money Market.

New York Stock Exchange.

Closing Prices for the week ending April. 26.

	Th.20.	F.21.	Sat.22.	M.24.	Tu.25.	W.26.
Adams Express	140	140½	.....	.....	140	.....
Albany and Susq.	131½	....	.....	.....	.....	.....
1st mortgage	.....	.....	.....	.....	.....	.....
2d mortgage	.....	.....	.....	.....	.....	.....
American Express	94	94	93¾	94	.....	93¼
Burl., C. R. & Nor	.....	.....	.....	.....	.....	.....
1st mortgage 5s	102	102¾	.....	102¼	102¼	102¼
Canada Southern	48	48¼	47¾	49	48½	.....
1st mortgage guar	95¾	95⅝	.....	95¾	95⅞	.....
Central of N. Jersey	71⅜	70½	66	67½	67⅞	68⅛
1st mort. 1890	.....	.....	116½	.....	.....	117⅛
7s, consol. ass	110	109½	.....	108½	109½	110½
7s, convertible ass.	114½	114	....	113	.....	112½
7s, Income	.....	.....	.....	.....	.....	.....
Adjustment	.....	106¾	....	.....	107	107
Central Pacific	88¾	88¾	88¾	89½	89½	.....
6s, gold	.	116	.....	117	.....	116¼
1st M. (San Joaq)	.....	.....	.....	.....	.....	.....
1st M. (Cal. & Or.)	.....	.....	.....	.....	.....	.....
Land grant 6s	.....	.....	.....	.....	.....	.....
Chesapeake & Ohio.	20	20¼	20¼	.....	.....	.....
1st pref	30¼	29¾	.....	.....	29½	.....
2d pref	.....	.....	.....	21½	.....	21
1st mort., series B	.....	81	.....	81	.....	81½
Chicago and Alton	130	.....	.....	128½	130	130½
Preferred	.....	.....	.....	.....	.....	.....
1st mortgage	.....	.....	.....	.....	.....	.....
Sinking Fund	.....	115	.....	.....	.....	.....
Chi,, Bur. & Quincy	129½	130	129½	130½	131	130½
7s, Consol. 1903	.....	128½	.....	.....	.....	128½
Chi., Mil. & St. Paul	110¼	111⅞	111½	112⅞	112¾	112¼
Preferred	119¾	120	120	122½	122¼	121¼
1st mortgage, 8s	.....	.....	.....	.....	.....	.....
2d mort., 7 3-10s	120	.....	.....	.....	.....	.....
7s, gold	115	.....	.....	.....	.....	.....
1st M. (La. C. div)	.....	.....	119	120	.....	.....
1st M. I. & M. div.)	.....	.....	.....	.....	.....	.....
1st.M. (I. & D. ext.)	.....	.....	.....	121	.....	.....
1st M. (H.&D. div.)	.....	.....	.....	.....	116½	.....
1st M.(C. & M.div.)	.....	.....	.....	125	.....	.....
Consolidated S. F.	.....	121¼	121¼	121	122	121⅞
Chi. & Northwestern	127⅝	129½	129½	130½	129½	129
Preferred	137¾	.....	139¾	140¼	139¾	140½
1st mortgage	108½	.....	.....	109	108⅞	108
Sinking Fund 6s	.....	110	.....	.....	.....	110½
Consolidated 7s	.....	.....	.....	.....	.....	.....
Consol. Gold bo'ds	.....	128	.....	128	128	.....
Do. reg	.....	.....	.....	.....	.....	.....
Chi., R. Isl. & Pac.	127⅛	127	126	127⅛	127¼	127⅜
6s, 1917, c	127	.....	.....	.....	.....	.....
Clev.,Col.,Cin.&Ind.	69½	.....	.....	.....	70	71⅝
1st mortgage	.....	.....	.....	.....	126	.....
Clev. & Pittsburg gr.	.....	134½	136½	.....	.....	136¾
7s, Consolidated	.....	.....	.....	.....	.....	.....
4th mortgage	.....	.....	.....	.....	114	.....
Col.,Chi.,& Ind. Cent	.....	11⅜	11½	10¾	10⅞	.....
1st mortgage	.....	.....	.....	.....	.....	.....
2d mortgage	.....	.....	.....	.....	.....	.....
Del. & Hud Canal.	105	105	103¾	104½	.....	.....
Reg. 7s, 1891	.....	.....	.....	116	.....	.....
Reg. 7s, 1884	.....	106½	.....	106¾	....	106¾
7s, 1894	.....	.....	.....	.....	116	116½
Del.,Lack.& Western	117½	118¼	117¼	117⅜	117⅜	118
2d mortgage 7s	.....	.....	.....	.....	.....	.....
7s, Consol. 1907	.....	.....	.....	.....	.....	.....
Erie Railway	.....	.....	.....	.....	.....	.....
1st mortgage	....	.....	.....	.....	.....	.....
2d mort. 5s, ext	..	.....	.....	107	.....	.....
3d mortgage	104¾	105	.....	.....	.....	.....
4th mort. 5s, ext.	106	106	.....	107	107	.....
5th mortgage	.....	.....	.....	.....	.....	111
7s, Consol. gold	126	126	126¼	126½	126¾	126¾
Great West. 1st mort	.....	.....	.....	...	109⅜	.....
2d mortgage	.....	.....	.....	103	103¾	.....
Hannibal & St. Jo	.....	.....	.....	.....	.....	.....
Preferred	87	86½	86	86	....	85
8s, Convertible	.....	.....	106½	107	104	.....
Houston & Tex. Cen	72	72	72¼	.....	72½	....
1st mortgage	.....	.....	.....	.....	111⅛	.....
2d mortgage	.....	.....	.....	.....	118	118½
Illinois Central	135¾	135½	134¼	137	136⅝	136½
LakeShore&MichSo	103	105	104	105	103	102¾
Consol. 7s	.....	.....	.....	.....	.....	.....
Consol. 7s, reg	126	.....	.....	.....	.....	.....
2d Consolidated	.....	.....	.....	.....	.....	.....
Leh. & W. B. con.ass	.....	102¾	.....	101½	102½	.....
Long Dock bonds	118	.....	.....	.....	.....	.....
Louisville & Nash.	74¼	74¾	73⅝	74⅛	75¼	74⅝
7s, Consolidated	.....	.....	.....	.....	.....	.....
Manhattan	42	43	.....	45	46½	.....
1st pref	.....	90	.....	91	....	.....
Met. Elevated	88	89¾	.....	88	89	.....
1st mortgage	.....	102	101¾	101½	.....	101¾
Michigan Central	78¼	80¼	79	80½	79¾	80¼
7s, 1902	.....	.....	128	.....	.....	.....
Morris & Essex	.....	124	124	122	123¾	.....
1st mortgage	.....	.....	.....	.....	.....	123
2d mortgage	...	.....	.....	.....	.....	140
7s of 1871	.....	.....	.....	.....	122½	.....
7s, Convertible	...	...	.....	.....	.....	.....
7s, Consolidated	124	124¾	125	125	125¾	125½
N. Y. Cen. & Hud. R.	126¼	128⅛	127⅛	127⅞	127¼	127
6s, S. F. 1883	.....	.....	.....	.....	...	.....
6s, S. F., 1887	.....	.....	.....	.....	...	.....
1st mortgage	.....	.....	.....	133⅞	.....	.....
1st mortgage, reg.	133¾	.....	.....	.....	.....	.....
N. Y. Elevated	.....	.....	.....	.....	.....	.....
1st mortgage	.....	.....	.....	.....	117	116¾
N. Y. & Harlem	.....	.....	.....	.....	.....	.....
Preferred	.....	.....	.....	.....	.....	.....
1st mortgage	.....	.....	.....	.....	.....	.....
1st mortgage, reg	.....	.....	.....	.....	.....	.....
N. Y., Lake Erie & W	35⅝	36	33⅜	37⅞	36⅞	36¾
Preferred	...	.....	72	73¼	75¾	75⅝	74¾
2d Consolidated	93⅝	93⅝	93¾	94¼	95	94⅛
New 2d 5s fund	.....	.....	.....	90½	.....	91
N.Y.,N.Hav'n&Hart	.....	.....	.....	.....	.....	.....
North Mo. 1st mort	..	.....	.....	121	121	.....
Northern Pacific	37⅞	38¼	37⅞	38¼	38⅛	38⅜
Preferred	77	77⅞	77¼	78	77⅞	78
Ohio & Mississippi.	37	36¼	.....	.....	36	.....
Prefer ed.	.....	.....	.....	.....	.....	.....
2d mortgage	.....	....	120	....	.....	.....
Consolidated 7s	.....	.....	.....	.....	.....	.....
Consol. S. Fund	. ..	119	.....	.....	.....	.....
Pacific Mail S. S. Co	39⅝	39⅜	38⅞	37½	37¾	38⅛
Pacific R. R. of Mo.	.....	.....	.....	.....	.....	.....
1st mortgage	.....	107½	.....	107¾	.....	.....
2d mortgage	.....	.....	.....	.....	.....	.....
Panama	.....	.....	.....	197½	198	.....	200
Phila. & Reading	57⅛	58⅛	56⅜	57¼	57¼	57¼
Pitts,Ft.W.&Chi.gtd	.....	.....	135½	.....	.....	135
1st mortgage	.....	.....	.....	.....	.....	140
2d mortgage	135	.....	.....	.....	137	137
3d mortgage	.....	.....	.....	.....	.....	.....
Pullman Palace Car	.....	.....	.....	.....	125	125
Quicksil'r Min'g Co	.....	...	.....	.....	.....	11½
Preferred	57	.....	.....	57	.....	.....
St. Louis & San Fran	.....	.....	.....	.....	.....	.....
Preferred	52	50¾	51	51	.....	50
1st Preferred	.....	.....	.....	.....	.....	.....
St. L., Alt'n & T. H.	23½	22½	.....	.....	.....	26
Preferred	60	.....	.....	56	60	66
1st mortgage	.....	.....	.....	.....	.....	.....
2d mort. pref	.....	.....	.....	.....	.....	.....
Income bonds	.....	.....	.....	.....	.....	.....
St. L., Iron Mt. & S	.....	.....	.....	.....	.....	.....
1st mortgage	.....	.....	116½	.....	.....	.....
2d mortgage	.....	.....	.....	110¼	.....	.....
Toledo and Wabash.	....	.....	.....	.....	.....	.....
1st mortgage	...	..	111¼	111¼	.....	.....
2d mortgage	.....	.....	.....	.....	.....	.....
7s, Consolidated	95	95	....	94	96	96
St. Louis Division	.....	102½	.....	.....	.....	102½
Union Pacific	110½	111¾	110⅝	111¾	111⅜	111⅜
1st mortgage	117½	.....	117⅞	.....	117½	.....
Land Grant 7s	.....	112½	.....	112½	112½	112½
Sinking Fund 8s	119	.....	.....	.....	.....	119
United States Ex	.....	74	.....	.....	.....	...
Wabash, St. L.& Pac	27⅞	28¾	28½	28¾	27⅞	28¼
Preferred	50½	51¾	50⅝	52¼	52½	51⅝
New mort. 7s	93	91	.....	.....	.....	.....
Wells-Fargo Ex	....	.....	.....	.....	.....	.....
Western Pacific b'ds	110½	.....	.....	.....	.....	.....
Western Union Tel.	81⅞	82⅝	81¾	82¼	81⅛	82⅛
7s, S.F conv., 1900	.....	.....	.....	.....	.....	.....
FEDERAL STOCKS:—						
U. S. 4s, 1907, reg	121¾	121¾	.....	121¾	121½	.....
U. S. 4s, 1907, coup	121¾	121¾	121¾	.....	121¼	121½
U. S. 4½s, 1891, reg	....	.....	116½	116½	.....	.....
U. S. 4½s, 1891, coup	.....	.....	.....	116¾	.....	.....
U. S. 5s, cont'd at 3½	102	.....	.....	102	.....	102⅛
U. S. 6s cont'd at 3½	.....	.....	.....	101½	.....	101¼
Dt. of Col. 3-65s, reg	.....	.....	.....	.....	.....	.....
Dt. of Col.3-65s,coup	.....	.....	.....	.....	.....	.....

Boston Stock Exchange.

Prices for the Week Ending April 26.

	Th.20.	F.21.	Sat.22.	M.24.	Tu.25.	W.26.
Atch.,Top.&San.Fe.	86⅝	86	85¾	86⅛	86½	86¾
1st mortgage	.....	.....	118⅞	...	.....	.....
Land Grant 7s	114	.....	114¼	.....	.....	.....
Boston & Albany	165	165½	164½	165	165	165½
Boston and Lowell.	101	101½	101¾	101¼	101¾	102
Boston & Maine	.....	146½	.....	146½	147	147¼
Boston& Providence	.....	161	.....	.....	162	162
Bos'n,Hart.& Erie7s	50	48	.....	.....	48½	48
Burl.& Mo.R.L.G.7s	.....	.....	.....	.....	.....	.....
Burl.& Mo.R.in Neb	.....	.....	.....	.....	.....	.....
6s, exempt	.....	.....	.....	.....	.....	110
4s	.....	.....	.....	.....	.....	.....
Chi.,Burl. & Quincy	129⅝	130	129⅜	130½	130⅝	130½
Cin.,Sand&Clev($50)	25	.....	.....	.....	25	26
Concord ($50)	100½	.....	.....	.....	.....	.....
Connecticut River	.....	.....	.....	.....	.....	.....
Eastern	....	37	38	.....	38	.....
New 4½ Bonds	.....	.....	107	106¾	.....	107
Fitchburg	125½	.....	125¾	.....	.....	126
N.Y. & New England	46	45	45¼	.....	46¾	.....
7s	114	114	113⅞	.....	113½	.....
Northern N. H.	.....	109	.....	.....	.....	.....
Norwich&Worcester	.....	.....	156	.....	.....	...
Ogden & Lake Cham	.....	.....	34	.....	.....	.....
Old Colony	.....	129½	127½	129¾	130	.....
Ph.,Wil.&Balt.($50).	63½	. ..	.....	.....	.....	.....
Portl'd,Saco & Ports	116	.....	.....	.....	.....	.....
Pueblo & Ark Val	113⅞	.....	.....	.....	.....	.....
Pullman Palace Car	126	....	125¼	.....	126	126
Union Pacific	111⅛	111	111	111	111¾	111¼
6s	116	115¾	.....	.....	115¾	.....
Land Grant 7s	...	.....	.....	...	112	112
Sinking Fund 8s	117¼	.....	117¾	.....	117¾	.....
Vermont & Mass	.....	.....	.....	.....	.....	.....
Worcester & Nashua	....	.....	.....	.....	. .	.....
Cambridge (Horse)	113	....	.....	.....	112	.....
Metropolitan(Horse)	.....	.....	.....	.....	.....	.....
Middlesex (Horse)	.....	.....	.....	.....	.....	.....
Cal.&Hecla Min'gCo	233	233	233	....	235	.....
Quincy	46	47	46½	47	.....	48¼

Baltimore Stock Exchange.

Closing Prices for the Week Ending April 25.

	W.19.	Th.20.	F.21.	Sat.22.	M.24.	Tu.25.
Baltimore & Ohio	.....	.....	.....	197	.....	.....
6s, 1885	.....	. ..	106	.....	106	....
Central Ohio ($50)	...	.....	.....	.....	46½	.....
1st mortgage	.....	109¼	109¼	.....	109¼	109½
Marietta & Cincin'ti	.....	.....	.....	.....	.....	.....
1st mortgage, 7s	.....	.....	.....	.....	.....	124
2d mortgage, 7s	.....	.....	.....	.....	.....	.....
3d mortgage, 8s	.....	.....	.....	.....	.....	53½
Northern Cen. ($50)	.....	....	.....	.....	49⅜	.....
2d mort., 6s 1885	.....	.....	107¼	.....	.....	.....
3d mort., 6s, 1900	.....	.....	.....	.....	.....	.....
6s, 1900, gold	.....	.....	.....	116½	.....	.....
6s, 1904, gold	.....	.....	.....	.....	.....	.....
Pitts.& Connellsv.7s	124	124	124	.....	124	124
Virginia 6s, Consol.	68½	69	.....	.....	69½	.....
Consol. coupons	.....	70	70	. ...	.....	.....
10-40 bonds	44½	.....	45	45	45⅜	45⅛
Def'd Certificates	.....	.....	.....	.....	.....	.....
Western Maryland	.....	.....	.....	.....	.....	15
1st M.,end.by Balt	.....	.....	.....	.....	.....	.....
2d M. do	.....	.....	.....	.....	.....	.....
3d M., do	.....	.....	.....	.....	.....	.....
1st M.,unendors'd	.....	.....	.....	.....	.....	.....
2d M.,end.WashCo	.....	.....	.....	.....	.....	.....
2d M., preferred	.....	.....	.....	.....	.....	.....
City Passenger R R.	....	.....	.....	....	...	.....

Philadelphia Stock Exchange.

Closing Prices for the Week Ending April 25.

	W.19.	Th.20.	F.21.	Sat.22.	M.24.	Tu.25.
Allegh'y Val. 7 3-10s	.....	.....	.....	.....	.....	.....
7s, Income	.....	.....	.....	52½	...	53
Buff., Pitts & West.	16⅞	16⅞	17	16½	16⅝	16⅞
Camd'n & Am. 6s, '83	.....	.....	.....	.....	.....	.....
6s, 1889	.....	.....	.....	.....	.....	.....
Mort. 6s, 1889	114½	.....	.....	.....	.....	.....
Camden & Atlantic	.....	.....	.....	.....	.....	.....
Preferred	.....	.....	.....	.....	.....	40
1st mortgage	.....	.....	.....	.....	.....	.....
2d mortgage	.....	.....	.....	.....	.....	.....
Catawissa	.....	.....	.....	22½	.....	.....
Preferred	.....	.....	.....	.....	.....	.....
7s, new	.....	.....	.....	.....	.....	.....
Del. & Bound Brook	.....	.....	.....	.....	.....	.....
7s	.....	.....	.....	.....	.....	.....
Elmira&Williamsp't	.....	.....	.....	.....	.....	.....
Preferred	.....	.....	.....	.....	.....	.....
Hunt. & B. Top Mt.	...	.....	.....	.....	12	11
Preferred	.....	.....	.....	.....	.....	23
2d mortgage	.....	.....	.....	.....	.....	.....
Lehigh Navigation.	39⅞	40	39⅞	39⅞	39⅝	39¾
6s, 1884	.....	.....	.....	.....	.....	104
Gold Loan	111⅛	.....	111⅝	.....	.....	.....
Railroad Loan	..	..	...	.....	117	.....
Conv. Gold Loan	109	.....	.....	.....	.....	.....
Consol. Mort, 7s	118½	.....	.....	.....	119	.....
Lehigh Valley	60¾	61	61	61⅛	61	61
1st mort. 6s, coup	.....	.....	.....	.....	.....	.....
1st mort. 6s, reg	.....	.....	.....	.....	.....	.....
2d mort. 7s	.....	.....	.....	.....	.....	.....
Consol mort. 6s	.....	.....	.....	.....	.....	.....
Consol.mtg.6s,reg	.....	.....	120¾	.....	.....	.....
Little Schuylkill	57¼	.....	.....	.....	57½	.....
Minehill&Sch.Hav'n	.....	.....	.....	.....	.....	.....
North Pennsylvania	64	.....	64	.....	64	.....
1st mortgage 6s	.....	.....	.....	.....	106¼	.....
2d mortgage 7s	.....	.....	.....	.....	.....	.....
Genl. mtg.7s,coup	.....	.....	.....	.....	.....	.....
Genl. mtg. 7s, reg	.....	.....	.....	.....	.....	.....
Northern Central	49⅜	.....	49⅛	.....	.....	.....
5s	.....	.....	.....	.....	.....	.....
Northern Pacific	38	37⅜	37¾	38	38¾	38⅜
Preferred	77⅛	77¼	..¾	77⅜	78	78

Pennsylvania R. R.	62	62¼	62¼	62	61¾	61⅞
1st mortgage	.....	.....	.....	.....	.....	.....
Gen'l mort	.....	.....	.....	.....	.....	.....
Gen'l mort reg.	.....	.....	123	.....	.....	125
Consol. mort. 6s.	.....	.....	.....	.....	.....	.....
Consol. mort. reg	.....	.....	.....	.....	120	....
Pa. State 5s, new	.....	116	.....	.....	.....	118
do 4s, new	.....	.....	.....	.....	.....	.....
Phila. & Reading	28¼	28⅞	28⅞	28	28¾	28½
1st mortgage 6s	.....	.....	.....	.....	.....	.....
7s of 1893	.....	.....	.....	.....	.....	.....
7s, new convert	.....	.....	.....	.....	74	74
Consol. mort. 7s	125½	125½	.....	....	125¼	.....
Consol. mort. reg.	.....	.....	.....	.....	.....	.....
Gen'l mort. 6s	96⅜	97	97⅛	97	97⅜	98¼
Philadelphia & Erie	15	.....	15	15	15	.....
1st mortgage 5s	.....	.....	102	.....	.....	.....
2d mortgage 7s	.....	...	.....	.....	.....	116
Pittsb., Cin. & St. L. 7s	118	118	.....	.....	118	118
Pitts., Tit. & Buff. 7s	95	94¾	.....	.....	94¾	.....
Schuylkill Navi't'n	..	..	..	.....	.....	.....
Preferred	.....	13½	13½	13¼	.....	.....
6s, 1872	.....	.....	...	.....	.....	.....
6s, 1882	.....	92	.....	.....	.....	.....
United Co. of N. J.	186¾	187	.....	187	187	187
Hestonville, (Horse)	.....	.....	.....	.....	.....	16
Chestnut & Wal. (do)	.....	.....	.....	87½	.....	...
Green & Coates (do)	.....	.....	.....	...	....	.

London Stock Exchange.

	Closing Prices — Apl. 6.		Mar. 31.	
Baltimore & Ohio (sterling)	114	116	114	116
Central of N. J., $100 shares	93	98	93	98
Do. consol. mort	114	118	113	115
Do. Adjustment Bonds	104	109	104	109
Do. Income Bonds	98	102	98	102
Det., G'd Haven & Mil. Equip bds	111	113	109	111
Do. Con. M. 5p.c., till '83 aft'r 6p.c	110	112	108	110
Illinois Central $100 shares	139	141	139	141
Lehigh Valley Cons. mortgage	118	122	118	122
Louisville & Nashville mort 6s	101	103	101	103
Do. Sink. Fund bds (S. & N. Ala)	98	100	98	100
Do. capital stock $100 shares	81	83	82	84
N. Y. Cent. & Hud. R. mt. bds	135½	136½	133	136
Do. $100 shares	135	136	136	137
Do mort. bonds (stg.)	122	125	120	124
N. Y., Lake Erie & West., $100 shs	37½	38	38⅛	39
Do. 6 p. c. pref. $100 shares	77	79	78	80
Do. 1st Con. Mort. bds (Erie)	127	129	127	129
Do. do. Funded Coupon bds	123	125	123	125
Do. 2d Consol Mort. bonds	97	98	97¼	98⅛
Do. do. Funded Coupon bds	95	97	95	97
Do. Gold Income bonds	..	..	88	92
N. Y., Pa. & Ohio 1st mort. bonds	48½	49½	49	56
Do. Prior Lien bds (sterling)	101	105	101	105
Pennsylvania, $50 shares	64	65⅛	65	66
Do. Con. Sink Fund Mort	118	120	118	123
Philadelphia & Reading $50 shs	32¼	32¾	32	32⅛
General Consol Mortgage	118	120	118	120
Do. Improvement Mortgage	103	105	106	108
Do. Gen. Mtg. '74, ex-def'd coup.	99	101	97	98
Do. Scrip for the 6 def. ½ coup.	99	101	97	100
Pittsb., Ft. W. & Chi. Eq. bds	104	106	104	106
St. L. Bridge 1st mort. gold b'd.	124	126	123	125
Do. 1st pref. stock	98	100	98	102
Union Pa. Land Grant 1st. mtg.	113	115	113	115
Wabash, St. L. & P. $100 shs	35	36	35½	36⅛
Do. $100 pref. shares	59½	60¼	62	63
Do. gen. mort. bonds	84	86	85	87

AMERICAN RAILROAD JOURNAL.

Financial and Commercial Review.

THURSDAY EVENING, April 27, 1882.

THE rates to the stockbrokers this morning for money on call were 2@3 per cent, and on United States bonds 2 per cent. Money was loaned for 30 and 60 days on dividend paying stocks at 2½@3 per cent, and for four months at 3½@4 per cent. Prime mercantile 60-day paper was selling at 5@5½ per cent. Few loans were made during the day above 3 per cent, and the closing quotations were 2@2½ per cent.

The actual rates for prime bankers' sterling were 4.86½@¾ and 4.89¼@½, with cables 4.89¾@4.90¼, and prime commercial bills 4.85¼@¾. The actual rates for Continental bills were as follows: Francs, 5.18⅛@5.17½, and 5.15; Marks, 95@95⅛, and 95⅝@95¾, and Guilders, 40⅛@40½.

Governor Hawkins, of Tennessee, has received a proposition from the holders of the Tennessee bonds to compromise the debt at 60 cents on the dollar and graded interest at 4, 5 and 6 per cent.

A despatch from Washington states that a call for $15,000,000 extended sixes will be issued May 3d. This will leave less than $45,000,000 of those bonds outstanding, and it is expected that they will all be practically retired by August.

The total valuation of railroad property in Colorado in 1880 was $11,533,982. In 1881 the valuation was $17,641,506.14.

The statement of business of the Philadelphia and Reading Railroad and Coal and Iron companies for March shows gross earnings of the railroad, $1,610,089.31, derived from the following sources; railroad traffic, $1,527,949.15; canal traffic, $21,450.22; steam colliers, $56,676.25; Richmond coal barges, $4,013.69. The expenses of the month, excluding rentals and interest, were $1,009,649.59, leaving a profit for the month of $600,439.72, being a decrease of $82,016.36 as compared with the corresponding month last year. The gross receipts of the Coal and Iron Company were $977,630.75; expenses, excluding interest, $922,621.74; profit, $55,009.01, being a gain of $20,756.06 as compared with the corresponding month last year. The gross receipts of both companies for the year to date were $2,587,720.06; expenses, $1,932,271.33; profit, $655,448.73, being a decrease as compared with the corresponding period of last year of $71,260.30.

The annual report of the Graniteville Cotton Manufacturing Company, at Augusta, Ga., for the year ended March 31, 1882, shows the net earnings for the year to have been $179,338, or nearly *thirty per cent* on the capital, and this after the erection of thirteen dwellings and some costly improvements put on the mills. The stockholders have voted to considerably enlarge their mills, which can be done out of the surplus earnings, which now amount to $293,882, after having all along paid handsome yearly dividends.

The stockholders of the River Front Railroad Company, Philadelphia, have agreed to increase the capital stock from $180,000 to $216,000, and a mortgage of $216,000 was authorized. A lease of the property to the Pennsylvania Railroad Company for $23,000 per annum was proposed, which is sufficient to pay interest on the bonds and an annual dividend of 5 per cent on the stock. They will issue two hundred and sixteen $1,000 registered thirty-year bonds, bearing interest at 4½ per cent, payable semi-annually in May and November.

A mortgage was recorded at Goldsboro, N. C., on the 20th inst, for $10,000,000 upon the Midland North Carolina Railway, made by W. J. Best, as president of the Company, to the American Loan and Trust Company of Boston, in trust for all the holders of its bonds. The mortgage bears date of Sept. 1, 1881, and is signed by W. J. Best, as president, and duly acknowledged at Boston, April 17, on which date it was accepted by the Loan and Trust Company. The Midland Railway Company last year leased the Atlantic and North Carolina Railway, and proposes to extend its lines to Salisbury. Twenty miles of grading has been done on the extension, and five miles of rails have been put down.

The Master's report of the Philadelphia and Reading companies for the month of February gives the total receipts of the railroad at $3,134,715.50, which includes a balance from the previous month of $393,159,50. The balance on the 1st of March amounted to $270,295.65. On account of the Coal and Iron Company, the total receipts for the month of February, including a balance of $150,046.26, were $1,244,109.18, leaving a balance on the 1st of March of $104,237.43. The deferred income bond account showed a balance of $276,568.64.

The manager of the Troy and Greenfield Railroad and Hoosac Tunnel reports the following expenditures upon the road for the month of March, 1882: Operating expenses, $18,234; second track in tunnel, $1,625; second track east, $1,959; sidings North Adams yard, $4,516; stone ballast, $1,379; iron bridges, $555; telegraph construction, $434—total, $28,703.

At a meeting of the stockholders of the Fitchburg Railroad Company, on the 21st inst. the issue of $500,000 5 per cent bonds by the directors was assented to. The bonds have already been sold to the Provident Institution for Savings.

The Boston Stock Exchange has admitted to the list the Sinaloa and Durango Railroad Company, incorporated March 1, 1882, under the laws of Massachusetts, for the purpose of building and operating railroad and telegraph lines in Mexico. Authorized capital, $800,000; par value of shares, $100. The statement says: No stock issued, but transferable receipts given for partial and full payments. The receipts issued represent 6,000 shares of stock, or $600,000. For $2,700 in cash the subscriber is to receive $3,000 in stock at par value, and $3,000 in first mortgage 6 per cent bonds. All assessments on 200 blocks of $2,700 each, $540,070, have been called. There has been expended for construction, materials, supplies and labor for construction, $484,066.22. The first section of forty miles, from Altata to Cullican, is now being built, and the subsidy, amounting to $32,000 on the four kilometres first completed, has been paid. A subsidy of $8,000 per kilometre is to be paid by the Mexican Government to this Company as each kilometre is finished and approved by the Department of Public Works.

A palace car for pisciculturists is among the latest elegancies of scientific development. A full description of one now in course of construction at the Mt. Claire Shops, Baltimore, for piscatory purposes is given on another page.

According to a return laid on the table of the House of Commons, Ottawa, on the 20th inst., the cost to the 28th February, 1882, of the portion of the Intercolonial Railway between Riviere du Loup and Hadlow, and the amount expended in improvements, and the cost of rolling-stock, etc., is as follows: The length of the line is 124½ miles. Purchase of Riviere du Loup branch, $1,500,000; track-laying, ballast, etc., $123,788; stations and buildings, $106,744; rails and fastenings, $324,491; sleepers, 36,465; fencing, $9,321; bridges, culverts, etc., $18,628; water service, $12,243; snow protection, $10,830; engine hire, $4,656; survey of loop line, $353; miscellaneous, $47,925; total, $945,649; rolling-stock, $333,436—total cost

to date, $2,528,885. The rolling-stock that has been purchased is as follows: 12 locomotives, 311 cars and 8 plows. The estimated amount required to complete repairs, improvements and equipment of the branch is $70,000.

The Mexico *Diario* (official) states that seven colonies of Italians, numbering 2,500 persons, have recently settled in the country, and that a few weeks since three hundred Italian families arrived at Vera Cruz, and have already settled on lands that had been selected by them in the vicinity of that city. The activity of immigration agents and the push of railroad construction are giving an impetus to Mexico that must be novel to the people of that somnolent Republic.

President Dickson's testimony before the Senate Committee investigating the Spuyten Duyvil disaster is referred to in another column.

The bill compelling railroad companies in the State of Texas to carry passengers at a uniform rate of 3 cents a mile passed the Legislature and was signed by the Governor within fifteen minutes after it was presented to him. It goes into operation ninety days after the close of the present session.

The San Francisco newspapers publish a list of New York and Boston firms signing a petition in favor of the veto of the Chinese bill and calling on business men to refuse dealing with them in the future. They will all fail now—a la Stewart.

The debt of the city of Charleston, S. C., in 1870 was $5,241,709; it is now $4,264,050. The debt was reduced during the year 1881 $362,300, all the liabilities were promptly paid, and a sinking fund has been set aside to cancel bonds as they become due.

Danville, Va., has voted, 6 to 1, in favor of a subscription of $60,000 to the Danville and New River Railroad. The subscription is, however, on condition that Patrick county makes a subscription also of not less than $100,000. The railroad authorities say the vote of Danville insured the speedy extension of the road westward from Martinsville, ultimately to tap the Norfolk and Western at New River.

A cotton factory company has been organized at Eufaula, Ala., with a capital of $75,000.

The following quotations of sales of railway and other securities, for the week, are in addition to those given elsewhere in our columns:

New York.—Atlantic and Pacific 1st, 97; Albany and Susq. consol., 125; Boston and New York Air Line pref., 64; Buffalo, New York and Erie 7s, new, 123; Chicago, St. Paul and Minneapolis 1st, 114½; Charlotte, Columbia and Augusta 1st, 108; Chicago, St. Paul, Minneapolis and Omaha, 36⅞; do. pref., 100; do. consol., 102⅝; Central Iowa, 32½; do. 1st, 112; Clev., Col., Cin. and Ind. consol., 125⅝; Cedar Falls and Minnesota, 17; Chicago, St. Louis and New Orleans, 76; Chicago, Milwaukee and St. Paul, Iowa and Dakota div. 1st, 116½; do. Southwest div. 1st, 110; do. Southern Minnesota div. 1st, 108; do. Chicago and Pacific West div. 1st, 94; Chesapeake and Ohio cur. int., 47; Chicago and Milwaukee 1st, 123; Chicago and Northwestern S. F. 5s, 99½; Chicago, Burlington and Quincy 8s, 104¾; do. 5s, S. F., 129: Cincinnati and Springfield 1st, guar. by Lake Shore, 111; Chicago and Eastern Illinois 1st, 82½; Dubuque and Sioux City, 84; Denver and Rio Grande, 60⅜; do. 1st, 13¾; do. 1st consol., 106½; Denver, South Park and Pacific 1st, 105; East Tennessee, Virginia and Georgia, 11¼; do. pref., 19½; do. 5s, 76½; do. inc., 48; Galveston, Harrisburg and San Antonio 1st, 103; Green Bay, Winona and St. Peter, 10; do. 1st, 85; Gulf, Colorado and Santa Fe 1st, 108½; Houston and Texas Central, Western div. 1st, 109. Hannibal and Central Missouri 1st, 107; Indiana, Bloomington and Western, 40; do. 1st, 89; do. 2d, 74; International and Great Northern 1st, 107: Indianapolis, Decatur and Springfield 1st, 101½; Jefferson R. R. 1st, 105; Keokuk and Des Moines, 16; do. 1st, 104; Kansas Pacific 1st consol., 106½; do. 6s, 1896, 112; do. 6s, Denver div. ass., 111½; Louisville, New Albany and Chicago, 57½; do. 1st, 103½; Lake Erie and Western, 28; do. 1st, 101⅜; Long Island, 54; do. 1st, 118; Lafayette, Bloomington and Muncie 1st, 102¾; Louisville and Nashville Gen'l mort. 6s, 99; Manhattan Beach, 32; do. 7s, 84; Marietta and Cincinnati 1st pref., 9¾; do. 2d pref., 4½; Missouri, Kansas and Texas, 30; do. gen'l mort. 6s, 81⅞; do. 2d, 62; do. consol., 105; Missouri Pacific, 88½; do. 1st consol., 103½; do. 3d, 110¾; Milwaukee, Lake Shore and Western, 47½; do. 1st, 103; Mobile and Ohio, 24; do. 1st mort., 110; do. 1st deben., 82; do. 2d deben., 50; Memphis and Charleston, 50; Michigan Central 5s, 98; Michigan Southern S. F., 109¼; New Jersey Southern 1st, guar., 97; Nashville, Chattanooga and St. Louis, 61; do. 1st, 116½; New York, Ontario and Western, 25⅜; Norfolk and Western pref., 52½; do. Gen'l mort., 104; New Orleans Pacific 1st, 86; Northern Pacific 1st, 101½; New York City and Northern Gen'l mort., 60; Oregon Railway and Nav., 140; do. 1st, 108; Ohio Central, 15; do. 1st, 98; do. inc., 35; Oregon Transp., 71½; Ohio South'n 15; do. 1st, 85; Peoria, Decatur and Evansville, 28⅝; do. 1st, 105; do. inc., 77; Rochester and Pittsburgh, 28¾; do. inc., 46; Richmond and Alleghany, 21½; do. 1st, 90; Richmond and Danville, 125; do. 1st, 100; do. deben, 70; Rome, Watertown and Ogdensburg, consol., 1st mort. Trust Co. certif., 88½; St. Louis and San Francisco 2d, Class A, 100½; do. B, 90⅜; do. C, 90⅛; St. Louis, Alton and Terre Haute div. bonds, 37½; Scioto Valley 1st, 102; St. Paul and Duluth pref., 78; St. Paul, Minneapolis and Manitoba, 119½; do. 1st, 110½; do. 2d, 107½; do. 1st, Dakota ext. 109; Southern Pacific of California 1st, 103¼; South Pacific of Mo., 1st, 105; Syracuse, Binghamton and New York 1st, 122½; St. Paul and Sioux City 1st, 110¾; St. Louis, Kansas City and Northern R. E., 7s, 103½; South Carolina inc., 48; do. 1st, 97¼; St. Louis, Iron Mountain and Southern 1st pref. inc., 95; Texas and Pacific, 38¾; do. inc. Land Grants, 63¾; do. Rio Grande div. 1st, 81½; Toledo Peoria and Western 1st, 107; Texas Central 1st, 108½; Wabash, St. Louis and Pacific, Iowa div. 1st, 91; do. Gen'l mort. 6s, 78½; do. Chicago div. 1st, 81½; Winona and St. Peter 1st, 109½; Alabama, Class A, 81¾; Louisiana 7s, consol., 65; Missouri 6s, 1882-'83, 102¾; do. 6s, 1887, 110¼; North Carolina 4s, consol., 82; do. S. T., 3d class, 7½; South Carolina 6s, non-fund, 9½; Tennessee 6s, 59¼; Virginia 6s, def., 14; Am. Dist. Tel., 44; Colorado Coal and Iron, 50½; do. 1st, 92; Consolidation Coal, 30½; New Central Coal, 15; Central Mining, ⅞; Excelsior, 2½; Homestake, 18½; Ontario, 35½; Standard, 17½.

Philadelphia.—Am. S. S. Co. 6s, 104½; Belvidere Delaware 2d, 107; Central Transportation, 34; Catawissa 2d pref., 55; Huntingdon and Broad Top Mt. consol. 5s, 87½; Northern Central 6s, 1885, 107; Nesquehoning Valley, 55; Perkiomen 6s, 104; Pennsylvania and New York Canal 7s, 123; Pennsylvania Company 4½s, 95⅞; Philadelphia, Wilmington and Baltimore 4s, 94½; Pennsylvania Canal 6s, 95; Philadelphia and Reading deferred income bonds reg., 30¼; do. consol. gold 6s, reg., 114; do. scrip, 97; St. Paul and Duluth, 28; Susq. Canal 6s, 59¾; Texas and Pacific consol. mort. 6s, 99; do. Rio Grande div., 6s, 82⅜; West Jersey div. scrip, 82. The latest quotations are: City 6s, 108@118; do. free of tax, 128@132; do. 4s, new, 108@113; Pennsylvania State 5s, new loan. 117@119; do. 4s, old, 110@112; do. 4s, new, 114@114½; Philadelphia and Reading R. R., 28⅝@28¾; do. consol. mort. 7s, reg., 125½@126½; do. gen'l mort. 6s, coupon, 97@97½; do. 7s, 1893, 117@120; do. new conv., 76¾@77¼; United New Jersey R. R. and Canal, 186½@187¼; Buffalo, Pittsburg and Western, 16¾@16⅞; Pittsburg, Titusville and Buffalo 7s, 94@95; Camden and Amboy mort. 6s, 1889, 114@115; Pennsylvania R. R., 61⅞@62; do. general mort. 6s, coupon, 125@126; do. reg., 125@126; do. consol. mort. 6s, reg., 119@121; Little Schuylkill R. R., 57@58; Schuylkill Navigation, pref., 13@14¼; do. 6s, 1882, 91@92; do. 1872, 105½@106½; Elmira and Williamsport pref., 56@60; do. 5s, 95@102; Lehigh Coal and Navigation, 39½@39¾; do. 6s, 1884, 104@104½; do. R. R. loan, 116½@117¼; do. Gold Loan, 111½@112; do. consol. 7s, 118½@119½; Northern Pacific, 38½@38⅝; do. pref., 77⅞@78⅛; North Pennsylvania, 63¾@64⅛; do. 6s, 105½@106½; do. 7s, 121½@122; do. 7s, General mort. reg., 121@122; Philadelphia and Erie, 14¾@15¼; do. 7s, 115@115¼; do. 5s, 101¾@102½; Minehill, 62@63; Catawissa, 22@24; do. pref., 56@57; do. new pref., 54@55; do. 7s, 1900, 117½@—; Lehigh Valley 60⅞@61; do. 6s, coupon, 121@123; do. reg., 123@124; do. 7s, 133@133½; do. consol. mort. 120½@121½; Fifth and Sixth streets (horse), 152@155; Second and Third, 109@115; Thirteenth and Fifteenth, 70@78; Spruce and Pine, 45@48; Green and Coates, 75@76; Chestnut and Walnut, 87@91; Germantown, 70@75; Union, 110@115; West Philadelphia, 105@115; People's 8@10; Continental, 100@102.

Baltimore.—Atlanta and Charlotte, 72; do. 1st, 107¾; Atlantic Coal, 1.20; Baltimore City 6s, 1890, 117½; do. 6s, 1886, 107; do. 6s, 1900, 129; do. 6s, 1884, 104; do. 5s, 1894, 115½; Baltimore and Ohio 6s, 1885, 106@—; Canton Co. 65; do. 6s, 104¼; Maryland Defense 6s, 104; do. 6s, 1890, 115½; do. 6s, exempt, 123; Marietta and Cincinnati 1st Trust certificate, 125; do. 2d do., 98⅝; do. 3d do., 53⅝; North Carolina 4s, 81; Northern Central, 49¼@49¾; do. 6s, 1885, 107@108; do. 6s, 1900, gold, 115½@—; Ohio and Mississippi, Springfield div. 1st, 120¼; Richmond and Danville gold bonds, 100; South Side 2d, 103½; do. 3d, 105; Sutro Tunnel, 0.62½; Union R. R. 6s, Canton end., 116; Virginia

Black scrip, 33; Virginia Midland 1st, 109; do. 2d, 107; do. 5th mort., 92⅞; Virginia and Tennessee 2d, 102; Wilmington, Columbia and Augusta, 109. The latest quotations are: Atlanta and Charlotte 1st, 107½@108; Baltimore and Ohio, 195@200; do. 6s, 1885, 105¾@106½; Baltimore City 6s, 1886, 108½@—; do. 6s, 1890, 117½@—; do. 6s, 1902, 130@—; do. 5s, 1916, 121@—; do. 5s, 1894, 115½@116; do. 4s, 1920, 115@—; Central Ohio 1st, 109@109¼; Canton 6s, gold, 104½@108; Columbia and Greenville 1st, 101¾@102½; Marietta and Cincinnati 1st, 124½@126; do. 2d, 98½@98¾; do. 3d, 53½@53¾; Northern Central, 49@49½; do. 5s, 1926, 97@@98; do. 6s, 1885, 107@108; do. 6s, 1900, 115@116½; do. 6s, 1900, gold, 115½@—; Norfolk Water 8s, 132@—; Ohio and Mississippi 2d, 120@121; do. Springfield div. 1st, 120@120½; Virginia and Tennessee 2d, 102@—; Virginia Consols, 68½@69; do. 10-40s, 45@45½; Virginia Midland 2d mort., 106½@107½; do. 5th mort., 92½@93; Western Maryland 1st, unindorsed, 106½@—; do. 2d pref., 106½@—.

Boston.—Atlantic and Pacific blocks, 100; do. 6s, 94; Atchison, Topeka and Santa Fe 5s. 97½; Boston Water Power, 4⅞; Boston Land, 7½; Burlington and Missouri River R. R. in Nebraska 6s, non-exempt, 103⅞; Boston, Clinton, Fitchburg and New Bedford, 65, Chicago, Burlington and Quincy 7s, 125; do, 4s, Denver ext., 84; Chicago, Milwaukee and St. Paul, Dubuque div. 6s, 102⅞; Connotton Valley, 7; do. 7s, 50; do. 7s, Straitsville 34; California Southern 1st, 84½; Chicago and West Michigan 5s, 94; Cincinnati, Sandusky and Cleveland 7s, 100; Flint and Pere Marquette, 24¼; do. pref.; 95½; Highland Horse R. R., 135¼; Iowa Falls and Sioux City, 86; Kansas City, Lawrence and Southern 5s, 102; Kansas City, St. Joseph and Council Bluffs 7s, 115; Kansas City, Fort Scott and Gulf, pref., 120; do. 7s, 110; Kalamazoo, Allegan and Grand Rapids 8s, 112; Little Rock and Fort Smith, 48¼; Louisiana and Missouri River, 15½; Mexican Central 7s, 85⅝; do. blocks, No. 2, 111; do. No. 3. 105¼; Massachusetts Central, 9½; do. 6s, 62; Maine Central, 55; Marquette, Houghton and Ontanagon, 64; New Mexico and Southern Pacific 7s, 112; Nashua and Lowell, 150; Northern Pacific 6s, 100; Oregon Short Line Subscriptions, 112¾; Omaha and Southwestern 8s, 121; Republican Valley 6s, 104; Sonora 7s, 104¾ do. blocks No. 4, 450; Toledo, Delphos and Burlington, 6¾; do. inc., 23½; do. Southeast div. 6s, 71; do. inc., 18; Wisconsin Central, 16½; do. 7s, 2d series, 45; Allouez Mining Co., 2½; Franklin, 11½; Huron, 1⅞; Harshaw, 2; Napa Consol. Quicksilver, 5½; Osceola, 33¼; Pewabic, 10½; Sullivan, 1¾; Silver Islet, 17½.

THE cars on the Italian railroads from Venice to Susa, at the foot of Mont Cenis, are of the American pattern, without compartments. They are without stoves, but are nicely warmed by portable flattened metallic cylinders about three feet in length, filled with hot water, and as they gradually cool they are changed for those which are warmer, at the several stopping places. The warm water in these cylinders is secured from leakage by screw orifices, and is of a temperature adapted to the warming b no burning the feet put upon them.

Central Railroad of New Jersey.

THE following report of the condition of the Central Railroad Company of New Jersey, addressed to the Controller of the State of New Jersey, has been filed at Trenton, N. J., by Receiver Little. Its preparation was delayed owing to the fact that the Receiver has only been in office for a short time, and the report was not completed before the death of Receiver Lathrop :—

In obedience to the law of the State of New Jersey, approved March 27, 1874 (Revision, p. 916) requiring annual reports to be made to the Legislature and transmitted to the Controller by the railroad companies of the State, the receiver of the Central Railroad Company of New Jersey presents the following reports for the year ending December 31, 1881 :—

Capital stock		$18,563,200 00
Funded debt		37,757,350 00
Other indebtedness	$3,835,757 10	
Less cash, bills and accounts receivable etc	1,393,195 10	
		2,442,562 10
Railroad, main stem, Newark branch and Perth Amboy branch		13,870,469 11
Jersey City station		1,805,805 50
Port Johnston coal station		601,768 66
Elizabethport station		465,057 60
Station houses, shops, etc		824,850 42
Total		$17,077,951 59
Equipment of road		4,644,515 00
EARNINGS :		
Passengers		$2,148,383 42
Merchandise		1,812,108 37
Coal		2,370,480 90
Mail, express, rents, etc		263,909 56
Total		$6,594,883 25
EXPENSES :		
Maintenance of way, etc	$1,111,347 02	
Rolling-stock	615,177 12	
Transportation expenses	2,637,710 94	
		4,364,235 08
Total		$2,230,648 17

The list of accidents upon the road during the year is appended, according to law, and the oath that the foregoing is true, and the signature of the receiver, includes all of the documents. Receiver Little said to a reporter that he would prepare a detailed report as requested, but it was a labor of considerable difficulty. The assets of the company included riparian and coal lands, mortgages, etc., which were of great value, but required close examination to ascertain their real value. The report would be a full exposition of the road's condition.

STREET railway companies are watching with interest the experiments making in Philadelphia with the Meharski compressed air motor —a French invention which has been pronounced a success in that country. At Nantes they have a street railway four miles long on which the cars are propelled by these motors. For fifteen hours a day cars leave the two ends of the track at intervals of ten minutes, and are propelled at a speed of six miles an hour. Each car weighs six tons, and is arranged to carry thirty-one passengers. The air, compressed to a tension of four hundred and fifty pounds to the square inch, is stored in cylindrical steel reservoirs under the car, and passes through a tank of hot water and steam in the front of the car before being used. No machinery is visible, nor is there any chimney or smoke. The various cars on the Nantes street railway run on an average 750 miles per day in the aggregate, and all this is done with a consumption of only four and half tons of coal. The unsteady motion which causes so many ludicrous and unpleasant *contretemps* in horse railways are avoided by this system, and it is claimed that the cars can be run in this country at about one-half what it costs for animal power.

The Coal Trade.

THE leading coal-carrying companies make the following reports of their tonnage for the week ending April 15th, and for the year to same date, compared with their respective amounts carried to the same time last year:—

	Week.	1882.	1881.
Reading Railroad	193,515	2,652,289	2,421,568
Schuylkill Canal	9,841	60,022	23,331
Lehigh Valley	164,321	2,063,537	1,859,230
Delaware, Lackawanna and Western	94,140	1,072,916	1,104,809
Shamokin	18,671	236,473	277,548
Central R. R. of New Jersey	87,593	1,004,112	1,056,778
United R. R. of New Jersey	38,692	445,169	429,101
Pennsylvania Coal	31,435	269,330	293,616
Delaware and Hudson Canal	75,213	859,627	900,525
Huntingdon and Broad Top Mountain	5,205	155,829	133,903
Penn. and New York	28,541	526,032	477,121
Clearfield, Pa.	60,353	792,981	632,247

The total tonnage of anthracite coal from all the regions for the week ending April 15, as reported by the several carrying companies, amounted to 648,596 tons, against 407,251 tons in the corresponding week last year, an increase of 241,345 tons. The total amount of anthracite mined for the year is 6,178,894 tons, against 6,804,996 tons for the same period last year, a decrease of 86,102 tons. The quantity of bituminous coal sent to market for the week amounted to 72,580 tons, against 112,876 tons in corresponding week last year, a decrease of 40,296 tons. The total amount of bituminous mined for the year is 1,388,968 tons, against 1,864,733 tons for the corresponding period last year, a decrease of 525,765 tons. The total tonnage of all kinds of coal for the week is 731,170 tons, against 520,127 tons in corresponding week last year, an increase of 201,049 tons, and the total tonnage for the coal year is 8,057,862 tons, against 8,669,729 tons to same date last year, a decrease of 611,867 tons. The quantity of coal and coke carried over the Pennsylvania Railroad for the week ending April 8 was 194,291 tons, of which 139,562 tons were coal and 54,729 tons coke. The total tonnage for the year thus far has been 2,943,544 tons, of which 2,077,375 tons were coal, and 866,169 tons coke. These figures embrace all the coal and coke carried over the road east and west. The shipments of bituminous coal from the mines of the Cumberland coal region for the week ending April 15 were 4,951 tons, and for the year to that date 459,954 tons, a decrease of 14,461 tons as compared with the corresponding period of 1881. Of the shipments last week 4,615 tons were to the Baltimore and Ohio Railroad, and the remainder to the canal. The shipments of the year have been : Baltimore and Ohio Railroad 376,721 tons ; decrease as compared with 1881, 21,217 tons. Chesapeake and Ohio Canal, 4,559 tons ; decrease as comparea with 1881, 20,158 tons. Pennsylvania Railroad, 72,842 tons ; increase over 1881, 23,082 tons. When business was suspended, March 15, the shipments for 1882 exceeded those of last year by 136,000 tons. The Reading Railroad shipment for last week, ending April 22, was about 177,000 tons, of which 52,000 tons were sent to and 40,000 tons shipped from Port Richmond, and 13,000 tons sent to and 12,900 tons shipped from Elizabethport.—*Phil. Ledger, April* 24.

To fasten emery to leather, boil glue very thin, add a little milk, raise the pile of the leather, and put on the glue with the brush. Then sprinkle on the emery, and let it cool.

RAILROAD AND CANAL DIVIDEND STATEMENT.

Showing the amount of Stock Outstanding, the Dividend Periods and the date of last Dividend.

Marked thus(*)are leased roads.	Stock out-standing.	Divide'd Periods.	Last Dividend Payable.
Albany and Susq*...100	3,500,000	semi-an	Jan. '82 2
Ashuelot.....100	210,000	q'arterly	Oct. '81 3½
Atch., Top. and S. Fe100	54 000,000	q'arterly	May '82 1½
Atlanta and W. Point100	1,232,200	semi-an	July '81 4
Atlantic and St. Law*100	5,840,000	semi-an	Mar. '82 3
Augusta and Savan'h100	1,022,900	semi-an	June'81 3½
Avon,Geneseo&MtM*100	225,000	semi-an	July '81 3
Baltimore and Ohio.100	14,792,566	semi-an	May '82 5
" " pref.100	5,000,000	semi-an	Jan. '82 3
Washington Br....100	1,650,000	semi-an	Apl. '82 5
Berkshire*.....100	600,000	q'arterly	Apl. '82 1¾
Boston and Albany..100	20,000,000	q'arterly	Mar. '82 2
Bos.&N.Y.AirLine pf.100	2,795,227	q'arterly	Mar. '82 1
Bos.,Cl.,F.&N.B.pref.100	1,750,100	.....	Apl. '82 3½
Bos.,Conc.&Mont.pf*100	800,000	semi-an	Nov. '81 3
Boston and Lowell..500	3,940,000	semi-an	Jan. '82 2
Boston and Maine...100	6,921,274	semi-an	May '82 4
Boston & Providence100	4,000,000	semi-an	May '82 4
Attleborough Br...100	131,700	semi-an	Jan. '82 3½
Bos.,Revere B&Lynn100	419,400	semi-an	Jan. '82 3½
Buffalo,N. Y. & Erie*.100	950,000	semi-an	Dec. '81 3
Camden & Atlantic.. 50	377,400	q'arterly	Apl '80 3s
" " pref. 50	880,650	q'arterly	Apl '80 3½s
Camden & Burl. Co..100	381,925	semi-an	July '81 3
Canada Southern....100	15,000,000	.....	Feb. '81 2½
Cape May &Millville* 50	447,000	semi-an	June'81 3
Catawissa*..... 50	1,159,500	annual	Oct.'81$1½
" pref..... 20	2,200,000	semi-an	Nov.'81 3½
" new pref.. 50	1,000,000	semi-an	Nov.'81 3½
Cayuga and Susq.*.. 50	589,110	semi-an	July '81 4½
Cedar Rapids&Mo.R*100	6,850,400	q'arterly	May'82 1½
" " pref.100	769,600	semi-an	Feb. '82 3½
Central of Georgia...100	7,500,000	semi-an	June'81 4
Central of New Jersey100	18,563,200	q'arterly	Apl. '76 2½
Central Ohio*..... 50	2,437,950	semi-an	Jan. '82 3
" pref.. . 50	411,550	semi-an	Jan. '82 3
Central Pacific 100	59,275,500	semi-an	Feb. '82 3
Chemung*.....100	380,000	q'arterly	July '81 1½
Cheshire preferred ..100	2,155,300	semi-an	Jan. '82 1½
Chicago and Alton...100	11,181,741	semi-an	Mar. '82 4
" " pref 100	2,425,400	semi-an	Mar. '82 4
Chi., Burl. & Quincy.100	55,337,455	q'arterly	Mar. '82 2
Chi., Iowa & Nebras*.100	3,916,200	semi-an	Jan. '82 4
Chi., Mil. & St. Paul.100	20,404,261	semi-an	Apl. '82 3½
" " pref 100	14,401,483	semi-an	Apl. '82 3½
Chi. & N. Western...100	14,988,257	semi-an	Dec. '81 3
" pref.100	21,525,353	q'arterly	Mar.'82 1¾
Chi., R. I. & Pacific..100	41,960,000	q'arterly	May '82 1¾
Chi. and West Mich .100	6,151,000	semi-an	Feb. '82 2½
Chi., St. P., M. & O..100	10,390,000	q'arterly	Jan. '82 1¾
C., Ind., St. L. & Chi.100	6,000,000	q'arterly	Apl. '82 1½
Cin., Sand. & Clev.pf. 50	429,037	semi-an	Nov.'81 3
Clev. and Mahoning* 50	3,759,200	semi-an	Nov.'81 3½
Clev. and Pittsburg* 50	11,244,336	q'arterly	Mar. '82 1¾
Columbus & Xenia*. 50	1,786,200	q'arterly	Dec. '81 2
Colum.&HockingVal.100	2,500,200	semi-an	Aug.'81 20s
Concord 50	1,500,000	semi-an	May '82 5
Concord and Ports.*.100	350,000	semi-an	Jan. '82 3½
Conn.& Passump.Riv100	2,244,400	semi-an	Feb. '82 3
Connecticut River ..100	2,100,000	semi-an	Jan. '82 4
Cumberland Valley.. 50	1,292,950	q'arterly	Apl. '82 2½
" 1st pref 50	241,900	semi-an	Apl. '82 4
" 2d pref. 50	243,000	semi-an	Apl. '82 4
Danbury & Norwalk. 50	600,000	.....	Apl. '82 1½
Dayton and Mich.*.. 50	2,402,573	semi-an	Oct. '81 1¾
" " pref. 50	1,211,250	q'arterly	Oct. '81 2
Delaware*..... 25	1,468,940	semi-an	Jan. '82 3
Del. & Bound Brook*100	1,652,000	q'arterly	Feb. '82 1¾
Del., Lack.& Western 50	26,200,000	q'arterly	Apl. '82 2
Denver & Rio Grande.100	29,160,000	q'arterly	Jan. '82 1½
Den.,South P. & Pac.100	3,500,000	.....	Aug.'80 4
Detroit, Lans. & Nor.100	1,825,600	semi-an	Aug.'80 2½
" " pref.100	2,503,380	semi-an	Feb. '82 3½
Dubuque&Sioux C'y*100	5,000,000	semi-an	Apl. '82 3
East Pennsylvania*., 50	1,709,550	semi-an	Jan. '82 3
East Mahanoy*..... 50	392,950	semi-an	Jan. '82 3
Eastern (N. H.).....100	492,500	semi-an	Dec. '81 2½
Eel River.....100	3,000,000	q'arterly	Mar. '82 $1
Elmira.Jef.&Canand*100	500,000	annual	Sep. '80 5
Elmira&Williamsp't* 50	500,000	semi-an	Nov. '81 1½
" " pref. 50	500,000	semi-an	Jan. '82 3½
Erie and Pitsburg*.. 50	1,998,400	q'arterly	Dec. '81 1¾
Evansville & Terre H.100	100,000	semi-an	Nov. '81 2
Fitchburg.....100	4,500,000	semi-an	Jan. '82 3
F. & P. Marquette pf.100	6,500,000	semi-an	Jan. '82 3
Ft.W. & Jackson pref.100	2,000,000	.....	July '81 2½
Georgia. ..... .100	4,200,000	q'arterly	Jan. '82 2½
Granite 100	1,250,000	semi-an	Jan. '82 3
Han. & St. Jo. pref .100	5,083,024	semi-an	Feb. '82 3½
Harrisbg&Lancaster 50	1,182,500	semi-an	Jan. '82 3½
Housatonic pref. ...100	1,180,000	q'arterly	Apl. '82 2
Illinois Central.....100	39,000,000	semi-an	Mar. '82 3½
Ia.Falls & Sioux City*100	4,623,500	q'arterly	Mar. '82 1¾
Iowa R. Land Co....100	7,620,000	q'arterly	May '82 1
Jeffersonv. Mad.&Ind100	2,000,000	q'arterly	Feb. '82 1¾
Joliet and Chicago*..100	1,500,000	q'arterly	Mar.'82 1¾
Kan.C.,Ft.S.&Gulf...100	4,000,000	.....	Feb. '82 2
" " pref..100	2,750,000	semi-an	Feb. '82 4
Kentucky Central...100	500,000	semi-an	June'81 1
" " pref..100	5,583,500	semi-an	June'81 3
Lake Shore&Mich.So.100	49,466,500	q'arterly	May '82 2
" (guar.)100	533,500	semi-an	Feb. '82 5
Lawrence*..... 50	450,000	q'arterly	Apl. '82 2
Lehigh Valley..... 50	27,496,895	q'arterly	Apl. '82 1¾
" " pref.50	106,300	q'arterly	Apl. '82 1¼
Little Miami..... 50	4,637,300	q'arterly	Mar. '82 2
Little Rock & Ft. S..100	4,096,135	.....	July' 81 10s
Little Schuylkill*.. . 50	2,646,100	semi-an.	Jan. '82 3½
Louisville & Nashv..100	18,130,913	semi-an.	Feb. '82 3
Lowell & Andover...100	500,000	semi-an.	Jan. '82 3½
Lykens Valley.....100	600,000	q'rterly.	Oct,' 81 2½
Manchester & Law..100	1 000,000	semi-an.	Nov.'81 5
Manhattan 100	13,000,000	.....	.....
" " 1st pref.100	6,500,000	q'rterly.	Apl. '82 1½
" " 2d pref.100	6,500,000	.....	Apl. '82 1½
Marietta& Cincinnati 50	1,386,350	.....	.....
" " 1st pref 50	8,105,600	semi-an.	Sep. '66 3s
" " 2d pref 50	4,440,100	semi-an.	Sep. '66 3s
Marq.Hout.&Ont.pf..100	2,259,026	.....	Feb. '82 4
Massawippi*.....100	400,000	semi-an.	Feb, '82 3
Michigan Central....100	18,738,204	q'rterly.	Aug.'81 1
Middlesex Central...100	280,000	semi-an.	Jan. '82 3
Mill Creek&Minehill* 50	323,375	semi-an.	Jan. '82 5
M.Hill& Schuyl.Hav* 50	4,022,500	semi-an.	Jan. '82 3½
Missouri Pacific.....100	28,169,800	q'rterly.	Apl. '82 1½
Mobile&Montgomery100	3,022,517	semi-an.	Feb. '80 2½
Mont. & Wells River100	800,000	annual	Feb. '80 2
Morris and Essex.... 50	15,000,000	semi-an.	Jan. '82 3½
Mt Carbon&PtCarbon 50	282,350	semi-an.	Jan.. '82 6
Nashua and Lowell..100	800,000	semi-an.	Nov.'81 4
Nashua & Rochester.100	1,305,800	semi-an.	Apl. '82 1½
Nashv. & Decatur...100	1,827,000	semi-an.	June'81 3
Nash.,Chat.&StLouis 25	6,670,325	semi-an.	Apl. '82 1½
Naugatuck.....100	2,000,000	semi-an.	Jan. '82 5
Nesquehoning Val'y* 50	1,300,000	semi-an.	Mar. '82 3
N.Castle&Beaver Val* 50	600,000	q'rterly.	Oct. '81 —
NewLondonNorth'n*100	1,500,000	q'rterly.	Jan. '82 1½
N. Y. Cen. & Hud. R.100	89,428,330	q'rterly.	Apl. '82 2
N. Y. and Harlem....100	7,950,000	q'rterly.	Apl. '82 2
" " pref.100	1,500,000	q'rterly.	Apl. '82 2
" City Line.. —	.....	annual	Apl. '82 3
N.Y.,LakeErie&West.100	77,083,800	.....	.....
" " pref.100	8,156,725	.....	Jan. '82 6
N. Y., N. H. & Hart..100	15,500,000	semi-an.	Jan. '82 5
N. Y., Prov. & Boston100	3,000,000	q'rterly.	Nov,'81 2
Niag.Bridg&Canand*100	1,000,000	semi-an.	July '81 3
North Carolina*.....100	3,000,000	semi-an.	Sep. '81 3
" " pref.100	1,000,000	semi-an.	Sep. '81 3
N. Eastern (S.C.) pref100	86,000	semi-an.	May '81 4
North Pennsylvania. 50	4,527,150	q'rterly.	Feb. '82 1¾
Northern Central.... 50	6,142,000	semi-an.	Jan. '82 3
Northern N. Hampsh100	3,068,400	semi-an.	Dec. '81 3
Northern N. Jersey*.100	1,000,000	semi-an.	July '80 2½
Norwich&Worcester*100	2,604,400	semi-an.	Jan. '82 5
Ohio 100	18,500,000	.....	.....
Ohio and Miss. pref..100	4,030,000	semi-an.	Mar.'75 3½
Old Colony.....100	7,333,800	semi-an.	Jan. '82 3
Oregon R'way&Nav.100	6,000,000	q'rterly.	May '82 2
Oswego & Syracuse..100	1,320,400	semi-an.	Aug.'81 4½
Panama.....100	7,000,000	.....	Jan. '82 6
Paterson & Hudson*.100	630,000	semi-an.	Jan. '82 4
Paterson & Ramapo.100	248,000	semi-an.	Jan. '82 4
Pember.&Hightst'n*. 50	342,150	semi-an.	Jan. '82 3
Pennsylvania..... 50	77,672,750	semi-an.	Nov.'81 4
Pennsylvania Co..... 50	20,000,000	semi-an.	June'81 2½
Peoria & Bureau Val*100	1,200,000	semi-an.	Feb. '82 4
Philadelphia & Erie*. 50	7,013,700	semi-an.	.....
" " pfd 50	2,400,000	semi-an.	Jan. '75 4
Phil,Ger.&Norrist'n* 50	2,231,900	q'rterly.	Dec. '81 3
Phil. and Reading... 50	32,726,375	q'rterly.	Jan. '76 2½
" " pref. 50	1,551,800	q'rterly.	July '76 3½
Phila. and Trenton..100	1,259,100	q'rterly.	Apl. '82 2½
Phila., Wil. and Balt. 50	11,585,750	semi-an.	Jan. '82 4
Pittsb, Ft. W. & Chi.*100	19,714,285	q'rterly.	Apl. '82 1¾
" Special Imp.100	6,770,900	q'rterly.	Apl. '82 1¾
Pittsfield&N.Adams..100	450,000	semi-an.	Jan. '82 2½
Portl., Saco & Portsm100	1,500,000	semi-an.	Jan. '82 3
Profile & Franconia..100	130,000	annual	Nov.'80 8
Providence &Worces.100	2,000,000	semi-an.	Jan, '82 3
Rensselaer&Saratog.*100	7,000,000	semi-an.	Jan. '82 4
Rhode Island& Mass.100	100,000	.....	Jan. '81 3
Richmond& Danv...100	3,866,000	q'rterly.	Feb. '82 3
Richmond & Petersb100	1,009,300	semi-an.	Jan. '81 3
Roch.&Genesee Val.*100	555,200	semi-an.	Jan .'82 3
Rome, Watert.& Ogd..100	5,293,900	semi-an.	July '75 1½
Rutland preferred.. 100	4,000,000	semi-an.	Feb. '82 1
St.L.,Alt. & T.Haute.100	2,300,000	.....	.....
" " pref.100	2,468,400	semi-an.	May '82 3
St.L.&S.Fran.1st pref100	4,500,000	.....	Feb. '82 3½
St.L.,I.Mt.&South'n.100	21,459,821	semi-an.	Feb. '74 3
St. P. & Duluth pref.100	4,705,006	q'rterly.	Mar.'82 1¾
St. P., Minn. & Man..100	15,000,000	semi-an.	Feb.'82 3½
Schuylkill Valley*... 50	576,050	semi-an.	Jan. '82 2½
Seaboard & Roanoke.100	1,299,600	semi-an.	Nov. '81 4
Shamokin V.&Pottsv 50	869,450	semi-an.	Feb. '82 3
Shore Line*.....100	1,000,000	semi-an.	Jan. '82 4
Sioux C.&Pacific pref100	169,000	semi-an.	Apl. '82 3½
South Br. (N. J.)*....100	438,300	semi-an.	Jan. '82 3
South Western (Ga.)*100	3,892,300	semi-an.	Dec. '81 3½
Stockbridge&Pitts.*.100	448,700	semi-an.	Oct. '81 1½
Summit Branch*.... 50	4,010,350	semi-an.	Feb. '76 3
Syr.,Bingham&N.Y.*100	2,500,000	semi-an.	Feb. '81 2
Terre Haute & Ind...100	1,988,150	semi-an.	Feb. '82 4
Troy and Boston....100	1,609,000	semi-an.	Feb. '80 2
Union Pacific.....100	61,000,000	q'rterly.	Apl. '82 1¾
United Cos of N. J.*.100	20,490,000	q'rterly.	Apl. '82 2½
Utica, Shenango&S V100	4,000,000	semi-an.	Nov. '81 3
Utica and Black Riv.100	1,772,000	semi-an.	Mar. '82 2
Vermont and Mass..100	3,050,000	semi-an.	Apl. '82 3
Wab. St.L & Pac.pref.100	29,615,100	q'rterly.	Nov. '81 1½
Ware River*.....100	750,000	semi-an.	Jan. '82 3½
Warren (N. J.).....100	1,800,000	semi-an.	Apl. '82 3½
Warwick Valley.....100	340,000	semi-an.	Jan. '82 2½
Westchest&Phil.pref100	821,300	semi-an.	July '80 2
West Jersey.....100	1,359,750	semi-an.	Apl. '83 3s
Wilmingt'n&Weld'n.100	1,456,200	semi-an.	Dec. '81 3
Wil., Col., & Aug 100	960,000	semi-an.	Dec. '81 3
Winchester&Poto'c.*100	180,000	semi-an.	Jan. '82 3
Winchester&Strasb.*100	74,700	semi-an.	Jan. 82 3
Worcester & Nashua. 75	1,789,800	semi-an.	Jan. '82 1½
HORSE-POWER R. R.			
Albany City.....100	200,000	annual	..... '80 5½
Baltimore City..... 25	1,000,000	semi-an.	Jan. '82 4
Balt.,Cat.&El. Mills..100	.....	semi-an.	Jan. '82 2
BleeckerSt.&Ful.F'y.100	900,000	semi-an.	July '81 3½
Boston&Chelsea pref. 50	110,000	semi-an.	Apl. '82 3
Broadway (Brooklyn)100	250,000	q'arterly	Oct. '81 3
B'way&7th Av,(N.Y.)100	2,100,000	q'arterly	Oct, '81 2
B'klyn&Hunter's Pt.100	400,000	semi-an.	Apl. '79 3
Brooklyn City.....100	2,000,000	q'arterly	Dec.'81 3½
Bushwick (Brooklyn)100	309,000	semi-an.	July '81 2½
Cambridge.....100	908,000	q'arterly	Apl. '82 4½
Cen.Park,N.& E.Riv.100	1 ,800,000	q'rterly.	Jan. '82 2
Christoph'r&TenthSt100	650,000	semi-an.	Aug.'81 2½
Citizens' (Phil.)..... 50	192,500	q'rterly.	Jan. '82 2½
Citizens' (Pbg.)..... 50	200,000	annual..	....'80 14½
Coney Island&Bklyn100	500,000	semi-an.	Oct. '80 5
Continental (Phil.) .. 50	580,000	semi-an.	Jan. '82 6
D.Dock,E.B'way&Bat100	1,200,000	q'arterly	Nov.'81 4
Eighth Av. (N. Y.)...100	1,000,000	q'rterly.	Oct. '81 3
42d St. & G. St. Ferry100	748,000	semi-an.	Nov.'81 6
Frankf.&Southw (Ph) 50	600,000	q'rterly.	Jan. '82 6
Germantown, (Ph.).. 50	572,860	q'rterly.	Apl. '82 2½
Girard College (Ph.) . 50	500,000	semi-an.	July '71 3
Grand St. & Newton.100	170,000	semi-an.	July '81 2½
Green&Coates St.(Ph) 50	150,000	q'rterly.	Apl. '82 3
Heston,Mantau&F'm 50	299,381	semi-an.	Jan. '75 4
Highland.....100	600,000	semi-an.	Jan. 82 4
Lomb.&SouthSts(Ph) 25	195,000	semi-an.	Oct. '79 4
Lynn and Boston....100	200,000	semi-an.	May '82 4
Malden and Melrose.100	165,500	.....	.....
Metropolitan (Bost.). 50	1,500,000	semi-an.	Jan. '82 4
Middlesex (Boston)..100	650,000	semi-an.	Nov.'81 3½
N.Y.,Bay Ridge&Jam100	150,000	.....	Oct. '78 7
Ninth Av. (N. Y.)....100	797,320	.....	.....
Orange &Newark....100	282,555	.....	.....
People's (Phila.)..... 25	124,744	.....	Apl. '82 2
Philadelphia City... 50	475,000	semi-an.	Jan. '82 5
Phila. and Darby.... 20	200,000	semi-an.	July '81 3½
Phila.&Grey's Ferry. 50	308,000	semi-an.	Jan. '82 6
Pbg,Alleg.&Manches. 50	300,000	q'rterly.	Oct. '81 3
Ridge Avenue (Ph.).. 50	420,000	semi-an.	Oct. '81 11
Second Avenue (N.Y.)100	1,199,500	semi-an.	July '81 2½
Second&ThirdSt.(Ph) 50	771,076	q'rterly.	Jan. '82 4½
17th &19th sts (Ph.).. 50	250,000	semi-an.	July '81 3
Sixth Avenue (N. Y.)100	750,000	semi-an.	Oct. '81 5
Somerville (Boston).100	113,000	semi-an.	Nov.'81 3
South Boston..... 50	600,000	semi-an.	Jan. '82 4
Third Avenue, N. Y..100	2,000,000	q'rterly.	Nov.'81 5
13th and 15th sts.,Ph 50	334,529	q'rterly.	Jan. '82 4
23d street, N. Y.....100	600,000	semi-an.	Aug.'81 4
Union, Boston.....100	374,300	semi-an.	Jan. '82 4
Union, Phila..... 50	1,005,000	semi-an.	Jan. '82 7
West Philadelphia... 50	750,000	semi-an.	July '77 10
CANALS.			
Chesapeake and Dela 50	2,078,038	semi-an.	June'75 2
Delaware Division... 50	1,633,350	semi-an.	Feb. '82 $1
Delawa. and Hudson100	20,000,000	q'rterly.	Mar. '82 1¾
Delaware & Raritan*.100	5,847,400	q'rterly.	Apl. '82 2½
Lehigh Coal and Nav 50	11,204,250	q'rterly.	Dec. '81 2
Monongahela Nav... 50	1,004,500	semi-an.	July '81 2
Morris, consolidated.100	1,025,000	semi-an.	Feb. '81 2
" preferred....100	1,175,000	semi-an.	Feb. '81 5
Pennsylvania..... 50	4,501,200	.....	.....
Schuyl. Nav., com.*. 50	859,100	annual..	Au. '81 50c.
" " pref... 50	3,200,950	annual..	Aug. '81 $1
MISCELLANEOUS.			
Adams Express.....100	12,000,000	q'rterly.	Mar.'82 2
American Express... 50	18,000,000	semi-an.	Jan. '82 3
Amoskeag Manuf.Co.100	3,000,000	semi-an.	June'81 5
Calumet&HeclaMin'g —	100,000 S.	q'rterly.	May '82 $5
Central Mining Co...100	.....	semi-an.	Feb. '82 2½
Consolidation Coal..100	10,250,000	semi-an.	Jan. '82 2
George's Creek C.&I.100	.....	semi-an.	Jan. '82 3
Maryland Coal.....100	4,400,000	semi-an.	Feb. '76 1¾
Mariposa L. &Mining100	10,000,000	.....	.....
" pref100	5,000,000	.....	.....
Missouri Val.LandCo100	200,000	semi-an.	Jan. '82 7
National Tube Works100	1,000,000	q'rterly.	Apl. '82 3
Pac. Mail Steamship.100	20,000,000	q'rterly.	Sept.'69 3
Pennsylvania Coal... 50	5,000,000	q'rterly.	Feb. '82 3
Pullman Palace Car..100	10,023,800	q'rterly.	May '82 2
Quicksilver, com....100	5,708,700	.....	Aug.'81 2½
" pref....100	4,291,300	.....	Aug.'81 9½
Quincy Mining Co... 25	40,000shs	semi-an.	Feb. '82 $8
Quincy R. R. Bridge.100	1,750,000	semi-an.	Jan. '82 5
SiouxC.&I.F.L.&L.Co100	500,000	semi-an.	Jan. '82 4
Spring Mt. Coal.....100	1,500,000	semi-an.	Dec. '81 3½
Topeka Equip'nt Co.100	255,000	semi-an.	Apl. '82 5
United States Ex....100	7,000,000	q'rterly.	Nov.'81 1
Wells-Fargo & Co. Ex100	6,250,000	semi-an.	Jan. '82 4
Western Union Tel..100	40,000,000	q'rterly.	Apl. '82 1½

RAILROAD EARNINGS.—MONTHLY.

	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total.
BURL., CEDAR RAP. & NORTHERN:													
1880	184,316	165,170	188,325	141,652	149,504	153,378	143,432	160,160	179,804	204,991	189,330	193,419	2,053,484
1881	167,750	124,510	148,551	184,680	165,630	205,912	174,351	209,112	221,801	221,748	203,880	232,812	2,259,037
1882	252,823	225,631	224,107	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
CENTRAL PACIFIC:													
1880	1,200,614	1,070,487	1,373,438	1,356,716	1,778,488	1,724,950	1,840,067	1,973,438	1,964,997	1,120,229	2,199,466	1,905,221	20,508,112
1881	1,602,907	1,454,218	1,709,637	1,874,000	2,068,000	2,063,000	1,859,000	2,059,000	2,293,000	2,514,000	2,267,000	2,110,000	23,947,951
1882	1,876,000	1,702,000	1,987 000	.....	.....	....	.....	.....	.....	.....	.....	.....	.....
CHESAPEAKE AND OHIO:													
1880	202,335	198,681	222,762	221,559	199,443	214,352	238,236	259,110	247,303	211,820	240,795	218,000	2,674,308
1881	162,540	184,389	228,479	227,343	252,235	241,135	225,096	262,858	247,144	237,303	235,585	203,562	2,702.762
1882	210,455	209,708	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
CHICAGO AND ALTON:													
1880	534,054	497,013	626,473	542,961	616,128	617,524	708,906	761,120	767,349	785,199	696,776	574,695	7,718,198
1881	487,890	461,641	529,915	548,675	528,860	616,935	671,466	771,466	768,897	750,359	680,133	635,307	7,553,988
1882	579,447	530,480	584,483	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
CHICAGO AND NORTHWESTERN:													
1880	1,154,632	1,131,683	1,361,725	1,294,573	1,875,608	1,671,177	1,699,686	1,767,938	2,020,245	2,105,217	1,855,671	1,477.902	19,416,007
1881	1,240,667	963,208	1,178,795	1,474,612	1,879,006	2,306,640	1,983,031	2,315,164	2,292,676	2,341,097	2,019,037	1,855,476	21,849,209
1882	1,620,336	1,471,945	1,696,568	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
CHICAGO, BURLINGTON AND QUINCY:													
1880	1,432,740	1,411,870	1,732,518	1,489,894	1,909,627	1,682,956	1,773,643	1,834,321	1,862,285	1,934,762	1,837,860	1,552,018	20,454.494
1881	1,307,948	1,034,821	1,418,149	1,574.371	1,679,455	2,083,803	1,888,558	2,173,945	2,262,981	2,031,001	1,816,133	1,905,490	21,324,150
1882	1,658,834	1,457,300	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
CHICAGO, MILWAUKEE AND ST. PAUL:													
1880	764,298	738,749	900,675	871,041	1,134,745	1,037,958	1,026,708	991,297	1,257,677	1,493,620	1,472,037	1,397,308	13,086,119
1881	990,847	682,717	916,989	1,260,000	1,538,000	1,371,000	1,560,000	1,678,000	1,645,000	1,590,000	1,569,000	1,855,000	17,025,462
1882	1,435,000	1,377,000	1,561,000	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
CHICAGO, ST. PAUL, MINNEAPOLIS AND OMAHA:													
1880	193,827	173,078	259,783	259,208	232,146	218,093	236,995	251,013	300,833	342,052	342,894	312,173	3,122,097
1881	257,786	158,594	251,648	261,211	350,124	404,562	392,702	385,586	363,685	382,714	380,733	391,950	3,981,296
1882	307,498	315,100	405.779	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
CINCINNATI, INDIANAPOLIS, ST. LOUIS AND CHICAGO:													
1880	155,697	172,541	198,220	168,199	186,995	200,332	204,138	233,478	343,627	239,881	209,014	198,254	2,412,185
1881	182,523	171,511	191,005	175,484	188,794	188,256	178,861	229,858	219,977	212,606	194,805	192,623	2,296,916
1882	200,042	186,879	208,066	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
DENVER AND RIO GRANDE:													
1880	124,759	126,922	160,883	164,882	193,925	295,455	373,132	400,133	406,583	473,318	408,562	349,196	3,478,007
1881	307,476	317,681	398,493	433,212	514,767	584,230	548,284	606,193	620,643	665,686	566,819	643.417	6,206,812
1882	491,914	412,987	535,055	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
HANNIBAL AND ST. JOSEPH:													
1880	176,079	166,965	216,061	206,735	191,317	179,396	224,312	238,081	233,448	242,214	207,147	279,635	2,561,391
1881	154,401	122,874	173,557	188,124	177,002	194,949	198,110	215,308	202,567	313,433	201,782	180,376	2,230,966
1882	138,284	154,717	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
ILLINOIS CENTRAL:													
1880	595,212	613,806	613,008	535,732	665,120	681,736	724,095	732,755	806,836	880,211	783,120	673.182	8,304,812
1881	631,281	524,499	557,789	662,493	673,259	803,887	720,004	868,407	828,847	815,238	737 218	763.475	8,586,397
1882	728,173	689,387	695,371	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
INDIANA, BLOOMINGTON AND WESTERN:													
1880	80,498	89,690	116,185	90,374	85,733	106,954	103,438	116,732	110,622	121,343	96,621	104,619	1,233,079
1881	90,283	83,261	192,085	103,555	102,630	96,586	83,764	117,956	195,307	181,674	160,826	156,697	.....
1882	195,824	175,755	206,235	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
LOUISVILLE AND NASHVILLE:													
1880	674,455	575,035	612,593	563,883	655,014	976,229	772,537	827,088	931,910	1,000,326	953,086	949,184	9,491,346
1881	816,960	805,124	947,959	850,862	828,726	1,227,885	817,135	876,192	951,566	1,002,950	1,065,223	1,122,285	11,326,859
1882	950,065	960,036	1,073,745	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
MOBILE AND OHIO:													
1880	250,116	204,094	168,301	140,091	129,249	121,855	131,621	140,593	184,246	264,714	251,368	287,373	2,373,621
1881	224,347	216,768	230,916	163,551	145,803	136,517	131,009	159,348	209,044	252,921	252,434	262,025	2,406,437
1882	161,433	158,154	152,651	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
NASHVILLE, CHATTANOOGA AND ST. LOUIS:													
1880	205,633	191,154	169.457	155,466	158,839	144,155	151,594	169,326	167,473	178,266	182,087	175,996	2,049.448
1881	178,143	190,866	207,710	183,525	104,430	154,549	150,430	168,317	179,979	172,121	152,059	173,127	2,075,256
1882	156,994	159,961	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
NEW YORK AND NEW ENGLAND:													
1880	164,232	149,907	183,845	179,689	183,701	219,891	205,056	249,885	235,642	215,491	210,856	198 108	2,396,302
1881	189,749	173,614	212,019	216,913	217,185	231,518	246,821	280,524	299,573	261,199	242,412	237,729	2,809,255
1882	215,624	213,791	256,674	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
NEW YORK, LAKE ERIE AND WESTERN:													
1879	1,147,173	1,207,391	1,356,780	1,372,755	1,350,574	1,230,419	1,273,533	1,450,223	1,492,497	1,713,697	1,515,835	1,398,224	16,509,127
1880	1,296,381	1,252,218	1,644,958	1,643,151	1,592,544	1,661,812	1,580,976	1,606,874	1,786,417	1,899,910	1,799,338	1,726,788	19,491,361
1881	1,443,437	1,425,765	1,847,261	1,709,057	1,776,891	1,794,982	1,787,081	1,772,895	1,734,200	.....	.....	.....	.....
NORTHERN CENTRAL:													
1880	334,494	330,860	415,325	386,130	329,788	419,193	450,298	453,923	464,093	512,918	459,054	494,310	5,050,387
1881	386,157	382,657	452,906	487,173	465,588	487,287	440,811	498,008	429,565	449,664	487,160	476,622	5,443,697
1882	407,368	413,551	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
NORTHERN PACIFIC:													
1880	81,390	77,259	119,357	185,700	217,613	253,105	241,277	223,500	330,300	358,456	300,822	220,993	2,629,710
1881	116,508	78,803	162,984	211,190	305,292	368,276	404,180	411,624	490,096	565,485	428,903	434.331	4,044.576
1882	239,800	269,000	384,000	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
PHILADELPHIA AND ERIE:													
1880	224,307	245,372	327,678	334,947	311,470	331,024	308,699	347.532	322,737	367,082	324,966	281,919	3,727,733
1881	224,303	225,501	285,573	293,323	343,792	350,585	291,669	303,849	276,522	292,392	284,078	282,772	3,454,309
1882	252,727	246 246	265,311	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
ST. LOUIS AND SAN FRANCISCO:													
1880	198,091	195,948	193,146	176,164	167,664	173,607	213,297	259,995	280,873	328,194	290,329	226,063	2,698,371
1881	212,435	178,234	262,050	265,298	283,399	260,254	252,333	286,373	279,064	308,569	284,320	287,914	3,160,245
1882	256,784	244,654	274,959	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
ST. LOUIS, ALTON AND TERRE HAUTE:													
1880	153,139	163,737	168,994	155,462	147,928	150,207	191,077	216,759	204,295	221,863	188,773	184,503	2,146,741
1881	175,725	166,012	201,137	194,776	163,285	165,896	158,674	189,295	187 299	179,921	162,544	153,852	2,112,801
1882	168,987	149,619	178,145	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
ST. LOUIS, IRON MOUNTAIN AND SOUTHERN:													
1880	555,983	490,195	451,560	408,241	349,053	363,454	432,655	565,869	671,219	688,365	632,052	656,951	6,265,597
1881	570,957	560,791	704,002	546,302	479,075	474,302	533,512	644,386	690,400	719,239	687,280	709 498	7,319,744
1882	516,370	501,127	585,008	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
ST. PAUL, MINNEAPOLIS AND MANITOBA:													
1880	180,239	137,645	261,798	333,014	281,899	243,407	272,089	232,579	274,188	345,057	300,675	297,641	3,160,231
1881	254,187	159,482	320,962	425,685	382,642	405,322	387,488	414,954	485,736	605,708	508,530	528,262	4,878,960
1882	395,461	418 358	531,004	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
TEXAS AND PACIFIC:													
1880	245,785	219,165	215,070	174,177	141,083	153,066	195,711	226,073	266,570	303,666	312,184	301,858	2,754.408
1881	281,176	260,781	319,928	280,347	267,443	264,204	320,466	354,082	337,117	578,668	357,724	381,218	3,921,569
1882	310,785	255,644	332,911	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
UNION PACIFIC RAILWAY:													
1880	1,433,636	1,393,992	1,730,509	1,937,220	2,027,269	1,928,528	1,934,215	1,913.035	2,270,179	2,707,860	2,251.148	1,869,335	23,448,445
1881	1,339,799	1,374,740	1,674,860	2,032,146	2,398,467	2,590,969	2,528,826	2,638,659	2,844,357	3,289.350	2,773,608	2,267,004	27,451,831
1882	1,961,088	1,759,863	2,226,832	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
WABASH, ST. LOUIS AND PACIFIC:													
1880	776,790	759,451	978,629	892,024	948,773	953,468	1,966,742	1,189,478	1,178,950	1,501,203	1,131,787	1,050,816	12,428,112
1881	811,617	818,922	1,121,592	1,023,482	1,144,660	1,308,993	1,131,751	1,542,838	1,490,027	1,396,300	1,399,555	1,328,278	14,461,570
1882	1,229,965	1,134,768	1,315,776	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....

The First Train from Albany to Schenectady.

A FORMER resident of the Mohawk Valley has contributed to the Minneapolis *Tribune* the following reminiscences concerning the opening of railroad communication between Albany and Schenectady. He says:—

"A personal item in the *Tribune* some weeks ago, mentioning William Marshall, of Schenectady (father of Mrs. George B. Hall, of Minneapolis), as conductor of the first railway passenger train run by steam in the United States, recalled to the writer's recollection his first railway ride on the same road and the two inclined planes up which the cars were drawn by stationary engines at Albany and Schenectady. The road, now a part of the New York Central, extended from Albany to Schenectady, 16 miles. The company to build it was chartered in 1826 and called the Mohawk and Hudson Railroad Company. Construction was begun in 1830, and in September, 1832, the road was open for traffic. John B. Jervis, civil engineer, now of Rome, Oneida county, superintended the building of the road; and during its progress, having his headquarters at Schenectady, he was a constant patron of Billy Marshall, who then kept a livery stable. The President of the Company was the Hon. John I. DeGraff, then Mayor of Schenectady, and formerly a member of Congress.

"The first passenger train left Albany for Schenectady Sept. 24, 1832. It consisted of a reconstructed English locomotive, weighing about four tons, which more resembled Saroni's light steam wagon than a locomotive; a small platform car for a tender, carrying two barrels of water and a few armfuls of wood, and two passenger cars. These passenger cars were made by taking the bodies of thorough-brace stage coaches from their road wheels and mounting them each on four car wheels. The engineer and fireman was John Hampson, an Englishman. An artist of the day made a picture of the train by cutting paper to represent it, and from this outline the engravings were made which are still extant. In these Marshall, as conductor, is represented as seated outside, in front of the first coach. The passengers were Capt. R. G. Cruttenden, S. Wilcox, Lewis Benedict, Joseph Alexander, Charles E. Dudley, Jacob Hayes, John Meigs, Edwin Croswell, Billy Winne, John Townsend, John I. DeGraff, Thurlow Weed, Josiah Snow, Joseph C. Yates, and Erastus Corning, making 17 persons carried by the train. Wilcox then kept the Western Hotel at Albany, Alexander was President of the Commercial Bank of that city, Hayes was High Constable of New York City, Meigs was Sheriff of Albany county, Croswell was editor of the Albany *Argus*, Winnie was the famous penny postman of Albany, and Weed was editor of the Albany *Journal*.

"This train made three round trips a day between Albany and Schenectady, or rather between the inclined planes, for horses were used to draw the cars into each city. Passenger tickets were sold at stores and shops for some time, and when the stages cut prices the tickets went very low. Mr. Marshall's duties as conductor were extensive. He had to look after the sale of tickets and the transfer of baggage in Schenectady, besides taking charge of the train on the three round trips. 'Billy' (so his old neighbors still call him) laid the foundation in the first 15 years' service of the present position of railway conductors as chief in charge of their trains. It is said when close cars and engines in the cabs came in use Billy, to facilitate communication with the engineer, ran a cord forward, and to its end at the tender suspended a stick of wood. Then he notified the engineer of his system of signals by raising and lowering the stick of wood. But the engineer thought he ought to be boss of the train and he chucked that piece of wood into the fire-box. Next trip Billy tied another stick of wood to the cord and gave the engineer notice that there would be somebody whipped if it was again removed. At the end of the trip the stick was missing, and the conductor and engineer had a hard fight. Billy won, and ever since railway engineers have had to obey the conductors' signals. But the stick of wood was soon dispensed with, and the conductors' cord was attached to the engine bell."

Causes of Railroad Accidents.

AT a meeting of the Senate Committee held at the Metropolitan Hotel, this city, on the 22d inst., for the purpose of continuing its investigation of the causes of the railroad accident at Spuyten Duyvil on the 13th of January last, Mr. Thomas Dickson, President of the Delaware and Hudson Canal Company, was examined at length as to the system of railway operation adopted by his company. The road, he said, had a single track and did not use the block signal system. Danger signals were given by the red and white "ball" system at crossings. He did not consider that it would be an additional precaution in the way of practical safety if trains were brought to a stop before crossing any point where the tracks intersected. He knew of no better way for heating cars than by hot water pipes and stoves. It was a bad thing to have fire in the cars at all, but its presence could not be dispensed with in cold weather. Since the Spuyten Duyvil disaster the cars on his road had been provided with axes and crowbars and hose, and fire-extinguishers. Accidents classed as due to "negligence" almost always resulted from violation of the rules of the road. Mr. Dickson considered that the more perfect the automatic signals were made and the more they were employed to save the intervention of employes in the work of guarding the works, the greater would be the degree of safety attained. Nearly all accidents were to be traced to the negligence of employes rather than to imperfections in the methods of operating trains. He thought that this negligence of employes was "due to absence of mind, and that most every one is troubled with that."

In case of an accident which was investigated by the officers of the road, Mr. Dickson said it would be to the interest of the company to keep the result of the investigation a secret, to keep back the truth. It might be due to the negligence of an employe or to some other cause which would reflect upon the company, and it would be injudicious for the company to be obliged to stand trial for damages on testimony secured in this way. "The jury system," Mr. Dickson, said, "is a farce in so far as it relates to railroad corporations. It is a company's policy to protect itself and keep the facts relating to any accident to itself and secret." Fifty per cent of all the accidents, he said, are unavoidable and unaccountable. Were the railroad companies to file their own official report, and were that report fair and true, it would not place the company before the jury in a better light. Witness considered jurors as being against the railroads at all times, and the public as well were prone to disregard any extenuating circumstances in connection with railroad accidents. He was opposed to the principle of an elective judiciary, but he did not think that it would benefit the railroad interests any to have an appointed judiciary. His company had better success in litigation in the United States courts than in the State courts. He had no suggestions to offer as to changes in the present laws which would be of mutual advantage to the public and the railroad corporations. He insisted, however, that there ought to be some special tribunal to try railroad cases and to supplant the present imperfect and unjust jury trial. "The less legal knowledge in such tribunal the better, perhaps," added the witness, laconically, eliciting laughter from the Senators.

Mr. E. Thomas, Superintendent of the New York, Lake Erie and Western Railroad, testified that he did not think the "block" system added to the safety of train running. It increased rather than diminished the danger. The "time block" system was superior. The Erie Road was arranging to light its cars with gas, the directors deeming gas safer than oil. The gas was stored in a receptacle underneath the car, and it was deemed impossible for an explosion to occur under this arrangement. Witness considered that all trains should come to full stop on approaching intersecting points of the road. The system of sounding wheels with a hammer was the best method he knew of for detecting broken wheels.

SOME people are able to give good reasons for their conduct and some others have no reason at all. A quick-witted boy who was accused of going in swimming, the proof of which was that his shirt was on wrong side out, told his mother that the shirt must have got turned while he was climbing over a fence.

THE Pennsylvania Railroad Company refuses to sell tickets to inebriated men, on the ground that they endanger the safety of sober passengers, to say nothing of their comfort. That rule would work well everywhere, and the sooner it is adopted by all passenger carriers, either by rail, water or stage, the better.

THIRTY hansom cabs of the standard English pattern, ordered by the Pennsylvania Railroad Company for use in its new station in Philadelphia, are now building in Bridgeport. If this experiment succeeds in furnishing a cheap and popular means of transportation to and from the station, the company will provide a large number of hansoms for that service.

THE LAKE SHORE AND MICHIGAN SOUTHERN RAILWAY COMPANY.

TREASURER'S OFFICE, GRAND CENTRAL DEPOT,
NEW YORK, March 28, 1882.

The Board of Directors of this company have this day declared a dividend of TWO per cent upon the capital stock, payable on MONDAY, the 1st day of May next, at this office.

For the purposes of this dividend, and also for the annual meeting of the stockholders for the election of directors, etc., which is to be held on the 3d day of May next, the transfer books will be closed at 3 o'clock P. M. on Saturday, the 1st day of April next, and will be reopened on the morning of Friday, the 5th day of May next.

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New Standard Gauge Locomotives 16 to 18x24. July and August delivery.
Several Second-hand Standard Gauge Locomotives in good order, immediate delivery.
One new 3ft. Gauge Locomotive, 12x18, weight 20 tons, immediate delivery.
Six new 3ft. Gauge Locomotives, 18 to 24 tons, July and August delivery.
New Saddle Tank Locomotives, 6 to 12 tons, delivery 60 to 90 days.
New Box, Flat, and Gondola Cars, Standard and Narrow Gauge, early delivery.
New Passenger and Combination Cars, 3ft. Gauge, delivery 30 days.
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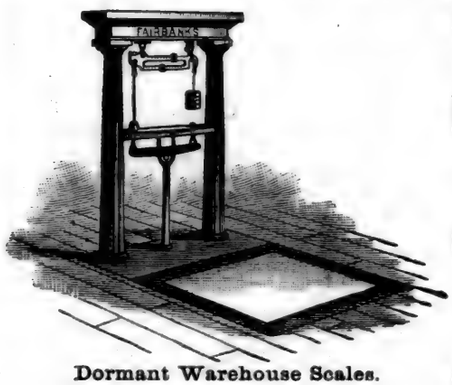
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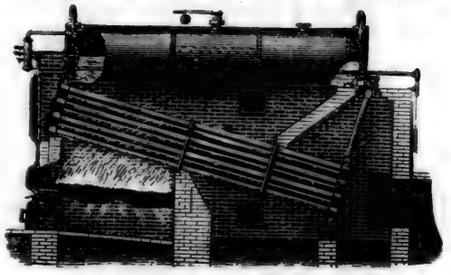
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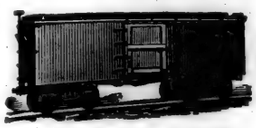
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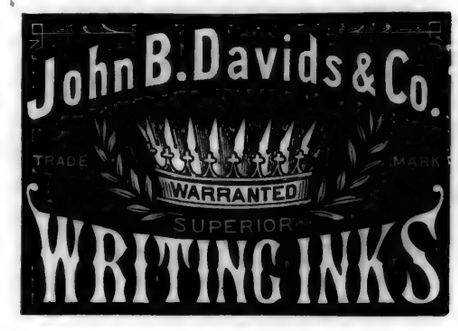
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American Railroad Journal.

ESTABLISHED 1831.

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SECOND QUARTO SERIES.—VOL. XXXVIII., No. 17.] NEW YORK, MAY 6, 1882. [WHOLE NO. 2,402.—VOL. LV.

The American Locomotive.

JOHN ROACH, the eminent American ship builder, in a recent address before the late New York Tariff Convention, said: "Now, I want to call your attention briefly to what we have done in building the locomotive. That will show the development of another American industry. Fifty years ago we imported a locomotive engine from England, as a sample. I made an examination some time since as to the number of locomotives now in the United States, the cost of their construction, and how it compares with the cost of construction in other countries. The number of locomotives in use in this country, January 1, 1879, was estimated at 16,445, valued at $164,450,000. The number of cars in use, not including palace cars, was estimated low at 498,000, which would cost at least $600,000,000, making the value of locomotives and cars together, $764,450,000. Besides, as much as one-tenth of the total now running must have been rebuilt, say five times, since 1830, at a cost of $382,225,000, making a grand total of $1,146,675,000, which is more than England has invested in ships. But, besides this, we have built locomotives for export to all parts of the world, owing to the recognized superiority of the American locomotive.

"The Baldwin Locomotive Works alone sent out of the country, from 1870 to 1880, over 520 locomotives, 152 of them to English colonies; and of all the locomotives used in the English colonies, from 95 to 98 per cent were built in the United States.

"The United States have exported since 1870, $20,000,000 worth of locomotives, and double that amount of cars.

"We have, then, succeeded in building locomotives of such quality and at such prices that we have taken England's locomotive business away from her in her own colonies. Is there any reason why, when our ship building shall be equally encouraged and developed by extending our trade and making a demand for it, we should not build ships for those countries which have not the resources to build them for themselves?

"But then we are told that while we can build the locomotive and car, we cannot build the ship, though that is built out of the same material and from the same forest and mine, and though the labor required to convert one hundred tons of pig iron into locomotives is much greater than it is in the finished ship, and just as high-priced. But we had a policy for building the locomotive, by finding a use for it, and you see the result."

The Peninsular Railroad.

RAILROADS have not greatly thriven on this Peninsula, in large part because of our unrivaled water communications with excellent markets; but with the thickening of population about New York City and Philadelphia, there has grown a largely increased demand for our products. The Virginia counties of the Peninsula lie almost entirely below the 38th parallel of latitude, extending down nearly to the 37th parallel, and the northern boundary of Accomac, the upper county, is nearly two degrees, or over 100 miles, south of Wilmington. The naturally mild climate of a region so far south, is tempered in winter by the presence of the ocean, Accomac and Northampton counties being merely a narrow tongue of sand, from one to ten miles wide, separating the waters of Chesapeake Bay from the ocean. The climate resulting from these conditions is such that these counties and the western shore of Virginia just opposite are probably several days earlier in their spring than any other region at an equal distance from the great markets of Philadelphia and New York.

A glance at the map will show that the projected Peninsular Railroad, to join the present system, of which the Delaware and Eastern Shore roads are chief elements, and run sixty or seventy miles south, through Accomac and Northampton counties to Cherrystone, on the Chesapeake side of the latter county, twelve or fifteen miles above the southern extremity of the Peninsula and less than thirty miles across the Bay from the western shore of Virginia, will secure for the lower Peninsula a remarkably direct route to New York City. If, as has been suggested, Cherrystone be connected with Norfolk by a steamboat line, the very shortest possible route from the fertile coast region of Virginia to Northern markets would be opened up. The distance from Cherrystone to New York is less than 300 miles, and railway communications once completed, the early luxuries of the season, raised on both Virginia shores, could be placed in the market of Jersey City, Brooklyn and New York on the day of shipment. At present these products are carried by the Old Dominion Steamship Company, and subject to all the delays incident to travel by water.

When all these things are considered it is evident that the Peninsular Railroad is not an impracticable dream, and there is little doubt that the Pennsylvania Railroad Company has its eye on the situation. Wilmington can hardly hope to gain a great deal from the passage through it of this traffic, but the realization of the scheme would probably improve our railway communications with the lower Peninsula, and give us faster and more frequent trains on the lines below us.—*Wilmington (Del.) Every Evening.*

Technical Education.

THE last of a series of Art lectures was delivered by Prof. Smith in the Mechanics' Hall, Montreal, on the 25th ult., his subject being, "Technical education; its place in a public school education." The lecturer said, in opening, that the nineteenth century was the age of scientists. It was dangerous in these days for any man to admit that he did nothing. Education must follow in the wake of the changes which the great inventions had made. Skilled labor and industrial arts were great requirements in every nation. Schools were wanted to do for artisans what the university did for the professional student. This deficiency could not be remedied by a few private efforts to establish mechanics' and technological institutes; it must be remedied by a national movement. The British nation, led by Prince Albert, had fostered a national movement for technical education which had been successful, and so it should be in Canada. Protection was well enough when it protected, but there was a higher and safer protection than tariffs, and that was superiority in skill over the assailing party. He was convinced that when this movement was instituted in Canada and skilled labor became a fact, the Chinese wall of protection at present existing would be thrown down and Canada would throw open her gates to all. The great want of this country to-day was skilled labor, and the only way to gain this was by providing industrial drawing in the schools and continuing it by technical education in schools for that purpose, which should be established in every Province of the Dominion and supported by Government. The lecturer then briefly reviewed the movement for technical education in Massachusetts, and concluded by exhibiting and explaining a number of drawings by some of his pupils.

At the conclusion of the lecture a vote of

thanks was passed to the Council of Arts and Manufactures for holding the lectures, and to Prof. Smith for his able treatment of the different subjects.

The Eight Hour Law.

A DECISION has been rendered by the Supreme Court of New York, General Term, in the case of Daniel J. McCarty against the Mayor. The plaintiff was employed as a carman in the Dock Department from 1873 to 1876. According to his testimony taken on the trial, he worked from seven o'clock in the morning until six o'clock in the evening, with an hour for dinner. On the Department pay-rolls his name appeared as a "scowman," at $2.50 per day. These pay-rolls he receipted, the receipts being in full for all services for the entire period covered by the pay-roll. By Chapter 385 of the Laws of 1870 it is provided that eight hours shall constitute a legal day's work for all classes of mechanics, working men, and laborers; but over-work, for an extra compensation by agreement between the employer and the employe is permitted. McCarty claimed that he was entitled to recover the reasonable value of the two hours' extra work for each day of his employment. Upon the trial at Circuit the Court held that by the statute the plaintiff was authorized to refuse work each day after the eight hours had expired, and that he could not claim any extra compensation for extra time unless he proved a contract to pay it; that no express contract for such payment was shown, and that the facts in evidence did not prove an implied contract. The General Term, in an opinion given by Judge Davis, sustains the position of the Judge at Circuit, holding that the verdict can be upheld "both upon the ground that the alleged hours of extra labor were voluntarily performed, or with the understanding that the price paid was for the full amount of the labor rendered."

The Wind as a Motive Power.

WHEN we look at the register of British shipping and see 40,000 vessels, of which about 10,000 are steamers and 30,000 sailing-ships, and when we think how vast an absolute amount of horse power is developed by the engines of those steamers, and how considerable a proportion it forms of the whole horse power taken from coal annually in the whole world at the present time, and when we consider the sailing-ships of other nations, which must be reckoned in the account, and throw in the little item of windmills, we find that even in the present day of steam ascendancy, old-fashioned wind still supplies a large part of all the energy used by man; but however much we may regret the time when Hood's young lady, visiting the fens of Lincolnshire, at Christmas, and writing to her dearest friend in London (both sixty years old now, if they are alive), describes the delight of sitting in a bower and looking over the wintry plain, not desolate, because "windmills lend revolving animation to the scene," we cannot shut our eyes to the fact of a lamentable decadence of wind-power. Is this decadence permanent or may we hope that it is only temporary? The subterranean coal-stores of the world are becoming exhausted, surely and not slowly, and the price of coal is upward bound upward bound on the whole, though, no doubt, it will have its ups and downs in the future, as it has had in the past, and as must be the case in respect to every marketable commodity. When the coal is all burned, or long before it is all burned, when there is so little of it left and the coal-mines from which that little is to be excavated are so distant and deep and hot that its price to the consumer is greatly higher than at present, it is most probable that wind-mills or wind-motors in some form will again be in the ascendant, and that wind will do man's mechanical work, at least in proportion comparable to its present doing of work at sea.—*Sir William Thomson.*

Grand Trunk Railway of Canada.

THE unanimity which prevailed at the half-yearly meeting of the Grand Trunk Railway, in London, on the 30th ult., after the railway had passed through eight months of a war involving the carriage of freights at rates which have often been less than remunerative, must be a gratifying circumstance to the management in this country, to whom the directors and proprietors are indebted for the very good results which have been evolved out of so unfavorable a period in the Company's working.

The one main fact stated by Sir Henry Tyler at the meeting is that the railway carried 553 million tons of freight one mile at 63 portions of a cent—26 millions more than in the corresponding period of 1880, when the rate was 75 portions of a cent. The work done in the half year at the rate of the corresponding half-year, which latter is only one-half what was obtained 8 years ago, would have given an extra amount which would have been entirely applicable for a dividend of six hundred and sixty-three thousand six hundred dollars. The working expenses, of course, show a higher rate per cent on the receipts, as it costs just the same to carry the freight, whether the rate obtained is a cent and a half as it was in 1873, three-quarters of a cent as it was in 1880, or sixty-three portions of a cent as it was in 1881. The balance between what its costs to work the railway and the receipts is what is available for the payment of the interest, charges and dividends. However, in this chaotic period of rates, the lowest ever known in this country, or, perhaps, for a lengthened period, in the history of railways in any country, the line has been able to handle five per cent more business than last year, at a reduction of sixteen per cent to the public, and yet pay the dividends in full in both the first and second preference shares. Going back eight years we find the same amount of revenue for much less than one-half the work done and nothing left for dividends. The science of working a railway at the minimum appears to have been the chief study of the management of to-day and in that to give an efficient service which has made the Grand Trunk Railway a popular road with Canadians, and has secured for itself a large portion of both American through passenger and freight business. Without the latter the service to the public—limited to the local wants of a sparsely populated country—would have been both poor in the number of trains and wanting in all those adjuncts of elegance, comfort and luxury which the Pullman and dining cars afford—which excellent service is only rendered possible by the large accession of American travel which has been sought and obtained.—*London, Ont., Free Press, Apl.* 27.

CHINA, it is said, is inaugurating a system of industries which will give employment at home for the class which now seeks it in this country. Railroads are about to be constructed, wheat culture is being extended and flour mills introduced to make them independent of California, and textile factories are already successfully working. Mining is now being developed under competent engineers. Shipbuilding is being expanded, and a beginning is made in agricultural implements. Shoes and all kinds of clothing they can make in China and supply their California customers at round profits.

NEWSPAPERS—Daniel Webster said: "Small is the sum that is required to patronize a newspaper, and well rewarded is the patron, I care not how humble and unpretending the gazette which he takes. It is next to impossible to fill a sheet with printed matter without putting something into it that is worth the subscription price. Every parent whose son is away from home at school, should supply him with a newspaper. I well remember what a marked difference there was between those of my schoolmates who had and those who had not access to newspapers. Other things being equal, the first were always decidedly superior to the last in debate, composition and intelligence."

THE *Parisian* says that the establishment of a metropolitan railway in Paris is the object of severe criticisms on the part of many. It is said that an elevated railway will spoil the perspective of the boulevards, which have been maintained at so much cost, while an underground railway will impair the solidity of the houses and interfere with the sewers and gas pipes. According to the project now under consideration the railway will be a daylight route. Paris alone will be traversed by cuttings and tunnels, and the longest tunnel will not exceed 1840 metres. Compressed air locomotives will be used, and the train will consist of one first-class and three second-class carriages, carrying 284 passengers.

THE Government of Holland has determined to reclaim the Zuyder Zee, which has an area of 20,000 hectares. The engineers in charge of this work have been engaged for ten years past in preparing the plans, and the total cost is now estimated at not less than $46,000,000. The dyke will be forty-one kilometres in length, and will extend from the city of Enkhuisen to the coast of the province of Overyssel. The top of the dyke will be built to the height of five metres above the level of the sea, which will bring it 2.05 metres above the highest tide. The dyke will be formed from sand and faced with clay, and will be built of sufficient dimensions to resist the heaviest seas. It is intended to commence operations on the work at four different points, and the calculation is to have it completed in from seven to ten years.

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BROKERS AND BROKERAGE.

BROKERS have long been a necessity of all large business centers. We can trace them back eighteen hundred years at least, as the excavations at Pompeii recently exposed to view a real-estate broker's office in which were waxen tablets with memoranda of sales as legible as when they were first written. The word broker, which means simply a dealer or trader, is of Latin origin, and the law governing brokers dates back to the Latin Code.

The office of a broker is such a delicate one that in most countries a broker, to be entitled to act as such, must take out a license, and in some countries is placed under bonds. In France, for instance, the brokers who deal in money, exchange, merchandise, insurance, and stock are called *agents de change*, and their number at Paris is limited to sixty. They are severally obliged to give bonds to the amount of twenty-five thousand dollars for the prevention of abuses. They are also obliged to keep books, are restricted to a charge of from $\frac{1}{8}$ to $\frac{1}{4}$ per cent, and are interdicted from carrying on or having any interest in any commercial or banking operations.

A broker is simply a middle-man; unlike a commission agent he usually has no possession of the goods and no lien on them for services. Brokers, however, are very often by local custom or by express agreement invested with the powers of a factor, but there must be a clear case of enlargement of the broker's powers, to make the principal chargeable beyond the limit which a broker's ordinary functions prescribe. If there is notice that the holder is only a broker he can pass no lien to a third party.

A broker, like an attorney, is selected as a specialist on account of his skill and discretion, and cannot therefore delegate his power or act through a substitute, so far as his duties are discretionary, except in cases of necessity. Brokerage for illegal purposes will not be sustained, but the line separating illegal transactions from it, legal ones, is a very narrow one. Stock-jobbing contracts have in this light been subjected to extended judicial inspection. In a recent case in Pennsylvania, cited in this issue, the distinction between lawful and unlawful contracts is clearly indicated. It was held in that State that contracts in stocks not intended to be delivered but settled only in differences could not be enforced by the broker or by the principals either. It is not unlawful to deal in stocks for speculation, but the stocks must be delivered or the opposite rule applies. This is a sound legal distinction, which amounts to but little in every day affairs.

A broker, so far as concerns the memorandum of sale, is the agent of both parties, but whether or not he can act as the agent of both parties so as to claim commissions from both is a question that cannot be regarded as settled.

In a recent case, the Ohio Supreme Court held that a broker acting for both parties may receive compensation from either, where it is clearly shown that each had full knowledge of all the circumstances and had assented to the double employment. The Court said that the non-liability of the second employer having knowledge of the first employment had been maintained in England, Massachusetts, Pennsylvania and Connecticut, but that in all of those States it had been strongly intimated that a recovery might be had by such agent, when he acted with the knowledge and consent of both principals. The validity of such contracts has been more directly before the courts and affirmed in New York, Indiana, Michigan and Georgia. The contrary doctrine is held in one or two States, but although there is a want of harmony in the decisions, the decided current of authority is in favor of the validity of such contracts where the consent of both principals to such double agency is clearly proved.

Annual Report of the New York Chamber of Commerce.

THE review of the twenty-fourth annual report of the Chamber of Commerce, prepared by Secretary George Wilson, contains much interesting information regarding the special work of the institution and the important movements in the various branches of commerce which affect the interests of this City and State. So far as the national commerce is concerned, the balance of trade is shown to be many millions of dollars in favor of America. The progress of commercial affairs consequently has been set down as favorable, with a promising outlook for the future. The review at the outset comments in a reassuring manner upon the "pause in the marvelous progress which was apparently unsettling the relations of the commercial world. The continued flow to the United States of the precious metals, in settlement of the balance of trade in its favor, brought on a financial crisis in Europe, with a pale reflection in our own money markets. The extreme of expansion in the United States, based upon this large addition of the precious metals to the circulating medium of the country, seems to have been reached. A slight return of these metals to Europe creates alarm and distrust. There is no real cause for such alarm. The fact seems to be that the United States, in its great commercial and individual activity, has grown up to the full measure of its circulating medium, and that any diminution of it will henceforth be immediately felt. In a word, that the country has at last, after 20 years of financial autonomy, resumed her place among financial nations." In reference to the important subject of railroad transportation the review speaks in a hopeful tone. It says:—

"The long cherished purpose of the Chamber to procure the appointment of a board of railroad commissioners, with powers similar to those of the railroad commissioners of Massachusetts, seems now within reach, and there is reason to believe these great highways of commerce may soon be brought within the legislative supervision contemplated by the Constitution of the State."

Important reform, the review further asserts, is also likely to be accomplished in the establishment, in the near future, of free canals in the State. The review makes particular note of the enormous increase of immigration to this country. It says:—

"The enormous figures of 1873, when the number for the year ending June 30 was 459,803, was nearly reached in 1880, when the number for the same period was 457,257; but in 1881, for the same time, the startling figures of 669,431 appear. These are the figures from the Washington Bureau of Statistics for the fiscal year. The report of the board of com-

missioners of emigration of the State of New York shows the arrivals in the calendar year 1881, at the port of New York alone, to have been 455,681 against 327,371 in 1880. The promise for the present year, 1882, is of an increase over these figures even."

The review gives extended space to an analysis of the progress of the various trades and the records of the imports and exports. The total value of foreign imports into the United States, including specie and bullion, in the year ending June 30, 1881, amounted to $753,240,125 against $760,989,056 the previous year. Of this, New York received $535,753,818, against $543,595,398 the previous year; the share of New York for the year ending June 30, 1881, being 71 per cent of the whole. The total value of domestic exports of the United States, including specie and bullion, for the year ending June 30, 1881, amounted to $898,152,891, against $833,294,246 the previous year. Of this, New York sent during the year ending June 30, 1881, $402,305,090, against $388,441,664 the year previous, the share of New York for the year ending June 30, 1881, being 45 per cent of the whole. Of the total foreign trade of the United States, imports and exports (with foreign exports, $23,631,302 added), amounting for the year ending June 30, 1881, to $1,675,024,318, against $1,613,770,633 for the year previous, New York had $954,488,906, against $944,229,124 the previous year, or 57 per cent of the whole.

The record during the calendar year was somewhat different. The value of the total imports of merchandise into the United States for the calendar year 1881 amounted to $670,199,654, against $696,805,867 the previous year, showing a decrease for 1881 of $26,606,213. The value of the total exports, domestic and foreign, for 1881, amounted to $833,547,723, against $889,680,149 the previous year, showing a decrease for 1881 of 56,132,426. The total foreign trade of the United States, imports and exports, exclusive of specie and bullion, in 1881, amounted to $1,503,747,377, against $1,586,486,016 in 1880, a decrease of $82,738,639.

The trade of New York for the calendar year represented in the total imports into the port of New York in 1881, exclusive of specie and bullion, was $439,401,673, against $464,176,680 the previous year, being a decrease of $24,775,007; and the total exports from the port of New York in 1881 were $373,136,370, against $415,822,827 the year previous, a decrease of $42,686,457. The total imports into the port of New York, including specie and bullion, for the year 1881, amounted to $495,424,906, against $539,386,766 the year previous, showing a decrease of $43,961,870; and the total exports for 1881 amounted to $385,760,201, against $425,193,099 the year previous, a decrease of $39,432,898. The total New York trade, imports and exports, of merchandise and of precious metals included, amounted in the calendar year 1881 to the sum of $381,185,107, against $964,579,875, showing a decrease of $83,394,768 from the extraordinary figures noted for 1880. This decrease, it will be observed, represents the total decrease for the whole United States, which is not singular, as New York is the chief port. This pause in the ascending scale of exports is to be attributed to the financial depression abroad, and in a measure also, to the high prices at which American products have been held at home.

The statistics of free goods imported show a marked increase in the annual imports into the New York markets. From a value of $82,000,000 in 1878 they rose to $129,000,000 in 1881, and represented more than one quarter of the entire importation at this port.

The Clearing-house transactions are set forth with great clearness and compactness in the review, and are given as supplying "the best measure of the financial operations of the country, real and speculative." "The circulating medium," it says, "has been enormously, beyond all precedent, increased by an addition of coin; and coin is confessedly the safest basis for expansion of credit. The transactions of the New York Clearing-house in 1879 exceeded those of the year previous by $10,000,000,000; those of the year 1880 again showed an excess of nearly $10,000,000,000. The official report shows the transactions for the twelve months of 1881 to have been on the same enormous scale of progression, being stated at $49,000,000,000, an increase of $ 0,000,000,000 over the $39,000,000,000 reported last year.

In discussing the movements in the precious metals the review says: "The production of gold and silver in 1881 was $64,292,096 and the imports $110,575,497, making a total of $174,867,593. Deducting the exports and re-exports of $19,406,847, the total increase for the fiscal year ending June 30, 1881, was $155,460,746. During the fiscal year ending with this date there was estimated to be in this country $625,981,771 of gold and silver, the amount for the calendar year ending December 31, 1881, being $684,498,562. The Director of the Mint, however, fixes the amount even higher, giving the total amount of precious metals coined or available for coinage on October 30, 1881, as $749,000,000, or a per capita of $14.93." The review refers briefly to the doings of the Monetary Conference in Paris in April last year, and closes with an exceedingly interesting commentary upon the growth of the Metropolis during the century of its existence, the close of which will be fittingly commemorated by the Chamber of Commerce in 1883. The city was evacuated by the British troops on November 25, 1783. "From this period," says the review, "the Chamber dates its present existence as a chartered institution of the State, and among its founders were many of the officers, who, after leading our troops to victory, at the peace laid down their swords, and engaged in commercial pursuits. To its merchants, New York, this now imperial City, owes its progress and its greatness.

Lehigh and Hudson River Railroad.

The Lehigh and Hudson River Railway Company have now completed 24 miles of their line between Belvidere and Andover, on which regular trains have been running since May 1st. Until the completion of the road through trains will be run in connection with the Sussex Railroad, between Andover and Franklin. The balance of the grading is nearly completed, the track is being laid rapidly, and it is expected that trains will be running over the entire line by the 1st of July.

INCORPORATION.

The name of the "Danforth Locomotive and Machine Company," at Paterson, N. J., has been changed by the directors to the "Cooke Locomotive and Machine Company," the Cookes having acquired all the late Danforth interest and now owning more than three-fourths of the stock of the concern.

The ten-year charter of the Indiana Car Company, at Cambridge City, having expired, its reorganization has been effected, and articles of incorporation have been filed with the Secretary of State. Capital stock $100,000. The directors are Wm. McMillan, W. H. Gardner, O. L. Bingham, and Dr. A. T. Buchanan.

Certificates of incorporation have been filed with the Secretary of State of Ohio of the Cincinnati Northwestern Railway Co., with a capital of $500,000; also of the Vermillion Railway Co., with a capital of $500,000; also a certificate curing certain defects in the consolidation of the Columbus, Hocking Valley and Toledo Railroad.

A charter has been granted at Harrisburg, Penn., to the Ridgeway and Clearfield Railroad Company, with a capital stock of $750,000. The road will be 28 miles in length, extending from Ridgeway, in Elk county, to Fall Creek, in Clearfield county. It will be constructed and operated by the Pennsylvania Railroad Company for the purpose of carrying Clearfield coal to the Philadelphia and Erie, thence to Emporium and to Buffalo via the Buffalo, New York and Philadelphia Railroad. J. N. DuBarry is president.

In the House of Representatives at Washington on the 29th ult., Representative Dunn, in giving notice that he would soon introduce a general railroad incorporation act, alluded to the fact that several bills are now pending before Congress to grant railroad charters to certain individuals to build railroads through the States, and said he was opposed to granting such franchises and exclusive rights to individuals to be hawked and peddled over the country. He gave notice that he would, at an early day, introduce a general railroad incorporation act, under the provisions of which any and all citizens of the United States may organize associations and build railroads through the States and Territories wherever they may see proper, and preventing the sale of mere franchises and the consolidation of competing lines of railroads.

Articles of incorporation under the general railroad law have been filed in the office of the Secretary of State at St. Albans, Vt., of the Canada Junction Railroad Company. The capital stock is subscribed for, and the first assessment of 10 per cent thereon has been paid in by the stockholders. The following board of directors has been chosen: Hon. Bradley Barlow, ex-Gov. Horace Fairbanks, Col. A. B. Jewett and F. A. Metcalf. The road has been surveyed and work will be begun at once on the line. The new road is to run from the present terminus of the southeastern extension to Frelisburg, just over the Vermont border, through the towns of Berkshire and Sheldon to Sheldon Junction, Vermont, there

connecting with the St. Johnsbury and Lake Champlain and the Missisquoi roads. The new line will be eleven miles in length.

A BILL incorporating the "New York Iron and Metal Exchange" was introduced at Albany, on the 28th ult. by Senator Kiernan and Assemblyman Robb. The incorporators named in the bill are: Edward P. White, Tallmadge Delafield, Alston Gerry, Benjamin B. Lemon, Carl Mayer, Maurice B. Flynn, Edward Hill, Horatio Dorr, Harrison B. Moore, Edward E. Gold, Henry A. Rogers, William W. Snow, Charles L. Sheldon, Edward B. Bartlett and Jeremiah P. Robinson. The purposes of this corporation are: to provide suitable rooms for an Iron and Metal Exchange in the City of New York; to regulate and govern the same; to inculcate just and equitable principles in trade; to establish and maintain uniformity in commercial usages; to preserve valuable business information; and to adjust controversies and differences between persons engaged in the iron and metal business. The initiation fee to the Exchange is put at $100, and the annual dues are to be $25.

ORGANIZATION.

AT the recent annual meeting of the stockholders of the Lewiston and Auburn Railroad Co., the following directors for the coming year were chosen: George S. Woodman, James Dingley, Charles E. Smith, J. L. H. Cobb, E. S. Davis, J. M. Robbins, C. I. Barker, James Dempsey, G. G. Wagg.

THE stockholders of the Baltimore Steam Packet Company have elected directors for the ensuing year, as follows: John M. Robinson, Enoch Pratt, S. M. Shoemaker and Charles F. Mayer, of Baltimore; Nalbro Frazier, Wm. L. Savage and Moncure Robinson, Jr., of Philadelphia, and Elihu Chauncey of New York. John M. Robinson was re-elected president.

AT the annual meeting of the Philadelphia and Chester County Railroad Company, held on the 1st inst., the following officers and directors were elected: President—Thomas S. Cox; directors—J. G. Allen, J. C. Sharpless, Samuel Wilson, Louis J. Ladner and Lewis Lukens; treasurer—J. G. Allen; secretary—W. Wayne Vogdes. It was decided to push the work of construction as rapidly as possible.

AT the annual meeting of the Carolina Central Railroad Company, held in Wilmington, N. C., on the 28th ult., the following directors were elected: John M. Robinson, J. S. Whedbee, R. C. Hoffman and Severne Eyre, of Baltimore; M. P. Leak, of Anson; D. W. Oates, Mecklenberg; C. M. Stedman, New Hanover; W. W. Chamberlain, Norfolk; J. C. Winder, R. S. Tucker, Raleigh. John M. Robinson was unanimously elected president.

AT the annual meeting of the stockholders of the Atchison, Topeka and Santa Fe Railroad Co., held at Topeka, Kansas, on the 22d ult., the following gentlemen were elected directors: W. B. Strong, Thomas Nickerson, J. T. Burr, A. L. Denspear, B. P. Cheeny, A. W. Nickerson, C. J. Payne, C. W. Pierce, Oliver Ames, S. A. Kent, C. K. Holiday, B. F. Stringfellow and L. Severy. The officers are: W. B. Strong, president; C. C. Wheeler, general manager; S. L. Thorndyke, controller; E. Wilder, secretary and treasurer; G. L. Goodwin, assistant secretary and treasurer; J. H. Whitehead, general auditor.

AT a meeting of the Central Ohio Railroad Company, held at Columbus, Ohio, on the 26th ult., the following board of directors was elected: Hugh J. Jewett, New York; Joseph R. Swan and Wm. Dennison, Columbus; Walter B. Brooks, Isaac W. Hall, Quincy; David Applegate and David See, Zanesville; Bradford Dunham, Newark; Joseph W. Jenkins, Ossman Latrope, Joshua G. Harvey and Robert Garrett, Baltimore; W. H. Clements, Cincinnati.

AT the recent meeting of the directors of the Eureka Springs Railroad Company, R. C. Kerns, of St. Louis, and J. B. Porterfield and John Carroll, of Eureka Springs, were elected to fill vacancies. The board as now constituted is as follows, Powell Clayton, John D. Adams, J. T. Brown, Jr., John Peay, M. W. Benjamine and James Torrans, Little Rock: R. C. Kerns, of St. Louis; J. B. Porterfield and John Carroll, of Eureka Springs. Powell Clayton was elected president; John D. Adams, vice-president; J. T. Brown, secretary, and John Peay, treasurer. Measures were adopted, which will consolidate the Arkansas and Missouri companies, the two having been necessary to secure separate charters from the respective States. The interests of both are identical.

AN election for officers and directors of the various branches of the Baltimore and Ohio Railroad was held at Pittsburgh, Penn., on the 1st inst., with the following result: Somerset and Cambria Railroad—President, J. B. Washington; directors, W. H. Koontz, C. C. Musselman, Welty McCullough, J. G. Harvey, Robt. Garrett and D. J. Morrell. Welty McCullough was elected secretary, and W. H. Ijams, treasurer. Brownsville and New Haven Railway—President, J. B. Washington; directors, A. L. McFarlane, W. J. K. Kline, W. H. Markle, Welty McCullough, A. O. Tinstman and Geo. W. Wilson. Welty McCullough was elected secretary and treasurer. Berlin Railroad—President, J. B. Washington; directors, Welty McCullough, Robt. Garrett, Joshua G. Harvey, W. H. Koontz, S. A. Philson and S. Philson. Welty McCullough was elected secretary and treasurer. Salisbury Railroad—President, Wm. S. Bissell; directors, H. S. Burgesser, W. M. Clements, S. Spencer, Robt. Garrett, J. M. King, John McCleave, John B. Jackson and J. B. Caven. J. B. Washington was elected secretary and treasurer.

ANNUAL meetings were held in Philadelphia on the 1st inst. of the stockholders of a number of the railroads of the Pennsylvania system, and officers and directors elected as follows: Chartiers Railway, President—G. B. Roberts; Directors—Alexander Biddle, J. N. DuBarry, S. M. Felton, Strickland Kneass, Wistar Morris, and Parker Shortridge. Sunbury and Lewiston Railroad, President—Aaron Fries; Directors—James H. Campbell, Josiah Hart, Samuel G. Lewis, John W. Moffly, George Shannon, and Stephen Green. Tyron and Clearfield Railroad, President—J. N. DuBarry; Directors—Strickland Kneass, Wistar Morris, Henry M. Phillips, G. B. Roberts, N. P. Shortridge, and Edmund Smith. Shamokin Valley and Pottsville Railroad—President, G. B. Roberts; Managers—Wistar Morris, J. N. DuBarry, Jacob P. Jones, A. J. Cassatt, Edmund Smith, John P. Green; Secretary—Stephen W. White. Sunbury, Hazleton and Wilkesbarre—President J. N. DuBarry; Directors—D. B. Cummins, Wistar Morris, Henry M. Phillips, G. B. Roberts, Edmund Smith, and J. Price Wetherill. Southern Pennsylvania Railway and Mining Company, President—Thomas B. Kennedy; Directors—George B. Roberts, Wistar Morris, Strickland Kneass, H. D. Welsh, H. M. Phillips, and J. N. DuBarry. Pomeroy and Newark Railroad—Directors—Strickland Kneass, Edmund Smith, J. N. DuBarry, John P. Wetherill, Henry D. Welsh, Wistar Morris and S. M. Felton; secretary and treasurer, James R. McClune. East Brandywine and Waynesburg Railroad—President—John Cornog; Directors—William M. Morton, T. M. Storb, Amos Diller, Strickland Kneass, B. F. Kinzer, S. M. Felton, Wistar Morris, G. B. Roberts, James McClune, Edmund Smith, and N. P. Shortridge. Lewisburg and Tyrone Railroad—President—Strickland Kneass; Directors—G. B. Roberts, Edmund Smith, Wistar Morris, Eli Stifer, James P. Coburn, and Samuel C. Stewart; secretary and treasurer—James R. McClune. Catawissa Railroad—President—M. P. Hutchinson; Directors—T. V. Williamson, F. K. Skipper, Emmer Weaver, George C. Carson, Joseph C. Harris, and John S. Graham.

CONSTRUCTION.

THE Edgar Thomson Steel Works Company has decided to build two more furnaces.

THE Northern Pacific Railroad track is laid to a point twenty miles east of the Pen d'Oreille Lake.

IT is expected that street railroad cars will be running in Altoona, Penn., by the Fourth of July.

THE New River Railroad is to be extended into the rich mineral lands of Southwestern Virginia.

THE double track on the North Pennsylvania Railroad is to be extended from Fort Washington to Ambler.

THE Mexican Central Railway was opened to traffic to Irapuato, 360 kilometres north of the City of Mexico, on the 1st inst.

THE works of the Wharton Switch Company, now building at Jenkinton, Penn., when completed will employ 1,000 hands.

THE Long Island Railroad Company has begun a preliminary survey for a road to run from Woodbury through Cold Spring to Huntington.

THE work of widening the bed of the Pittsburgh, Fort Wayne and Chicago Railroad for the purpose of laying a double track has been commenced at Orrville, O.

THE second electric railway constructed by the Messrs. Siemens, and running from Lichterfelde to the College for Cadets, Berlin, was formally opened on the 29th ult.

WORK on the second track of the Baltimore and Ohio Railroad between Elrods and Pitts-

burgh is being pushed forward rapidly. It is expected that the line will be completed and in running order by the 1st of June.

THE East Portland City Council has granted to the Oregon Railroad and Navigation Company the right of way asked through the city. The matter had been under discussion for several months.

THE official inauguration of the completed railroad system of which the St. Gothard Tunnel is a part, has been fixed for May 21. The rejoicings at Milan, Lucerne and elsewhere will occupy five days.

THREE miles of the Woodstown and Swedesboro (N. J.) Railroad are now graded, and it is expected the line will be finished to Salem by the 1st of September. As soon as the road is completed to Woodstown it will be open for travel.

A SPECIAL train from Indianapolis, Ind., the first over the new line of the Indianapolis, Bloomington and Western Railroad Company, arrived at Springfield, Ills., on the 1st inst. It has been decided not to open the line to traffic until it has been thoroughly ballasted.

THE railroad from Wolf Creek to Paint Rock, Tenn., a branch of the East Tennessee, Virginia and Georgia Railroad, was completed on the 28th ult., connecting the Western North Carolina Railroad with the Tennessee system, and giving another line from the seaboard through the Blue Ridge Mountains to the West.

RECENT official publications show that the Mexican Central Railway Company has constructed in the republic 557 kilometres of road, the Mexican National Company 268 kilometres, and the Tehuantepec Company 63 kilometres. The status of the Gould and Degress Railway Company has been approved by the Department of Public Works.

THE last spike in the Augusta and Greenville Railroad was driven on the 28th ult. and an excursion train run to Greenville, S. C. The road is seventy miles long, and will connect with the Spartanburg, Laurens and Greenwood Railroad at Greenwood, and when finished will give Augusta, Ga., another route to the East via the North Carolina Central, which is to be built from Shelby, S. C., to Spartanburg.

THE new branch of the Chesapeake and Ohio Railroad from Newport News to Old Point is under way, and work is being pushed forward as rapidly as possible. It is the intention to have it completed by July 1, and to run through Pullman sleepers from Old Point to the Greenbrier White Sulphur Springs and other mountain resorts. This branch is intended exclusively for passenger traffic, as the main terminus will be at Newport News.

THE engineer in charge of the construction of the Eastern division of the Indiana, Bloomington and Western Railway, between Indianapolis and Springfield, Ohio, states that the last spike was driven and the new line completed on the 29th ult. This new line is the connecting link between the Cincinnati, Sandusky and Cleveland Railway, or the Ohio division of the Indiana, Bloomington and Western, and the Peoria and St. Louis division of the Indiana, Bloomington and Western system of roads.

Statement of the Public Debt of the United States, May 1, 1882.

DEBT BEARING INTEREST.

	Amount Outstanding.	Accrued Interest.
6 per cent loan, 1861-'81, continued at 3½ per ct.	$41,337,550 00	$482,271 42
6 per cent loan 1863-'81 continued at 3½ per ct	47,855,600 00	558,315 33
5 per cent funded loan of 1881	401,503,900 00	3,513,159 12
4½ per cent funded loan of 1891	250,000,000 00	1,875,000 00
4 per cent funded loan of 1907	738,854,800 00	2,462,849 33
4 per cent refunding certificates	493,000 00	1,643 33
3 per cent navy pension fund	14,000,000 00	140,000 00
Aggregate of debt bearing interest	$1,494,044,850 00	$9,033,238 53
Interest due and unpaid		2,244,926 38

DEBT ON WHICH INTEREST HAS CEASED SINCE MATURITY.

	Amount Outstanding.	Interest due and unpaid
4 to 6 per cent. old debt, 1837	$57,665 00	$64,173 81
5 per cent. Mexican indemnity stock 1846,	1,104 91	85 74
6 per cent. bonds, 1847	1,250 00	22 00
6 per cent. bounty land scrip, 1847	3,275 00	213 06
5 per cent. Texas indemnity bonds, 1850	20,000 00	2,945 00
5 per cent. bonds, of 1858	8,000 00	....
5 per cent. bonds, of 1860	10,000 00	600 00
6 per cent. 5-20 bonds, 1862, called	370,050 00	8,348 64
6 per cent. 5-20 bonds, June 1864, called	58,650 00	107 95
6 per cent. 5-20 bonds, 1863, called	70,750 00	18,674 41
5 per cent. 10-40 bonds, 1864, called	410,550 00	106,034 82
6 per cent. Consol. bonds, 1865, called	386,350 00	13,979 33
6 per cent. Consol. bonds, 1867, called	1,025,100 00	196,516 07
6 per cent. Consol. bonds, 1868, called	287,050 00	23,165 27
6 per cent. loan, Feb. 8, 1861, matured Dec. 31, 1880	86,000 00	5,070 00
5 per cent. funded loan 1881, called	1,597,850 00	29,472 62
Oregon War Debt, March 2, 1881, matured July 1, 1881	120,450 00	5,155 50
6 per cent loan of July 17 and Aug. 5, 1861, matured June 30, 1881	733,200 00	17,254 50
6 per cent loan of July 17 and Aug. 5, 1861, continued at 3½ per cent, matured Dec. 24, 1881, and Jan. 29, 1882, called	7,666,950 00	60,404 49
6 per cent. loan of March 3, 1863, matured June 30, 1881	241,450 00	3,225 00
1-10 to 6 per cent. Treasury notes, prior to 1846	82,525 35	2,668 06
1-10 to 6 per cent. Treasury notes, 1846	6,000 00	206 00
6 per ct. Treasury notes, 1847	950 00	57 00
3 to 6 per cent. Treasury notes, 1857	1,700 00	99 00
6 per ct. Treasury notes, 1861	3,000 00	364 50
7 3-10 per cent. 3 years' Treasury notes, 1861	16,300 00	1,104 43
5 per cent. 1 year notes, 1863	42,205 00	2,122 35
5 per cent. 2 year notes, 1863	32,900 00	1,643 55
6 per ct. compound interest notes, 1863-64	222,260 00	45,386 07
7 3-10 per cent. 3 years' Treasury notes, 1864-65	139,350 00	4,486 48
6 per cent. certificates of indebtedness, 1862-63	4,000 00	253 48
4 to 6 per cent. temporary loan, 1864	2,960 00	244 19
3 per cent. certificates, called.	5,000 00	394 31
Aggregated of debt on which Interest has ceased since maturity	$13,714,845 26	$614,478 63

DEBT BEARING NO INTEREST.

Demand notes, 1861-62	$59,810 00	
Legal tender notes, 1862-63	346,681,016 00	
Certificates of Deposit	11,115,000 00	
Coin certificates, 1863	5,072,120 00	
Silver certificates, 1878	67,781,360 00	
Unclaimed interest		5,726 51
Fractional currency, 1862, 1863 and 1864 $15,433,741 77		
Less amount estimated as lost or destroyed, act of June, 21, 1879	8,375,934 00	
	7,057,807 77	
Aggregate of debt bearing no interest	$437,767,113 77	$5,726 51

RECAPITULATION.

	Amount Outstanding.	Interest.
Debt bearing interest in coin, viz:		
Bonds at 6 per cent., continued at 3½ per cent.	$89,193,150 00	
Bonds at 5 per cent, continued at 3½ per cent.	401,503,900 00	
Bonds at 4½ per cent.	250,000,000 00	
Bonds at 4 per cent.	738,854,800 00	
Refunding certificates	493,000 00	
Navy pension fund, 3 p.c	14,000,000 00	
	$1,494,044,850 00	$11,278,164 91
Debt on which interest has ceased since maturity.	13,714,845 26	614,478 63
Debt bearing no int., viz:		
Old demand and legal-tender notes	$346,740,826 00	
Certificates of deposit	11,115,000 00	
Coin & silver certificates.	72,853,480 00	
Fractional currency	7,057,807 77	
	$437,767,113 77	
Unclaimed interest		5,726 51
	$1,945,526,809 03	$11,898,370 05
Total debt, principal and interest to date, including interest due and unpaid	$1,957,425,179 08	

AMOUNT IN TREASURY.

Interest due and unpaid		$2,244,926 38
Debt on which interest has ceased		13,714,845 26
Interest thereon		614,478 63
Gold and silver certificates		72,853,480 00
U. S. notes held for redemption of certificates of deposit		11,115,000 00
Cash balance available May 1, 1882		145,031,850 20
		$245,574,580 47
Debt, less am't in Treas'y May 1, 1882	$1,711,850,598 61	
Debt, less am't in Treasury April 1, 1882	1,726,266,422 35	
Decrease of debt during the month		$14,415,823 74
Decrease of debt since June 30, 1881		$128,748,213 37

BONDS ISSUED TO THE PACIFIC RAILROAD COMPANIES, INTEREST PAYABLE IN LAWFUL MONEY.

	Amount Outstanding.	Accrued Interest not paid.
Central Pacific bonds, 1862-64	$25,885,120 00	$517,702 40
Kansas Pacific bonds, 1862-64	6,303,000 90	126,060 00
Union Pacific bonds, 1862-64	27,236,512 00	544,730 24
Cent. Branch Union Pacific bonds, 1862-64	1,600,000 00	32,000 00
West'n Pacific Bonds, 1862-64	1,970,560 00	39,411 20
Sioux City & Pacific bonds, 1862-64	1,628,320 00	32,566 40
Totals	$64,623,512 00	$1,292,470 24

Interest paid by the United States, $53,405,977.38; interest repaid by transportation of mails, &c., $15,096,048.68; interest repaid by cash payments: 5 per cent net earnings, $655,198.87; balance of interest paid by United States, $37,654,729.83.

The foregoing is a correct statement of the public debt, as appears from the books and Treasurer's returns in the Department at the close of business, April 29, 1882.

CHARLES J. FOLGER,
Secretary of the Treasury.

A CYNIC says he agrees with Longfellow that "life is not an empty dream." It is a full dream, pretty much all nightmare.

A HARLEM man who had offered $50 to any one who would remove his bunion, now turns around and wants $10,000 because a street car accommodated him.

A STORY is told of an old gentleman who always took notes of his minister's sermon, and on one occasion read them to the minister himself. "Stop, stop!" said he at the occurrence of a certain sentence, "I didn't say that." "I know you didn't," was the reply, "I put that in myself to make sense."

MR. CHAS. H. ODELL, representing in this city the Pittsburg Bessemer Steel Co., Limited, the Sandusky Rolling Mill and Manufacturing Co., and the New Albany Rail Mill Co., has removed from No. 104 John street to 47 Wall street, where he will be happy to meet and greet as hitherto his old friends and customers.

Appliances for Electric Railways.

In a recent lecture in London on electric railways by Professor Ayrton the following suggestive points were made: Last year an electric railway on a small scale ran in the grounds of the Crystal Palace, and before that the Lichterfeld Railway in Berlin was and is in regular service, carrying passengers day by day at from nine to twelve miles an hour. In these lines the real motive agency was a gas or a steam engine, out of sight, the energy of which was converted into electricity, and carried along the rails, which constituted a "going" and a "return" wire. Moreover these were short lines, and the "load" was comparatively light. When, however, it is proposed to conduct the ordinary traffic of a railway with heavy loads and long distances a difficulty arises through the leakage of electricity by conduction to the earth and otherwise. It is well known that almost any amount of power may be converted into electrical energy and carried to any distance with comparatively small loss. Thus, a central steam-engine of say 1,000-horse power may be employed to propel several trains without the intervention of locomotives, the power being transmitted along the rails or by wires, always provided that leakage is avoided. To accomplish this object Mr. Ayrton and his colleague propose to divide the line into sections, each of which is put into connection with the leading wire only as the train passes over it. Thus there would be no loss except on that section, the rest of the wire being well insulated; and an absolute block system would thus be created, for no two trains could ever be in the same section. The theatre of the Royal Institute was the scene of enthusiastic cheering when Professor Ayrton showed his model slow and express trains running around a model railway, and stopping automatically when they came to a section on which another train was traveling.

A Large Locomotive.

A new and powerful locomotive, constructed under the supervision of its inventor, Mr. Theodore N. Ely, Superintendent of Motive Power, has just been turned out of the shops of the Pennsylvania Railroad Company at Altoona, Penn. It is named "No. 4," but on account of its huge proportions has been nicknamed *Jumbo* by the employes of the company. It is intended to be run on the accommodation trains between Philadelphia and Paoli and West Chester. The locomotive is one solid frame, there being no break between the tender and the engine proper, and weighs when fully equipped for travel 120,400 pounds, or a little over sixty tons. It is fitted with five-foot driving wheels and with thirty-three inch truck wheels under the smoke stack, while in the rear of the driving-wheels there is one six-wheel swivel truck which will enable the engine to turn a very sharp curve. The cylinder is 17x24, and the water tank, which has a capacity of 2,000 gallons, surrounds the entire fire-box, which is eight feet deep. The engine is so constructed as to run in either direction and has a pilot at each end, thus doing away with the use of a turn-table. It is at least three feet higher than the average locomotive, while the cab, which is entirely closed, is about three times the size of that of other engines. Back of the cab is the coal tank, which contains about as much coal as is carried in an ordinary tender. Either hard or soft coal may be used. Another improvement is the application of a patent hot water reversing gear, which has never been put into practical use on any engine in this country. It is generally known that engines are reversed by the power of the steam, but *Jumbo* is so constructed as to be reversed with the hot water from the boiler, and virtually reverses itself, saving the engineer physical work, as all he has to do is to touch a spring, and the engine will instantly change its course. The injector checks enter the boiler behind the dome, thus protecting the pipes in case of collision, which it is expected will prevent the escape of steam and hot water.

The Block Signal Systems.

The following brief account of the arrangement and operation of the block signal system in use by the Pennsylvania Railroad Company is from the *Manufacturer and Builder*:—

The whole distance is divided into "blocks," each block provided with a signal station. Between Philadelphia and Newark there are sixty of these. Between Newark and Jersey City, where trains run with greater frequency, there are ten. They are not, anywhere along the whole road, more than four miles apart. Each station is provided with a three-fold signal, with ample telegraphic connections. This signal is erected directly over the track, in full view of the engine driver. He must not pass from one block to the next until this signal tells him that the way is clear. The signal consists of a frame, in the center of which is a circular opening about as big as the head of a barrel. This is so arranged as to display white, red or green, as may be wanted. Red means that the train must stop, for there is danger of obstruction. White means that the next block is clear, and that the train must go on. Green means that the green flags adorn the rear end of the trains which have recently passed on, and that the engine driver must proceed with caution until he comes to a station which displays a white light. Whether the blocks are short or long, no train is allowed to go on a block until that block is reported by telegraph to be clear. Thus there is no danger that one train will run into the rear of another. But, it may be asked, how will it be if the man in the signal station is suddenly struck by paralysis or overcome by slumber? This question is answered by the statement that red is the normal state of the disc which the engine driver sees. Red means "stop." The signal is changed from red to white or green only by the action of the signal man, who, by pulling a rope, brings white or green to view. When he lets go of the rope the signal again displays red, and no train proceeds until there is a change. It does not seem possible to provide anything more simple or more trustworthy than this. Of course, the working of such a system costs something; but it prevents accidents, which are the most costly things in railroad traffic.

Philadelphiaand Erie Railroad.

The Philadelphia and Erie Railroad Company makes the following exhibit of business for the month of March, 1882:

Gross earnings	$265,311 14
Gross expenses	187,595 83
Net earnings	$77,715 31
Net earnings, 1881	107,896 43
Decrease	$30,181 12
Net earnings three months of 1882	$227,634 69
Net earnings three months of 1881	233,569 79
Increase	$5,935 10

Pennsylvania Railroad.

The statement of the business of all the lines of the Pennsylvania Railroad Company east of Pittsburg and Erie for March, 1882, as compared with the same month in 1881, shows

An increase in gross earnings of	$67,989
An increase in expenses of	451,413
A decrease in net earnings of	$383,424

The three months of 1882, as compared with the same period in 1881, show

An increase in gross earnings of	$463,232
An increase in expenses of	1,057,734
A decrease in net earnings of	$594,502

All lines west of Pittsburg and Erie for the three months of 1882 show a deficiency in meeting all liabilities of $75,034, being a decrease as compared with the same period in 1881 of $995,684.

A coal dealer recently received from a prominent shoddyite, who had been to Europe, an order for five tons of coal "delivered a la cart."

Passenjaire—"Why is it that these street-boys who catch on the cars have not been fined before?" Drivaire—"Cause they've been found behind."

Mr. Evarts says that a sentence going the rounds of the papers, attributed to him, is an attempt at condensing one of his dispatches protesting against the dismemberment of Turkey. It was founded on an incident which occurred at one of his Thanksgiving dinners at home. "I had a roasted New England goose well stuffed with sage, with plenty of apple sauce and the usual accompaniments. At the close of the meal I said: 'My children, you now see the difference between the condition of affairs before and after dinner. You then saw a goose stuffed with sage; now you see a sage stuffed with goose.'"

A very useful and convenient paper for travelers coming to the city, and business houses on the lookout for hotel arrivals, is *The Daily Hotel Reporter*, published at 92 White street, Henry G. Taylor, editor. It contains an interesting page of hotel paragraphs and general notes, though its main feature, of course, is its list of hotel arrivals, which is arranged in an unusually desirable manner, having the towns and cities from which the guests arrive arranged alphabetically, which is a much greater convenience for the reader than the ordinary method of classifying by hotels. Under this plan the reader is enabled at a glance to see who is in town from any place in which he especially interested. The list is printed in large, plain type and is evidently carefully prepared.

The Stock Exchanges and Money Market.

New York Stock Exchange.

Closing Prices for the week ending May 3.

	Th.27.	F.28.	Sat.29.	M.1.	Tu.2.	W.3.
Adams Express	.....	141½	.....	140½	.....	.....
Albany and Susq.	134	....	.....	.....	.....	.....
1st mortgage	.....	.....	.....	.....	....	.....
2d mortgage	.....	.....	.....	.....	.....	.....
American Express	94¼	94¾	94⅛	93¾	93¾	94¾
Burl., C. R. & Nor.	.....	... .	.....	.....	.....	.....
1st mortgage 5s	102¼	102¾	.....	102½	102¼	.....
Canada Southern	50½	49¼	48⅝	.....	49½	50⅝
1st mortgage guar	96	95⅞	.....	95⅞	95⅝	95¾
Central of N. Jersey	69¼	68¾	68⅞	70½	71⅜	68¾
1st mort. 1890	118	.....	.....	.....	.....	.....
7s, consol. ass	.....	108	109	110	110	....
7s, convertible ass.	110	.....	111	.....	111	110½
7s, Income	.....	.....	.....	.....	.....	.....
Adjustment	.....	.....	.....	.....	.....	.....
Central Pacific	89½	89	88¾	88⅞	.....	89⅛
6s, gold	110¼	.....	.....	.....	.....	.....
1st M. (San Joaq)	.....	.....	.....	.....	.....	.....
1st M. (Cal. & Or.)	.....	.....	... .	.....	.....	.....
Land grant 6s	104¾	.....	.....	.....	105¼	.....
Chesapeake & Ohio	..	20¼	.....	.....	.....	21
1st pref	.....	.....	.....	.....	29	29
2d pref	.....	.....	.....	.....	....	22½
1st mort., series B	.....	.....	81	.....	79¾	78½
Chicago and Alton	130¾	.....	130½	.....	131¼	131½
Preferred	.....	.....	.....	.....	.....	.....
1st mortgage	.....	.....	.....	.....	.....	120
Sinking Fund	.....	.....	.....	.....	.....	.....
Chi., Bur. & Quincy	130¼	130	130	130	130	132
7s, Consol. 1903	.....	128¾	128¾	.....	129	128⅞
Chi., Mil. & St. Paul	112⅜	111¾	111⅝	111⅝	112⅛	112⅜
Preferred	.....	121	121	.....	120½	120⅞
1st mortgage, 8s	.....	.....	.....	.....	.....	.....
2d mort., 7 3-10s	.....	.....	.....	.....	.....	.....
7s, gold	.....	.....	.....	.....	....	.....
1st M. (La. C. div)	.....	120	.....	.....	.....	.....
1st M. I. & M. div.)	.....	.....	.....	.....	.....	....
1st M. (I. & D. ext.)	.....	.....	.....	.....	.....	.....
1st M. (H.&D. div.)	116½	117¼	117½	117½	117½	118
1st M. (C. & M. div.)	.....	... .	.....	.....	.....	.....
Consolidated S. F.	.....	.....	121¾	.....	.....	.....
Chi. & Northwestern	129½	128¾	128⅛	128½	128¾	128⅝
Preferred	140	140	.....	139¾	140¼	140
1st mortgage	109	.....	.....	.....	.....	.....
Sinking Fund 6s	.....	.....	109	.....	.....	.....
Consolidated 7s	.....	.....	.....	.....	128¾	128¾
Consol. Gold bo'ds	.....	127	129	128¼	.....	.....
Do. reg	.....	.....	.....	.....	.....	.....
Chi., R. Isl. & Pac.	127⅞	127¼	128¼	128¾	129¾	130
6s, 1917, c	.....	.....	.....	127	.....	.....
Clev., Col., Cin. & Ind.	72	71½	69	68⅝	.....	70
1st mortgage	.....	.....	.....	.....	.....	....
Clev. & Pittsburg gr.	.....	.....	.....	.....	.....	.....
7s, Consolidated	.....	.....	.....	.....	.....	.....
4th mortgage	.....	.....	.....	.....	.....	.....
Col., Chi., & Ind. Cent	10⅛	10⅛	....	10⅛	10¼	11
1st mortgage	.....	.....	.....	.....	.....	.....
2d mortgage	.....	.....	.....	.....	.....	.....
Del. & Hud Canal.	104½	104¾	104¼	104½	105½	...
Reg. 7s, 1891	116	.....	.....	.....	115½	...
Reg. 7s, 1884	.....	.....	.....	106¾	.....	....	106¾
7s, 1894	.....	.....	115¾	.....	.....	117	.....
Del., Lack. & Western	118½	118	118	118¼	119¼	118¼
2d mortgage 7s	.....	.....	.....	.....	.....	.....
7s, Consol. 1907	.....	.....	.....	.....	.....	.....
Erie Railway	...	.....	.....	.....	.....	.....
1st mortgage	....	.....	.....	.....	.....	.....
2d mort. 5s, ext.	..	.	.....	.....	.....	.....
3d mortgage	104⅛	.....	104½	.....	.....	.....
4th mort. 5s, ext.	.....	.....	107⅛	107	.....	.....
5th mortgage	.....	.....	.....	.....	.....	.....
7s, Consol. gold	126½	.....	.....	.....	.....	.....
Great West. 1st mort	.....	.....	.....	...	.....	.....
2d mortgage	.....	.....	....	.....	100	.....
Hannibal & St. Jo.	.....	.....	.....	.....	.....	.....
Preferred	86½	86¾	.....	.....	85¼	.....
8s, Convertible	107	.....	.....	.....	.....	.....
Houston & Tex. Cen	....	.....	.....	72	72½	....
1st mortgage	112	....	.....	111⅞	.....	.....
2d mortgage	.....	.....	.....	.....	.....	119
Illinois Central	136	136¾	136¼	135¾	136¾	137
Lake Shore & Mich So	103¾	101¾	100¾	99⅞	100½	100⅝
Consol. 7s	.....	.....	.....	.....	.....	.....
Consol. 7s, reg	127⅛	.....	.....	.....	.....	.....
2d Consolidated	.....	.....	.....	.....	.....	.....
Leh. & W. B. con. ass	.....	.....	102½	.....	102½	104
Long Dock bonds	.....	.....	.....	118	.....	.....
Louisville & Nash.	75⅛	74⅞	75¼	76⅛	77⅝	76¾
7s, Consolidated	.....	.....	.....	.....	.....	118
Manhattan	.....	46	.....	47⅛	48½	48¾
1st pref	.....	90	.....	.....	.....	.....
Met. Elevated	.....	.....	.....	.....	.....	.....
1st mortgage	.....	101¼	101¾	.....	.....	101½
Michigan Central	80⅛	80¼	80⅛	80⅛	82	82¾
7s, 1902	127½	.....	.....	125x	125	.....
Morris & Essex	...	144	.....	.....	124	124¾
1st mortgage	.....	.....	....	.....	136	.....
2d mortgage	.....	.....	.....	.....	.....	.....
7s of 1871	.....	.....	123	.....	.....	122
7s, Convertible	.	.. .	.....	.....	.....	.....
7s, Consolidated	.....	.....	125¾	.....	.....	.....
N. Y. Cen. & Hud. R.	127½	126⅝	125¼	124¼	125¾	125⅞
6s, S. F. 1883	.....	104½	104⅝	.....	.....	101½x
6s, S. F., 1887	... .	.....	.....	.....	. ...	....
1st mortgage	.....	.....	133¼	.....	...	.....
1st mortgage, reg.	.....	.....	.....	.....	.....	133⅛
N. Y. Elevated	.....	... .	.....	.....	.....	.....
1st mortgage	.....	.....	.....	116⅞	117	.....
N. Y. & Harlem	.....	.....	.....	.....	205	.....
Preferred	.....	.....	.....	.....	.....	.....
1st mortgage	.....	.....	.....	.....	.....	.....
1st mortgage, reg	....	.....	.....	.....	.....	.....
N. Y., Lake Erie & W	36⅜	35¾	35⅜	35⅛	35⅞	35¾
Preferred	.....	.....	.....	72	.....	72⅛
2d Consolidated	94½	93¾	93½	93	94	93⅞
New 2d 5s fund	91	91¼	90½	.....	90	91
N. Y., N. Hav'n & Hart	.....	.....	.....	170¼	.....	.....
North Mo. 1st mort	..	.....	.....	.....	.....	.....
Northern Pacific	39	38¼	38⅝	38¾	39⅝	40⅛
Preferred	78¼	77⅝	77⅜	77⅜	78⅜	78¾
Ohio & Mississippi.	35¼	33½	33	30¾	31⅛	31¾
Prefer. ed	.....	.....	.....	.....	.....	.....
2d mortgage	... .	.....	118	....	.....	118
Consolidated 7s	.....	.....	.....	.....	.....	118¾
Consol. S. Fund	.....	.....	.....	.....	.....	.....
Pacific Mail S. S. Co	39¾	38¾	39¾	40⅜	41¼	41½
Pacific R. R. of Mo.	.....	.....	.....	....	.....	....
1st mortgage	.....	107⅛	.....	.....	.....	107¾
2d mortgage	.....	.....	.....	.....	.....	.....
Panama	.....	.....	.....	.....	.....	.....
Phila. & Reading	57⅝	56¾	56⅝	56½	57¾	57
Pitts, Ft. W. & Chi. gtd	.....	.....	.....	.....	136¾	136⅜
1st mortgage	.....	.....	. ...	.....	.....	.....
2d mortgage	138	138	.....	.....	.....	.....
3d mortgage	.....	.....	.....	.....	.....	130
Pullman Palace Car	.....	127	.....	127	124	125
Quicksil'r Min'g Co	.....	...	.....	.....	.....	.....
Preferred	.....	.....	.....	.....	.....	57¼
St. Louis & San Fran	.....	.....	....	38¼	38	.....
Preferred	51	.....	.....	.....	.....	50½
1st Preferred	.....	.....	.....	.....	.....	.....
St. L., Alt'n & T. H.	26	.....	26½	.....	29	29
Preferred	67	65¼	64½	66	73½	72½
1st mortgage	.....	.....	.....	.....	.....	.....
2d mort. pref	.....	.....	.....	.....	.....	.....
Income bonds	.....	.....	.....	.....	.....	.....
St. L., Iron Mt. & S	.....	.....	.....	.....	.....	.....
1st mortgage	.....	.....	.....	.....	.....	.....
2d mortgage	110	110	.....	.....	.....	.....
Toledo and Wabash	....	.....	.....	.....	.....	.....
1st mortgage	... .	..	.....	.....	.....	111¼
2d mortgage	102½	.....	104¼	.....	100¾	100¼
7s, Consolidated	.....	.....	...	.....	.....	.....
St. Louis Division	102½	.....	102½	.....	.....	103
Union Pacific	111⅜	111	111¼	111¼	112	111⅞
1st mortgage	118	117⅝	117¾	117¼	117½	.....
Land Grant 7s	.....	112½	.....	.....	.....	.....
Sinking Fund 8s	119½	119⅜	119½	.....	120	.....
United States Ex	.....	.....	.....	.....	74½	74¼
Wabash, St. L. & Pac	28¾	28½	28½	28⅛	30	29¾
Preferred	51⅜	51½	51⅛	51	53⅜	53⅞
New mort. 7s	....	.....	.....	.....	.....	...
Wells-Fargo Ex	.....	.....	126¾	.....	.....	127½
Western Pacific b'ds	.....	112	.....	112½	.....	.....
Western Union Tel.	82¾	82½	81⅞	81⅞	82¾	83
7s, S. F conv., 1900	.....	.....	.....	.....	.....	.....
FEDERAL STOCKS:—						
U. S. 4s, 1907, reg	121	121½	.....	121	.....	120¾
U. S. 4s, 1907, coup.	121	121⅛	121	121	120⅞	120¾
U. S. 4½s, 1891, reg.	116¼	116	.....	114⅞x	....	114½
U. S. 4½s, 1891, coup	.....	116¼	.....	116¼	115⅝	115⅝
U. S. 5s, cont'd at 3⅛	102	102⅛	.....	102¼	102⅛	102⅛
U. S. 6s cont'd at 3½	.....	101¾	.....	.....	.....	101⅞
Dt. of Col. 3-65s, reg	.....	.....	.....	.....	.....	.....
Dt. of Col. 3-65s, coup	....	.....	110¾	.....	.....	.....

Boston Stock Exchange.

Prices for the Week Ending May 3.

	Th.27.	F.28.	Sat.29.	M.1.	Tu.2.	W.3.
Atch., Top. & San. Fe.	86¼	87	86¾	85¼	85¾	85⅞
1st mortgage	.....	.....	...	118⅞	118½	1183¼
Land Grant 7s	.....	.....	.....	.....	.....	.....
Boston & Albany	168¼	169	170	168¾	.....	166
Boston and Lowell	....	102⅛	.....	102	.....	.....
Boston & Maine	.....	.....	.....	145	144½	144¼
Boston & Providence	.....	163	163½	163½	.....	.....
Bos'n, Hart. & Erie 7s	48¼	.....	49	48⅞	.....	49
Burl. & Mo. R. L. G. 7s	.....	.....	.....	.....	.....	.....
Burl. & Mo. R. in Neb	.....	.....	.....	.....	.....	.....
6s, exempt	109¾	109¾	.....	.....	.....	110
4s	.....	.....	.....	.....	.....	.....
Chi., Burl. & Quincy	129¾	130	130	130	130½	132
Cin., Sand. & Clev ($50)	.....	24¾	.....	24¼	25½	.....
Concord ($50)	.....	.....	.....	.....	.....	.....
Connecticut River	.....	.....	.....	.....	.....	.....
Eastern	39	39	39½	40	.....	39
New 4½ Bonds	.....	106⅛	107	.....	107⅛	107⅜
Fitchburg	126½	.....	.....	.....	.....	.....
N. Y. & New England	46½	.....	.....	47	.....	.....
7s	113⅛	113	113⅜	.....	113⅛	.....
Northern N. H.	.....	.....	.....	.....	.....	.....
Norwich & Worcester	.....	159	.....	.....	159	....
Ogden & Lake Cham	.....	.....	.....	.....	30	.....
Old Colony	131¼	132	133	132¾	132	133
Ph., Wil. & Balt. ($50)	.....	62	.....	62	.....	.....
Portl'd, Saco & Ports	.....	115	.....	.....	115	.....
Pueblo & Ark Val 7s	113	112¾	112½	112⅛	.....	112⅛
Pullman Palace Car	126½	....	127	.....	126	.....
Union Pacific	111¼	111⅜	111½	111¼	112¼	111⅛
6s	....	115⅛	.....	.....	115¼	.....
Land Grant 7s	....	.....	.....	...	112⅛	.....
Sinking Fund 8s	118	.....	118¼	.....	.....	119
Vermont & Mass	....	.....	.....	.....	.....	.....
Worcester & Nashua	....	.....	.....	.....	. ..	.....
Cambridge (Horse)	....	....	.....	.....	.....	.....
Metropolitan (Horse)	.....	.....	.....	.....	.....	.....
Middlesex (Horse)	.....	.....	.....	.....	.....	.....
Cal. & Hecla Min'g Co	240	.....	240	239¼	239	239
Quincy	50	.....	49¾	51	51¼	52¼

Philadelphia Stock Exchange.

Closing Prices for the Week Ending May 2.

	W.26.	Th.27.	F.28.	Sat.29.	M.1.	Tu.2.
Allegh'y Val. 7 3-10s	122¼	.....	.....	.....	122	122
7s, Income	.....	.....	.....	52	50½	52
Buff., Pitts & West.	16½	16	16¾	15¾	15¾	16¼
Camd'n & Am. 6s, '83	.....	.....	.....	.....	.....	102¾
6s, 1889	.....	.....	.....	.....	.....	.....
Mort. 6s, 1889	115½	.....	.....	.....	.....	.....
Camden & Atlantic	.....	.....	.....	.....	.....	.....
Preferred	40	.....	.....	.....	.....	40
1st mortgage	.....	.....	.....	.....	.....	.....
2d mortgage	.....	.....	.....	.....	.....	.....
Catawissa	.....	.....	.....	.....	....	22
Preferred	.....	.....	57	.....	.....	.....
2d pref	55	.....	.....	.....	.....	.....
7s, new	.....	.....	.....	.....	.....	.....
Del. & Bound Brook	....	.....	.....	.....	.....	.....
7s	127	127	.....	.....	.....	.....
Elmira & Williamsp't	.....	.....	.....	.....	.....	.....
Preferred	.....	.....	.....	.....	.....	.....
Hunt. & B. Top Mt.	... .	11	11	.....	...	.....
Preferred	.....	24½	22½	.....	.....	.....
2d mortgage	.....	.....	.....	.....	.....	.....
Lehigh Navigation	39¼	39⅜	38¾	37¾	37¾	38¼
6s, 1884	104½	.....	.....	.....	.....	.....
Gold Loan	.....	.....	.....	.....	.....	.....
Railroad Loan	...	.. .	.....	.....	.....	.....
Conv. Gold Loan	.....	.....	.....	.....	.....	.....
Consol. Mort, 7s	119	.....	.....	117	119½	.....
Lehigh Valley	61	61	60¾	61	60¾	60¾
1st mort. 6s, coup	.....	.....	.....	.....	.....	.....
1st mort. 6s, reg	.....	.....	.....	.....	.....	.....
2d mort. 7s	.....	.....	.....	.....	.....	133
Consol mort. 6s	.....	.....	.....	.....	.....	.....
Consol. mtg. 6s, reg	....	121	.....	.....	.....	121
Little Schuylkill	.....	.....	.....	57½	57¾	57¼
Minehill & Sch. Hav'n	.....	.....	63	.....	.....	63
North Pennsylvania	.....	.....	.....	.....	64	...
1st mortgage 6s	..	.....	.....	.....	106½	.....
2d mortgage 7s	.....	.....	.....	.....	.....	.....
Genl. mtg. 7s, coup	.....	.....	.....	.....	.....	.....
Genl. mtg. 7s, reg	.....	.....	.....	.....	.....	.....
Northern Central	.....	.....	.....	49½	.....	..
5s	.....	97½	97⅛	.....	.....	97⅛
Northern Pacific	39	39¼	39	38⅜	38⅝	39⅛
Preferred	77⅞	77⅜	78	77¾	78⅜	78¾
Pennsylvania R. R.	61⅝	61¾	61⅞	61¼	57¾x	58¾
1st mortgage	.....	.....	.....	.....	.....	.....
Gen'l mort	.....	.....	.....	.....	.....	126
Gen'l mort reg.	.....	.....	125	.....	125⅜	.....
Consol. mort. 6s	.....	.....	.....	.....	.....	.....
Consol. mort. reg	.....	.....	.....	.....	.....	...
Pa. State 5s, new	...	.....	.....	.....	.....	.....
do 4s, new	.....	.....	.....	.....	.....	.....
Phila. & Reading	28¾	28¾	28⅞	28¼	28⅛	28⅜
1st mortgage 6s	.....	.....	.....	.....	.....	.....
7s of 1893	.....	.....	.....	.....	.....	.....
7s, new convert	77	.....	.....	.....	.....	.....
Consol. mort. 7s	125½	....	126	....	.....	.....
Consol. mort. reg.	.....	.....	.....	.....	.....	.....
Gen'l mort. 6s	97⅛	97¾	97¾	97¾	97¾	98¼
Def. Income bonds	....	.....	.....	29¾	.....	.....
Philadelphia & Erie	.....	.....	.....	.....	.....	.....
1st mortgage 5s	.....	.....	.....	.....	.....	.....
2d mortgage 7s	.....	...	.....	.....	.....	..
Pittsb., Cin. & St. L. 7s	118	118	.....	118	118	.....
Pitts., Tit. & Buff. 7s	.....	.....	.....	.....	.....	.....
Schuylkill Navi't'n	..	..	..	.....	.....	.....
Preferred	13¼	.....	.....	13	.....	.....
6s, 1872	.....	.....	...	.....	.....	.....
6s, 1882	91	.....	.....	91	.....	.....
United Co. of N. J.	.....	.....	187¾	.....	.....	188
Hestonville, (Horse)	17	.....	....	....	.....	.....
Chestnut & Wal. (do)	.....	.....	.....	.....	.....	.....
Green & Coates (do)	.....	.....	.....	.....	....	...

Baltimore Stock Exchange.

Closing Prices for the Week Ending May 2.

	W. 26.	Th. 27.	F. 28.	Sat. 29.	M. 1.	Tu. 2.
Baltimore & Ohio..	.....	.....	.....	.....	.....	.....
6s, 1885.....	106	. ..	.....	.....	.....	....
Central Ohio ($50)..	...	47	.....	.....	.....	.....
1st mortgage.....	.....	109¼	.....	.....	.....	.....
Marietta & Cincin'ti	.....	.....	.....	.....	.....	.....
1st mortgage, 7s..	.....	.....	.....	.....	.....	....
2d mortgage, 7s..	.....	.....	.....	.....	.....	.....
3d mortgage, 8s..	.....	.....	.....	. ..	.....	.....
Northern Cen. ($50)	.....	.....	.....	.....	49¼	.....
2d mort., 6s 1885..	.....	.....	.....	.....	.....	.....
3d mort., 6s, 1900.	.....	.....	.....	.....	.....	.....
6s, 1900, gold.....	.....	.....	.....	.....	.....	.....
6s, 1904, gold.....	114	115	.....	.....	.....	.....
Pitts. & Connellsv. 7s	124	124	.....	124	.....	.....
Virginia 6s, Consol.	68½	68⅛	63	62⅝	62	62¼
Consol. coupons..	7c	60	60	. ...	60	61
10 40 bonds.....	45	41¾	42¾	42⅛	42½	.....
Def'd Certificates.	.....	.....	.....	.....	.....	.....
Western Maryland..	16	17⅛	19	18⅜	.....	.....
1st M., end. by Balt	.....	.....	.....	.....	.....	.....
2d M. do .	.....	.....	.....	.....	.....	....
3d M., do .	128	.....	.....	.....	.....	.....
1st M., unendors'd	.....	.....	.....	.....	.....	.....
2d M., end. WashCo	.....	.....	.....	.....	.....	.....
2d M., preferred..	.....	.....	.....	.....	.....	.....
City Passenger R R.	....	.....	.....	.....	...	....

London Stock Exchange.

	Closing Prices — Apl. 21.		Apl. 14.	
Baltimore & Ohio (sterling).....	114	116	114	116
Central of N. J., $100 shares....	93	98	93	98
Do. consol. mort.....	114	116	114	116
Do. Adjustment Bonds.....	101	106	101	106
Do. Income Bonds.....	93	97	98	102
Det., G'd Haven & Mil. Equip bds	112	115	112	114
Do. Con. M. 5p.c., till '83 aft'r 6p.c	110	112	110	112
Illinois Central $100 shares.....	138	140	137	139
Lehigh Valley Cons. mortgage..	118	122	118	122
Louisville & Nashville mort 6s.	101	103	101	103
Do. Sink. Fund bds (S. & N. Ala)	100	102	98	100
Do. capital stock $100 shares.	76	78	75	77
N. Y. Cent. & Hud. R. mt. bds..	134	136	135½	136½
Do. $100 shares.....	126	130	131	132
Do mort. bonds (stg.).....	123	125	122	125
N. Y., Lake Erie & West., $100 shs	36	36½	35⅞	36¼
Do. 6 p. c. pref. $100 shares ..	74	76	74	76
Do. 1st Con. Mort. bds (Erie) .	127	129	127	129
Do. do. Funded Coupon bds.	124	126	123	125
Do. 2d Consol Mort. bonds...	95	97	94	96
Do. do. Funded Coupon bds..	92	94	91	93
Do. Gold Income bonds.....	..	..	..	..
N Y., Pa. & Ohio 1st mort. bonds.	46¼	47⅛	47	48
Do. Prior Lien bds (sterling)..	101	105	101	105
Pennsylvania, $50 shares.....	63½	64	63¾	64¼
Do. Con. Sink Fund Mort....	118	120	118	120
Philadelphia & Reading $50 shs	29¼	29¾	30¾	31¼
General Consol Mortgage.....	118	120	118	120
Do. Improvement Mortgage..	103	105	103	105
Do. Gen. Mtg. '74, ex-def'd coup.	99	101	99	101
Do. Scrip for the 6 def. ¼ coup.	99	101	99	101
Pittsb., Ft. W. & Chi. Eq. bds....	104	106	104	106
St. L. Bridge 1st mort. gold b'd.	125	127	125	127
Do. 1st pref. stock.....	98	102	98	102
Union Pa. Land Grant 1st. mtg.	113	115	113	115
Wabash, St. L. & P. $100 shs.....	27	29	30	31
Do. $100 pref. shares.....	51	53	55⅛	56¼
Do. gen. mort. bonds.....	77	79	81	83

AMERICAN RAILROAD JOURNAL.

Financial and Commercial Review.

THURSDAY EVENING, May 4, 1882.

THE quotations for call loans this morning were 2½@3½ per cent on stocks, and 1½@2½ per cent on Governments. Time loans were 4 per cent down on stocks, and 3 per cent down on United States bonds. The rates for prime mercantile paper were 4½@5 per cent, for 60 days' to 4 months' date. In the afternoon the quotation for call loans on stocks was 3 per cent, but in the last hour fell to 2@2½ per cent.

The actual rates for prime bankers' sterling were 4.86¾@4.87 and 4.89½@4.90, with cable transfers 4.90¼@½, and prime commercial bills 4.85¾@4.86. The actual rates for Continental bills were as follows: Francs, 5.16⅞@5.17½, and 5.13⅜@5.14⅜, Marks, 95⅛@¼, and 95¾@⅞, and Guilders, 40¼@5-16 and 40½@7-16.

At a meeting of the Board of Directors of the Pennsylvania Railroad Company, held in Philadelphia on the 1st inst., a semi-annual dividend of four per cent was declared payable in cash, clear of all taxes, on and after the 29th inst., to stockholders of record April 29th. It was also resolved by the Board that stockholders be given the privilege of subscribing at par to the stock of the company in the proportion of eight per cent of the number of shares registered in their names on the 29th of April, 1882, and that those entitled to a fraction of a share can subscribe for a full share. All subscriptions must be made and paid for in full prior to the 15th of June, 1882, and no subscription will be received after that date. The privilege of taking new stock may be sold by any stockholder. The issue of these additional shares was authorized by the stockholders more than a year ago. The consequent increase of capital will be about $6,250,000, making the total amount with the new addition about $84,000,000. The explanation given for this action is that the company is compelled to provide new equipment and additional tracks and depots, and prefers to supply the funds by an increase of capital rather than by an issue of bonds. It is understood that the outlay for the purposes stated in this year will be $8,000,000 or $9,000,000. The amount required over and above the proceeds of the stock issued will be provided from the surplus earnings, it is said, without curtailing dividends.

The Secretary of the Treasury issued on the 1st inst. a call for the remainder of the 6s of 1881, about $11,200,000, that were authorized by the acts of 17th of July and 5th August, 1861, and continued at 3½ per cent from 1st July, 1881. This call is the 113th in regular order. The bonds embraced in the call mature on 1st July next, after which date interest ceases. The numbers of the bonds called, both inclusive, are as follows: $50, Nos. 2,466 to 2,564; $100, Nos. 17,751 to 18,618; $500, Nos. 11,961 to 12,283; $1,000, Nos. 55,951 to 56,972; $5,000, Nos. 17,581 to 17,834, and $10,000, Nos. 38,811 to 40,116.

By referring to the Statement of the Public Debt of the United States, given in another column, it will be seen that the total debt amounted, on the 30th ult., to $1,957,425,179.08, less cash in the Treasury, $245,574,580.47, leaving net $1,711,850,598.61. Of the bonded debt $250,000,000 bears 4½ per cent interest, $739,347,800 bears 4 per cent, $490,697,050 bears 3½ per cent and $14,000,000 bears 3 per cent. Interest has ceased upon $13,714,845.26, and $437,767,113.77 bears no interest, being in the form of legal tenders and other currency, certificates of deposits, and gold and silver certificates. Of the cash in the Treasury the sum of $145,031,850.20 is available, free of all current liabilities. In addition to the above there are outstanding bonds issued to the Pacific Railroad companies amounting to $64,623,512, known as the currency 6s. These bonds mature from 1895 to 1899, inclusive.

The following is an analysis of the April debt statement prepared by the Clerk of the Committee of Ways and Means:

The reduction in the public debt for April was above the average for the preceding months of the current fiscal year, the amount for the month being $14,415,824, and for the ten months $128,748,213. The largest reduction hitherto made in the public debt during any one year was in 1867, when the reduction was below $128,000,000, or about $1,000,000 less than has been reached during the past ten months. Thus far the reduction for the current year leads all preceding years and is likely to reach $145,000,000. While the reduction for April is reported at less than $15,000,000, there was a reduction for the month in the interest-bearing debt of $20,707,850. This apparent discrepancy is explained by the fact that the cash in the Treasury compared with April 1 is reduced about $5,000,000, and this in turn is explained by large disbursements made on account of called bonds. Since July 1, 1881, the average monthly reduction in the public debt has been $12,875,000.

Of the continued six per cent bonds only $89,000,000 are now outstanding and nearly $42,000,000 of this amount have been called for redemption.

The 109th, 110th and 111th calls for $5,000,000 each will mature on May 3, 10 and 17 respectively, and the 112th, which is for $15,000,000, will mature on June 7. In these four calls $30,000,000 are included, and the call just issued for over $11,000,000 wipes out the remainder of the loan of 1861, the original amount of which was $189,000,000, and which was the first loan authorized on account of the Rebellion. Of the $80,000,000 included in the four calls last matured about $7,500,000 are still outstanding.

The Treasurer's statement of assets and liabilities for April shows an increase of $3,416,473 in standard silver dollars, the amount of these coins now in the Treasury being $81,595,056. Against this amount there is outstanding $58,900,000 in silver certificates, which shows the government to be absolute owner of but twenty-eight per cent of the amount of silver dollars now in the Treasury. In fractional silver coins the increase for the month was about $250,000. In gold coin and in gold bullion there is now on hand over $155,000,000, a decline of $11,250,000 since April 1. There is also a loss of $2,000,000 in the amount of United States and national bank notes held in the Treasurer's general fund since the last monthly statement was issued. The fund held for the redemption of notes of national banks, failed, in liquidation and reducing circulation increased during April $3,000,000. This is accounted for by the rapid absorption by the government of the three and a half per cent bonds. Many banks holding the called bonds deposit United States notes for their bonds and reduce circulation rather than purchase four per cent bonds at the present premium.

The amount of four per cent bonds now held by the Treasurer to secure circulation and deposits is $102,296,950, a decrease of nearly $600,000 compared with May 1, 1881.

During the month just closed, however, the deposits by national banks of this class of bonds were $3,500,000, against $820,000 withdrawn. The bulk of these deposits was by new banks established in the West. The available cash balance in the Treasury is $142,334,183, a decrease of over $5,000,000 compared with April 1.

The total receipts for April show an increase of $3,500,000 over those for April, 1881, as will be seen from the following comparative statement:—

	1882.	1881.
Customs	$17,862,836	$17,056,636
Internal Revenue	11,996,375	11,824,345
Miscellaneous	4,884,262	2,369,119
Total	$34,743,472	$31,250,100

For the ten months of the current fiscal year the total receipts were $334,300,557, against $298,008,253 for the corresponding months of last year, an increase of $36,000,000.

In consequence of larger reduction in the principal and rate of interest on the public debt the expenditures for the ten months closing with April show a decrease of over $10,000,000 compared with the same ten months of the preceding year. This large saving in expenditure has the effect to increase the net surplus revenue by that amount.

The following quotations of sales of railway and other securities, for the week, are in addition to those given elsewhere in our columns:

New York.—Atlantic and Pacific 1st, 95; Atchison, Colorado and Pacific 1st, 95½; Buffalo, New York and Erie 1st, 1916, 130; Boston and New York Air Line pref., 62½; Buffalo and Erie 7s, new, 122½; Boston, Hartford and Erie 1st, 48½; Columbus, Chicago and Indiana Central 1st, Trust Co. certif. ass. sup., 115; Chicago, St. Paul, Minneapolis and Omaha, 37⅜; do. pref., 101; do. consol., 104; Columbia and Greenfield pref., 70; do. 1st, 103, Chicago, St. Louis and New Orleans, 76½; Chicago, Milwaukee and St. Paul, Southwest div. 6s, 108½; do. Southern Minnesota div. 1st, 108; do. Chicago and Pacific West div. 1st, 94½; do. Chicago and Pacific div. 1st, 110; Chesapeake and Ohio cur. int., 46½; do. 7s, Series A, 100; do. 6s, 1911, 100½; Central Iowa 1st, 113; Clev., Col., Cin. and Ind. consol., 124; Chicago, Burlington and Quincy 8s, 104½; do. 4s, Iowa div., 87½; Chicago and Northwestern S. F. 5s, 99⅞; Cairo and Fulton 1st, 109½; Dubuque and Sioux City, 83; Denver and Rio Grande, 61¾; do. 1st, 112; do. consol., 107¼; Denver, South Park and Pacific 1st, 102; Delaware and Hudson, Penn. div., 125½; East Tennessee, Virginia and Georgia, 11⅝; do. pref., 20½; do. Divisional 5s, 76½; do. inc., 49; Elizabethtown, Lexington and Big Sandy 6s, 98⅞; Gulf, Colorado and Santa Fe 1st, 107¾; Green Bay, Winona and St. Peter 1st, 85; do. inc., 20; International and Great Northern 1st, 107; Iowa Midland 8s, 132; Indiana, Bloomington and Western, 41; do. 1st, 89; do. 2d, 73½; Kansas Pacific 1st consol., 103; do. 6s, 1896, 113; do. 6s, 1895, 112; do. 6s, Denver div. ass., 112; Keokuk and Des Moines, 18; do. 1st, 104; Lafayette, Bloomington and Muncie 1st, 103½; Louisville, New Albany and Chicago 1st, 103¼; Lake Erie and Western, 30¼; Long Island, 54; do. consol. 5s, 97½; Louisville and Nashville Gen'l mort. 6s, 99; do. Cecilian Branch 1st, 104; New Orleans and Mobile 1st, 95; Minneapolis and St. Louis, 21; do. pref., 61½; do. 2d, 90; Missouri, Kansas and Texas, 31⅛; do. gen'l mort. 6s, 81¾; do. consol., 105½; do. 2d, 62; Missouri Pacific, 90¾; do. 1st consol., 103½; do. 3d, 108½; Memphis and Charleston, 54; Milwaukee, Lake Shore and Western, 48½; do. 1st, 99½; Manhattan Beach, 32½; Mobile and Ohio, 25½; do. 2d deben., 50; Marietta and Cincinnati 1st pref., 8; Michigan Southern S. F., 106¾; Michigan Central 5s, 98; Metropolitan Elevated 2d, 90; New York, Chicago and St. Louis, 14½; do. pref., 33⅜; do. 1st, ex June coupon., 89⅝; Nashville, Chattanooga and St. Louis, 63½; do. 1st, 116½; New York, Ontario and Western, 25⅛; Norfolk and Western pref., 53; do. Gen'l mort., 104½; New Orleans Pacific 1st, 86; Northern Pacific 1st, 101½; New York City and Northern Gen'l mort., 45; New Jersey Southern guar., 97; Ohio Southern 1st, 86; Ohio Central, 14⅜; do. 1st. 96½; do. inc., 35; Oregon Railway and Nav., 140; do. 1st, 106; Oregon Transp., 72; Ohio and Mississippi, Springfield div. 1st, 117; Peoria, Decatur and Evansville, 29½; do. inc., Evansville div., 69; Pennsylvania Co. 4½s, 96; Rochester and Pittsburgh, 29¾; do. 1st, 102; do. inc., 45; Richmond and Alleghany, 17¾; Richmond and Danville, 105; do. West Point, 112; do. 6s, 100; do. deben, 69. Rensselaer and Saratoga, 138; Rome, Watertown and Ogdensburg 1st, 111½; do. consol. Trust Co. certif., 89¾; Scioto Valley 1st consol., 100¾; St. Louis, Alton and Terre Haute div. bonds, 40; St. Paul and Duluth pref., 78; St. Paul, Minneapolis and Manitoba, 119½; do. 1st, 110½; do. 2d, 108; do. Dakota ext. 1st, 107; St. Paul and Sioux City 1st, 110½; South Pacific of Missouri 1st, 106; South Carolina 1st, 89½; St. Louis and San Francisco 2d, Class B, 88½; do. C, 90⅛; St. Louis, Kansas City and Northern R. E., 7s, 104½; Southern Pacific of Cal., 1st, 104; St. Louis Iron Mountain and Southern 5s, 78; Texas and Pacific, 40½; do. inc. Land Grants, 65; do. consol. 6s, 96; do. Rio Grande div. 1st, 82¼; Toledo Delphos and Burlington, 12¼; do. inc., 20¾; Toledo, Peoria and Western 1st, 108; Texas Central 1st, S. F. 7s, 109; Union Pacific, Collateral Trust, 106; Wabash, St. Louis and Pacific, Gen'l mort. 6s, 81½; do. Chicago div. 1st, 81; do. Iowa div. 1st, 90; Alabama, Class A, 81⅝; Georgia 7s, new, 101½; Louisiana 7s, consol., 66½; Missouri 6s, 1882-'83, 102; do. 1886, 109; do. 1887, 110⅝; do. 1888, 111; do. 1889-'90, 112½; North Carolina 4s, consol., 81; do. 6s, S. T., 3d class, 7⅜; South Carolina 6s, non-fund, 8½; Tennessee 6s, 58; do. new, 56; Virginia 6s, def., 14½; Am. Dist. Tel., 46; Canton Co., 60; Sutro Tunnel ½; Colorado Coal and Iron, 51; do. 6s, 93; Maryland Coal, 13; Deadwood Mining, 6; Excelsior, 2⅜; Homestake, 18½; Ontario, 35; Standard, 15½.

Boston.—Atlantic and Pacific blocks, 103; do. 6s, 94; do. inc., 30; Atchison, Topeka and Sanat Fe mort. 5s, 97½; Boston Water Power Co., 4½; Boston Land, 7⅜; Burlington and Missouri River in Nebraska 6s, non-exempt, 103½; Boston, Clinton, Fitchburg and New Bedford pref., 130; Chicago, Burlington and Quincy 7s, 126½; do. 4s, old, 86¾; do. 4s, Denver extension, 85; Connotton Valley, 6¾; do. 7s, Straitsville 32; California Southern Blocks, 110; do. 1st 7s, 85; Chicago, Milwaukee and St. Paul, Dubuque div. 6s, 102½; do. Wisconsin Valley div. 6s, 98; Cincinnati, Sandusky and Cleveland 7s, 102; Chicago and West Michigan, 71; Flint and Pere Marquette, 25; do. pref., 96; Iowa Falls and Sioux City, 92; Kansas City, Lawrence and Southern 5s, 102½; Kansas City, Topeka and Western 7s, 119; Kansas City, Fort Scott and Gulf 7s, 110½; Kansas City, St. Joseph and Council Bluffs 7s, 114¾; Little Rock and Fort Smith, 48; do. 7s, 107½; Maine Central, 58½; Massachusetts Central, 11; do. 6s, 62½; Marquette, Houghton and Ontonagon, 63; Mexican Central Block, No. 2, 113½; do. No. 3. 107; do. 7s, 84⅞; Nashua and Rochester, 54¾; New Mexico and Southern Pacific 7s, 111½; Northern Pacific 6s, 99¾; New York and New England 6s, 104; Nodaway Valley 7s, 110; Ogdensburg and Lake Champlain inc., 43; Oregon Short Line Subscriptions, 112½; Rutland pref., 24; do. 6s, 100; Republican Valley 6s, 104; Sonora 7s, 103½; Toledo, Cincinnati and St. Louis, 6¾; Toledo, Delphos and Burlington, Southeast div. 6s, 70; do. inc., 17; Wisconsin Central, 16½; do. 7s, 1st series, 77; do. 2d series, 45; Franklin Mining, 11½; Huron, 1½; Harshaw, 2½; Napa Consol. Quicksilver, 5½; Osceola, 33¾; Pewabic, 11; Ridge, 87½; Silver Islet, 21.

Baltimore.—Atlantic and North Carolina 1st, 125; Atlanta and Charlotte, 70⅜; do. 1st, 111; Atlantic Coal, 1.10; Baltimore City 6s, 1886, 108; do. 6s, 1900, 130; do. 6s, 1890, 117¾; do. 5s, 1900, 118½; do. 5s, 1916, 121¾; Baltimore and Ohio 1st pref., 125; do. 2d pref., 120½; Columbia and Greenville 1st, 103; Canton Co. 6s, 104½; Maryland Defense 6s, 104½; do. Relief 6s, 113½; Marietta and Cincinnati 1st Trust certificate, 125½; do. 2d do., 98½; do. 3d do., 53¾; North Carolina 4s, 80; People's Pass. R. W., 7; Parkersburg Branch, 12; Richmond and Danville 1st, gold, 100½; Rochester and Pittsburg Income, 45; Virginia Peelers, 38; do. 10-40 coupons, 65; Virginia and Tennessee 8s, 124; Virginia Midland scrip, 50; do. 2d, mort., 108; do. 5th mort., 93; Wilmington, Columbia and Augusta, 109¾. The latest quotations are: Atlanta and Charlotte 1st, 110⅞@111; Baltimore City 6s, 1884, 104@—; do. 6s, 1886, 108½@—; do. 6s, 1890, 117¾@—; do. 5s, 1894, 115½@116¼; Baltimore and Ohio, 196@—; Baltimore City Passenger R. R., 43@—; Canton Co. 6s, gold, 103@104½; Columbia and Greenville 1st, 102¾@103¼; Marietta and Cincinnati 1st, 125½@126; do. 2d, 98@98½; do. 3d, 53⅝@53¾; Northern Central, 49¼@49⅝; do. 6s, 1885, 107@108; do. 6s, 1900, gold, 116@—; do. 5s, 1926, 97½@99; Ohio and Mississippi, Springfield div. 1st, 117½@118; Pittsburg and Connellsville 7s, 123⅜@—; Virginia and Tennessee 8s, 123½@124½; Virginia Midland 2d mort., 108@109; do. 5th mort., 93@96; Virginia Consols, 63@63¾; do. 10-40s, 42½@43.

Philadelphia.—Am. S. S. Co. 6s, 104¾; Central Transportation, 35; Chesapeake and Delaware Canal 6s, 88½; Camden and Atlantic scrip, 76; Catawissa 2d pref., 55; Huntingdon and Broad Top Mt. consol. 5s, 88; Morris Canal, 70; do. pref., 170; New Orleans Pacific 1st, 86½; Nesquehoning Valley, 55; Oil Creek 1st, 102; Philadelphia, Germantown and Norristown, 110⅜; Pennsylvania R. R. allotments, 8¼; Pennsylvania Canal 6s, 95; Philadelphia, Wilmington and Baltimore 4s, 95; Philadelphia and Reading R. R. scrip, 99; do. deferred income bonds, 29¾; Perkiomen 6s, 104¾; Susquehanna Canal pref. 6s, 85; Schuylkill Nav. 6s, 1895, 65; Sunbury, Hazleton and Wilkesbarre 2d 5s, 20; Texas and Pacific consol. mort. 6s, 99; do. Rio Grande div., 6s, 81½; West Jersey scrip, 82. The latest quotations are: City 6s, 108@118; do. free of tax, 128@132; do. 4s, new, 108@113; Pennsylvania State 5s, new loan, 117@119; do.

4s, old, 110@112; do. 4s, new, 114@114½; Philadelphia and Reading R. R., 28¾@29; do. consol. mort. 7s, reg., 125@126; do. gen'l mort. 6s, coupon, 98@98½; do. 7s, 1893, 117½@120; do. new conv., 77@80; United New Jersey R. R. and Canal, 187¾@188½; Buffalo, Pittsburg and Western, 16½@16½; Pittsburg, Titusville and Buffalo 7s, 94½@95½; Camden and Amboy mort. 6s, 1889, 112@116; Pennsylvania R. R., 58⅜@58½; do. general mort. 6s, coupon, .25@126; do. reg., 125½@126½; do. consol. mort. 6s, reg., 119@120; Little Schuylkill R. R., 57@58; Schuylkill Navigation, pref., 12½@13½; do. 6s, 1882, 90½@91½; Elmira and Williamsport pref., 57@60; do. 5s, 95@102; Lehigh Coal and Navigation, 38¾@39; do. 6s, 1884, 104½@105; do. R. R. loan, 116@117; do. Gold Loan, 112@112½; do. consol. 7s, 119@119½; Northern Pacific, 39⅜@39½; do. pref., 78¾@78⅞; North Pennsylvania, 63½@64½; do. 6s, 106@107; do. 7s, 120½@121½; do. 7s, General mort. reg., 121@122; Philadelphia and Erie, 14@15; do. 7s, 115@116; do. 5s, 102@103; Minehill, 62¾@63¼; Catawissa, 21½@22½; do. pref., 56@57; do. new pref., 54@55; do. 7s, 1900, 117@—; Lehigh Valley 60½@60¾; do. 6s, coupon, 120@122; do. reg., 121@122; do. 7s, 133@133; do. consol. mort. 120½@121½; Fifth and Sixth streets (horse), 152@155; Second and Third, 109@114; Thirteenth and Fifteenth, 70@76; Spruce and Pine, 47@48; Green and Coates, 75@76; Chestnut and Walnut, 90@91; Germantown, 70@75; Union, 110@115; West Philadelphia, 105@110; People's 8¾@9¼; Continental, 100@102.

A New Iron Freight Propeller.

There was launched at Wilmington, Del., on the 24th ult. a new iron freight propeller built by the Harlan & Hollingsworth Company for the Chester River Steamboat Company of Maryland. The vessel is to be called Corsica, after Corsica Creek, a tributary of Chester River. The dimensions are as follows: Length, 140 feet; beam, 26 feet; depth, 8 feet 6 inches. The saloon will be 18 by 12 and the dining-room 8 by 12 feet. There will be sleeping accommodations for twenty-six persons. The machinery will consist of a vertical, jet-condensing, direct-acting propeller engine; cylinder 26 inches diameter, by 24 inches stroke of piston, arranged with slide and cut-off valves; wrought-iron shaft, with thrust-collars and cast-iron crank wheel; cast-iron wheel of seven feet diameter, and a flue and tubular boiler of 45 pounds of steam per square inch. The cost of the Corsica when completed will be $30,000. She was built especially for the peach trade, and will have a carrying capacity for 8,000 boxes. The side-wheel steamers B. S. Ford and Geo. Law also belong to the Chester River Steamboat Company, of which Mr. Geo. Warfield is president. The Corsica will be ready to go on the Chester River route in the early part of June.

It is related that an old country dame committed herself for the first time to a railway carriage, and by a misadventure the train on arrival that very day was run too quickly into the station, so that a van or two became smashed, and the passengers were much thrown about. The old lady in particular was jerked under the seat upon the top of her bandboxes, where she was found by the guard, meekly and patiently awaiting the opening of the door. Upon his exclaiming, "For goodness sake, ma'am, come out, there's been an accident," she gently replied, "Oh, sir, I thought you always stopped like this."

Northern Central Railway.

The following is a comparative statement of the gross earnings, operating expenses and net earnings, of the Northern Central Railway Company for the month of March, and for the three months ended March 31:—

	1882.	1881.
Gross earnings	$430,193 55	$452,905 87
Operating expenses	254,388 50	255,943 72
Extraordinary expenses	42,939 35	1,270 20
Total expenses	$297,327 85	$257,213 92
Net earnings	$132,865 70	$195,691 95

For three months ended March 31:—

	1882.	1881.
Gross earnings	$1,251,112 92	$1,221,719 70
Operating expenses	787,968 39	744,156 02
Extraordinary expenses	115,859 73	6,859 02
Total expenses	$903,828 12	$751,015 04
Net earnings	$347,284 80	$470,704 66

Railways in Switzerland.

The Federal Post Office and Railway Department has published a report on the present condition of the railways of Switzerland, from which we learn that the total length of ordinary railways in running order is 2.571 kilometres (1,954 miles); of special lines, funicular and short mountain railways, 85 kilometres (33 miles); making a total of 1,627 miles, exclusive of the St. Gothard system, which does not yet figure in the mileage returns. The capital invested in Swiss railways reaches a total of 962,165,525f. (£38,492,621), of which 339 millions have been raised by shares, 82 millions by contonal and other subsidies, and 540 millions by loan. The average cost of their construction per kilometre is 303,710f. (£12,148) for the ordinary, and 211,850f (£8,474) for the special lines. The difference arises from the fact that, although the actual making of mountain lines is more expensive than the making of ordinary lines, the value of the land over which they run is, for the most part, little more than nominal. The revenue in 1880 from passenger traffic amounted to 23½ million, and from goods traffic to 31½ million, francs. Adding miscellaneous receipts, the gross total was 60 millions (£2,400,000). The working expenses, including maintenance of permanent way, were 31½ million francs (£1,260,000), equal to 52.48 per cent of the gross receipts. The balance available for dividends and interest was thus 28½ millions (£1,160,000), from which it follows that the net yield per kilometre was 11,116fr. (£444 13s.) In 1880 the receipts of Swiss railways available for interest and dividend were only at the rate of 3:10 per cent, and there are some lines which make no more than their working expenses. Of the net revenue, 27½ million francs went for interest on loans on "special funds," leaving for the ordinary shareholders 5½ millions, equal to about 1¾ per cent. The foregoing figures do not include the claims of shareholders and creditors on the seven railways which during the last few years have gone into liquidation, and which have either been sold to new companies or are being worked by liquidators.

It is reported that the Chicago, Burlington and Quincy is within 47 miles of Denver, and concentrating its entire force of some 2,000 men and 1,000 teams, for it desires to go into Denver about the same time Gould expects to go into Omaha over his new Nebraska extension.

The Coal Trade.

The leading coal-carrying companies make the following reports of their tonnage for the week ending April 22d, and for the year to same date, compared with their respective amounts carried to the same time last year:—

	Week.	1882.	1881.
Reading Railroad	184,112	2,836,402	2,545,857
Schuylkill Canal	10,903	70,925	31,346
Lehigh Valley	131,772	2,195,309	1,950,529
Delaware, Lackawanna and Western	90,336	1,163,253	1,164,648
Shamokin	18,730	255,204	298,308
Central R. R. of New Jersey	108,233	1,112,344	1,109,911
United R. R. of New Jersey	.....	445,169	429,101
Pennsylvania Coal	32,088	301,419	315,845
Delaware and Hudson Canal	68,481	928,109	1,006,195
Huntingdon and Broad Top Mountain	5,964	161,794	138,854
Penn. and New York	28,749	554,781	500,854
Clearfield, Pa.	62,342	854,323	689,173

The total tonnage of anthracite coal from all the regions for the week ending April 22, as reported by the several carrying companies, amounted to 594,619 tons, against 409,024 tons in the corresponding week last year, an increase of 185,595 tons. The total amount of anthracite mined for the year is 7,314,079 tons, against 7,693,920 tons for the same period last year, a decrease of 379,841 tons. The quantity of bituminous coal sent to market for the week amounted to 75,847 tons, against 107,569 tons in corresponding week last year, a decrease of 32,082 tons. The total amount of bituminous mined for the year is 1,414,749 tons, against 1,396,420 tons for the corresponding period last year, a decrease of 18,329 tons. The total tonnage of all kinds of coal for the week is 670,106 tons, against 516,593 tons in corresponding week last year, an increase of 153,513 tons, and the total tonnage for the coal year is 8,729,828 tons, against 9,090,340 tons to same date last year, a decrease of 361,512 tons. The quantity of coal and coke carried over the Pennsylvania Railroad for the week ending April 22 was 217,715 tons, of which 158,722 tons were coal and 58,993 tons coke. The total tonnage for the year thus far has been 3,365,785 tons, of which 2,388,139 tons were coal, and 977,646 tons coke. These figures embrace all the coal and coke carried over the road east and west. The shipments of bituminous coal from the mines of the Cumberland coal region for the week ending April 22 were 5,351 tons, and for the year to that date 465,305 tons, a decrease of 51,686 tons as compared with the corresponding period of 1881. All the coal shipped last week was sent by the Baltimore and Ohio Railroad, the shipments by which for the year to date have been 382,072 tons, a decrease of 48,008 tons as compared with last year. The canal shipments for the year have been 4,559 tons, a decrease of 29,674 tons as compared with 1881. The shipments by the Pennsylvania Railroad for the year have been 74,842 tons, an increase of 22,164 tons over 1881. The Reading Railroad shipment for last week, ending April 29, was about 118,500 tons, of which 25,600 tons were sent to and 14,300 tons shipped from Port Richmond, and 12,800 tons sent to and 14,300 tons shipped from Elizabethport.—*Phil. Ledger, May 1.*

Six elegant Pullman Palace Sleeping Cars, for the Chicago, Milwaukee and St. Paul Railway Company, were shipped from the works of the Harlan & Hollingsworth Co., Wilmington, Del., on the 29th ult.

RAILROAD AND CANAL DIVIDEND STATEMENT.

Showing the amount of Stock Outstanding, the Dividend Periods and the date of last Dividend.

Marked thus(*)are leased roads.	Stock out-standing.	Divide'd Periods.	Last Dividend Payable.
Albany and Susq*...100	3,500,000	semi-an	Jan. '82 2
Ashuelot.....100	210,000	q'arterly	Oct. '81 3½
Atch., Top. and S. Fe100	54 000,000	q'arterly	May '82 1½
Atlanta and W. Point100	1,232,300	semi-an	July '81 4
Atlantic and St. Law*100	5,840,000	semi-an	Mar. '82 3
Augusta and Savan'h100	1,022,900	semi-an	June'81 3½
Avon,Genesee&MtM*100	225,000	semi-an	July '81 3
Baltimore and Ohio.100	14,792,566	semi-an	May '82 5
" " pref.100	5,000,000	semi-an	Jan. '82 3
Washington Br....100	1,650,000	semi-an	Apl. '82 5
Berkshire*.....100	600,000	q'arterly	Apl. '82 1¾
Boston and Albany..100	20,000,000	q'arterly	Mar. '82 2
Bos.&N.Y.AirLine pf.100	2,795,227	q'arterly	Mar. '82 1
Bos.,Cl.,F.&N.B.pref.100	1,750,100	.....	Apl. '82 3½
Bos.,Conc.&Mont.pf*100	800,000	semi-an	May '82 3
Boston and Lowell..500	3,940.000	semi-an	Jan. '82 2
Boston and Maine...100	6,921,274	semi-an	May '82 4
Boston & Providence100	4,000,000	semi-an	May '82 4
Attleborough Br...100	131,700	semi-an	Jan. '82 3½
Bos.,Revere B &Lynn100	419,400	semi-an	Jan. '82 3½
Bugalo,N.Y.& Erie*.100	950,000	semi-an	Dec. '81 3
Camden & Atlantic.. 50	377,400	q'arterly	Apl '80 3s
" pref. 50	880,650	q'arterly	Apl '80 3½s
Camden & Burl. Co..100	381,925	semi-an	July '81 3
Canada Southern....100	15,000,000	.....	Feb. '81 2½
Cape May &Millville* 50	447,000	semi-an	June'81 3
Catawissa*..... 50	1,159,500	annual	Oct. '81 1½
" pref..... 20	2,200,000	semi-an	May '82 3½
" new pref.. 50	1,000,000	semi-an	May '82 3½
Cayuga and Susq.*.. 50	589,110	semi-an	July '81 4½
Cedar Rapids&Mo.R*100	6,850,400	q'arterly	May '82 1½
" " pref.100	769,600	semi-an	Feb. '82 3½
Central of Georgia...100	7,500,000	semi-an	June'81 4
Central of New Jersey100	18,563,200	q'arterly	Apl. '76 2½
Central Ohio*..... 50	2,437,950	semi-an	Jan. '82 3
" pref.. . 50	411,550	semi-an	Jan. '82 3
Central Pacific 100	59,275,500	semi-an	Feb. '82 3
Chemung*.....100	380,000	q'arterly	July '81 1½
Cheshire preferred...100	2,155,300	semi-an	Jan. '82 1½
Chicago and Alton...100	11,181,741	semi-an	Mar. '82 4
" " pref 100	2,425,400	semi-an	Mar. '82 4
Chi., Burl. & Quincy.100	55,337,455	q'arterly	Mar. '82 2
Chi., Iowa & Nebras*.100	3,916,200	semi-an	Jan. '82 4
Chi., Mil. & St. Paul.100	20,404,261	semi-an	Apl. '82 3½
" " pref 100	14,401,483	semi-an	Apl. '82 3½
Chi. & N. Western...100	14,988,257	semi-an	Dec. '81 3
" pref.100	21,525,353	q'arterly	Mar.'82 1¾
Chi., R. I. & Pacific..100	41,960,000	q'arterly	May '82 1¾
Chi. and West Mich .100	6,151,000	semi-an	Feb. '82 2½
Chi., St. P., M. & O..100	10,390,000	q'arterly	Jan. '82 1¾
C., Ind., St. L. & Chi.100	6,000,000	q'arterly	Apl. '82 1½
Cin., Sand. & Clev.pf. 50	429,037	semi-an	May '82 3
Clev. and Mahoning* 50	3,759,200	semi-an	Nov. '81 3½
Clev. and Pittsburg* 50	11,244,336	q'arterly	Mar. '82 1¾
Columbus & Xenia*. 50	1,786,200	q'arterly	Dec. '81 2
Colum.&HockingVal.100	2,500,200	semi-an	Aug. '81 20s
Concord 50	1,500,000	semi-an	May '82 5
Concord and Ports.*.100	350,000	semi-an	Jan. '82 3½
Conn.& Passump.Riv100	2,244,400	semi-an	Feb. '82 3
Connecticut River ..100	2,100,000	semi-an	Jan. '82 4
Cumberland Valley.. 50	1,292,950	q'arterly	Apl. '82 2½
" 1st pref 50	241,900	semi-an	Apl. '82 4
" 2d pref. 50	243,000	semi-an	Apl. '82 4
Danbury & Norwalk. 50	600,000	.....	Apl. '82 1½
Dayton and Mich.*.. 50	2,402,573	semi-an	Oct. '81 1¾
" " pref. 50	1,211,250	q'arterly	Oct. '81 2
Delaware*..... 25	1,468,940	semi-an	Jan. '82 3
Del. & Bound Brook*100	1,652,000	q'arterly	May '82 1¾
Del., Lack.& Western 50	26,200,000	q'arterly	Apl. '82 2
Denver & Rio Grande.100	29,160,000	q'arterly	Jan. '82 1½
Den.,South P. & Pac.100	3,500,000	.....	Aug.'80 4
Detroit, Lans. & Nor.100	1,825,600	semi-an	Aug.'80 2½
" " pref.100	2,503,380	semi-an	Feb. '82 3½
Dubuque&Sioux C'y*100	5,000,000	semi-an	Apl. '82 3
East Pennsylvania*., 50	1,709,550	semi-an	Jan. '82 3
East Mahanoy*..... 50	392,950	semi-an	Jan. '82 3
Eastern (N. H.).....100	492,500	semi-an	Dec. '81 2½
Eel River.....100	3,000,000	q'arterly	Mar. '82 $1
Elmira.Jef.&Canand*100	500,000	annual	Sep. '80 5
Elmira&Williamsp't* 50	500,000	semi-an	May '82 1½
" " pref. 50	500,000	semi-an	Jan. '82 3½
Erie and Pitsburg*.. 50	1,998,400	q'arterly	Dec. '81 1¾
Evansville & Terre H.100	100,000	semi-an	Nov. '81 2
Fitchburg.....100	4,500,000	semi-an	Jan. '82 3
F. & P. Marquette pf.100	6,500,000	semi-an	Jan. '82 3
Ft.W. & Jackson pref.100	2,000,000	.....	May '82 2½
Georgia. 100	4,200,000	q'arterly	Jan. '82 2½
Granite 100	1,250,000	semi-an	Jan. '82 3
Han. & St. Jo. pref .100	5,083,024	semi-an	Feb. '82 3½
Harrisbg&Lancaster 50	1,182,500	semi-an	Jan. '82 3½
Housatonic pref. ...100	1,180,000	q'arterly	Apl. '82 2
Illinois Central.....100	39,000,000	semi-an	Mar. '82 3½
Ia.Falls & Sioux City*100	4,623,300	q'arterly	Mar. '82 1½
Iowa R. Land Co....100	7,620,000	q'arterly	May '82 1
Jeffersonv. Mad.&Ind100	4,000,000	q'arterly	Feb. '82 1¾
Joliet and Chicago*..100	1,500,000	q'arterly	Mar. '82 1¾
Kan.C.,Ft.S.&Gulf...100	4,000,000	.....	Feb. '82 2
" " pref..100	2,750,000	semi-an	Feb. '82 4
Kentucky Central...100	500,000	semi-an	June'81 1
" " pref..100	5,583,500	semi-an	June'81 3
Lake Shore&Mich.So.100	49,466,500	q'arterly	May '82 2
" (guar.)100	533,500	semi-an	Feb. '82 5
Lawrence*..... 50	450,000	q'arterly	Apl. '82 2
Lehigh Valley..... 50	27,496,895	q'arterly	Apl. '82 1½
" " pref.50	106,300	q'arterly	Apl. '82 1½

Marked thus(*)are leased roads.	Stock out-standing.	Divide'd Periods.	Last Dividend Payable.
Little Miami..... 50	4,637,300	q'arterly	Mar. '82 2
Little Rock & Ft. S..100	4,096,135	.....	July' 81 10s
Little Schuylkill*.. . 50	2,646,100	semi-an.	Jan. '82 3½
Louisville & Nashv..100	18,130,913	semi-an.	Feb. '82 3
Lowell & Andover...100	500,000	semi-an.	Jan. '82 3½
Lykens Valley.....100	600,000	q'rterly.	Oct,' 81 2½
Manchester & Law..100	1 000,000	semi-an.	May '82 5
Manhattan 100	13,000,000	.....	.....
" " 1st pref.100	6,500,000	q'rterly.	Apl. '82 1½
" " 2d pref.100	6,500,000	.....	Apl. '82 1½
Marietta& Cincinnati 50	1,386,350	.....	.....
" " 1st pref 50	8,105,600	semi-an.	Sep. '66 3s
" " 2d pref 50	4,440,100	semi-an.	Sep. '66 3s
Marq.Hout.&Ont.pf..100	2,259,026	.....	Feb. '82 4
Massawippi*.....100	400,000	semi-an.	Feb. '82 3
Michigan Central....100	18,738,204	q'rterly.	Aug.'81 1
Middlesex Central...100	280,000	semi-an.	[illegible] 3
Mill Creek&Minehill* 50	323,375	semi-an.	Jan. '82 5
M.Hill& Schuyl.Hav* 50	4,022,500	semi-an.	Jan. '82 3½
Missouri Pacific.....100	28,169,800	q'rterly.	Apl. '82 1½
Mobile&Montgomery100	3,022,517	semi-an.	Feb. '80 2½
Mont. & Wells River100	800,000	annual	Feb. '80 2
Morris and Essex.... 50	15,000,000	semi-an.	Jan. '82 3½
Mt Carbon&PtCarbon 50	282,350	semi-an.	Jan.. '82 6
Nashua and Lowell..100	800,000	semi-an.	May '82 4
Nashua & Rochester.100	1,305,800	semi-an.	Apl. '82 1½
Nashv. & Decatur...100	1,827,000	semi-an.	June'81 3
Nash.,Chat.&StLouis 25	6,670,325	semi-an.	Apl. '82 1½
Naugatuck.....100	2,000,000	semi-an.	Jan. '82 5
Nesquehoning Val'y* 50	1,300,000	semi-an.	Mar. '82 3
N.Castle&Beaver Val* 50	600,000	q'rterly.	Oct. '81 —
NewLondonNorth'n*100	1,500,000	q'rterly.	Jan. '82 1½
N. Y. Con. & Hud. R.100	89,428,330	q'rterly.	Apl. '82 2
N. Y. and Harlem....100	7,950,000	q'rterly.	Apl. '82 2
" " pref.100	1,500,000	q'rterly.	Apl. '82 2
" City Line.. —	.....	annual	Apl. '82 3
N.Y.,LakeErie&West.100	77,083,800	.....	.....
" " pref.100	8,156,725	.....	Jan. '82 6
N. Y., N. H. & Hart..100	15,500,000	semi-an.	Jan. '82 5
N. Y., Prov. & Boston100	3,000,000	q'rterly.	May '82 2
Niag.Bridg&Canand*100	1,000,000	semi-an.	July '81 3
North Carolina*.....100	3,000,000	semi-an.	Sep. '81 3
" " pref.100	1,000,000	semi-an.	Sep. '81 3
N. Eastern (S.C.) pref100	86,000	semi-an.	May '81 4
North Pennsylvania. 50	4,527,150	q'rterly.	May '82 1¾
Northern Central.... 50	6,142,000	semi-an.	Jan. '82 3
Northern N. Hampsh100	3,068,400	semi-an.	Dec. '81 3
Northern N. Jersey*.100	1,000,000	semi-an.	July '80 2½
Norwich&Worcester*100	2,604,400	semi-an.	Jan. '82 5
Ohio 100	18,500,000	.....	.....
Ohio and Miss. pref..100	4,030,000	semi-an.	Mar.'75 3½
Old Colony.....100	7,333,800	semi-an.	Jan. '82 3
Oregon R'way&Nav.100	6,000,000	q'rterly.	May '82 2
Oswego & Syracuse..100	1,320,400	semi-an.	Aug.'81 4½
Panama 100	7,000,000	.....	Jan. '82 6
Paterson & Hudson*.100	630,000	semi-an.	Jan. '82 4
Paterson & Ramapo.100	248,000	semi-an.	Jan. '82 4
Pember.&Highstat'n*. 50	342,150	semi-an.	Jan. '82 3
Pennsylvania..... 50	77,672,750	semi-an.	May '82 4
Pennsylvania Co..... 50	20,000,000	semi-an.	June'81 2½
Peoria & Bureau Val*100	1,200,000	semi-an.	Feb. '82 4
Philadelphia & Erie*. 50	7,013,700	semi-an.	.....
" " pfd 50	2,400,000	semi-an.	Jan. '75 4
Phil,Ger.&Norrist'n* 50	2,231,900	q'rterly.	Dec. '81 3
Phil. and Reading... 50	32,726,375	q'rterly.	Jan. '76 2½
" " pref. 50	1,551,800	q'rterly.	July '76 3½
Phila. and Trenton..100	1,259,100	q'rterly.	Apl. '82 2½
Phila., Wil. and Balt. 50	11,585,750	semi-an.	Jan. '82 4
Pittsb.,Ft. W. & Chi.*100	19,714,285	q'rterly.	Apl. '82 1¾
" Special Imp.100	6,770,900	q'rterly.	Apl. '82 1¾
Pittsfield&N.Adams..100	450,000	semi-an.	Jan. '82 2½
Portl., Saco & Portsm100	1,500,000	semi-an.	Jan. '82 3
Profile & Franconia...100	130,000	annual	Nov.'80 8
Providence &Worces.100	2,000,000	semi-an.	Jan, '82 3
Rensselaer&Saratog.*100	7,000,000	semi-an.	Jan. '82 4
Rhode Island& Mass.100	100,000	.....	Jan. '81 3
Richmond& Danv...100	3,866,000	q'rterly.	May '82 2
Richmond & Petersb100	1,009,300	semi-an.	Jan. '81 3
Roch.&Genesee Val.*100	555,200	semi-an.	Jan. '82 3
Rome, Watert. & Ogd..100	5,293,900	semi-an.	July '75 1½
Rutland preferred.. 100	4,000,000	semi-an.	Feb. '82 1
St.L.,Alt. & T.Haute.100	2,300,000	.....	.....
" " pref.100	2,468,400	.....	May '82 3
St.L.&S.Fran.1st pref100	4,500,000	.....	Feb. '82 3½
St.L., I.Mt.&South'n.100	21,459,821	semi-an.	Feb. '74 3
St. P. & Duluth pref.100	4,705,006	q'rterly.	Mar. '82 1¾
St. P., Minn. & Man..100	15,000,000	semi-an.	eb.'82 3½
Schuylkill Valley*... 50	576,050	semi-an.	an. '82 2½
Seaboard & Roanoke.100	1,299,600	semi-an.	May '82 5
Shamokin V.&Pottsv 50	869,450	semi-an.	Feb. '82 3
Shore Line*.....100	1,000,000	semi-an.	Jan. '82 4
Sioux C.&Pacific pref100	169,000	semi-an.	Apl. '82 3½
South Br. (N. J.)*....100	438,300	semi-an.	Jan. '82 3
South Western (Ga.)*100	3,892,300	semi-an.	Dec. '81 3½
Stockbridge&Pitts.*..100	448,700	semi-an.	Oct. '81 1½
Summit Branch*.... 50	4,010,350	semi-an.	Feb. '76 3
Syr.,Bingham&N.Y.*100	2,500,000	semi-an.	Feb. '81 2
Terre Haute & Ind...100	1,988,150	semi-an.	Feb. '82 4
Troy and Boston....100	1,609,000	semi-an.	Feb. '80 2
Union Pacific 100	61,000,000	q'rterly.	Apl. '82 1¾
United Cos of N. J.*.100	20,490,000	q'rterly.	Apl. '82 2½
Utica, Shenango&S V100	4,000,000	semi-an.	Nov. '81 3
Utica and Black Riv.100	1,772,000	semi-an.	Mar. '82 2
Vermont and Mass..100	3,050,000	semi-an.	Apl. '82 3
Wab. St.L.& Pac.pref.100	22,615,100	q'rterly.	Nov.'81 1½

Markedthus(*)are leased roads.	Stock out-standing.	Divide'd Periods.	Last Dividend Payable.
Ware River*.....100	750,000	semi-an.	Jan. '82 3½
Warren (N. J.).....100	1,800,000	semi-an.	Apl. '82 3½
Warwick Valley.....100	340,000	semi-an.	Jan. '82 2½
Westchest&Phil.pref100	821,300	semi-an.	July '80 2
West Jersey.....100	1,359,750	semi-an.	Apl. '83 3s
Wilmingt'n&Weld'n.100	1,456,200	semi-an.	Dec. '81 3
Wil., Col., & Aug 100	960,000	semi-an.	Dec. '81 3
Winchester&Poto'c.*100	180,000	semi-an.	Jan. '82 3
Winchester&Strasb.*100	74,700	semi-an.	Jan. 82 3
Worcester & Nashua. 75	1,789,800	semi-an.	Jan. '82 1½
HORSE-POWER R. R.			
Albany City.....100	200,000	annual	.....'80 5½
Baltimore City..... 25	1,000,000	semi-an.	Jan. '82 4
Balt.,Cat.&El. Mills..100	....	semi-an.	Jan. '82 2
BleeckerSt.&Ful.F'y.100	900,000	semi-an.	July '81 3
Boston&Chelsea pref. 50	110,000	semi-an.	Apl. '82 3
Broadway (Brooklyn)100	250,000	q'arterly	Oct. '81 3
B'way&7th Av,(N.Y.)100	2,100,000	q'arterly	Oct, '81 2
B'klyn&Hunter's Pt.100	400,000	semi-an.	Apl. '79 3
Brooklyn City.....100	2,000,000	q'arterly	Dec. '81 3½
Bushwick (Brooklyn)100	309,000	semi-an.	July '81 2½
Cambridge.....100	908,000	q'arterly	Apl. '82 4½
Cen.Park,N.& E.Riv.100	1 ,800,000	q'rterly.	Jan. '82 2
Christoph'r&TenthSt100	650,000	semi-an.	Aug.'81 2½
Citizens' (Phil.)..... 50	192,500	q'rterly.	Jan. '82 2½
Citizens' (Pbg.)..... 50	200,000	annual..	....'80 14½
Coney Island&Bklyn100	500,000	semi-an.	Oct. '80 5
Continental (Phil.) .. 50	580,000	semi-an.	Jan. '82 6
D.Dock,E.B'way&Bat100	1,200,000	q'arterly	Nov.'81 4
Eighth Av. (N. Y.)....100	1,000,000	q'rterly.	Oct. '81 3
42d St. & G. St. Ferry100	748,000	semi-an.	Nov.'81 6
Frankf.&Southw (Ph) 50	600,000	q'rterly.	Jan. '82 6
Germantown, (Ph.).. 50	572,860	q'rterly.	Apl. '82 2½
Girard College (Ph.) . 50	500,000	semi-an.	July '71 3
Grand St. & Newton.100	170,000	semi-an.	July '81 2½
Green&Coates St.(Ph) 50	150,000	q'rterly.	Apl. '82 3
Heston,Mantau&F'm 50	299,381	semi-an.	Jan. '75 4
Highland.....100	600,000	semi-an.	Jan. 82 4
Lomb.&SouthSts(Ph) 25	195,000	semi-an.	Oct. '79 4
Lynn and Boston....100	200,000	semi-an.	May '82 4
Malden and Melrose.100	165,500	.....	.....
Metropolitan (Bost.). 50	1,500,000	semi-an.	Jan. '82 4
Middlesex (Boston)..100	650,000	semi-an.	May '82 2½
N.Y.,Bay Ridge&Jam100	150,000	.....	Oct. '78 7
Ninth Av. (N. Y.)....100	797,320	.....	.....
Orange &Newark....100	282,555	.....	.....
People's (Phila.)..... 25	124,744	.....	Apl. '82 2
Philadelphia City... 50	475,000	semi-an.	Jan. '82 5
Phila. and Darby.... 20	200,000	semi-an.	July '81 3½
Phila.&Grey's Ferry. 50	308,000	semi-an.	Jan. '82 6
Pbg,Alleg.&Manches. 50	300,000	q'rterly.	Oct. '81 3
Ridge Avenue (Ph.).. 50	420,000	semi-an.	Oct. '81 11
Second Avenue (N.Y.)100	h199,500	semi-an.	July '81 2½
Second&ThirdSt.(Ph) 50	771,076	q'rterly.	Jan. '82 4½
17th &19th sts (Ph.).. 50	250,000	semi-an.	July '81 3
Sixth Avenue (N. Y.)100	750,000	semi-an.	Oct. '81 5
Somerville (Boston).100	113,000	semi-an.	May '62 3
South Boston..... 50	600,000	semi-an.	Jan. '82 4
Third Avenue, N. Y...100	2,000,000	q'rterly.	Nov.'81 5
13th and 15th sts.,Ph 50	334,529	q'rterly.	Jan. '82 4
23d street, N. Y.....100	600,000	semi-an.	Aug.'81 4
Union, Boston.....100	374,300	semi-an.	Jan '82 4
Union, Phila..... 50	1,005,000	semi-an.	Jan. '82 7
West Philadelphia... 50	750,000	semi-an.	July '77 10
CANALS.			
Chesapeake and Dela 50	2,078,038	semi-an.	June'75 2
Delaware Division... 50	1,633,350	semi-an.	Feb. '82 $1
Delawa. and Hudson100	20,000,000	q'rterly.	Mar. '82 1¾
Delaware & Raritan*.100	5,847,400	q'rterly.	Apl. '82 2½
Lehigh Coal and Nav 50	11,204,250	q'rterly.	Dec. '81 2
Monongahela Nav... 50	1,004,500	semi-an.	July '81 $2
Morris, consolidated.100	1,025,000	semi-an.	Feb. '81 2
" preferred....100	1,175,000	semi-an.	Feb. '81 5
Pennsylvania..... 50	4,501,200	.....	.....
Schuyl. Nav., com.*. 50	859,100	annual..	Au. '81 50c.
" " pref... 50	3,200,950	annual..	Aug. '81 $1
MISCELLANEOUS.			
Adams Express.....100	12,000,000	q'rterly.	Mar.'82 2
American Express... 50	18,000,000	semi-an.	Jan. '82 3
Amoskeag Manuf.Co.100	3,000,000	semi-an.	June'81 5
Calumet&HeclaMin'g —	100,000 S.	q'rterly.	May '82 $5
Central Mining Co...100	.....	semi-an.	Feb. '82 2½
Consolidation Coal..100	10,250,000	semi-an.	Jan. '82 2
George's Creek C.&I.100	.....	semi-an.	Jan. '82 3
Maryland Coal.....100	4,400,000	semi-an.	Feb. '76 1½
Mariposa L. &Mining100	10,000,000	.....	.....
" pref100	5,000,000	.....	.....
Missouri Val.LandCo100	200,000	semi-an.	Jan. '82 7
National Tube Works100	1,000,000	q'rterly.	Apl. '82 3
Pac. Mail Steamship.100	20,000,000	q'rterly.	Sept.'69 3
Pennsylvania Coal... 50	5,000,000	q'rterly	Feb. '82 3
Pullman Palace Car..100	10,023,800	q'rterly.	May '82 2
Quicksilver, com....100	5,708,700	.....	Aug.'81 2½
" pref....100	4,291,300	.....	Aug.'81 9½
Quincy Mining Co... 25	40,000shs	semi-an.	Feb. '82 $8
Quincy R. R. Bridge.100	1,750,000	semi-an.	Jan. '82 5
SiouxC.&I.F.L.&L.Co100	500,000	semi-an.	Jan. '82 4
Spring Mt. Coal.....100	1,500,000	semi-an.	Dec. '81 3½
Topeka Equip'nt Co.100	255,000	semi-an.	Apl. '82 5
United States Ex....100	7,000,000	q'rterly.	May '82 1
Wells-Fargo & Co. Ex100	6,250,000	semi-an.	Jan. '82 4
Western Union Tel..100	80,000,000	q'rterly.	Apl. '82 1½

RAILROAD EARNINGS.—MONTHLY.

	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total.
Burl., Cedar Rap. & Northern:													
1880	184,316	165,170	188,325	141,652	149,504	153,378	143,432	160,160	179,804	204,991	189,330	193,419	2,053,484
1881	167,750	124,510	148,551	184,680	165,630	205,912	174,351	209,112	221,801	221,748	203,880	232,812	2,259,037
1882	252,823	225,631	224,107	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Central Pacific:													
1880	1,200,614	1,070,487	1,373,438	1,356,716	1,778,488	1,724,950	1,840,067	1,973,438	1,964,997	1,120,229	2,199,466	1,905,221	20,508,112
1881	1,602,907	1,454,218	1,709,637	1,874,000	2,068,000	2,063,000	1,859,000	2,059,000	2,293,000	2,514,000	2,267,000	2,110,000	23,947,951
1882	1,876,000	1,702,000	1,987 000	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Chesapeake and Ohio:													
1880	202,335	198,681	222,762	221,559	199,443	214,352	238,236	259,110	247,303	211,820	240,795	218,009	2,674,308
1881	162,540	184,389	228,479	227,343	252,235	241,135	225,096	262,858	247,144	237,303	235,585	203,562	2,707,762
1882	210,455	209,708	208,981	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Chicago and Alton:													
1880	534,054	497,013	626,473	542,961	616,128	617,524	708,906	761,120	767,349	785,199	696,776	574,695	7,718,198
1881	487,890	461,641	529,915	548,675	528,860	616,935	671,466	771,466	768,897	750,359	680,133	635,307	7,553,988
1882	570.447	530,480	584,483	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Chicago and Northwestern:													
1880	1,154,632	1,131,683	1,361,725	1,294,573	1,875,608	1,671,177	1,699,686	1,767,938	2,020,243	2,105,217	1,855,671	1,477,902	19,416,007
1881	1,240,667	963,208	1,178,795	1,474,612	1,879,006	2,306,640	1,983,031	2,315,164	2,292,676	2,341,057	2,019,037	1,855,476	21,849,209
1882	1,620,336	1,471,945	1,696,568	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Chicago, Burlington and Quincy:													
1880	1,432,740	1,411,870	1,732,518	1,489,894	1,909,627	1,682,956	1,773,643	1,834,321	1,862,285	1,934,762	1,837,860	1,552,018	20,454,494
1881	1,307,948	1,034,821	1,418,149	1,574,371	1,679,455	2,083,803	1,888,558	2,173,945	2,262,981	2,031,001	1,816,133	1,905,490	21,324,150
1882	1,658,834	1,457,300	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Chicago, Milwaukee and St. Paul:													
1880	764,298	738,749	900,675	871,041	1,134,745	1,037,958	1,026,708	991,297	1,257,677	1,493,620	1,472,037	1,397,308	13,086,119
1881	990,847	682,717	916.989	1,260,000	1,538,900	1,371,000	1,560,000	1,678,000	1,645,000	1,590,000	1,569,000	1,855,000	17,025,462
1882	1,435,000	1,377,000	1,561,000	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Chicago, St. Paul, Minneapolis and Omaha:													
1880	193,827	173,078	259,783	259,208	232,146	218,093	236,995	251,013	300,833	342,052	342,894	312,173	3,122,097
1881	257,786	158,594	251,648	261,211	350,124	404,562	392,702	385,586	363,685	382,714	380,733	391,950	3,981,296
1882	307,498	315,100	405,779	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Cincinnati, Indianapolis, St. Louis and Chicago:													
1880	155,697	172,541	198,220	168,199	186,995	200,332	204,138	233,478	343,627	239,881	209,014	198,254	2,412,185
1881	182,523	171,511	191,005	175,484	188,794	188,256	178,861	229,858	219,977	212,606	194,805	192,623	2,296,916
1882	200,042	186,879	208,066	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Denver and Rio Grande:													
1880	124,759	126,922	160,883	164,882	193,925	295,455	373,132	400,133	406,583	473,318	408,562	349,196	3,478,007
1881	307,476	317,681	398,493	433,212	514,767	584,230	548,284	606,193	620,643	665,686	566,819	643,417	6,206,812
1882	491,914	412,987	535,055	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Hannibal and St. Joseph:													
1880	176,079	166,965	216,061	206,735	191,317	179,396	224,312	238,081	233,448	242,214	207,147	279,635	2,561,391
1881	154,401	122,874	173,557	188,124	177,002	194,949	198,110	215,308	202,567	313,433	201,782	180,376	2,230,966
1882	138,284	154,717	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Illinois Central:													
1880	[illegible]712	613,806	613,008	535,732	665,120	681,736	724,095	732,755	806,836	880,211	783,120	673.182	8,304,812
1881	6[illegible]281	524,499	557,789	662,493	673,259	803,887	720,004	868,407	828,847	815,238	737 218	763,475	8,586,397
1882	728,173	689,387	695,371	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Indiana, Bloomington and Western:													
1880	80,498	89,690	116,185	90,374	85,733	106,954	103,438	116,732	110,622	121,343	96,621	104,619	1,233,079
1881	90,283	83,261	192,085	103,555	102,630	96,586	83,764	117,956	195,307	181,674	160,826	156,697	.....
1882	195,824	175,755	206,235	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Louisville and Nashville:													
1880	674,455	575,035	612,593	563,883	655,014	976,229	772,537	827,088	931,910	1,000,326	953,086	949,184	9,491,346
1881	816,960	805,124	947,959	850,862	828,726	1,227,885	817,135	876,192	951,566	1,008,950	1,065,223	1,122,285	11,326,859
1882	950,065	960,036	1,073,745	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Mobile and Ohio:													
1880	250,116	204,094	168,301	140,091	129,249	121,855	131,621	140,593	184,246	264,714	251,368	287,373	2,373,621
1881	224,347	216,768	230,916	163,551	145,803	136,517	131,009	159,348	209,044	252,921	252,434	262,025	2,406,437
1882	161,433	158,154	152,651	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Nashville, Chattanooga and St. Louis:													
1880	205,633	191,154	169.457	155,466	158,839	144,155	151,594	169,326	167,473	178,266	182,087	175,996	2,049,448
1881	178,143	190,866	207,710	183,525	104.430	154.549	150,430	168.317	179.979	172,121	152,059	173,127	2,075,256
1882	156,994	159,961	161,005	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
New York and New England:													
1880	164,232	149,907	183,845	179,689	183,701	219,891	205,056	249,885	235,642	215,491	210,856	198 108	2,396,302
1881	189,749	173,614	212,019	216,913	217,185	231,518	246,821	280,524	299,573	261,199	242,412	237,729	2,809,255
1882	215,624	213,791	256,674	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
New York, Lake Erie and Western:													
1879	1,147,173	1,207,391	1,356,780	1,372,755	1,350,574	1,230,419	1,273,533	1,450,223	1,492,497	1,713,697	1,515,835	1,398,224	16,509,127
1880	1,296,381	1,252,218	1,644,958	1,643,151	1,592,544	1,661,812	1,580,976	1,606,874	1,786,417	1,899,910	1,799,338	1,726,788	19,491,361
1881	1,443,437	1,425,765	1,847,261	1,709,057	1,776,891	1,794,982	1,787,081	1,772,895	1,734,200	.....	.....	.....	.....
Northern Central:													
1880	334.494	330,860	415,325	386,130	329,788	419,103	450,298	453,923	464,093	512,918	459,054	494,310	5,050,387
1881	386,157	382,657	452,906	487,173	465,588	487,287	440,811	498,008	429,565	449,664	487,160	476,622	5,443,697
1882	407,368	413,551	430,194	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Northern Pacific:													
1880	81,300	77,259	119,357	185,700	217,613	253,103	241,277	223,500	330,300	358,456	300,822	220,993	2,629,710
1881	116,508	78,803	162,984	211,190	305,292	368,276	404,180	411,624	490,096	565,485	428,903	434,331	4,044,576
1882	239,800	269,000	384,000	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Philadelphia and Erie:													
1880	224,307	245,372	327,678	334,947	311,470	331,024	308,699	347,532	322,737	367,082	324,966	281,919	3,727,733
1881	224,303	225,501	285,573	293,323	343,792	350,585	291,669	303,849	276,522	292,392	284,078	282,772	3,454,309
1882	252,727	246 246	265,311	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
St. Louis and San Francisco:													
1880	198,091	195,948	193,146	176,164	167,664	173,607	213,297	259,995	280,873	328,194	290,329	226,063	2,698,371
1881	212,435	178,234	262,050	265,298	283,399	260,254	252,333	286,373	279,064	308,569	284,320	287,914	3,160,243
1882	256,784	244,654	274,959	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
St. Louis, Alton and Terre Haute:													
1880	153,139	163,737	168,994	155,462	147,928	150,207	191,077	216,759	204,295	221,863	188,773	184,503	2,146,741
1881	175,725	166,012	201,137	194,776	163,285	165,896	158,674	189,295	187 299	179,921	162,544	153,852	2,112,801
1882	168,987	149,619	178,145	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
St. Louis, Iron Mountain and Southern:													
1880	555.983	490,195	451,560	408,241	349,053	363,454	432,655	565,869	671,219	688,365	632,052	656,951	6,265,597
1881	570,957	560,791	704,002	546,302	479,075	474,302	533,512	644,386	690,400	719,239	687,280	709 498	7,319,744
1882	516,370	501,127	585,008	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
St. Paul, Minneapolis and Manitoba:													
1880	180,239	137,645	261,798	333,014	281,899	243,407	272,089	232,579	274,188	345,057	300,675	297,641	3,160,231
1881	254,187	159,482	320,962	425,685	382,642	405,322	387,488	414,954	485,736	605,708	508,530	528,262	4,878,960
1882	395,461	418 358	531,004	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Texas and Pacific:													
1880	245,785	219.165	215,070	174,177	141,083	153,066	195,711	226,073	266 570	303,666	312,184	301,858	2,754,408
1881	281,176	260,781	319,928	280,347	267,443	264,204	320,466	354,082	337,117	578,668	357,724	381,218	3,921,369
1882	310,785	255,644	332,911	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Union Pacific Railway:													
1880	1,433,636	1,393,992	1,730,509	1,937,220	2,027,269	1,928,528	1,934,215	1,913.035	2,270,179	2,707,860	2,251.148	1,869,335	23,448,445
1881	1,339,799	1,374,740	1,674,860	2,032,146	2,393,467	2,590,969	2.528,826	2,638,659	2,844,357	3,289,350	2,773,608	2,267,004	27,451,831
1882	1,961,088	1 759,863	2,226,832	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Wabash, St. Louis and Pacific:													
1880	776,790	759,451	978,629	892,024	948,773	953,463	1,966,742	1,189,478	1,178,950	1,501,303	1,131,787	1,050,816	12,428,113
1881	811,617	818,922	1,121,592	1,023,482	1,144,660	1,308,993	1,131,751	1,542,838	1,490,027	1,396,300	1,399,555	1,328,278	14,461,570
1882	1,229,965	1,134,768	1,315,776	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....

Railways in Austro-Hungary.

In the year 1872, new railway lines to the extent of 2,129 kilometers were opened to traffic in Austro-Hungary, after which there was a continuous decrease from year to year until, in 1880, but 60 kils. of new lines were opened, of which 40 kils. belonged to the Austrian half of the Empire. In 1880, the question of local lines first began to occupy attention, and the Austrian Government granted concessions for 157 kils. of these lines, of which, however, only 14 kils. were opened in that year, the residue being completed and thrown open in 1881, in which year 455 kils. of the same class of lines were in addition conceded, of which 76 kils. only were actually finished. In all, 427 kils. of new railway lines were opened during 1881, of which 301 kils. were in Austria, and 126 kils. in Hungary. The total extent of the Austro-Hungarian railway system is thus brought to 11,834 kils.

There remain in Austria 379 kils. of the 427 kils. of local lines authorized in 1881 still to be constructed. Adding to this mileage the length of the two great lines which are now being constructed, viz: the Gallician or Transversal line, 407 kils. long and the Alsberg tunnel line 136 kils. long, total length of line still under construction is 923 kils.

As to Hungary, some 698 kils. of line are now in course of construction, of which 123 kils. are shortly expected to be finished, mainly composing the Ujssass and Rakos, and the Sissek, Sunja, and Kastajnieza and Bosnian frontier, railways. Another line whose works are being pushed on with great energy is the Buda-Pesth and Semlin, 375 kils. long. This great line will form a link, and by no means an unimportant one, in the chain of communication which will provide uninterrupted railway communication between the North Sea ports and Central Europe and the Baltic ports on the one hand, and Constantinople and Salonica on the other.

Valuable Discovery of Asbestos.

At a depth of ninety feet in the Apache copper mine, in the Santa Catarinas, a ten inch vein of asbestos has been discovered. When found the workmen reported to Superintendent Scott that they had struck a petrified log. He thought it impossible, and made an examination, and at first sight believed the strike was what it afterward proved to be, after a careful assay and analysis. The specimen shown us, in specific gravity is almost eqral to lead, of a fine fibrous character. The fibres are combined together in a compact mass, but split off similar to a straight-grained wood. It is a greenish color, with a white shade. The vein appears permanent at present, and, as a matter of course, adds greatly to the property.

The finest fibrous variety, with easily separable fibres, is used for making cloth, which renders it indestructible by the elements. In ancient times the cloth made from asbestos was used to enwrap dead bodies placed on the funeral pile, so as to preserve the ashes unmixed. The finest quality is found in Savoy, but it is abundant in Corscia. It is also found in Cornwall and several of the Shetland Islands. Small veins have been discovered in California and Nevada. The value in its native form is about $300 per ton. It is now largely used in the manufacture of fire-proof materials, such as cloths, papers, etc.—*Tuscon Star.*

Our Mineral Wealth.

Mr. S. V. White, President of the New York Mining Stock Exchange, has appointed a committee to raise subscriptions in this city and vicinity to aid in the preparations for the National Mining and Industrial Exposition which is to be held in Denver, Col., during the months of August, September, and October. The object of the exposition, which was originated in Colorado, is to exhibit specimens of all the mineral products of this country, and especially the royal minerals, gold and silver, in connection with the machinery used in extracting and milling the ores, in such a manner that visitors may secure at a glance an idea of the vast mineral resources of the continent. It is proposed to collect ores and minerals from every mine in the United States in such quantities that the exhibits will represent the average character of the mines from which they are taken. Accompanying the ores are to be charts of the mines, with detailed information of the assay value of the ores, and yields, process of milling, and the geological formation of the ground from which the ore is taken. The exhibits will be classified in States and districts, and each district will have its representative machinery on exhibition, showing the methods of working best adapted to different kinds of ore. The plan, in brief, is to do for minerals what was done for cotton in Atlanta, Ga., last summer—make them the subject of a special exhibition by means of which some idea can be given to the general visitor of the vast amount of wealth which lies hidden in our Western States and Territories. Exhibits will also be received from other countries. For the purpose of carrying this scheme into effect, a company has been formed under the laws of Colorado, with a capital of $200,000, and of this amount $100,000 has been subscribed in the city of Denver alone. The company has purchased forty acres of land in Denver, and a contract has already been made for the construction of a permanent exhibition building. This structure is to be 500 feet long and 316 wide, with large galleries and spacious windows, designed after the National Museum at Washington. It is to be constructed of stone, brick, iron and glass, and the estimated cost is $135,000. The exposition fund of $200,000 is now being raised on bonds secured by mortgage on the exposition building and the land on which it stands, the bonds to bear 8 per cent interest, payable semi-annually, and to become due January 1, 1892. Joseph T. Corforth, President of the Denver Board of Trade, has been made Trustee of the association, the funds raised on the bonds are placed in his hands, and to secure them a trust deed has been made to him, covering all the property of the company. Similar committees have been appointed in Boston, Chicago and Philadelphia, and a general spirit is manifested throughout the Eastern States to take an active interest in this representative exposition of the mineral resources of the West.

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TREASURER'S OFFICE, GRAND CENTRAL DEPOT, NEW YORK, March 28, 1882.

The Board of Directors of this company have this day declared a dividend of TWO per cent upon the capital stock, payable on MONDAY, the 1st day of May next, at this office.

For the purposes of this dividend, and also for the annual meeting of the stockholders for the election of directors, etc., which is to be held on the 3d day of May next, the transfer books will be closed at 3 o'clock P. M. on Saturday, the 1st day of April next, and will be reopened on the morning of Friday, the 5th day of May next.

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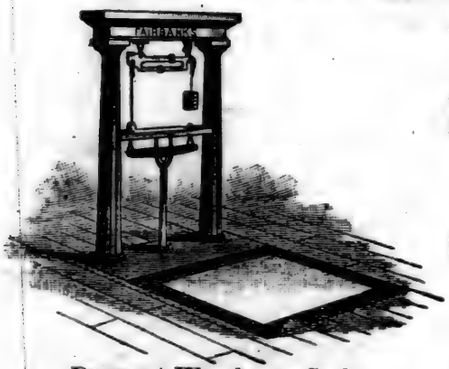
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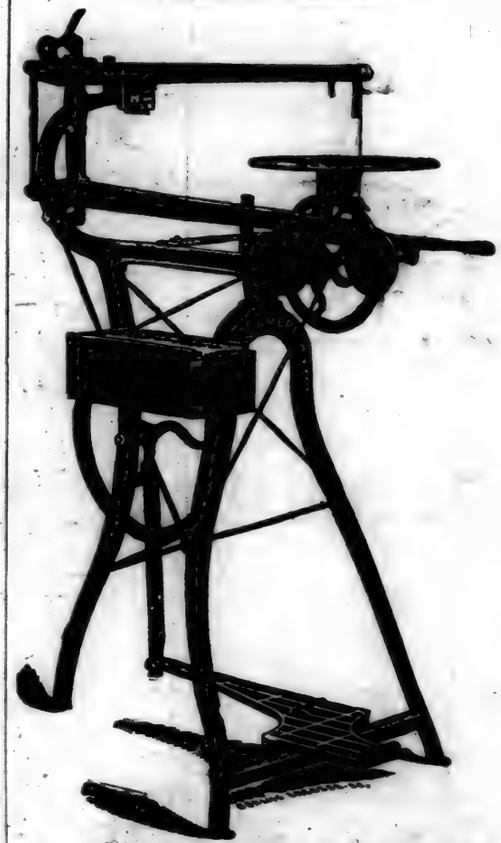
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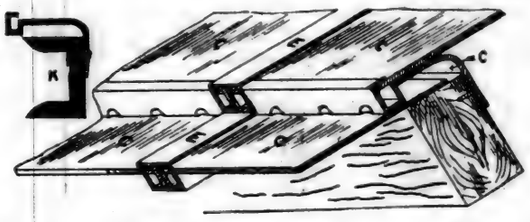
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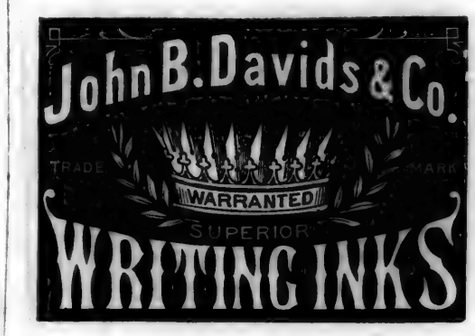
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Wealth of Mexican Mines.

THE wealth that lies in the Sierra Madre Mountains of Northern Mexico is said to be too great for human comprehension, and that within a hundred miles of Chihuahua there are a dozen placers, each of which is richer than a dozen Leadvilles. Mr. G. A. Gibson, a prospector, being interviewed by a Leadville reporter said :—

"People do not understood the riches of Mexico, and a man would be laughed at for telling about them. There is one example in the Santa Ulala mine, a short distance from the city of Chihuahua. It was first discovered early in the last century, and has been worked more or less since. The first workmen were the monks, and with the primitive machinery within reach they were able to take from this wonderful mine nine millions of silver, besides which they lost through their imperfect machinery almost as much. This mine is situated in one of the hills distinct from the Sierra Madre chain, and is one of a peculiar class of hills which rise abruptly from the plain, run for several miles and end just as abruptly. The mine is more extensive than the Mammoth Cave and has miles of galleries and chambers, into which no one dares to enter without a guide. The ore is something like the Leadville carbonates, and exists in three immense beds, one above the other. The lower mine, which was first discovered, is a vast honeycomb, the cells being huge chambers opening into each other by narrow passages where the ore had pushed down. The roofs of these chambers are supported by immense pillars of ore, in which alone there is a fortune, while in every direction are unworked ore beds of untold riches. After this immense ore bed, which is said to have panned out $700,000,000, was exhausted, which occurred in 1805, another and richer body of ore was found above it by the accidental falling of a section of the roof. This body of ore was worked through holes in the roof of the first mine, and produced even more than the original mine. Neither the first nor the second body of ore was exhausted when a third bed of unparalleled richness was discovered still further up, which was partially worked in the same manner as was the second body. The third body is the most wonderful of all, and a description of it reads like a dream, or a tale out of the Arabian Nights. While the discoverers were working it, some forty years ago, they ran across a natural chamber, which surpasses the artificial grandeur of a royal palace. Stalactites and stalagmites are abundant, but there is a huge floor, clear of all protuberances, which is three feet thick, and is as clear as the clearest spring water. It is over 500 feet long and 300 broad, and as smooth as ice. It is a royal ball-room, the like of which exists nowhere else on earth. Around this chamber are pillars innumerable, as white as snow, producing an effect grand and beautiful. Between these pillars are green and red walls, colored as by the pencil of a fairy artist of supernatural skill. The gnomes who worked this wonderful chamber fashioned the most grotesque figures upon the wall, but in one corner is the greatest wonder of all. This is a bas relief, a perfect Greek face of a young girl, surpassing in loveliness anything that can be imagined, while immediately under it water gushes from the wall and flows across the crystal floor.

"Very few have ever seen this wonderful chamber, although many have been in the mines. There are few guides who know where it is, and they demand enormous fees for showing it. When the chamber is lit up, the effect is bewildering in its gorgeous beauty. It is the holy inner temple of the great treasure cave.

"In these hills are thousands of ore-beds which have never been prospected much, but there is every reason to believe that there are many places where many beds exist in groups sufficient to create a great city when the time comes. The trouble now is with the country itself. The Mexican mining laws are the best in the world, but the Government is powerless to enforce them. At the Santa Ulala mine is an immense body of ore which is the refuse of one hundred and fifty years' workings. From it an immense amount of silver could be extracted by the use of improved machinery, but in the present state of affairs no company feels justified in taking the risk. The railroad, however, will reach Chihuahua on June 1st, and then improvements will be made."

Wheat From India.

IT would be an odd freak of destiny if the opening of the Suez Canal were seriously to affect the fortunes of Canada, yet that is not impossible. The shippers of wheat from India appear to have completely surmounted the old transport difficulties, and the value of the export last year exceeded £7,000,000, while more than a million's worth was shipped during the past month. It is quite possible, therefore, that India may carry off a large share of the wheat trade from the United States, as the States carred it off from Russia, and so stop the rapid extension of cultivation in Manitoba. With light railways in the Punjaub, the supply of good wheat for export might be raised to more than 10,000,000 quarters, at a price with which, in a good year, Americans cannot compete. The single difficulty with which growers in Northern India now have to contend is the slow, and therefore expensive, method of collection by country carts and river boats. Grant even a slight improvement in internal transit, and England would be fed from India—an enormous addition to the importance of the Suez Canal.—*London Spectator.*

Making Gold.

THE odd thing is that the alchemists were probably right in principle, even in their wildest dream. Every fresh advance of chemical science encourages the belief that the metals, in their various classes, are really identical as to ultimate substance—indeed, possibly all of them together, with, it may be, the other elements, blend into some such common matter as the scarcely imaginary hydrogenium, of which hydrogen is the vapor. Dr. Norman Lockyer's researches with the spectroscope tend to confirm this unity of material ; and if it exists Parcelsus was right, and gold is merely an allotropic form of their substances. In saying this, however, we hasten to reassure the Stock Exchange, by adding that theory would bring chemists none the nearer to practice in regard of manufacturing gold by the ton. The student of science can make palladium or platinum combine almost miraculously with hydrogen, and melt gold in selenic acid ; but he knows little of that subtle and unapproachable chemistry by which the earth's primeval heat fused and formed, under pressure and conditions inimitable by us, her gold and iron, her salts and crystals. Man must dig for nuggets and dust still, or work for the shining stuff with hand or head. The worst that could happen to shake the great idol on his metallic throne would be—what is certainly geologically possible—the sudden discovery of a mother-nugget of gold, a monstrous central deposit in the cavernous base of some Australian or Californian reef, furnishing, say, half a million of tons of specie. That would shake the markets and send silver up, but speculators need not fear science, nor the modern alchemists.

Meanwhile, if we have not inherited from the ancient Archimages the universal solvent or the elixir of life, at least they gave us chemistry. It was in grouping along that dark fantastic road of wild desires that Roger Bacon discovered gunpowder, Gebir nitric and hydrochloric acid, Valentine the precipitation of iron, and Paracelsus his grand doctrine of the unity of visible matter. Thus does Nature teach her children. With the childish allurements of alchemy she led them toward chemical truths; with the superstitions of astrology she seduced them into the sublimities of astronomy. Gold also — the embodiment of wealth—is in like manner her go-cart, as it were, or nursery-plaything, for humanity. While men traverse lands and seas, and toil and strive and suffer, to hoard up this yellow shining dross, the work of effort and evolution goes briskly on; the race develops, and the globe's surface is exploited. The loving mother who, by the proffered orange, tempts her child to walk, does much as Nature does to the human race with this glittering gold.—*London Telegraph.*

Is Jumbo an Elephant?

Any one at all familiar with elephants, upon first seeing Jumbo will be quite as much surprised at his peculiar build as by his great height and massive proportions. In some respects he resembles the ordinary African elephant, but in others he differs from that type as widely as from their Asiatic congeners. His legs are remarkably long, his head is strikingly small, and his back is dished in a way that gives peculiar prominence to his hips and fore shoulders. When seen in profile he presents an appearance not unlike some of the sketches of the mastodon given in works on the fauna of pre-historic ages. Professor Doremus, of New York, is said to favor the theory that Jumbo is of mastodonic lineage, and many other scientists are reported to entertain similar views. Whether he is a lingering specimen of the monsters of the Miocene or Pliocene periods or not, the fact remains that Jumbo is the biggest beast now known to be in captivity, and it is doubtful if a larger animal walks the earth.

Copper in Missouri.

The St. Louis *Age of Steel* says that ingot copper is being produced in the State of Missouri equal in quality to any produced in this country. The mines and works at St. Genevieve are succeeding as a business enterprise beyond the expectation of any one, and even beyond the belief of a Boston copper expert, who made a failure at the attempt some years ago. The present works were erected in the fall of 1880, under the direction and plans of Mr. Nicholson, a graduate of the mining department of Washington University. Some time before an attempt at smelting the ore was made by one of the best copper men in Boston, who gave it up, declaring that it was an impossibility. The subject assigned Mr. Nicholson by Professor Potter for a graduation theses was the copper deposit at St. Genevieve. His work was so thorough and exhaustive, and his plans for a smelting process so practical, that the owner of the land employed him to erect works. That his ideas were practical is proven by the fact that the works have made handsome profits from the start, and they are turning out about twenty-five tons of ingot to-day, nearly all of which is sold in this market. Since the first of January last, over eighty tons have been produced, representing a value of about $30,000. Last week Professor Potter spent three days at the works with his entire class of students, who were given a chance to do some of the practical work at the furnaces.

Formidable Pile Driver.

The Baltimore *Sun* says that Mr. Andrew Brown, wharf-builder, has just completed one of the largest and most formidable pile-drivers in that port. It is 50 feet long, 22 wide, and 5 feet draught. It is built with nine kelsons running the entire length, and has a thickness of six inches of solid wood, braced from top to bottom. The kelsons and beams are kneed with Chesapeake white oak. The height of derrick is 60 feet, in which a 2,500-pound hammer travels in ways lined with one-inch iron, five inches wide. The power is furnished by a powerful double-friction drum-hoisting engine, capable of raising a 3,000-pound hammer to a drop of 25 feet twenty times a minute. The engine is adapted to heavy derrick work, and one drum can be used for hoisting the load while the other handles the derrick-boom to suit different requirements. All parts of the machinery are of the strongest kind, and located on deck under a house 20 by 16 feet. The powerful hammer was made at the Bollman Iron Works, and the whole machine is the product of Baltimore mechanics. The mechanical work was done by Wells & Co.

Railways in Spain.

There were in operation at the commencement of this year 4,573⅛ miles of first-class line; at the same time there were in course of construction 856⅞ miles; and 868¾ miles had received official approval—making an aggregate of 6,298¾ miles. There were also at the date mentioned 263⅛ miles of line of local interest in operation, and 492¼ miles of similar line in course of construction or authorized—making an aggregate of 755⅜ miles. Spain also possessed at the same date 135⅝ miles of rural tramways, of which 34⅜ miles were in operation. It is, therefore, claimed that Spain possesses altogether 7,187½ miles of line, of which 4,871¼ miles are in working condition, while 1,310⅜ miles are in course of construction, and 1,007½ miles have only attained the stage of authorization. The extent of new line opened in Spain last year was 238⅛ miles. The first Spanish line was that from Barcelona to Mataro, opened in 1848. Between 1844 and 1882—a period of 38 years—the annual average constructive progress made has thus been 142½ miles per annum. The most active period in the annals of Spanish construction must be said to be the years comprised between 1859 and 1866, inclusive. In those eight years 2,685 miles were completed, giving an average of 335⅝ miles per annum. The first rural tramway brought into operation in Spain was opened in 1875, and small additions have been made to this class of line in every subsequent year.

A special train of two coaches, with Mr. W. H. Vanderbilt, Superintendent W. H. Taylor and others on board, ran on the 4th inst. from Amherstburg to St. Thomas, one hundred and eleven miles, in one hundred and nine minutes, running time. J. P. Courtright was conductor, and John A. Arnett, engineer.

A fine new reading-room for the mechanics and general employes of the Grand Trunk Railway Company of Canada, was formally opened on the 2d inst., at Point St. Charles. Mr. Joseph Hickson, the General Manager, presided. The membership, which commenced with one hundred and twenty some years ago, is now six hundred and fifty. There is a good library attached.

The Connecticut Legislature has adopted measures making its general railroad laws more liberal. Permission to bridge navigable waters is given whenever the company has filed with the Secretary of State a sworn statement that there has been expended in construction a sum equal to $10,000 for each mile of its road, between either terminal point of the road and the location of the proposed bridge.

Captain William Pease, of Montclair, N. J., was ejected from a train of the Delaware, Lackawanna and Western Railroad Company because he had refused to pay his fare after the conductor had rejected a ticket he had offered him. Just before he was ejected he reconsidered his refusal and said he would pay. The railroad men paid no attention to this offer, but threw him to the ground, severely injuring him. He sued the railroad company for $5,000 damages, and a jury in the Court of Common Pleas on the 5th inst. gave him a verdict for $3,000. In charging the jury, Judge Van Hoesen said it was the duty of the conductor of the train to receive Captain Pease's fare when he offered to pay it, and to permit him to ride to where he wanted to go. Ex-Judge George M. Curtis appeared for the plaintiff, and Mr. Hamilton Odell for the railroad company.

If possible a railroad station should have such an air of comfort and fitness in it that the heart might be made almost willing to wait a half hour for a belated train. In this, Mr. Wilde is truer than John Ruskin, for Mr. Ruskin declared that all ornamentation placed in or on a railway station was badly located, for the human soul waiting for a train was so forlorn that to offer it the beautiful was like placing a dish of food before a sea-sick dyspeptic. There being a great many happy people at railway stations—persons waiting for a loved one who is only five miles away; persons down to begin a bridal tour; persons there to see the mother-in-law safely off on her home-run—all these welcome a little of the æsthetic, and feel that the railway houses are quite home-like. Inasmuch as Mr. Wilde advocates a universal decoration, he surpasses his guide, but this is the only particular in which the disciple is greater than his master.—Prof. Swing.

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THE RIGHTS AND DUTIES OF STOCKHOLDERS.

THE theory of our law of incorporations supposes that the stockholders exercise some power of approval or dissent upon the actions of the managers; the practice is sometimes far otherwise. Stockholders' meetings are for the most part perfunctory and formal affairs; the real authority and powers of the corporation being exercised by the President and Board of Directors. The directors themselves, however, are commonly mere lay-figures, or subservient counters, with no other or higher function than to ratify the doings of their chief. This being so, there is naturally a sufficient reason for it. The "one man power" has its great advantage in a state of society where even the commerce and industry of a nation are conducted upon principles of free competition; and assumes the character of a subdued warfare where everybody is for himself first, and where the weal of the community is left to be cared for by such poor creatures as the average legislator and judges of courts which remotely, if not nearly, depend for their selections on the popular majority.

An instructive illustration of the power of a minority of stockholders to defy and defeat the wishes of the majority is to be seen in the case of the Central Railroad Company of New Jersey, which has engaged both the finesse of the Stock Exchange and the legerdemain of the courts. There can be but little doubt that the majority of the stockholders are represented by the parties who seek to have an election of officers and directors—popularly known as the Gowen-Garrett party. But their efforts to choose their own officers, that is to say the servants of the corporation, is, for the time being, frustrated by the incumbent directors, a majority of whom never were elected, but are holding under the authority of the board to fill vacancies as they occur. It is hazarding little to say that the policy of the company is, and has been for some time, shaped by persons who are not only not the real owners of the property, but those who have interests opposed to its success. Until the sitting board gets the control, or until some compromise measure is reached, its members do not propose to submit to the will of its owners. The forms of law, the favor of judges, and the possession of the offices and books, help them in this ignoble effort; but the spirit of justice, equity and high honor indicate quite plainly that if these men, with the advantage of their position, their access to its books, and knowledge of its finances, are so distrustful of its future, or so ignorant of its capabilities, or inspire so little confidence as not to have won the owners to their side, or have not themselves become the owners, they are not fit custodians of the property. No better reason need be offered for turning them out than their own attitude of wanting to retain control of a property they had neither the courage nor the ability to get possession of fairly.

Having premised thus much as to the undignified attitude and imbecility of the minority in possession, we can the more freely allow their claim that their conduct is dictated by a desire to prevent an irreparable injury to the property. Their defence doubtless is that they desire to avert the control from Mr. Gowen, as not being a sound manager; or that the property is too valuable to be allowed to pass into the hands of Mr. Garrett. While both of these pleas may be admitted, they do not meet the accusation; the stockholders for the time being are the proper judges of that. To show this it is only necessary to ask, To whose benefit does the policy of the incumbents inure? Nobody's so much as that of the Pennsylvania Railroad Company—the great, the unscrupulous rival of the Central Railroad Company of New Jersey. What has the Pennsylvania ever done for the Central, that the latter can afford to be used as a shield against the powerful rivals of the former? Less than nothing. It agreed to maintain high rates on the Philadelphia competitive traffic, but not at all on terms of equality—on such terms that the Central gets but about five per cent of the passengers, and not one per cent of the freight between the competing points! Moreover, what little exclusive business the Central had it has consented to divide with the more powerful road—as at Long Branch. It does not lie in the power of such management to shrug its shoulders at Mr. F. B. GOWEN's financiering, who in his mistakes never made the graver mistake of surrendering to his rival while he had any ammunition to continue the contest. Nor could the ascendency of the Baltimore and Ohio be any worse for the property or for its settled owners than the present nerveless policy of sailing under the wing of the Pennsylvania monopoly. If the latter desires to buy off the rivalry and competition of the Central it should be willing to, and the directors of the Central should see to it that it does, guarantee say ten per cent dividends upon the stock, as the owners of other roads have done east and west. Without that the Central should seize and hold its independence as something not to be tampered with. The Central seems to have tied hands, and although it has the best approach and water front of all it is unable to make adequate use of it.

As matter of fact the Central should not be put under Mr. GOWEN's management; but it should be worked in concert with the Reading system, and also with the Lehigh Valley. Neither ought it to be under Mr. GARRETT's control, or used exclusively for the Baltimore and Ohio's New York connection. The Reading and Mr. GOWEN have Philadelphia as their objective, just as much as the Pennsylvania. Mr. GARRETT and his system have Baltimore for theirs. The Central Railroad Company of New Jersey has a greater mission than to play a minor part in any such programme. It has the foundation upon which a system can be reared greater and more important than the Pennsylvania is at present, perhaps overshadowing any other New York trunk line if it only gets into good hands. It ought to be independent, and at the same time have a great

southern, western, and southwestern system as tributaries, including the Baltimore and Ohio and the Philadelphia and Reading. The latter reaches Williamsport, and could readily be extended to Pittsburgh and Central Ohio, where it would strike other independent lines traversing the district between the Lakes and Kentucky.

The Baltimore and Ohio will do more or less business to New York; and if it will build the link to Philadelphia, and accord full facilities over it, the Central and Reading can do the same this side of Philadelphia, whether there be a common ownership or not. But the worst thing that can be said of Mr. GARRETT's judgment in this regard is that he is still seeking to piece out this link. He moves slowly; he ought to have had it done long ago. The Reading and Central are the true parties, however, to build that southern trunk line.

Besides the Baltimore and Ohio there is the Norfolk and East Tennessee system of 1,500 miles or more in a similar attitude as to New York business, which may be expected to reach New York via the Shenandoah Valley line, and the Reading from Harrisburg. Then there is the Chesapeake and Ohio system, now covering some 1,500 miles east of the Mississippi, whose eastern business, which does not take the steamer from the ocean terminus, may be expected to reach New York via Washington, D. C. To this may be added the Richmond and Danville system of 1,800 miles, and which also demands an outlet to New York. The Seaboard route will probably ultimately have a ferry across from Norfolk to the Eastern Shore, and so on via Wilmington, Del., for a part of its traffic. It is manifest that the present monopoly of all-rail transportation between Philadelphia and Baltimore, and which is at present virtually extended to New York and Richmond, cannot continue indefinitely; there is too much back country to pour into New York through this very contracted pipe end of the funnel. The managers of the Pennsylvania have hardly the prescience to open in advance their double track road to all carriers, on equal terms, so as to make it virtually a cheap and serviceable highway for all western or southern lines, as well as their own; hence the rival line must come. For the same partisan reasons little better can be expected of Mr. GARRETT. The Central of New Jersey and the Philadelphia and Reading together might step in and do this work, and Mr. GOWEN has some of the qualities for it; but he certainly could not with the business eunuchs of the Central as allies. Mr. GOULD or Mr. KEENE, if so disposed, could doubtless make the Central the most important stem-line in the country, if either would but take hold of the National charter now offered by Congress. Until the man appears equal to this occasion, Mr. ROBERTS has things all his own way; but nevertheless his competitor will come—sooner than some comfortable stockholders expect. Meantime the stockholders of the Central Railroad Company of New Jersey have a duty to perform—not to throw away the magnificent future of their property, but to insist on a change of administration. If they have not in their own ranks a competent adviser, let them hire one.

Reducing the National Debt.

WHILE the determination to pay every dollar of the public debt—one hundred cents to the dollar—is unalterable, there is a growing feeling, not confined to any party, that the present generation is bearing too heavy burdens for the purpose, more than can in justice be demanded of it, when it is considered what this generation has done for the future. The actual debt incurred by the Government for the war was in round numbers $2,700,000,000, but this sum is far from conveying an idea of the actual contributions of the people for this purpose. Beyond this government expenditure, the present generation contributed its final and most precious gift, the lives and services of its men in youth and in their prime. Leaving moral and emotional considerations aside, the more economic sacrifice thus made is with difficulty realized. It is estimated that the total loss on the field and from disease on both sides during the late war amounted to 600,000 men, and that about 400,000 more, by wounds and disease, have been deprived of the full exercise of their powers.

The average annual productive capacity of a man, beyond his own support, in this country is estimated approximately at $300. For twenty years labor the sum would be $6,000, and the total loss in productive labor would amount to $3,600,000,000. If the invalids are considered to retain half their productive power, $1,200,000,000 more must be added for their loss of labor, which, with the actual amount of debt, gives the total direct contribution of the present generation, in so far as it can be estimated, at $7,500,000,000. Even this enormous sum, of course, does not fully represent the extent of the sacrifice that was made during twenty years for the future's good.

Is it surprising, then, in view of these immense losses, that business men and the great producing classes are united in the demand that burdens of taxation, necessary at one time to support the drain of war, be now reduced, and that they ask by virtue of past sacrifice for present relief? What that sacrifice has been tells plainly that selfishness and the spirit of complaint have no part in prompting their petitions. Grateful generations to come can find no fault with the present because they, too, are asked to share a burden assumed by us that they might enjoy greater happiness.

Proud as we have a right to be of the monthly statements of Secretary Folger, the lessons which they suggest are plain and the duty they impose on Congress unavoidable. The time is propitious for action, and public sentiment is strong in its tendency one way. Reduction in custom duties, under present conditions, does not mean the surrender of one jot or one tittle of the protective principle. It means simple justice to those who have already done more than we realize, and who have a right to ask that they should reap, at least in part, the material as well as the moral benefit of the great and costly struggle they carried through to a successful end.—*Albany Evening Journal.*

CONSTRUCTION.

THE Schenectady Locomotive Works, at Schenectady, N. Y., are completing an order for 35 engines for the St. Paul, Minneapolis and Manitoba Railroad.

THE Brooks Locomotive Works, Dunkirk, N. Y., now employ about 1,000 men in the works, which are running night and day. Eighteen engines are turned out every month.

THE Houston East and West Texas Narrow Gauge Railroad is graded to within 6 miles of Nacogdoches, while track has been laid to the Neches River. It is expected that the road will reach Nacogdoches by the 1st of August, if not before.

THE survey of a new railroad from South Mountain to within 6 miles of Carlisle, Penn., has been completed. The road will be 21 miles in length, and it is expected that contracts will be given out next week. The Pennsylvania Railroad Company guarantees the bonds of the new company.

THE St. Louis, Des Moines and Northern Narrow-Gauge Railway over the Des Moines River, 22 miles north of Duluth, is completed. The bridge is known as the long bridge and is the largest structure in the State. It consists of two spans of 175 feet each, the balance of the structure being trestle. Its aggregate length is 2,040 feet from bluff to bluff. The railway track lies 101 feet above low water mark.

AT a meeting of the stockholders of the Shenandoah Valley Railroad Company, held at Luray Va., on the 3d inst., the report of the president and board of directors was read, showing great progress in the construction of the road, which will be completed to Roanoke by June 15, when through trains will be run from Hagerstown to Roanoke, making complete eastern and southern connections. The capital stock of the road was reported at $3,696,200; funded debt at $6,200,000; total $9,896,200, or $39,900 per mile for construction and equipment.

THE Long Island Railroad Company has a large force of men employed laying a second track from Woodhaven to Jamaica. When completed the road will be a double track from Flatbush avenue, Brooklyn, to Jamaica. A double track is to be laid on the Montauk Railroad from Van Wyck avenue, Jamaica, to Springfield, and when completed the track now in use from Rockaway Junction to Springfield will be abandoned. Surveyors in the employ of the company are engaged in running a line for the extension of the South Shore Railroad

from Syosset to Huntington, through Cold Spring.

The New York, Susquehanna and Western Railroad Company, as at present constituted, is composed of the Midland Railroad Company of New Jersey, the Paterson Extension Company, the Midland Connecting Company, the North Jersey Railroad Company, the Water Gap Railroad Company and the Pennsylvania Midland Railway Company. The report of the directors, which was presented at the recent annual meeting of the stockholders in Jersey City, shows that the Paterson Extension Branch, running from the main line into the heart of the City of Paterson, has been completed and is in successful operation. The new connecting line from Two Bridges, near Odgensburg, Sussex county, N. J., is in process of construction, and the company expects that it will be finished by August 1. It runs from Two Bridges to Stroudsburg, Penn., and thence 3 miles west, connecting with the Delaware, Lackawanna and Western Railroad, by which the coal mined in the Susquehanna and Western's coal fields in the Lackawanna Valley is brought to the company's line. Thence it is to be transferred to West End (Marion), near Jersey City, and under the same contract with the Delaware, Lackawanna and Western is to be transported to the Hoboken coal docks at tide-water. The annual output of coal next year and the year thereafter under the arrangement is to be 1,800,000 tons, with an increase at the expiration of the two years. Under the consolidation arrangement of the several companies, the united organization was authorized to issue $10,000,000 of preferred stock, and $20,000,000 of common stock. An enactment was secured last winter in the New Jersey Legislature which enabled the company to reduce the amount of stock, and by agreement of the stockholders the common stock has been reduced from $20,000,000 to $13,000,000 and the preferred stock from $10,000,000 to $8,000,000.

ORGANIZATION.

At the annual meeting of the American Seaman's Friend Society, held in this city on the 8th inst., the following officers were elected: President, R. P. Buck; corresponding secretary, Rev. Dr. Samuel H. Hall; treasurer, Wm. C. Sturgis; assistant treasurer, L. P. Hubbard; trustees, for three years, R. P. Buck, Wm. A. Booth, Rev. E. D. G. Prime, Horace Gray, Reuben W. Ropes, Daniel Barnes, Wm. F. Lee, and Wm. De Groot.

The incorporators of the "The Brooklyn and Up-Town Ferry Company," whose articles of incorporation were filed in the County Clerk's office on the 3d inst., are Edmund McLoughlin, Wyatt M. Bassatt, Jeremiah Darling, Benjamin Flint, Ambrose Snow, Stephen F. Shortland, Sinclair Stuart, George W. Roosevelt, Robert Sullivan and Daniel S. Remsen. The capital stock is fixed at $1,000,000. It is intended to run the boats from the foot of East Fourteenth street, in this city, to the foot of Broadway, Brooklyn, E. D.

At the annual meeting of the stockholders of the Eastern Railroad in New Hampshire, held on the 4th inst., the following board of directors was elected: Moody Currier, Dexter Richardson, Francis Thompson, Edward L. Giddings, Edward A. Abbott, William H. Goodwin, Frank A. Philbrick. At a subsequent meeting of the directors, Moody Currier was elected president, and William H. Hacket, clerk. The treasurer, Edward A. Abbott, presented the annual report for the year ending April 29, 1882, which showed a balance of $3,438.19.

At the annual meeting of the Lake Shore and Michigan Southern Railway Company, held in Cleveland, Ohio, on the 3d inst., all the old board of directors was re-elected, as follows: William H. Vanderbilt, Cornelius Vanderbilt, William K. Vanderbilt, Augustus Schell, Samuel F. Barger, John E. Burrill, D. O. Mills, of New York; Amasa Stone, Henry B. Payne, of Cleveland; William L. Scott, Charles M. Reed, of Erie; Rasselas Brown, of Warren, Penn.; Albert Keep, of Chicago. The directors organized by re-electing all of last year's officers of the board and of the road.

The annual election for officers of the New York Stock Exchange took place on the 8th inst. The regular ticket, which was elected, embraced the names of:—President, F. N. Lawrence; chairman, James Mitchell; vice chairman, Alexander Henriques; treasurer, D. C. Hays; secretary, B. O. White; trustee of the gratuity fund for five years, James M. Fuller. Governing committee, for four years, Donald McKay, Henry Meigs, A. Wolff, Jr.; Nelson Robinson, Clarence S. Day, Randolph Keppler. William Adams, Thomas Denny, James D. Smith and N. W. T. Hatch; for two years, W A. Bowron; for one year, Charles M. Stead.

At a meeting of the subscribers to the New York Iron and Metal Exchange, held in this city on the 3d inst., the committee appointed to secure a charter reported that the bill had been introduced in both houses of the Legislature. The following officers of the association were elected: President, Jordan L. Mott; vice-president, M. B. Flynn; treasurer, Tallmadge Delafield; managers, William W. Snow, Carl Mayer, Edward B. Bartlett, B. B. Lyman, Henry A. Rogers, Palmer Budd, Edward P. White, J. P. Robinson, Jr., William T. Gummey, Aliston Gorry, John D. Frazer, Edward Hill. A committee of five to make arrangements for suitable rooms was appointed.

The Atlantic and Pacific Interocean Railroad Company, which was incorporated under the laws of this State on the 18th ult., organized on the 3d inst. by the election of the following officers:—President, Nathaniel P. Banks; vice-president, John I. Waterbury; secretary, Chas. J. Canda, and treasurer, Joseph L. Hance. The officers, together with Conrad N. Jordan, John B. Woodward and George W. Smith, constitute the Executive Committee. The company was formed to build a railroad across Central America from Port Cortes, on Honduras Bay, to Fonseca, on the Pacific—a distance of 234 miles according to the route surveyed. Of this, thirty-eight miles of road are in operation. The company has a large concession from the Honduras Government.

At the annual election of the New York Law nstitute on the 8th inst. the following officers and members of the standing committees were chosen: President, Charles Tracy; first vice-president, Samuel Blatchford; second vice-president, Stephen P. Nash; treasurer, Cornelius Van Santvooyd; recording secretary, Joseph S. Bosworth; corresponding secretary, Benjamin D. Silliman; librarian and assistant treasurer, Aaron J. Vanderpoel. Library committee—Edmund Terry, Thomas H. Rodman, Samuel Brown, Edward Patterson, James C. Carter, William Watson, Thomas M. North and Everett P. Wheeler. Committee on jurisprudence—William M. Evarts, George De Forest Lord, Ashbel Green, John E. Burrill, Charles F. Stone, Enoch L. Fancher and Edmund Wetmore. Committee on censorship—Frederick R. Coudert, Charles F. Southmayd, John McKeon, Clarence A. Seward, Benjamin T. Kissam, Henry D. Sedgwick, William H. Arnoux, Rocellus S. Guernsey and Ira D. Warren.

INCORPORATION.

The Laconia Car Company, of Laconia, N. H., formerly doing business as partners, has formed a stock corporation with $60,000 capital and the following officers: Perley Putnam, president; John C. Moulton, treasurer; John C. Moulton, Perley Putnam and G. M. G. Moulton, directors.

Articles of incorporation of the Pittsburgh, Cleveland and Toledo Railroad Company were filed in the office of the Secretary of State at Columbus, Ohio, on the 2d inst. The capital is $2,900,000. The incorporators are: Wm. J. McKinnie, George J. Margerum, Wm. J. Hitchcock, Lucius E. Cochran and William C. Agnew. The line of the road and works of said company shall be located as hereafter specified, and its principal business shall be transacted at the city of Youngstown, in Mahoning county, Ohio. The termini of said line of road shall be a point in the east line of the State of Ohio in the township of Poland, in Mahoning county, about 100 feet north of the center line of the Pittsburgh and Lake Erie Railroad, as now constructed and operated, and the western termini thereof shall be a point in the line of the New York, Pennsylvania and Ohio Railroad, and the Wheeling and Lake Erie Railroad, at or near Pike station, in Canaan township, Wayne county, O.; and passing through the counties of Mahoning, Trumbull, Portage, Summit and Medina, and into the county of Wayne, O.

Skill in forecasting the weather has reduced the number of ocean disasters materially. The British Board of Trade reports that in the year ending June 30, 1877, 1,805 wrecks could be attributed to the weather; in the year ending June 30, 1878, the number of wrecks traced to the same cause was 1,429; the next year witnessed a reduction to 1,109; and in 1880, a further reduction to 891. These beneficent results of the work of the weather bureau have led to the enlargement of the scope. In order that more data may be obtained regarding storms, etc., British sea captains are required to take meteorological observations during their voyages and send the charts which they make out to the London meteorological office. These ocean charts will supplement very materially the observations made at the signal stations on the land.

Yokohama Stock Exchange.

A CORRESPONDENT of the San Francisco *Chronicle*, writing from Yokohama, Japan, says that Yokohama has its stock board that is as pregnant with loss and disaster as any of the institutions that have proved the gateway to ruin to so many thousands in San Francisco. Kinsats, or the irredeemable paper currency of the empire, is the gamble, and it assumes large proportions. The building devoted to this curse is large and ample enough to admit a large crowd, is well filled by men and boys connected with the different brokers' establishments, and it is a perfect pandemonium when in session. Three boards are held daily, and the fluctuations of the quotations are rapid enough to suit the veteran dealer. Transactions are limited to the minimum of $1,000, but the maximum is unlimited. It is amusing to see the secretary of the institution take down the transactions, which he does with his Japanese pencil, making his characters and signs, about eight inches long, with the rapidity of a steam-engine, devoting a page to each sale. There is no caller; sales are effected in the same clamorous manner as in all institutions of the kind, in front of the stand occupied by the secretary and other officers in charge, who register the transactions as reported to them.

"I have visited the exchange several times. The doors are open to all who wish to enter either on business or from curiosity. The same scene is witnessed on the opening of business that used to be seen at the Pacific when things were booming on the Comstock. The messenger boys, who have been on hand, make a rush for the door and scatter like leaves in an autumn gale—taking the quotations to their employers. Every month during the past year the price of kinsats has fluctuated between 163 and 180. I suppose somebody must make money, but, so far as I am able to learn, most all of the foreigners who have dabbled in this kinsat gamble have had their fingers burned, and many of them to the tune of thousands of dollars."

Black Birch as a Substitute for Black Walnut.

BLACK birch, which is rapidly coming in favor, is a close-grained and very handsome wood, and can be easily stained to resemble walnut exactly. It is just as easy to work, and is suitable for nearly, if not all, the purposes to which black walnut is at present applied. Birch is much the same color as cherry, but the latter wood is now very scarce, and consequently dear. It is a difficult thing to obtain cherry at $50 a thousand feet, while birch wood can be had at any saw-mill for $1 per thousand feet. When properly stained it is almost impossible to distinguish the difference between it and walnut, as it is susceptible of a beautiful polish equal to any wood now used in the manufacture of furniture. In the forests throughout Ontario birch grows in abundance, especially if the land is not too boggy. There is a great difference in the wood of different sections. Where the land is high and dry the wood is firm and clear, but if the land is low and wet the wood has a tendency to be soft and of a bluish color. In all the northern regions it can be found in great abundance, and as the tree grows to such a great size, little trouble is experienced in procuring it in large quantities. —*Toronto Globe.*

Anti-Chinese Legislation.

THE anti-Chinese bill in its new form has passed both houses of Congress by more than a two-thirds vote. As amended it reduces the period during which the immigration of Chinese is suspended to ten instead of twenty years. It modifies the passport and registration features of the vetoed bill, but applies to skilled and unskilled laborers alike the ban of exclusion contained in the former bill. It is in some respects a more carefully digested piece of legislation, and more likely to prove efficient in excluding such Chinese as may attempt to enter the country overland, by way of Mexico on the one hand or Canada on the other.

Looked at in its larger aspects, the anti-Chinese bill is an important piece of legislation, as it is a formal discardal of the weak and sentimental optimism which refused to recognize the possibility of there being any race of foreigners of too poor material for citizenship in the United States. It recognizes American citizenship as a boon of no inconsiderable value, to be bestowed only on such as come up to a certain standard of moral and intellectual character. Taking our Fourth-of-July orators at their word, foreign governments have been quite ready to ship to our shores paupers and jail-birds of every country and every clime. That class of immigrants we have learned to send back to the European taxpayer to support, and the discrimination thus begun is extended by the anti-Chinese bill, with the view of applying to American laborers the same "protection" that is at present enjoyed by American manufacturers.

The objection to the Chinese immigrants, however, is not that they are paupers or criminals; and the few that reach the Eastern cities are orderly, industrious, and by no means "cheap" in their charges for work. On the other hand, they are not numerous enough on this side to be considered a factor in the labor market, and can do nothing to affect the prices of labor here. The reason why the 1,009,390 whites of the Pacific coast object to the admission of vast hordes of Chinese may be briefly stated as follows: Their low standard of living enables them to exist and make money on wages which will barely keep the soul and body of an Anglo-Saxon together. They therefore first underbid in the labor market, and afterward, when they have accumulated capital and become employers and manufacturers, undersell in the goods market, thus driving out of competition the citizen, whose conception of living is higher and more progressive. They cannot be counted on as consumers of the products of others, though effective enough as producers of wares, such as clothing, shirts, boots, cigars, laundry work, garden stuff, &c. Their subordination to close corporations, with whom they have contracted for transportation home after death or on the acquisition of wealth, is objected to, such subordination causing them to obey the mandates of the "Six Companies" rather than the laws of the United States. The fact that there are no Chinese *wives* brought over, except perhaps by the wealthy, is because the Chinaman does not come to settle, learn our laws, adopt our customs and become an American in any sense, as other immigrants do, but comes on an "industrial predatory tour" to make his money and return with it when made to China: in a word, he is viewed on the Pacific coast from the industrial point of view as an invincible parasite upon the body of American labor, and politically as "a non-assimilable dose" which American society cannot digest. Remedial measures are therefore thought to be imperatively necessary.—*Baltimore Sun.*

Palace Cattle Cars.

SIX new cars of the "Montgomery Palace Stock Car Company" have arrived at Baltimore from Milton, Penn., where they were built. They are intended, with others up to the number of 25, for service on the lines of the Baltimore and Ohio Railroad. The Company was chartered in New York, and Messrs. Robert Garrett and other Baltimoreans are stockholders. These palace cars for cattle are of buff color, are 32 feet long, 9½ feet wide, and considerably above the usual height. Each car is fitted for 16 head of cattle, and feeding-troughs and pipes for drinking-water are among the attachments. The feed boxes are at the top, and by a drop-bottom process the feed is emptied into the trough. The water is drawn through rubber hose from the tanks on the lines of road where the locomotives are supplied. The cars take the Janney coupler, and the Loughridge air-brake is to be added at the Mt. Clare shops. The Baltimore and Ohio is first to give this style of car a trial.

THE New York Court of Appeals, in a decision rendered on the 2d inst. refusing to enjoin a Coney Island Steam Railway Company from using steam as a motive power to the end of Atlantic avenue at the ferry, has substantially authorized the general use of steam in cities as a motive power. This decision is obviously founded on common sense. Locomotive engines under proper control are no more to be ruled out of use because the use of them may here and there be an annoyance, than stationary engines.

A DECISION was filed at Harrisburg, Penn., on the 1st inst., by Judge McPherson, in favor of the Lehigh Valley Railroad Company in the suit brought by the State for the recovery of $135,932 taxes due on the Company's bonds for 1880 and 1881. The Court held that the law of 1879 did not impose a tax, but merely fixed a rate which is to be assessed at the actual and not the par value of the bonds, and until furnished an assessment the company could make no deduction for taxes when paying interest to its bondholders. The decision further recited that, as owners of the bonds in the several counties have already paid to the Commonwealth the assessment levied upon the said bonds, the corporation which issued the bonds cannot be held liable for any other further tax.

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Grand Trunk and Great Western Railways.

A REPORTER of the Montreal *Gazette* called on the 3d inst. upon Mr. Joseph Hickson, the General Manager of the Grand Trunk Railway, to inquire if he had information respecting the projected fusion of the Great Western and Grand Trunk railways which he was at liberty to communicate to the public.

MR. HICKSON—The newspapers know, I think, as much as I do on the subject. The shareholders of the Great Western seem to be in earnest in desiring an arrangement with the Grand Trunk, and I have no doubt they will succeed in devising ways and means of bringing it about.

REPORTER—What will be the effect of the arrangement on the trade of Canada?

MR. HICKSON—I have no hesitation in saying that the country will be better served, and in the end at less cost than under the present condition of things. The national interest in many ways will be promoted, and notably in the development of the trade of the St. Lawrence and the Canadian ocean shipping.

REPORTER—But what will be the effect on the American railway connections of the Great Western, and more particularly the roads controlled by Mr. Vanderbilt?

MR. HICKSON—The policy of the Grand Trunk Company is to maintain friendly relations with the American lines, and I feel certain they would be more unwilling to disturb the friendly relations of the Great Western with the Michigan Central and New York Central companies, and personally I do not see the least necessity for their doing so, arising out of any material interest of the company.

Tombstone Mill and Mining Co.

THE annual report of the superintendent of the Tombstone Mill and Mining Company for the year ending March 31, 1882, which has just been received, shows that the total yield of the company's mines for the year was 29,211.66 tons of ore, the approximate market value of which was $1,376,047.12, or an average of $45.60 silver and $1.74 gold per ton. The average value of the ore from the beginning of operations has been $60.47 per ton. The total outlay for the year for work and materials was $684,412.21, and the cost of mining and milling $23.43 per ton. The present outlook for ore the superintendent considers exceedingly good. Large quantities of ore remain in the Combination ore body, the Toughnut 160 foot ore body, and below the 250-foot level of Goodenough. During the year the Corbin mill was changed entirely to wet crushing, the Gird mill received five new stamps and an engine, and other changes were made, increasing the capacity of the mills from 60 tons to 115 tons of ore per day. The company now has about 50,000 tons of tailings at the mills, which are estimated to contain about $15 worth of silver, gold and lead per ton. From these tailings eight tons of concentrates are now being obtained daily, containing about 20 per cent lead and 50 to 75 ounces silver per ton. About 55 per cent of the value of the tailings is obtained in the concentrates, but this yield will shortly be materially increased by a new method of operation. A circular of the directors of the company, accompanying the report, states that the bullion yield of the mines for the first three weeks of April was $73,000. The net indebtedness of the company on April 29, as shown by the circular, was $349,951.09. The directors have continued to pay, from the net product of the mines, regular monthly dividends, rather than appropriate the amount to the extinguishment of this debt, "considering the tailings beds an asset more than sufficient for that purpose, in which assumption subsequent developments justify them." Two plans have been before the board for the application of these beds to the payment of the debt—first, "that the company should temporarily suspend dividends, and, so long as should be necessary, apply the net proceeds of the mines to the purchase of sufficient concentrating and smelting machinery to rapidly work up the 50,000 tons of tailings now in the beds, and those accumulating at the rate of 30,000 tons yearly;" second, "to sell the tailings beds to a company to be formed for that purpose, for a sufficient amount of money in cash to pay off the whole of the company's indebtedness, the stock of the new company to be divided into 500,000 shares, in order to allow each stockholder in the present company the option of subscribing pro rata for stock in the smelting company." The circular states: "The necessary mill, smelter and additional concentrators will be at once ordered by this company; the whole cost of such plant to be refunded by the smelting company, should such be formed. And your board has deemed it wise to suspend dividends until this additional concentrating and smelting plant shall have been put in operation and fully paid for, or the tailings beds sold as suggested." Of the nine claims owned by the company only two have been extensively worked, and the deepest workings have not gone below 300 feet.

Finances of the Philadelphia and Reading Railroad.

AT a meeting of the bond and share holders of the Philadelphia and Reading Railroad Company, held in London on the 21st ult., President Gowen, who was present and addressed the meeting, is reported to have said that the company had sustained a loss of about $5,000,000 through the litigation brought on by the McCalmonts, but he believed this would be recovered after the company was free from trouble. As to the financial condition of the company, he said they could in any year pay off $30,000,000 of their indebtedness, which now bore 6 and 7 per cent interest. In December, 1880, their floating debt amounted to $10,464,000, but it had since been reduced to $9,682,000. To provide for the payment of that floating debt—by which alone they would reduce the fixed charges by between $600,000 and $700,000—the company made an issue of deferred income bonds, which would produce several hundred thousand dollars more than enough to pay it. Of the $34,300,000 of deferred income bonds sold, the first installment had been paid as regarded $26,000,000, but as to over $7,000,000, the installment had not been paid, in consequence of the doubt thrown on the legality of the issue by the decision of the Court.

The present amount of floating debt was about $8,000,000, and the remaining instalments on the deferred income bonds would very much more than pay that. The next step was the reduction of the fixed charges by substituting a security bearing a lower rate of interest for one now bearing a higher rate. The Board of Managers had authorized the creation of a mortgage debt of $160,000,000. The total funded indebtedness of the Coal and Iron and railroad companies, including the debts and the capital of the various leased lines on which the company paid dividend and interest, amounted to $151,000,000, including $5,000,000 of general mortgage bonds not issued to the public, but which had been outstanding collateral for the floating debt. Deducting that $5,000,000 there was left $146,000,000, on which the company was paying 6 and 7 per cent interest. Their present annual fixed charges amounted to $9,200,000 in round figures. The general result of the plan they would adopt would be that in the course of a few years these charges would be reduced at any rate to $8,000,000. There would thus be a saving of $1,200,000 in annual fixed charges, and of nearly $700,000 in respect of floating debt interest. These savings alone amounted very nearly to 6 per cent interest on the share capital of the company, irrespective of any increase of net earnings.

The general mortgages outstanding amounted to $16,686,000, but they had the right at any period of the annual drawings to increase the sinking fund to any amount and out of any funds. The drawing must take place in May, but it would be practically unnecessary to go through that formality. They need not determine whether they would pay the general mortgage until the end of May or the beginning of June, the period for payment being the first of July; and whether they paid it this year or next would depend entirely on the price they could obtain for the new securities. If they felt convinced that they could in future get 5 or 10 per cent more for the principal of new securities it would be wise to wait until that price could be realized, rather than sell them for less in order to save 1 per cent for one year. He was, however, hopeful of paying the general mortgage bonds. Apart from them there were 6 and 7 per cent obligations, some of which matured on the 1st of July, while they could pay off the others at any time. They must, however, be paid off before any dividend was paid to the shareholders. There were income mortgage bonds, 7 per cent obligations, amounting to $2,454,000, and they proposed to include them in the sums to be paid off between now and the 1st of July. He concluded by saying that the Company would be ready by the 1st of July to meet every obligation and be freed from the receivership.

"WHAT did you say the conductor's name is?" "Glass—Mr. Glass." "Oh no!" "But it is!" "Impossible—it can't be!" "And why not, pray?" "Because sir, Glass is a non-conductor!" Deafening applause from the scientific passengers.

The Stock Exchanges and Money Market.

New York Stock Exchange.

Closing Prices for the week ending May 10.

	Th.4.	F.5.	Sat.6.	M. 8.	Tu.9.	W.10.
Adams Express			141½	142	140⅝	
Albany and Susq.			134			
1st mortgage						
2d mortgage			105			
American Express		95¼	95		95	95
Burl., C. R. & Nor.				79		
1st mortgage 5s		102½	102½	102½		102¾
Canada Southern	52	52	51¾	51¾	51½	51
1st mortgage guar	96	96¼		95⅞		96
Central of N. Jersey	69⅜	71⅜	72¾	70¼	71⅛	71
1st mort. 1890	118				118	
7s, consol. ass	111½	111½		111	110¼	110¾
7s, convertible ass.	110½	110⅛	111	110		
7s, Income		90				
Adjustment		106		106		
Central Pacific	90¼	90½	90¾	90¼	90½	90
6s, gold	116¾	116½	116⅞		117	
1st M. (San Joaq)	108½				109	
1st M. (Cal. & Or.)						
Land grant 6s					105¾	
Chesapeake & Ohio	23½	23½	23¾	23¾	22¾	
1st pref	31½	32½	33	33¼	32	32¼
2d pref	24¾	24¾	25¼	24¾		
1st mort., series B	79¾		81	81¾	81¼	80¼
Chicago and Alton	133½	133	133½	134	133½	133½
Preferred						
1st mortgage						
Sinking Fund	112	112	111			112¾
Chi,, Bur. & Quincy	133	133⅛	133¼	133¾	132¾	132
7s, Consol. 1903	129			129	129	
Chi., Mil. & St. Paul	113	113¼	113½	112½	112⅛	112⅛
Preferred	121¾	121⅞	122	122	121½	
1st mortgage, 8s	134½					
2d mort., 7 3-10s						
7s, gold			127			
1st M. (La. C. div)						
1st M. I. & M. div.)						
1st M. (I. & D. ext.)						
1st M. (H.&D. div.)	118	118		118		118
1st M.(C. & M.div.)					125	
Consolidated S. F.				122½		122⅛
Chi. & Northwestern	129¼	129¼	129½	129	129⅛	128¾
Preferred	140	140¾	140¼		140	140½
1st mortgage						109
Sinking Fund 6s	110½					
Consolidated 7s	133	133		133	134	
Consol. Gold bo'ds	128⅝					
Do. reg						
Chi., R. Isl. & Pac.	131	131⅛	131¼	131	130⅜	129⅞
6s, 1917, c						
Clev.,Col.,Cin.&Ind.	72½		73½	74	76	74
1st mortgage						
Clev. & Pittsburg gr.						
7s, Consolidated						
4th mortgage						
Col.,Chi.,& Ind. Cent	11¼		12⅛	12	12	12¼
1st mortgage						120
2d mortgage						
Del. & Hud Canal.	105⅛	105⅛	105⅛	105⅛	105⅝	105¾
Reg. 7s, 1891						
Reg. 7s, 1884						107
7s, 1894			117			
Del.,Lack.& Western	118⅞	119⅝	122	121¼	120¾	128⅞
2d mortgage 7s						
7s, Consol. 1907						
Erie Railway						
1st mortgage	127½		127½			127⅛
2d mort. 5s, ext.						
3d mortgage	104⅛		104⅝			105
4th mort. 5s, ext.						
5th mortgage			112		112	
7s, Consol. gold		126⅝	126⅝	126⅞	126⅞	
Great West. 1st mort		109⅛			109½	
2d mortgage	101¼		101	101		101⅛
Hannibal & St. Jo.						
Preferred	86½		85½		85	84
8s, Convertible	106					
Houston & Tex. Cen	73		74¼	73		
1st mortgage				112	111⅞	
2d mortgage						120
Illinois Central	136⅝	137	137	137	137	
LakeShore&MichSo	103⅛	103¼	103¾	102⅝	102¼	102⅞
Consol. 7s						
Consol. 7s, reg						
2d Consolidated			125½			
Leh. & W. B. con.ass	104⅛		106	106		106
Long Dock bonds						
Louisville & Nash.	77½	77¾	77⅝	76¾	76⅜	75⅞
7s, Consolidated					118	118
Manhattan			49½	51⅛	53⅛	55⅛	54⅛
1st pref	90		90¼		90⅜	
Met. Elevated		87½		87		
1st mortgage	102	101¾	102		101⅞	
Michigan Central	84¾	85¼	86	86	86¾	87
7s, 1902		124⅞			125⅛	
Morris & Essex	125	124½	124	124¾		
1st mortgage	135½					
2d mortgage						
7s of 1871	122½					
7s, Convertible						
7s, Consolidated					126	
N.Y. Cen. & Hud. R.	126¾	127½	127⅞	127½	126½	127⅜
6s, S. F. 1883						
6s, S. F., 1887				110½		112
1st mortgage						
1st mortgage, reg.	134				134	
N. Y. Elevated						
1st mortgage				118	118½	
N. Y. & Harlem						
Preferred						
1st mortgage						
1st mortgage, reg						131⅛
N. Y., Lake Erie & W	36½	36¾	36⅝	36	35⅝	35⅞
Preferred	72½	72⅝	72⅞			
2d Consolidated	94⅜	94¼	94⅜	94¼	94½	94⅝
New 2d 5s fund		91	91			91
N.Y.,N.Hav'n&Hart			180	179¾		177
North Mo. 1st mort		121	121½			
Northern Pacific	40½	41	41¾	40⅜	40	40⅞
Preferred	78¾	79⅛	80¼	79¼	78½	79
Ohio & Mississippi	32½	33½	34⅛	35	33	33
Preferred			105	100		
2d mortgage		118				118¼
Consolidated 7s						
Consol. S. Fund			118½			
Pacific Mail S. S. Co	40¾	40¾	43	42¾	43¼	42¼
Pacific R. R. of Mo.						
1st mortgage	108		105			
2d mortgage			115⅛			
Panama					204	
Phila. & Reading	57½	57⅝	58⅝	57	57½	58¼
Pitts,Ft.W.&Chi.gtd	136		135¾			136½
1st mortgage						
2d mortgage						
3d mortgage		130	130			130
Pullman Palace Car	125			125	123½	122
Quicksil'r Min'g Co		12	12	12	11	
Preferred		58		58	57⅞	58
St. Louis & San Fran		38¾	38			
Preferred	51	51½	51½		51	
1st Preferred						88½
St. L., Alt'n & T. H.	28½		28½		26¼	
Preferred	70	69¾		64		
1st mortgage						
2d mort. pref			108⅞			
Income bonds						
St. L., Iron Mt. & S						
1st mortgage	117½	117¾			117	
2d mortgage			107		107	
Toledo and Wabash						
1st mortgage						
2d mortgage	101					101
7s, Consolidated						
St. Louis Division			103½			
Union Pacific	112¾	112⅞	113⅝	113¾	113¼	113⅜
1st mortgage	117¾	117¾	117⅞		117¾	117¾
Land Grant 7s			113			
Sinking Fund 8s			121			
United States Ex				73	72½	
Wabash, St. L.& Pac	30¾	31¼	31⅜	29⅞	29⅞	30
Preferred	54¾	55¼	54⅞	51⅝	52	52⅜
New mort. 7s						
Wells-Fargo Ex	128¾		128		126	
Western Pacific b'ds						
Western Union Tel.	83⅝	84⅜	85⅛	84⅝	83⅞	84⅜
7s., S.F conv., 1900						
FEDERAL STOCKS:—						
U. S. 4s, 1907, reg	120¾	121⅛	121⅜	121⅝	121¼	121½
U. S. 4s, 1907, coup		121⅜		121⅛	121¼	
U. S. 4½s, 1891, reg					114⅝	
U. S. 4½s, 1891, coup						
U. S. 5s, cont'd at 3½			101⅞	101⅛		101½
U. S. 6s cont'd at 3½	101¼	101¼				
Dt. of Col. 3-65s, reg						
Dt. of Col.3-65s,coup						

Boston Stock Exchange.

Prices for the Week Ending May 10.

	Th.4.	F. 5.	Sat.6.	M.8.	Tu.9.	W.10.
Atch.,Top.&San.Fe.	86⅛	87½	87⅞	87¼	86⅞	86¼
1st mortgage						
Land Grant 7s	114	114				
Boston & Albany	165		165	165	166	166
Boston and Lowell		102	102½	102½		
Boston & Maine				143¾		
Boston& Providence	163½					
Bos'n,Hart.& Erie7s	49¼	50¼	50	50½		
Burl.& Mo.R.L.G.7s						
Burl.& Mo.R.in Neb						
6s, exempt	109⅞					
4s						
Chi.,Burl. & Quincy	133¼	132⅞	133⅜	133½	132⅞	132⅜
Cin.,Sand&Clev($50)	26⅛	27¼	27⅜	27⅝	27¼	26⅝
Concord ($50)	97½x					
Connecticut River						
Eastern	39	39	39¼		38½	
New 4½ Bonds	107½		107½	108	108	
Fitchburg						
N.Y. & New England		47⅜	48	48¼		47⅛
7s	114		115	114⅜	114⅛	
Northern N. H.						
Norwich&Worcester					160	
Ogden & Lake Cham		35			35	
Old Colony	133	132		132¼		133
Ph.,Wil.&Balt.($50)						
Portl'd,Saco & Ports						
Pueblo & Ark Val 7s	112⅝		113	113¼		113
Pullman Palace Car	125			126		126
Union Pacific	112¾	113⅛	113¾	114⅛	113¾	113¼
6s						116
Land Grant 7s						
Sinking Fund 8s	119				119	
Vermont & Mass						
Worcester & Nashua					58	58
Cambridge (Horse)			111¾			
Metropolitan(Horse)	74					
Middlesex (Horse)						
Cal.&Hecla Min'gCo			238	238		
Quincy		55	54	54⅛	54	53¾

Philadelphia Stock Exchange.

Closing Prices for the Week Ending May 9.

	W. 3.	Th.4.	F. 5.	Sat.6.	M.8.	Tu.9.
Allegh'y Val. 7 3-10s						
7s, Income		52				
Buff., Pitts & West.	15¾	16	16¾	16¾	16¼	16½
Camd'n & Am. 6s, '83						
6s, 1889						
Mort. 6s, 1889						
Camden & Atlantic						
Preferred						
1st mortgage			120			
2d mortgage						
Catawissa	22⅛		22			
Preferred			55			
2d pref			54		52¾	
7s, new						
Del. & Bound Brook						
7s						
Elmira&Williamsp't						
Preferred						
Hunt. & B. Top Mt.		12	11¾	11⅞	12	
Preferred	24	26¼	26¼			
2d mortgage						
Lehigh Navigation	38⅛	38¾	39⅛	39¼	38⅞	39
6s, 1884		105	105¼		105¼	
Gold Loan						112¾
Railroad Loan						115¾
Conv. Gold Loan						109½
Consol. Mort, 7s,						
Lehigh Valley	60⅛	60½	61	61	60½	60¾
1st mort. 6s, coup						
1st mort. 6s, reg			123½			
2d mort. 7s			133			
Consol mort. 6s						
Consol.mtg.6s,reg						121½
Little Schuylkill	57			58		
Minehill&Sch.Hav'n						63½
North Pennsylvania	64	64			64	64
1st mortgage 6s						
2d mortgage 7s		118		118		
Genl. mtg.7s,coup						
Genl. mtg. 7s, reg						
Northern Central						
5s				98		98
Northern Pacific	40	40½	41	41⅜	40¾	40⅝
Preferred	78¼	78½	79¼	80⅛	79¼	78½
Pennsylvania R. R.	58	57¾	58	58¾	58⅜	58¼
1st mortgage						
Gen'l mort						
Gen'l mort reg						
Consol. mort. 6s						
Consol. mort. reg						
Pa. State 5s, new						118½
do 4s, new						
Phila. & Reading	28½	28¾	28¾	29¼	28⅝	28⅝
1st mortgage 6s	122¾					
7s of 1893						
7s, new convert				75	75	
Consol. mort. 7s		125¼				
Consol. mort. reg						
Gen'l mort. 6s	98	98¼	98¼	98¼	98¼	98¼
Def.Income bonds						
Philadelphia & Erie					14¾	
1st mortgage 5s						
2d mortgage 7s			117			
Pittsb.,Cin.&St.L.7s	118½		118¼		118½	
Pitts.,Tit.&Buff. 7s,	96		96½			
Schuylkill Navi't'n						
Preferred	13	13			12¾	13
6s, 1895		65			66	
6s, 1882	91	92				
United Co. of N. J.	187¾	188	188	188	188	188
Hestonville, (Horse)	17¼	18		18¾	18¾	19
Chestnut&Wal.(do)						
Green & Coates (do)						

Baltimore Stock Exchange.

Closing Prices for the Week Ending May 9.

	W. 3.	Th. 4.	F. 5.	Sat. 6.	M. 8.	Tu. 9.
Baltimore & Ohio..	.....	.....	.....	193	.....	.....
6s, 1885.....	.....	.....	.....	.....	.....	.....
Central Ohio ($50)..	...	.....	.....	.....	.....	.....
1st mortgage.....	.....	.....	.....	.....	.....	.....
Marietta & Cincin'ti	.....	.....	.....	.....	.....	.....
1st mortgage, 7s..	.....	.....	.....	.....	125	....
2d mortgage, 7s..	.....	.....	.....	.....	.....	.....
3d mortgage, 8s..	.....	.....	.....	54	.....	.....
Northern Cen. ($50)	49	.....	.....	.....	.....	.....
2d mort., 6s 1885..	.....	.....	.....	109	108	.....
3d mort., 6s, 1900.	.....	.....	.....	.....	.....	.....
6s, 1900, gold.....	.....	.....	.....	.....	.....	.....
6s, 1904, gold.....	.....	.....	.....	.....	.....	.....
Pitts. & Connellsv. 7s	.....	124	.....	.....	.....	.....
Virginia 6s, Consol.	63½	64	66	65½	66	66¼
Consol. coupons..	.....	.....	63	.....	.....	65
10 40 bonds.....	42¾	42¾	43½	43¼	.....	43½
Def'd Certificates.	.....	.....	12½	.....	.....	.....
Western Maryland..	.....	.....	17	.....	.....	17
1st M., end. by Balt	.....	.....	.....	.....	.....	.....
2d M. do	.....	.....	.....	.....	.....	.....
3d M., do	.....	.....	.....	.....	.....	.....
1st M., unendors'd	.....	.....	.....	.....	.....	.....
2d M., end. WashCo	.....	.....	.....	.....	.....	.....
2d M., preferred..	.....	.....	.....	.....	.....	.....
City Passenger R R.	....	.....	.....	.....	....	.....

London Stock Exchange.

	Closing Prices — Apl. 21.		Apl. 28.	
Baltimore & Ohio (sterling).....	114	116	114	116
Central of N. J., $100 shares....	93	98	93	98
Do. consol. mort.....	114	116	112	115
Do. Adjustment Bonds.....	101	106	101	106
Do. Income Bonds.....	93	97	93	97
Det., G'd Haven & Mil. Equip bds	112	115	113	115
Do. Con. M. 5p.c., till '83 aft'r 6p.c	110	112	111	113
Illinois Central $100 shares.....	138	140	138	140
Lehigh Valley Cons. mortgage..	118	122	118	122
Louisville & Nashville mort 6s.	101	103	101	103
Do. Sink. Fund bds (S. & N. Ala)	100	102	100	102
Do. capital stock $100 shares.	76	78	76	78
N. Y. Cent. & Hud. R. mt. bds..	134	136	134	136
Do. $100 shares.....	126	130	130½	131½
Do mort. bonds (stg.).....	123	125	123	125
N. Y., Lake Erie & West., $100 shs	36	36½	36¾	37¼
Do. 6 p. c. pref. $100 shares ..	74	76	75	77
Do. 1st Con. Mort. bds (Erie) .	127	129	127	129
Do. do. Funded Coupon bds.	124	126	124	126
Do. 2d Consol Mort. bonds...	95	97	95	97
Do. do. Funded Coupon bds..	92	94	92	94
Do. Gold Income bonds.....	..	..	..	..
N Y., Pa. & Ohio 1st mort. bonds.	46½	47½	46½	47½
Do. Prior Lien bds (sterling)..	101	105	101	105
Pennsylvania, $50 shares.....	63½	64	62¼	62¾
Do. Con. Sink Fund Mort....	118	120	119	121
Philadelphia & Reading $50 shs	29¼	29¾	29¼	29¾
General Consol Mortgage.....	118	120	118	120
Do. Improvement Mortgage..	103	105	102	104
Do. Gen. Mtg. '74, ex-def'd coup.	99	101	99	101
Do. Scrip for the 6 def. ½ coup.	99	101	99	101
Pittsb., Ft. W. & Chi. Eq. bds....	104	106	104	106
St. L. Bridge 1st mort. gold b'd.	125	127	125	127
Do. 1st pref. stock.....	98	102	98	102
Union Pa. Land Grant 1st. mtg.	113	115	113	115
Wabash, St. L. & P. $100 shs.....	27	29	28	30
Do. $100 pref. shares.....	51	53	52½	53½
Do. gen. mort. bonds.....	77	79	79	81

AMERICAN RAILROAD JOURNAL.

Financial and Commercial Review.

THURSDAY EVENING, May 11, 1882.

In the morning hours the quotations for call loans on stocks were 2½(@4 per cent, the ruling figures during the day being 3@3½ per cent. On United States bonds the quotations were 2@2½ per cent. Prime mercantile paper was 4@5 per cent. In the afternoon, and at the close, the quotation for call loans at the Stock Exchange was 3 per cent.

The actual rates for prime bankers' sterling, both in the morning and at the close in the afternoon, were 4.86¾@4.87¼, and 4.89¾@4.90, with cable transfers 4.90½@⅝, and prime commercial bills 4.85½@¾. The actual rates for Continental bills were as follows: Francs, 5.16¼@⅜ and 5.13⅛@¾, Marks, 95⅛@¼, and 95¾@⅞, and Guilders, 40 3-16@½ and 40 9-16@⅝.

The earnings of the Rochester and Pittsburgh Railroad for the fourth week in April 1882, were $7,135.03, against $4,256.19 for the fourth week in April, 1881, an increase of $2,878.84; for the month of April, 1882, the earnings were $25,419.64, against $17,024.73 for the month of April, 1881, an increase of $8,394.90; for the four months ending April 30, 1882, the earnings were $87,904, against $68,132 for the corresponding period of 1881, an increase of $19,572.

The Deferred Income bonds of the Philadelphia and Reading Railroad Company were admitted to call at the London Stock Exchange on the 9th inst.

The North Pennsylvania Railroad has declared a quarterly dividend of 1¾ per cent, less 5 per cent retained for the contingent fund.

From the report of the Delaware and Hudson Canal Company for the year 1881 we learn that 3,211,496.09 tons of coal were mined and sold for the account of the company; 450,295.16 tons were transported for other parties—making a total of 3,661,792.05 tons handled during the year. The business of the year yielded a profit on the capital stock of a fraction over 10½ per cent. The leased lines of the company were reported self-sustaining. The bonded debt was reduced by the retiring and canceling of $994,000 of the bonds of the company, which were purchased from time to time. The Examining Committee report a profit for the year of $2,102,463.78.

The gross earnings of the Burlington, Cedar Rapids and Northern Railroad Company for the year 1881 were $2,259,000, the operating expenses $1,626,000, and the net $632,186, against $710,000 in the preceding year, when the mileage was sixty-eight less. The total mileage at the close of the year was 620.

The directors of the Lehigh Valley Railroad Company have approved the contract with the New York, Lake Erie and Western Railroad Company, by which an increased coal traffic is expected. The old contract between these two companies expired about two years ago, but the terms of the same agreement have been adhered to ever since. The contract now made is to exist for ten years, and its present provisions are virtually the same as those of the old agreement, a new feature being that the Lehigh Valley Railroad will handle through business to New York as well as to Philadelphia.

The gross earnings of the Seaboard and Roanoke Railroad from transportation for the year 1881 were $709,301.12; disbursed on expense account, $503,803.55; balance, $178,587.57.

The report of the Treasurer of the American Seaman's Friend Society shows that for the year ending March 31 the disbursements were $52,429.02, and the receipts $61,166.72, leaving a balance of $8,737.70.

The mortgage deed of the Valley Railroad Company was recorded on the 6th inst. in the Augusta County Clerk's office at Staunton, Va. The amount of mortgage issued under the deed is $1,000,000, divided into shares of $1,000 each. The trustees named are Wm. F. Burns, T. Harrison Garrett and Joshua G. Harvey. This mortgage is secured by the assets and franchises of the Valley Railroad Company, and it is issued to procure the funds necessary to complete the road to Lexington, which is now being pushed forward. The tax for its recordation in Augusta county was $1,000.

A statement of the business of the Cunard Steamship Company for the past year shows that the net profits amount to £159,849 2s. 3d., and, after providing for depreciation, insurance, &c., and setting aside £11,123 4s. 6d. to the reserve fund, there remains the sum of £49,331 15s., which the directors recommend to be appropriated as follows: To dividend at the rate of 3 per centum on the paid up capital of £1,600,000, £48,000; to balance of profit and loss, new account, £1,331 15s. Total, £49,331 15s.

The total gross tonnage of all kinds of vessels engaged in the British merchant marine service in December, 1881, was 8,430,703, of which 4,560,117 were steamers and 3,870,586 sailing-vessels, showing an increase for the three years, 1879, 1880 and 1881, of 1,034,507 gross tons in steamers and a decrease of 452,120 gross tons in sailing-vessels.

The Chief of the Bureau of Statistics, in his monthly statement of the imports and exports of the United States, reports that the excess of imports or of exports of merchandise has been as follows: March 1882, excess of imports, $5,978,214; March, 1881, excess of exports, $24,359,620. Three months ended March 31, 1882, excess of imports, $320,393; same period last year, excess of exports, $73,128,038. Nine months ended March 31, 1882, excess of exports, $234,840,790. Twelve months ended March 31, 1882, excess of exports, $89,882,173; same period last year, excess of exports, $243,442,411. The excess of imports or of exports of gold and silver coin and bullion was as follows: March, 1882, excess of exports, $3,295,502; March, 1881, imports, $6,445,606. Three months ended March 31, 1882, the excess of exports, $11,595,003; same period last year, excess of imports, $10,265,774. Nine months ended March 31, 1882, excess of imports, $14,921,791; same period last year, excess of imports, $78,623,770. Twelve months ended March 31, 1882, excess of imports, $27,466,671; same period last year, excess of imports, $78,943,979.

The following quotations of sales of railway and other securities, for the week, are in addition to those given elsewhere in our columns:

New York.—Atlantic and Pacific 1st, 99¼; Atchison, Colorado and Pacific 1st, 96; Boston and New York Air Line pref., 63; Buffalo and Erie 7s, new, 122¾; Central Iowa 1st, 114; do. deben. certif., 70; Chicago, St. Paul, Minneapolis and Omaha, 38⅞; do. pref., 101¾; do. consol., 104½; Columbia and Greenville pref., 72; Cedar Falls and Minnesota, 19; Chicago, Burlington and Quincy 5s, S. F., 101¾; do. 4s, Iowa div., 87½; Chicago, Mil. and St. Paul, Chicago and Pacific West div. 1st, 94; do. Southern Minnesota div. 1st, 108; do. do. Southwest div. 1st, 109½; Columbus, Chicago and Indiana Central 1st, Trust Co. certif. ass. sup., 115; Chicago, St. Paul and Minneapolis 1st, 113; Chesapeake and Ohio 1st, Series A, 101; do. cur. int., 48; do. pur. money fund., 116; Cleveland and Toledo S. F., 109⅜; Denver and Rio Grande, 61⅝; do. 1st, 112½; do. consol., 108; Dubuque and Sioux City, 83; Denver, South Park and Pacific 1st, 101; East Tennessee, Virginia and Georgia, 11⅝; do. pref., 20⅛; do. inc., 50; do. 5s, 76½; Evansville and Terre Haute 1st, 96;

Green Bay, Winona and St. Peter, 10; do. 1st, 85; do. inc., 20; Galveston, Harrisburg and San Antonio 1st, 104; Hannibal and St. Joseph 6s, consol., 103¾; International and Great Northern 1st, 105; Indianapolis, Decatur and Springfield 1st, 102; Indiana, Bloomington and Western, 42¾; do. 1st, 89; do. 2d, 75; Keokuk and Des Moines, 18; do. 1st, 103¼; Kansas Pacific 1st consol., 103¼; do. 6s, 1896, 113½; do. 6s, Denver div. ass., 109⅞; Louisville and Nashville Gen'l mort. 6s, 99¾; do. New Orleans and Mobile div. 1st, 96; Louisville, New Albany and Chicago, 60; do. 1st, 103½; Lake Erie and Western, 31; do. 1st, 101½; Long Island, 55; do. 5s, 97½; Lafayette, Bloomington and Muncie 1st, 100½; Memphis and Charleston, 54; Minneapolis and St. Louis, 25; do. pref., 63; do. 2d, 90; Missouri, Kansas and Texas, 31⅝; do. consol. 7s, 105¾; do. 2d, 62; do. gen'l mort. 6s, 83; Missouri Pacific, 92⅞; do. 1st consol., 100½; do. 3d, 108½; Milwaukee, Lake Shore and Western, 51; do. 1st, 102; do. inc., 78½; Manhattan Beach, 33½; Mobile and Ohio, 25; do. 1st deben., 80¼ do. 1st mort., 109½; Marietta and Cincinnati 1st pref., 8½; Metropolitan Elevated 2d, 90; Milwaukee and Northern 1st, 92; Michigan Central 5s, 98; Michigan Southern S. F., 106½; New York, Chicago and St. Louis, 13⅝; do. pref., 33½; do. 1st, ex-June coupon, 89½; New York, Ontario and Western, 26; Norfolk and Western pref., 52½; do. Gen'l mort., 101½; Nashville, Chattanooga and St. Louis, 61; do. 1st, 116¾; Northern Pacific 1st, 101¼; New Orleans Pacific 1st, 86; New York City and Northern Gen'l mort., 54; Oregon Transp., 72½; Oregon Short Line 6s, 104; Ohio Central, 15; do. 1st, 96; do. inc., 35½; Oregon Railway and Nav., 140; do. 1st, 109⅛; Ohio Southern 1st, 87; do. inc., 32; Peoria, Decatur and Evansville, 30; do. 1st, 105½; do. inc., Evansville div., 75; Pennsylvania Co. 4½s, 97; Rome, Watertown and Ogdensburg consol. Trust Co. certif., 89½; Richmond and Danville, 110; do. deben, 69: do. 1st, 100; Rochester and Pittsburgh, 30¾; do. 1st, 102½; do. inc., 46¾; Richmond and Alleghany, 20; do. 1st, 88; Richmond, Danville and West Point, ex-priv., 56½; Rensselaer and Saratoga, 140; Southern Pacific of California 1st, 105; Scioto Valley 1st, 100; St. Paul and Sioux City 1st, 110½; St. Paul and Duluth, 29⅞; do. pref., 79¾; St. Paul, Minneapolis and Manitoba, 120½; do. 1st, 111; do. 1st, Dakota ext. 107; St. Louis, Iron Mountain and Southern 5s, 78; do. Arkansas Branch 1st, 110; St. Louis and San Francisco 2d, Class A, 98; do. B, 88½; St. Louis, Kansas City and Northern R. E., 7s, 104¾; do. Omaha div. 1st, 107; South Carolina 1st, 98½; do. 2d, 85; do. inc., 47¾; Syracuse, Binghamton and New York 1st, 124; Texas and Pacific, 41¼; do. inc. Land Grants, 61½; do. Rio Grande div. 1st, 81⅜; Toledo, Delphos and Burlington, 12½; Texas Central 1st, 106½; Winona and St. Peter 2d, 120½; Wabash, St. Louis and Pacific, Gen'l mort. 6s, 80¼; do. Chicago div. 1st, 82¾; do. Iowa div. 1st, 90; Alabama, Class A, 85; Arkansas 7s, L. R., P. B. and N. O., 20; Louisiana consol., 7s, 64; Missouri 6s, 1886, 109; North Carolina consol. 4s, 81½; do. S. T., 3d class, 8; Colorado Coal and Iron, 51⅝; do. 1st, 91; Cam. Coal, 34; Consolidation Coal, 30; Maryland Coal, 14; Sutro Tunnel ½; Tennessee 6s, 57; Excelsior Mining Co., 2; Homestake, 17¾; Ontario, 36.

Boston.—Atchison, Topeka and Santa Fe 5s, 97½; Atlantic and Pacific blocks, 105; do. inc., 29; do. 6s, 97; Atchison and Nebraska 7s, 118, Burlington and Missouri River in Nebraska 6s, non-exempt, 103¼; Boston Land, 7½; Boston Water Power, 4⅝; Boston, Clinton, Fitchburg and New Bedford, 64; do. pref., 130; do. 7s, 111; Boston and Albany 7s, 124½; Chicago, Burlington and Quincy 4s, old, 87; do. 5s, 1919; 103¼; do. 4s, Denver extension, 85; Connotton Valley, 7¼; California Southern 6s, 84⅞; Connecticut and Passumpsic Rivers R. R., 99; Cincinnati, Sandusky and Cleveland 7s, 103¾; Chicago and West Michigan, 70; Chicago, Milwaukee and St. Paul, Dubuque div. 6s, 103; Central Iowa, 33; Flint and Pere Marquette, 24¼; do. pref., 97; Iowa Falls and Sioux City, 91; Kansas City, Fort Scott and Gulf 7s, 110½; Kansas City, St. Joseph and Council Bluffs 7s, 114½; Kansas City, Lawrence and Southern 5s, 102¼; Kansas City, Topeka and Western 7s, 120; Little Rock and Fort Smith, 53; do. 7s, 109; Massachusetts Central, 7; do. 6s, 48; Mexican Central 7s, 86⅝; do. Block, No. 3, 109; do. No. 2, 118; Michigan Central Air Line 8s, 115; Maine Central, 55; Marquette, Houghton and Ontonagon, 66; New York and New England 6s, 104⅜; New Mexico and Southern Pacific 7s, 112½; Northern Pacific 6s, 99¾; Oregon Short Line Subscriptions, 114; Ogdensburg and Lake Champlain consol. 6s, 93; Rutland, 4; do. pref., 24¼; Sonora 7s, 103½; do. Block No. 4, 450; Toledo, Delphos and Burlington inc., 23; Toledo, Cincinnati and St. Louis, 6½; do. 6s, 66½; do. inc., 17; Wisconsin Central, 17¼; do. 7s, 1st series, 78; Allouez Mining Co., 2; Brunswick Antimony, 12; Franklin, 10½; Harshaw, 2; Napa Quicksilver, 5¾; Osceola, 33; Pewabic, 10½; Phœnix, 2; Ridge 1; Sullivan, 1⅜; Silver Islet, 20⅞.

Baltimore.—Atlanta and Charlotte, 1st, 110¾; Atlantic Coal, 1.20; Baltimore and Ohio 2d pref., 121; Baltimore City 6s, 1890, 118; do. 6s, 1893, exempt, 122½; do. 5s, 1916, 123; do. 5s, 1894, 116; Columbia and Greenville 1st, 104⅛; do. 2d, 86; Canton Co., 62; do. 6s, 104; Marietta and Cincinnati 1st Trust certificate, 126½; do. 2d do., 98¾; do. 3d do., 54½; Maryland Defense 6s, 104¾; Richmond and Danville 1st, gold, 100¼; Virginia Midland 2d mort., 109; do. 5th mort., 93½; Virginia Peelers, 34; Wilmington, Columbia and Augusta, 110. The latest quotations are: Atlanta and Charlotte 1st, 110¾@111; Baltimore and Ohio, 195@198; Baltimore City 6s, 1884, 104@—; do. 6s, 1900, —@130¼; do. 5s, 1916, 123½; do. 4s, 1920, 113@115; Columbia and Greenville 1st, 104@105; Marietta and Cincinnati 1st, 126@126½; do. 2d, 98¼@99; do. 3d, 54@54¼; Northern Central, 49@49¼; do. 6s, 1885, 108@108½; do. 6s, 1900, gold, 116@—; Ohio and Mississippi, Springfield div. 1st, 116½ @117½; Pittsburg and Connellsville 7s, 124@ 125; Richmond and Danville 1st gold, 100@ 100½; Virginia Midland 5th mort., 93½@95; do. inc., 60@65; Virginia Consols, 65½@67½; do. 10-40s, 43@43¼.

Philadelphia.—Am. S. S. Co. 6s, 104½; Allegheny Valley, Eastern ext. 7s, 118; Central Transportation, 34½; Chesapeake and Delaware Canal 6s, 88½; Huntingdon and Broad Top Mt. consol. 5s, 88⅞; Nesquehoning Valley, 54½; Oil Creek 1st, 102; Pennsylvania and New York Canal 7s, 1906, 112½; Pennsylvania allotments, 8½; Philadelphia and Reading scrip, 97½; Philadelphia, Wilmington and Baltimore 4s, 95; Philadelphia, Germantown and Norristown, 110½; Susquehanna Coal 6s, 114; Susquehanna Canal 7s, 60; Texas and Pacific consol. mort. 6s, 99½; Western Pennsylvania 6s, 107; West Jersey and Atlantic 1st, 110; West Jersey dividend scrip, 82. The latest quotations are: City 6s, 108@118; do. free of tax, 128@132; do. 4s, new, 108@113; Pennsylvania State 5s, new loan, 117@119; do. 4s, old, 110@112; do. 4s, new, 114@114½; Philadelphia and Reading R. R., 28½ @28⅝; do. consol. mort. 7s, reg., 125½@126½; do. gen'l mort. 6s, coupon, 98@98½; do. 7s, 1893, 117½@120; do. new conv., 70@73; United New Jersey R. R. and Canal, 187¾@188¼; Buffalo, Pittsburg and Western, 16@16¼; Pittsburg, Titusville and Buffalo 7s, 95½@96½; Camden and Amboy mort. 6s, 1889, 112½@116; Pennsylvania R. R., 58⅜@58½; do. general mort. 6s, coupon, 125½@126; do. reg., 125@126; do. consol. mort. 6s, reg., 120@121; Little Schuylkill R. R., 57@58; Schuylkill Navigation, pref., 12¾@13¼; do. 6s, 1882, 90@92; Elmira and Williamsport pref., 57@60; do. 5s, 95@102; Lehigh Coal and Navigation, 38⅞@39; do. 6s, 1884, 105@106; do. R. R. loan, 115½@116; do. Gold Loan, 112½@113; do. consol. 7s, 119@ 119½; Northern Pacific, 40@40⅛; do. pref., 78½ @78⅝; North Pennsylvania, 63¾@64¼; do. 6s, 106@108; do. 7s, 118@118; do. 7s, General mort. reg., 120@122; Philadelphia and Erie, 14¼@15; do. 7s, 115@116; do. 5s, 102@103; Minehill, 63½@63¾; Catawissa, 21½@22½; do. pref., 54½@55; do. new pref., 53@54; do. 7s, 1900, 120@—; Lehigh Valley 60½@60⅝; do. 6s, coupon, 122½@123; do. reg., 123@124; do. 7s, 132½@133½; do. consol. mort. 121¼@121¾; Fifth and Sixth streets (horse), 152@155; Second and Third, 110@114; Thirteenth and Fifteenth, 70 @75; Spruce and Pine, 45@48; Green and Coates, 78@80; Chestnut and Walnut, 90@93; Germantown, 70@75; Union, 110@115; West Philadelphia, 105@108; People's 9½@10; Continental, 100@102.

For the production of steel and steel rails there are in Russia eighteen works, in seven of which Bessemer apparatus exists. In three of them the chief production is by the crucible system, and in the others by the Siemens-Martin. For these works, where coke is used it is imported, and almost all the ferro-manganese, spiegeleisen, etc. is also imported, and even carried to the Ural. The eighteen works produce per annum about 82,500 tons ingot steel, mostly for gun making and government use, tires, etc.; also 50,000 tons of steel rails, value about 20,000,000 roubles (£2,000,000).

On a railroad in Michigan, where a train was passing a station at a greater rate of speed than the law allowed, and where it was customary for trains to stop, a passenger sprang off and was badly injured. In a suit for damages he recovered, the jury holding that he was not negligent, and had a right to act on the supposition that the train was about stopping. The Supreme Court reversed the decision, and held had he been carried past the station he would have had his legal remedy, but he took the chances and must abide the result. His negligence and rashness deprived him of any legal redress.

The Largest Locomotive in the World.

THERE has just been completed at the Central Pacific Railroad works in this city a locomotive of gigantic proportions, destined for the heavy grades of the Southern Pacific Railroad. The work has been done in the most complete manner, and the engine is well proportioned, not showing to a casual glance that she is so immense. A. J. Stevens, General Master Mechanic, designed and superintended the construction; George A. Stoddard, Chief Draughtsman of the works, made the drawings to carry out Mr. Stevens' ideas. The trial trip was a success, and Sacramento can now boast of a successful inauguration of locomotive building.

The boiler was made by Chas. H. Hooper, foreman of the boiler shop, under the direction of Mr. Stevens, of the following dimensions: Thickness of the shell, 7-16 of an inch, Otis steel; whole length of boiler over all 29 feet 2¼ inches; shell 60 inches in diameter, 17 feet long, containing 166 tubes 2¼ inches in diameter; fire-box, 108 inches long by 56 inches deep, made of 5-16 of an inch steel—being thinner than the outside shell so as to make steam easier; combustion chamber, 53 inches long by 36 inches deep. The crown sheet is supported by 37 bars, made of best bar iron, 5 by ¾ inches, placed 4 inches apart, each bar supported by two slings strung to the wagon top of the boiler by two stays. The stay-bolts in the fire-box and combustion chamber are ⅞ of an inch in diameter, and perforated with a 3-16 of an inch hole. The dome is 26 inches in diameter and 40 inches high. The smoke arch 56 inches in diameter and 37 inches long. The whole weight of the boiler, complete, is 14 tons.

The cylinder of the engine is 19 inches in diameter; stroke of piston, 30 inches. There is an independent cut-off valve working on the back or top of the main valve, which is a double valve with a double exhaust at each end of the cylinder worked by six eccentrics. Two on each side work the link motion, and one on each side works the cut-off on the cylinder. There is a steam cylinder in the cab attached to the reversing lever to enable the engineer to work the reversing gear easily, also a cylinder on one side to work the steam-brakes, which are attached to three pairs of the driving-wheels. There are four pairs of driving-wheels, 4 feet 6 inches in diameter, two pairs of which are flanged to hold the engine on the track, and the others blank. There is an instrument attached to the back of the tender connecting with the draw-bar, called a dynomometer, to test the strength and pulling capacity of the engine. The weight on the driving-wheels is 53 tons; on the forward truck, 8½ tons; whole weight of the engine with water, exclusive of tender, 61½ tons. The driving-wheel base on track is 15 feet 9 inches. Capacity of tender, 3,000 gallons of water and 5 tons of coal. This engine is nearly all of an original design, and not copied from Eastern manufacturers. The double valves are an invention of Mr. Stevens, and are a new idea for a locomotive engine.—*Sacramento Record-Union.*

Sinaloa and Durango Railroad.

THE following appeared in *El Continental* for April 3 and 17, a newspaper published in Culiacan, State of Sinaloa, Mexico :—

The largest merchant ship that has come to the Mexican Pacific ports, viz., the River Nith, a British barque of 2,000 tons burden, was on the 23d ult. towed into the harbor of Altata by the steamer General Zaragoza.

This barque, which has come from England with cars and rails for the Sinaloa and Durango Railroad Company, effected her discharge alongside the warves of the company, together with two schooners, the Alice and the Lottie Carson. These wharves, combined with the innumerable improvements that are continually being made, give a mercantile appearance to the harbor of Altata such as is not seen in any other of the western ports.

We know that many parties in this city intend visiting the port, and therefore mention that we consider this an opportune time for such an excursion, as there is much that will astonish them, and they will be well received by the residents in Altata.

One thousand men are at the present time employed on the railroad between Altata and Culiacan. Considering this number and the land through which they are passing, the activity with which the works are being carried on may be calculated, and it is expected that the road will be completed to Culiacan before the end of June.

The workers grading the road have already reached the town of San Pedro, about 5 leagues from Culiacan, and the rails are laid and the road completed as far as Bachimeto.

Great American and European Short Line Railway.

AN act was passed on the 6th inst. by the House of Commons of Newfoundland incorporating the Great American and European Short Line Railway Company. Large and important concessions are made to the company. They are to receive from the Newfoundland government 5,000 acres of select Crown land for every mile of railroad they construct; they are conceded an exclusive monopoly of the country for railroad purposes for a term of forty-five years, and they are to enjoy during that term an immunity from taxation on all material required for the purposes of railway construction. The question proposed by the representative of the syndicate of an annual subsidy to the company or an indorsement of their roadbed bonds to the extent of $3,000,000 has been left to the constituences, as the current term is the last of the existing Legislature and a general election takes place in the ensuing autumn. The new railway syndicate, which is composed of New York and London capitalists, contains, among others, the names of William Rond, Norvin Green, Frank W. Allin, Domingo Vasquez, Albert L. Blackman, Celden X. Hobbs, John M. Walton and J. J. O'Connor.

The object of the company is to establish more rapid, safe and certain communication between America and Europe across the Island of Newfoundland than at present exists. The outline of the scheme is the construction of a railroad from the most eastern point of the Newfoundland coast across the island to Cape Race. This western terminus will connect by steam ferry with the railway to be constructed from Cape North over the Island of Cape Breton to the Straits of Canso, the straits to be crossed by ferry. The line will traverse the north shore of Nova Scotia and form a junction with the Intercolonial Railway, from which connections will be effected with the railways communicating with Boston, New York, Philadelphia, Montreal, Chicago, St. Louis and San Francisco. From the east shore of Newfoundland the company will establish a line, consisting of ten powerful and swift despatch steamships, to connect with the west coast of Ireland, and thence by fast express trains with London and all Continental cities. The minimum saving of time between London and New York is estimated at forty-eight hours. The whole sea voyage is reduced to 1,700 miles between these great commercial centres, and the dangerous coast, a thousand miles in extent, lying between Cape Race and New York—the grave of numerous ocean steamers and sailing-ships—is completely avoided. The company anticipate carrying annually across the Atlantic by this short line not less than 200,000 passengers. They are also sanguine that they will so largely facilitate as to completely absorb the transportation of the mails of the governments of America, Europe and Asia. The work of construction is to be proceeded with immediately.

Little Pittsburgh Mining Company.

THE annual report of the Little Pittsburgh Consolidated Mining Company, submitted at the annual meeting on the 1st inst., shows that the total surplus on April 1, 1882, was $111,561,-26; tons of ore settled for during the year, 6,-297 345-2000; total cash received for ore, $172,-008.59; average price received per ton, $27.31½; average price previous year, $38.13. The decrease in the price is ascribed to the quantity of iron furnished the smelters for flux, which was shipped as ore, and which averaged from $4 to $9 per ton. The cost of prospecting and development work for the year, including mining of ore, etc., was $131,819.31. The average number of men employed was 100. The mineral now being worked in New Discovery is largely confined to stringers and spurs, and as a whole is not looking as well as it did a year ago. Recent developments in the Amie property adjoining the Little Pittsburgh on the east, seem to indicate that the north ore body from the Dunkin and Climax may extend into the Little Pittsburgh property. A shaft, called No. 9 Pittsburgh, has therefore been started near the intersection of the north line of Winnemuck and the east line of Pittsburgh for the purpose of prospecting this ground.

THE Titusville, Penn., *Herald* says that 429 new oil wells were completed in the month of April, with a production of 9,469 barrels, against 380 wells, with 8,924 barrels production, for March. There were 452 rigs building and 406 wells drilling on the last day of April, 483 rigs building and 408 wells drilling on the last day of March.

RAILROAD AND CANAL DIVIDEND STATEMENT.

Showing the amount of Stock Outstanding, the Dividend Periods and the date of last Dividend.

Marked thus(*)are leased roads.	Stock outstanding.	Divide'd Periods.	Last Dividend Payable.
Albany and Susq*...100	3,500,000	semi-an	Jan. '82 2
Ashuelot.....100	210,000	q'arterly	Oct. '81 3½
Atch., Top. and S. Fe100	54 000,000	q'arterly	May '82 1½
Atlanta and W. Point100	1,232,200	semi-an	July '81 4
Atlantic and St. Law*100	5,840,000	semi-an	Mar.'82 3
Augusta and Savan'h100	1,022,900	semi-an	June'81 3½
Avon,Genesee&MtM*100	225,000	semi-an	July '81 3
Baltimore and Ohio.100	14,792,566	semi-an	May '8205
" " pref.100	5,000,000	semi-an	Jan. '82 3
Washington Br....100	1,650,000	semi-an	Apl. '82 5
Berkshire*.....100	600,000	q'arterly	Apl. '82 1¾
Boston and Albany..100	20,000,000	q'arterly	Mar. '82 2
Bos.&N.Y.AirLine pf.100	2,795,227	q'arterly	Mar. '82 1
Bos.,Cl.,F.&N.B.pref.100	1,750,100	.....	Apl. '82 3½
Bos.,Conc.&Mont.pf*100	800,000	semi-an	May '82 3
Boston and Lowell..500	3,940.000	semi-an	Jan. '82 2
Boston and Maine...100	6,921,274	semi-an	May '82 4
Boston & Providence100	4,000,000	semi-an	May '82 4
Attleborough Br...100	131,700	semi-an	Jan. '82 3½
Bos.,Revere B &Lynn100	419,400	semi-an	Jan. '82 3½
Buffalo,N. Y. & Erie*.100	950,000	semi-an	Dec. '81 3
Camden & Atlantic.. 50	377,400	q'arterly	Apl '80 3s
" " pref. 50	880,650	q'arterly	Apl '80 3½s
Camden & Burl. Co..100	381,925	semi-an	July '81 3
Canada Southern....100	15,000,000	.....	Feb. '81 2½
Cape May &Millville* 50	447,000	semi-an	June'81 3
Catawissa*..... 50	1,159,500	annual	Oct. '81$1¼
" pref..... 50	2,200,000	semi-an	May '82 3½
" new pref.. 50	1,000,000	semi-an	May '82 3½
Cayuga and Susq.*.. 50	589,110	semi-an	July '81 4½
Cedar Rapids&Mo.R*100	6,850,400	q'arterly	May '82 1½
" " pref.100	769,600	semi-an	Feb. '82 3½
Central of Georgia...100	7,500,000	semi-an	June'81 4
Central of New Jersey100	18,563,200	q'arterly	Apl. '76 2½
Central Ohio*..... 50	2,437,950	semi-an	Jan. '82 3
" pref.. . 50	411,550	semi-an	Jan. '8203
Central Pacific 100	59,275,500	semi-an	Feb. '82 3
Chemung*.....100	380,000	q'arterly	July '81 1½
Cheshire preferred ..100	2,155,300	semi-an	Jan. '82 1½
Chicago and Alton...100	11,181,741	semi-an	Mar. '92 4
" " pref 100	2,425,400	semi-an	Mar. '82 4
Chi., Burl. & Quincy.100	55,337,455	q'arterly	Mar. '82 2
Chi., Iowa & Nebras*.100	3,916,200	semi-an	Jan. '82 4
Chi., Mil. & St. Paul.100	20,404,261	semi-an	Apl. '82 3½
" " pref 100	14,401,483	semi-an	Apl. '82 3½
Chi. & N. Western...100	14,988,257	semi-an	Dec. '81 3
" pref.100	21,525,353	q'arterly	Mar.'82 1¾
Chi., R. I. & Pacific..100	41,960,000	q'arterly	May '82 1¾
Chi. and West Mich .100	6,151,000	semi-an	Feb. '82 2½
Chi., St. P., M. & O..100	10,390,000	q'arterly	Jan. '82 1¾
C., Ind., St. L. & Chi.100	6,000,000	q'arterly	Apl. '82 1½
Cin., Sand. & Clev.pf. 50	429,037	semi-an	May '82 3
Clev. and Mahoning* 50	3,759,200	semi-an	Nov. '81 3½
Clev. and Pittsburg* 50	11,244,336	q'arterly	June'82 1¾
Columbus & Xenia*. 50	1,786,200	q'arterly	Dec. '81 2
Colum.&HockingVal.100	2,500,200	semi-an	Aug.'81 20s
Concord 50	1,500,000	semi-an	May '82 5
Concord and Ports.*.100	350,000	semi-an	Jan. '82 3½
Conn.& Passump.Riv100	2,244,400	semi-an	Feb. '82 3
Connecticut River ..100	2,100,000	semi-an	Jan. '82 4
Cumberland Valley.. 50	1,292,950	q'arterly	Apl. '82 2½
" 1st pref 50	241,900	semi-an	Apl. '82 4
" 2d pref. 50	243,000	semi-an	Apl. '82 4
Danbury & Norwalk. 50	600,000	.....	Apl. '82 1½
Dayton and Mich.*.. 50	2,402,573	semi-an	Oct. '81 1¾
" " pref. 50	1,211,250	q'arterly	Oct. '81 2
Delaware*..... 25	1,468,940	semi-an	Jan. '82 3
Del. & Bound Brook*100	1,652,000	q'arterly	May '82 1¾
Del., Lack.& Western 50	26,200,000	q'arterly	Apl. '82 2
Denver & Rio Grande.100	29,160,000	q'arterly	Jan. '82 1½
Den.,South P. & Pac.100	3,500,000	.....	Aug.'80 4
Detroit, Lans. & Nor.100	1,825,600	semi-an	Aug.'80 2½
" " pref.100	2,503,380	semi-an	Feb. '82 3½
Dubuque&Sioux C'y*100	5,000,000	semi-an	Apl. '82 3
East Pennsylvania*., 50	1,709,550	semi-an	Jan. '82 3
East Mahanoy*..... 50	392,950	semi-an	Jan. '82 3
Eastern (N. H.).....100	492,500	semi-an	Dec. '81 2½
Eel River.....100	3,000,000	q'arterly	Mar. '82 $1
Elmira.Jef.&Canand*100	500,000	annual	Sep. '80 5
Elmira&Williamsp't* 50	500,000	semi-an	May '82 1½
" " pref. 50	500,000	semi-an	Jan. '82 3½
Erie and Pitsburg*.. 50	1,998,400	q'arterly	Dec. '81 1¾
Evansville & Terre H.100	100,000	semi-an	Nov. '81 2
Fitchburg.....100	4,500,000	semi-an	Jan. '82 3
F. & P. Marquette pf.100	6,500,000	semi-an	Jan. '82 3
Ft.W. & Jackson pref.100	2,000,000	.....	May '82 2
Georgia. ..... .100	4,200,000	q'arterly	Jan. '82 2½
Granite 100	1,250,000	semi-an	Jan. '82 3
Han. & St. Jo. pref .100	5,083,024	semi-an	Feb. '82 3½
Harrisbg&Lancaster 50	1,182,500	semi-an	Jan. '82 3¼
Housatonic pref. ...100	1,180,000	q'arterly	Apl. '82 2
Illinois Central.....100	39,000,000	semi-an	Mar. '82 3½
Ia.Falls & Sioux City*100	4,623,500	q'arterly	Mar. '82 1¾
Iowa R. Land Co....100	7,620,000	q'arterly	May '82 1
Jefferson v. Mad.&Ind100	2,000,000	q'arterly	Feb. '82 1¾
Joliet and Chicago*..100	1,500,000	q'arterly	Mar. '82 1¾
Kan.C.,Ft.S.&Gulf...100	4,000,000	.....	Feb. '82 2
" " pref..100	2,750,000	semi-an	Feb. '82 4
Kentucky Central...100	500,000	semi-an	June'81 1
" " pref..100	5,583,500	semi-an	June'81 3
Lake Shore&Mich.So.100	49,466,500	q'arterly	May '82 2
" (guar.)100	533,500	semi-an	Feb. '82 5
Lawrence*..... 50	450,000	q'arterly	Apl. '82 2
Lehigh Valley..... 50	27,496,895	q'arterly	Apl. '82 1½
" pref.50	106,300	q'arterly	Apl. '82 1¼
Little Miami..... 50	4,637,300	q'arterly	Mar. '82 2
Little Rock & Ft. S..100	4,096,135	.....	July' 81 10s
Little Schuylkill*... 50	2,646,100	semi-an.	Jan. '82 3½
Louisville & Nashv..100	18,130,913	semi-an.	Feb. '82 3
Lowell & Andover...100	500,000	semi-an.	Jan. '82 3½
Lykens Valley.....100	600,000	q'rterly.	Oct,' 81 2½
Manchester & Law..100	1 000,000	semi-an.	May '82 5
Manhattan 100	13,000,000	.....	.....
" " 1st pref.100	6,500,000	q'rterly.	Apl. '82 1½
" " 2d pref.100	6,500,000	.....	Apl. '82 1½
Marietta& Cincinnati 50	1,386,350	.....	.....
" " 1st pref 50	8,105,600	semi-an.	Sep. '66 3s
" " 2d pref 50	4,440,100	semi-an.	Sep. '66 3s
Marq.Hout.&Ont.pf..100	2,259,026	.....	Feb. '82 4
Massawippi*.....100	400,000	semi-an.	Feb. '82 3
Michigan Central....100	18,738,204	q'rterly.	Aug.'81 1
Middlesex Central...100	280,000	semi-an.	F 0. '82 3
Mill Creek&Minehill* 50	323,375	semi-an.	Jan. '82 5
M.Hill& Schuyl.Hav* 50	4,022,500	semi-an.	Jan. '82 3½
Missouri Pacific.....100	28,169,800	q'rterly.	Apl. '82 1½
Mobile&Montgomery100	3,022,517	semi-an.	Feb. '80 2½
Mont. & Wells River100	800,000	annual	Feb. '80 2
Morris and Essex.... 50	15,000,000	semi-an.	Jan. '82 3½
Mt Carbon&PtCarbon 50	282,350	semi-an.	Jan.. '82 6
Nashua and Lowell..100	800,000	semi-an.	May '82 4
Nashua & Rochester.100	1,305,800	semi-an.	Apl. '82 1½
Nashv. & Decatur...100	1,827,000	semi-an.	June'81 3
Nash.,Chat.&StLouis 25	6,670,325	semi-an.	Apl. '82 1½
Naugatuck.....100	2,000,000	semi-an.	Jan. '82 5
Nesquehoning Val'y* 50	1,300,000	semi-an.	Mar.'82 3
N.Castle&Beaver Val* 50	600,000	q'rterly.	Oct. '81 —
NewLondonNorth'n*100	1,500,000	q'rterly.	Jan. '82 1½
N. Y. Cen. & Hud. R.100	89,428,330	q'rterly.	Apl. '82 2
N. Y. and Harlem....100	7,950,000	q'rterly.	Apl. '82 2
" " pref.100	1,500,000	q'rterly.	Apl. '82 2
" City Line.. —	.....	annual	Apl. '82 3
N.Y.,LakeErie&West.100	77,083,800	.....	.....
" " pref.100	8,156,725	.....	Jan. '82 6
N. Y., N. H. & Hart..100	15,500,000	semi-an.	Jan. '82 5
N. Y., Prov. & Boston100	3,000,000	q'rterly.	May '82 2
Niag.Bridg&Canand*100	1,000,000	semi-an.	July '81 3
North Carolina*.....100	3,000,000	semi-an.	Sep. '81 3
" " pref.100	1,000,000	semi-an.	Sep. '81 3
N. Eastern (S.C.) pref100	86,000	semi-an.	May '81 4
North Pennsylvania. 50	4,527,150	q'rterly.	May '82 1¾
Northern Central.... 50	6,142,000	semi-an.	Jan. '82 3
Northern N. Hampsh100	3,068,400	semi-an.	Dec. '81 3
Northern N. Jersey*.100	1,000,000	semi-an.	July '80 2½
Norwich&Worcester*100	2,604,400	semi-an.	Jan. '82 5
Ohio 100	18,500,000	.....	.....
Ohio and Miss. pref..100	4,030,000	semi-an.	Mar.'75 3½
Old Colony.....100	7,333,800	semi-an.	Jan. '82 3
Oregon R'way&Nav.100	6,000,000	q'rterly.	May '82 2
Oswego & Syracuse..100	1,320,400	semi-an.	Aug.'81 4½
Panama.....100	7,000,000	.....	Jan. '82 6
Paterson & Hudson*.100	630,000	semi-an.	Jan. '82 4
Paterson & Ramapo.100	248,000	semi-an.	Jan. '82 4
Pember.&Highist'n*. 50	342,150	semi-an.	Jan. '82 3
Pennsylvania..... 50	77,672,750	semi-an.	May '82 4
Pennsylvania Co..... 50	20,000,000	semi-an.	June'81 2½
Peoria & Bureau Val*100	1,200,000	semi-an.	Feb. '82 4
Philadelphia & Erie*. 50	7,013,700	semi-an.	.....
" " pfd 50	2,400,000	semi-an.	Jan. '75 4
Phil,Ger. &Norrist'n* 50	2,231,900	q'rterly.	Mar '82 3
Phil. and Reading... 50	32,726,375	q'rterly.	Jan. '76 2½
" " pref. 50	1,551,800	q'rterly.	July '76 3½
Phila. and Trenton..100	1,259,100	q'rterly.	Apl. '82 2½
Phila., Wil. and Balt. 50	11,585,750	semi-an.	Jan. '82 4
Pittsb.,Ft. W. & Chi.*100	19,714,285	q'rterly.	Apl. '82 1¾
" Special Imp.100	6,770,900	q'rterly.	Apl. '82 1¾
Pittsfield&N.Adams..100	450,000	semi-an.	Jan. '82 2½
Portl., Saco & Portsm100	1,500,000	semi-an.	Jan. '82 3
Profile & Franconia..100	130,000	annual	Nov.'80 8
Providence &Worces.100	2,000,000	semi-an.	Jan, '82 3
Rensselaer&Saratog.*100	7,000,000	semi-an.	Jan. '82 4
Rhode Island& Mass.100	100,000	.....	Jan. '81 3
Richmond& Danv...100	3,866,000	q'rterly.	May '82 2
Richmond & Petersb100	1,009,300	semi-an.	Jan. '81 3
Roch.&Geneses Val.*100	555,200	semi-an.	Jan .'82 3
Rome,Watert.& Ogd..100	5,293,900	semi-an.	July '75 1½
Rutland preferred.. 100	4,000,000	semi-an.	Feb. '82 1
St.L.,Alt. & T.Haute.100	2,300,000	.....	.....
" " pref.100	2,468,400	.....	May '82 3
St.L.&S.Fran.1st pref100	4,500,000	.....	Feb. '82 3½
St.L.,I.Mt.&South'n.100	21,459,821	semi-an.	Feb. '74 3
St. P. & Duluth pref.100	4,705,006	q'rterly.	Mar.'82 1¾
St. P., Minn. & Man..100	15,000,000	semi-an.	Feb.'82 3½
Schuylkill Valley*... 50	576,050	semi-an.	Jan. '82 2½
Seaboard & Roanoke.100	1,299,600	semi-an.	May '82 5
Shamokin V.&Pottsv 50	869,450	semi-an.	Feb.'82 3
Shore Line*.....100	1,000,000	semi-an.	Jan. '82 4
Sioux C.&Pacific pref100	169,000	semi-an.	Apl. '82 3½
South Br. (N. J.)*....100	438,300	semi-an.	Jan. '82 3
South Western (Ga.)*100	3,892,300	semi-an.	Dec. '81 3½
Stockbridge&Pitts.*.100	448,700	semi-an.	Oct. '81 1½
Summit Branch*.... 50	4,010,350	semi-an.	Feb. '76 3
Syr.,Bingham&N.Y.*100	2,500,000	semi-an.	Feb. '81 2
Terre Haute & Ind...100	1,988,150	semi-an.	Feb. '82 4
Troy and Boston....100	1,609,000	semi-an.	Feb. '80 2
Union Pacific. 100	61,000,000	q'rterly.	Apl. '82 1½
United Cos of N. J.*.100	20,490,000	q'rterly.	Apl. '82 2½
Utica, Shenango&S V100	4,000,000	semi-an.	Nov. '81 3
Utica and Black Riv.100	1,772,000	semi-an.	Mar. '82 2
Vermont and Mass..100	3,050,000	semi-an.	Apl. '82 3
Wab. St.L & Pac.pref.100	22,615,100	q'rterly.	Nov.'81 1½
Ware River*.....100	750,000	semi-an.	Jan. '82 3½
Warren (N. J.).....100	1,800,000	semi-an.	Apl. '82 3½
Warwick Valley.....100	340,000	semi-an.	Jan. '82 2½
Westchest&Phil.pref100	821,300	semi-an.	July '80 2
West Jersey.....100	1,359,750	semi-an.	Apl. '83 3s
Wilmingt'n&Weld'n.100	1,456,200	semi-an.	Dec. '81 3
Wil., Col., & Aug 100	960,000	semi-an.	Dec. '81 3
Winchester&Poto'c.*100	180,000	semi-an.	Jan. '82 3
Winchester&Strasb.*100	74,700	semi-an.	Jan. 82 3
Worcester & Nashua. 75	1,789,800	semi-an.	Jan. '82 1½
HORSE-POWER R. R.			
Albany City.....100	200,000	annual	.....'80 5½
Baltimore City..... 25	1,000,000	semi-an.	Jan. '82 4
Balt.,Cat.&El. Mills..100	....	semi-an.	Jan. '82 2
BleeckerSt.&Ful.F'y.100	900,000	semi-an.	July '81 3½
Boston&Chelsea pref. 50	110,000	semi-an.	Apl. '82 3
Broadway (Brooklyn)100	250,000	q'arterly	Oct. '81 3
B'way&7th Av,(N.Y.)100	2,100,000	q'arterly	Oct, '81 2
B'klyn&Hunter's Pt.100	400,000	semi-an.	Apl. '79 3
Brooklyn City.....100	2,000,000	q'arterly	Dec.'81 3½
Bushwick (Brooklyn)100	309,000	semi-an.	July '81 2½
Cambridge.....100	908,000	q'arterly	Apl. '82 4½
Cen.Park,N.& E.Riv.100	1 ,800,000	q'rterly.	Jan. '82 2
Christoph'r&TenthSt100	650,000	semi-an.	Aug.'81 2½
Citizens' (Phil.)..... 50	192,500	q'rterly.	Jan. '82 2½
Citizens' (Pbg.)..... 50	200,000	annual.	....'80 14½
Coney Island&Bklyn100	500,000	semi-an.	Oct. '80 5
Continental (Phil.) .. 50	580,000	semi-an.	Jan. '82 6
D.Dock,E.B'way&Bat100	1,200,000	q'arterly	Nov.'81 4
Eighth Av. (N. Y.)...100	1,000,000	q'rterly.	Oct. '81 3
42d St. & G. St. Ferry100	748,000	semi-an.	Nov.'81 6
Frankf.&Southw (Ph) 50	600,000	q'rterly.	Jan. '82 6
Germantown, (Ph.).. 50	572,860	q'rterly.	Apl. '82 2½
Girard College (Ph.) . 50	500,000	semi-an.	July '71 3
Grand St. & Newton.100	170,000	semi-an.	July '81 2½
Green&Coates St.(Ph) 50	150,000	q'rterly.	Apl. '82 3
Heston,Mantau&F'm 50	299,381	semi-an.	Jan. '75 4
Highland.....100	600,000	semi-an.	Jan. 82 4
Lomb.&SouthSts(Ph) 25	195,000	semi-an.	Oct. '79 4
Lynn and Boston....100	200,000	semi-an.	May '82 4
Malden and Melrose.100	165,500	.....	.....
Metropolitan (Bost.). 50	1,500,000	semi-an.	Jan. '82 4
Middlesex (Boston)..100	650,000	semi-an.	May '82 3½
N.Y.,Bay Ridge&Jam100	150,000	.....	Oct. '78 7
Ninth Av. (N. Y.)....100	797,320	.....	.....
Orange &Newark....100	282,555	.....	.....
People's (Phila.)..... 25	124,744	.....	Apl. '82 2
Philadelphia City.... 50	475,000	semi-an.	Jan. '82 5
Phila. and Darby.... 20	200,000	semi-an.	July '81 3½
Phila.&Grey's Ferry. 50	308,000	semi-an.	Jan. '82 6
Pbg,Alleg.&Manches. 50	300,000	q'rterly.	Oct. '81 3
Ridge Avenue (Ph.).. 50	420,000	semi-an.	Oct. '81 11
Second Avenue (N.Y.)100	1,199,500	semi-an.	July '81 2½
Second&ThirdSt.(Ph) 50	771,076	q'rterly.	Jan. '82 4½
17th &19th sts (Ph.).. 50	250,000	semi-an.	July '81 3
Sixth Avenue (N. Y.)100	750,000	semi-an.	Oct. '81 5
Somerville (Boston).100	113,000	semi-an.	May '82 3
South Boston..... 50	600,000	semi-an.	Jan. '82 4
Third Avenue, N. Y..100	2,000,000	q'rterly.	Nov.'81 5
13th and 15th sts.,Ph 50	334,529	q'rterly.	Jan. '82 4
23d street, N. Y.....100	600,000	semi-an.	Aug.'81 4
Union, Boston.....100	374,300	semi-an.	Jan '82 4
Union, Phila..... 50	1,005,000	semi-an.	Jan. '82 7
West Philadelphia... 50	750,000	semi-an.	July '77 10
CANALS.			
Chesapeake and Dela 50	2,078,038	semi-an.	June'75 2
Delaware Division... 50	1,633,350	semi-an.	Feb. '82 $1
Delawa. and Hudson100	20,000,000	q'rterly.	Mar. '82 1¾
Delaware & Raritan*.100	5,847,400	q'rterly.	Apl. '82 2½
Lehigh Coal and Nav 50	11,204,250	q'rterly.	Dec. '81 2
Monongahela Nav... 50	1,004,500	semi-an.	July '81$2
Morris, consolidated.100	1,025,000	semi-an.	Feb. '81 2
" preferred....100	1,175,000	semi-an.	Feb. '81 5
Pennsylvania..... 50	4,501,200	.....	.....
Schuyl. Nav., com.*. 50	859,100	annual.	Au. '81 50c.
" " pref... 50	3,200,950	annual.	Aug. '81 $1
MISCELLANEOUS.			
Adams Express.....100	12,000,000	q'rterly.	Mar.'82 2
American Express... 50	18,000,000	semi-an.	Jan. '82 3
Amoskeag Manuf.Co.100	3,000,000	semi-an.	June'81 5
Calumet&HeclaMin'g —	100,000 S.	q'rterly.	May '82 $5
Central Mining Co....100	.....	semi-an.	Feb. '82 2½
Consolidation Coal..100	10,250,000	semi-an.	Jan. '82 2
George's Creek C.&I.100	.....	semi-an.	Jan. '82 3
Maryland Coal.....100	4,400,000	semi-an.	Feb. '76 1¾
Mariposa L. &Mining100	10,000,000	.....	.....
" pref100	5,000,000	.....	.....
Missouri Val.LandCo100	200,000	semi-an.	Jan. '82 7
National Tube Works100	1,000,000	q'rterly.	Apl. '82 3
Pac. Mail Steamship.100	20,000,000	q'rterly.	Sept.'69 3
Pennsylvania Coal... 50	5,000,000	q'rterly.	Feb. '82 3
Pullman Palace Car..100	10,023,800	q'rterly.	May '82 2
Quicksilver, com....100	5,708,700	.....	May '82 4
" pref....100	4,291,300	.....	May '82 6
Quincy Mining Co... 25	40,000shs	semi-an.	Feb. '82 $8
Quincy R. R. Bridge.100	1,750,000	semi-an.	Jan. '82 5
SiouxC.&I.F.L.&L.Co100	500,000	semi-an.	Jan. '82 4
Spring Mt. Coal.....100	1,500,000	semi-an.	Dec. '81 3½
Topeka Equip'nt Co.100	255,000	semi-an.	Apl. '82 5
United States Ex....100	7,000,000	q'rterly.	May '82 1
Wells-Fargo & Co. Ex100	6,250,000	semi-an.	Jan. '82 4
Western Union Tel..100	80,000,000	q'rterly.	Apl. '82 1½

RAILROAD EARNINGS.—MONTHLY.

	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total.
Burl., Cedar Rap. & Northern:													
1880	184,316	165,170	188,325	141,652	149,504	153,378	143,432	160,160	179,804	204,991	189,330	193,419	2,053,484
1881	167,750	124,510	148,551	184,680	165,630	205,912	174,351	209,112	221,801	221,748	203,880	232,812	2,259,037
1882	252,823	225,631	224,107	178,304	.....	.....	.....	.....	.....	.....	.....	.....	.....
Central Pacific:													
1880	1,200,614	1,070,487	1,373,438	1,356,716	1,778,488	1,724,950	1,840,067	1,973,438	1,964,997	1,120,229	2,199,466	1,905,221	20,508,112
1881	1,602,907	1,454,218	1,709,637	1,872,370	2,068,000	2,063,000	1,859,000	2,059,000	2,293,000	2,514,000	2,267,000	2,110,000	23,947,951
1882	1,876,000	1,702,000	1,987,000	2,052,000	.....	.....	.....	.....	.....	.....	.....	.....	.....
Chesapeake and Ohio:													
1880	202,335	198,681	222,762	221,559	199,443	214,352	238,236	259,110	247,303	211,820	240,795	218,000	2,674,308
1881	162,540	184,389	228,479	227,343	252,235	241,135	225,096	262,858	247,144	237,303	235,585	203,562	2,700,762
1882	210,455	209,708	208,981	253,861	.....	.....	.....	.....	.....	.....	.....	.....	.....
Chicago and Alton:													
1880	534,054	497,013	626,473	542,961	616,128	617,524	708,906	761,120	767,349	785,199	696,776	574,695	7,718,198
1881	487,890	461,641	529,915	424,465	528,860	616,935	671,466	771,466	768,897	750,359	680,133	635,307	7,553,988
1882	579,447	530,480	584,483	432,620	.....	.....	.....	.....	.....	.....	.....	.....	.....
Chicago and Northwestern:													
1880	1,154,632	1,131,683	1,361,725	1,294,573	1,875,608	1,671,177	1,699,686	1,767,938	2,020,245	2,105,217	1,855,671	1,477,902	19,416,007
1881	1,240,667	963,208	1,178,795	1,474,612	1,879,006	2,306,640	1,983,031	2,315,164	2,292,676	2,341,097	2,019,037	1,855,476	21,849,209
1882	1,620,336	1,471,945	1,696,568	1,634,819	.....	.....	.....	.....	.....	.....	.....	.....	.....
Chicago, Burlington and Quincy:													
1880	1,432,740	1,411,870	1,732,518	1,489,894	1,909,627	1,682,956	1,773,643	1,834,321	1,862,285	1,934,762	1,837,860	1,552,018	20,454,494
1881	1,307,948	1,034,821	1,418,149	1,574,371	1,679,455	2,083,803	1,888,558	2,173,945	2,262,981	2,031,001	1,816,133	1,905,490	21,324,150
1882	1,658,834	1,457,300	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Chicago, Milwaukee and St. Paul:													
1880	764,298	738,749	900,675	871,041	1,134,745	1,037,958	1,026,708	991,297	1,257,677	1,493,620	1,472,037	1,397,308	13,086,119
1881	990,847	682,717	916,989	1,259,946	1,538,000	1,371,000	1,560,000	1,678,000	1,645,000	1,590,000	1,569,900	1,855,000	17,025,462
1882	1,435,000	1,377,000	1,561,000	1,518,000	.....	.....	.....	.....	.....	.....	.....	.....	.....
Chicago, St. Paul, Minneapolis and Omaha:													
1880	193,827	173,078	259,783	259,208	232,146	218,093	236,995	251,013	300,833	342,052	342,894	312,173	3,122,097
1881	257,786	158,594	251,648	261,211	350,124	404,562	392,702	385,586	363,685	382,714	380,733	391,950	3,981,296
1882	307,498	315,100	405,779	356,558	.....	.....	.....	.....	.....	.....	.....	.....	.....
Cincinnati, Indianapolis, St. Louis and Chicago:													
1880	155,697	172,541	198,220	168,199	186,995	200,332	204,138	233,478	343,627	239,881	209,014	198,254	2,312,185
1881	182,523	171,511	191,005	175,484	188,794	188,256	178,861	229,858	219,977	212,606	194,805	192,623	2,296,916
1882	200,042	186,879	208,066	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Denver and Rio Grande:													
1880	124,759	126,922	160,883	164,882	193,925	295,455	373,132	400,133	406,583	473,318	408,562	349,196	3,478,007
1881	307,476	317,681	398,493	433,111	514,767	584,230	548,284	606,193	620,643	665,686	566,819	643,417	6,206,812
1882	491,914	412,987	535,055	559,917	.....	.....	.....	.....	.....	.....	.....	.....	.....
Hannibal and St. Joseph:													
1880	176,079	166,965	216,061	206,735	191,317	179,396	224,312	238,081	233,448	242,214	207,147	279,635	2,561,391
1881	154,401	122,874	176,356	190,812	177,002	194,949	198,110	215,308	202,567	313,433	201,782	180,376	2,230,966
1882	138,284	154,717	168,798	148,913	.....	.....	.....	.....	.....	.....	.....	.....	.....
Illinois Central:													
1880	591,212	613,806	613,008	535,732	665,120	681,736	724,095	732,755	806,836	880,211	783,120	673,182	8,304,812
1881	631,281	524,499	557,789	662,493	673,259	803,887	720,004	868,407	828,847	815,238	737 218	763,475	8,586,397
1882	728,173	689,387	695,371	674,603	.....	.....	.....	.....	.....	.....	.....	.....	.....
Indiana, Bloomington and Western:													
1880	80,498	89,690	116,185	90,374	85,733	106,954	103,438	116,732	110,622	121,343	96,621	104,619	1,233,079
1881	90,283	83,261	192,085	203,677	102,630	96,586	83,764	117,956	195,307	181,674	160,826	156,697	.....
1882	195,824	175,755	206,235	205,934	.....	.....	.....	.....	.....	.....	.....	.....	.....
Louisville and Nashville:													
1880	674,455	575,035	612,593	563,883	655,014	976,229	772,537	827,088	931,910	1,000,326	953,086	949,184	9,491,346
1881	816,960	805,124	947,959	850,862	828,726	1,227,885	817,135	876,192	951,566	1,002,950	1,065,223	1,122,285	11,326,859
1882	950,065	960,036	1,073,745	950,007	.....	.....	.....	.....	.....	.....	.....	.....	.....
Mobile and Ohio:													
1880	250,116	204,094	168,301	140,091	129,249	121,855	131,621	140,593	184,246	264,714	251,368	287,373	2,373,621
1881	224,347	216,768	230,916	163,551	145,803	136,517	131,009	159,348	209,044	252,921	252,434	262,025	2,406,437
1882	161,433	158,154	152,651	145,272	.....	.....	.....	.....	.....	.....	.....	.....	.....
Nashville, Chattanooga and St. Louis:													
1880	205,633	191,154	169.457	155,466	158,839	144,155	151,594	169,326	167,473	178,266	182,087	175,996	2,049,448
1881	178,143	190,866	207,710	183,525	104,430	154,549	150,430	168,317	179,979	172,121	152,059	173,127	2,075,256
1882	156,994	159,961	161,005	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
New York and New England:													
1880	164,232	149,907	183,845	179,689	183,701	219,891	205,056	249,885	235,642	215,491	210,856	198 108	2,396,302
1881	189,749	173,614	212,019	216,913	217,185	231,518	246,821	280,524	299,573	261,199	242,412	237,729	2,809,255
1882	215,624	213,791	256,674	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
New York, Lake Erie and Western:													
1879	1,147,173	1,207,391	1,356,780	1,372,755	1,350,574	1,230,419	1,273,533	1,450.223	1,492,497	1,713,697	1,515,835	1,398,224	16,509,127
1880	1,296,381	1,252,218	1,644,958	1,643,151	1,592,544	1,661,812	1,580,976	1,606,874	1,786,417	1,899,910	1,799.338	1,726,788	19,491,361
1881	1,443,437	1,425,765	1,847,261	1,709,057	1,776,891	1,794,982	1,787,081	1,772,895	1,734,200	.....	.....	.....	.....
Northern Central:													
1880	334.494	330,860	415,325	386,130	320,788	419,193	450,298	453,923	464,093	512,918	459.054	494,310	5,050,387
1881	386,157	382,657	452,906	487,173	465,588	487,287	440,811	498,008	429,565	449,664	487,160	476,622	5,443,097
1882	407,368	413,551	430,194	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Northern Pacific:													
1880	81,390	77,259	119,357	185,700	217,613	253,105	241,277	223,500	330,300	358,456	300,822	220,993	2,629,710
1881	116,508	78,803	162,984	216,210	305,292	368,276	404,180	411,624	490,096	565,485	428,903	434,331	4,044,576
1882	239,800	269,000	384,000	438,000	.....	.....	.....	.....	.....	.....	.....	.....	.....
Philadelphia and Erie:													
1880	224,307	245,372	327,678	334,947	311,470	331,024	308,699	347,532	322,737	367,082	324,966	281,919	3,727,733
1881	224,303	225,501	285,573	293,323	343,792	350,585	291,669	303,849	276,522	292,392	284,078	282,772	3,454,309
1882	252,727	246 246	265,311	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
St. Louis and San Francisco:													
1880	198,091	195,948	193,146	176,164	167,664	173,607	213,297	259,995	280,873	328,194	290,329	226,063	2,698,371
1881	212.435	178,234	262,050	265,298	283,399	260,254	252,333	286,373	279,064	308,569	284,320	287,914	3,160,245
1882	256,784	244,654	274,959	242,806	.....	.....	.....	.....	.....	.....	.....	.....	.....
St. Louis, Alton and Terre Haute:													
1880	153,139	163,737	168,994	155,462	147,928	150,207	191,077	216.759	204,295	221,863	188,773	184,503	2,146,741
1881	175,725	166,012	201,137	197,447	163,285	165,896	158,674	189,295	187 299	179,921	162,544	153,852	2,112,801
1882	168,987	149,619	178,145	157,450	.....	.....	.....	.....	.....	.....	.....	.....	.....
St. Louis, Iron Mountain and Southern:													
1880	555,983	490,195	451,560	408,241	349,053	363,454	432,655	565,869	671,219	688,365	632,052	656,951	6,265,597
1881	570,957	560,791	704,002	548,300	479,075	474,302	533,512	644,386	690,400	719,239	687,280	709 498	7,319,744
1882	516,370	501,127	585,008	581,977	.....	.....	.....	.....	.....	.....	.....	.....	.....
St. Paul, Minneapolis and Manitoba:													
1880	180,239	137,645	261,798	333,014	281,899	243,407	272,089	232,579	274,188	345,057	300,675	297,641	3,160,231
1881	254,187	159,482	320,962	425,685	382,642	405,322	387,488	414,954	485,736	605,708	508,530	528,262	4,878,960
1882	395,461	418 358	531,004	570,890	.....	.....	.....	.....	.....	.....	.....	.....	.....
Texas and Pacific:													
1880	245,785	219.165	215,070	174,177	141,083	153,066	195,711	226,073	266.570	303,666	312,184	301,858	2,754,408
1881	281,176	260,781	319,928	295,066	267,443	264,204	320,466	354,082	337,117	578,668	357,724	381,218	3,921,569
1882	310,785	255,644	332,911	359,543	.....	.....	.....	.....	.....	.....	.....	.....	.....
Union Pacific Railway:													
1880	1,433,636	1,393,992	1,730,509	1,937,220	2,027,269	1,928,528	1,934,215	1,913.035	2,270,179	2,707,860	2,251.148	1,869,335	23,448,445
1881	1,339,799	1,374,740	1,674,860	1,766,894	2,393,467	2,590,969	2,528,826	2,638,659	2,844,357	3,289 350	2,773,608	2,267,004	27,451,831
1882	1,961,088	1.759,863	2,226,832	2,462,004	.....	.....	.....	.....	.....	.....	.....	.....	.....
Wabash, St. Louis and Pacific:													
1880	776,790	759,451	978,629	892,024	948,773	95 ,468	1,966,742	1,189,478	1,178,950	1,501,203	1,131,787	1,050,816	12,428,112
1881	811,617	818,922	1,121,592	1,023,482	1,144,660	1,30 ,993	1,131,751	1,542,838	1,490,027	1,396,300	1,399.555	1,308,278	14,461,570
1882	1,229,965	1,734,768	1,315,776	1,378,194	.....	.....	.....	.....	.....	.....	.....	.....	.....

Pittsburgh's Industries.

From the report of the Pittsburgh Chamber of Commerce we learn that the cash capital invested in the rolling-mills of that city amounts to $19,020,000, with a product amounting to $30,242,257. There are 18,905 hands employed in these mills. In blast furnaces and other manufactories in iron, there is a capital of $5,157,000, a product of $9,286,493, and 2,511 hands employed. In steel, the capital is $10,170,000, the product $18,378,836, and 7,060 hands employed. There are other branches of the iron trade not embraced in the above, but the figures are ample to warrant Pittsburgh in still laying claim to being the great iron centre of the country. Next in importance is the coal trade. Here the capital is $15,552,000, the product $12,208,306, and the number of hands 17,962. To this may be added the coke industry. There is a capital of no less than $10,854,500 invested in this comparatively new trade, with a product of $4,423,559, and 5,659 hands. These two articles together yield a product of over $16,000,000, upon a capital of little over $26,000,000. The boating and shipping interests next claim attention. Here we find a capital of $7,447,000, a product of $2,400,000, and 3,260 hands employed. The glass industry is one of the oldest and one of the most valuable manufactures. There are fifty-nine factories, with a capital of $6,986,000, a product of $6,832,683, and employing 6,442 hands.

The Coal Trade.

The leading coal-carrying companies make the following reports of their tonnage for the week ending April 29th, and for the year to same date, compared with their respective amounts carried to the same time last year:—

	Week.	1882.	1881.
Reading Railroad	121,962	2,958,364	2,759,581
Schuylkill Canal	9,782	80,707	42,183
Lehigh Valley	69,445	2,264,677	2,110,675
Delaware, Lackawanna and Western	61,570	1,224,824	1,256,898
Shamokin	18,152	273,356	327,666
Central R. R. of New Jersey	83,478	1,195,823	1,284,912
United R. R. of New Jersey	25,221	513,114	495,913
Pennsylvania Coal	19,283	320,703	347,460
Delaware and Hudson Canal	46,123	974,232	1,091,662
Huntingdon and Broad Top Mountain	5,909	167,703	144,102
Penn. and New York	20,954	575,735	530,109
Clearfield, Pa.	66,401	920,724	742,744

The total tonnage of anthracite coal from all the regions for the week ending April 29, as reported by the several carrying companies, amounted to 382,369 tons, against 681,425 tons in the corresponding week last year, a decrease of 299,056 tons. The total amount of anthracite mined for the year is 7,722,236 tons, against 8,376,832 tons for the same period last year, a decrease of 654,596 tons. The quantity of bituminous coal sent to market for the week amounted to 79,668 tons, against 90,246 tons in corresponding week last year, a decrease of 10,578 tons. The total amount of bituminous mined for the year is 1,488,608 tons, against 1,486,665 tons for the corresponding period last year, an increase of 1,943 tons. The total tonnage of all kinds of coal for the week is 462,037 tons, against 771,671 tons in corresponding week last year, a decrease of 309,634 tons, and the total tonnage for the coal year is 9,210,884 tons, against 9,683,497 tons to same date last year, a decrease of 652,658 tons. The quantity of coal and coke carried over the Pennsylvania Railroad for the week ending April 22 was 217,715 tons, of which 158,722 tons were coal and 58,993 tons coke. The total tonnage for the year thus far has been 3,365,785 tons, of which 2,388,139 tons were coal, and 977,646 tons coke. These figures embrace all the coal and coke carried over the road east and west. The shipments of bituminous coal from the mines of the Cumberland coal region for the week ending April 29 were 5,237 tons — West Virginia Central and Pittsburg Railway Company, 4,395 tons; Piedmont Coal and Iron Company, 770 tons; Consolidation Company, 72 tons—and for the year to that date 470,542 tons, a decrease of 81,265 tons as compared with the corresponding period of 1881. All the coal was carried by the Baltimore and Ohio Railroad, the shipments by which for the year to date have been 387,309 tons, a decrease of 67,445 tons as compared with last year. The canal shipments for the year have been 4,559 tons, a decrease of 39,206 tons as compared with 1881. The shipments by the Pennsylvania Railroad for the year have been 74,842 tons, an increase of 21,564 tons over 1881. The Reading Railroad shipment for last week, ending May 6, was about 120,500 tons, of which 25,600 tons were sent to and 37,300 tons shipped from Port Richmond, and 12,000 tons sent to and 13,000 tons shipped from Elizabethport.—*Phil. Ledger, May* 8.

A self-acting car coupler has recently been patented by Marion W. McCann, of Wayne county, Penn., which though simple in construction, on exhibition at once elicits the attention of railroad men interested in saving the lives of their employes, as well as preserving their rolling-stock. It entirely supersedes the necessity of exposure of the person in or about the drawbars or bunter blocks, all couplings being made or unmade from the sides or tops of the car by lever attachments to the center sill—no pin to be set in any way, that being done by the lever. The inventor makes the broad claim that a car with his attachment will connect with the drawbar of any car now in use where the deviation in height of same is not over eight inches, thereby making mixed trains with and without his invention.

Not less than 154,184,300 tons of coal were taken out of British mines last year, and to do this work 495,000 men were employed. Sir Henry Bessemer has been endeavoring to make people realize what that quantity of coal really is. He says that if this coal were formed into cylindrical columns 50 feet in diameter and 500 feet in height, and if these were placed in a row their own diameter apart, they would make a colonnade 85 miles 750 yards long, the product of each working day being sufficient to make 14 such columns. Another method of giving some idea of the immense nature of the British coal industry is this: The coal extracted last year would make a wall 200 miles long, 100 feet high, and 41 feet 11 inches thick, a mass exceeding that of the great wall of China by enough to add 346 miles to its length. And yet so vast are the British coal deposits, it is estimated that they will yield the present output for 800 or 1,000 years to come.

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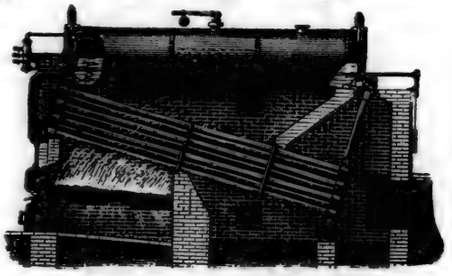
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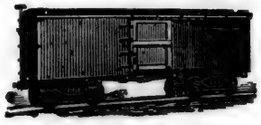
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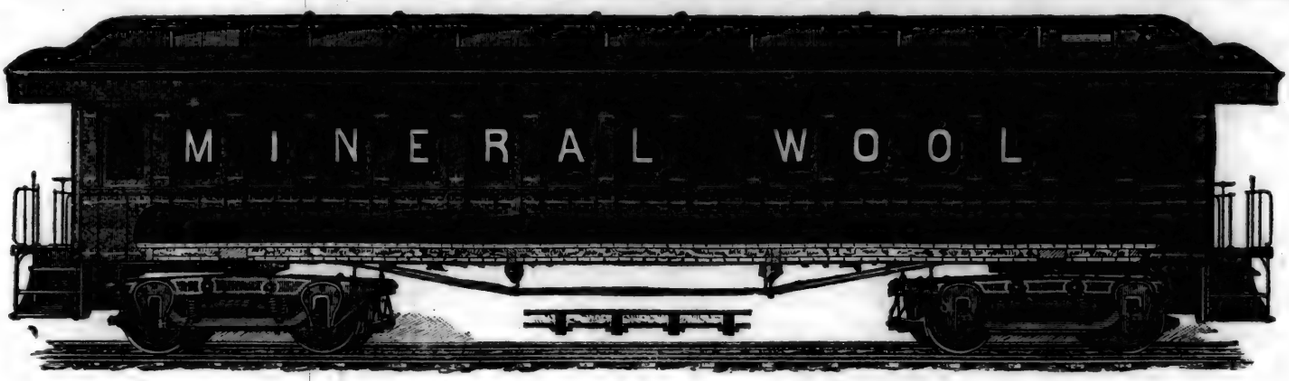
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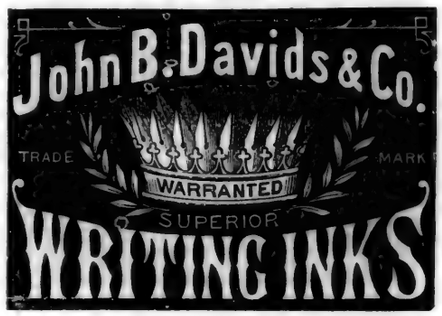
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ESTABLISHED 1831.

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SECOND QUARTO SERIES.—VOL. XXXVIII., No. 19.] NEW YORK, MAY 20, 1882. [WHOLE No. 2,404.—VOL. LV.

The Chinese Problem.

VESSELS are leaving China loaded with emigrants for American ports, whose hope probably was to reach their field of industrial enterprise before any law should stand between it and them. Meantime the President, yielding to the race prejudices of the people, has signed the Anti-Chinese bill, and it is not unlikely that many of these adventurers will turn to Canada, where work waits them upon the Pacific railway, and whence they can dribble through into the United States to the disgust of the hoodlums. This decision brings the Chinese problem upon us with redoubled seriousness. We have always objected to anti-Chinese laws both in the United States and Canada. There, because they are in direct contradiction to the constitution of the nation, and here because such race distinctions are opposed to the whole genius of our Christian institutions. Among the ignorant there are always strong race prejudices. The Chinese are not more heartily despised and disliked in America just now than the French were in England a century ago. The reasons the English hated the French were that they spoke a language that they did not understand, had a religion which they looked on as idolatry, and were supposed to live on frogs. The popular objection to the Chinese to-day is precisely similar, with the substitution of rats for frogs, as we now see nothing barbarous in eating frogs. The only other objection raised against the Chinese is that they are better workmen, that is, in the economical sense ; that they will do more and better work for the same money. This is a capital crime among the worse workmen. Opposition to the Chinese on this score is a confession of inability to compete with them, and of industrial inferiority to them. If the religious and moral ground of opposition had any value one would think the opposition would be strongest among those to whom our own religion and institutions are dearest—the religious and moralist classes. If there is any one who should see no good side to a heathen, one would think it would be the evangelical, who has spent so much of his energies in waking up his countrymen to send the gospel to cleanse him from his vileness. Strange to say, however, the evangelicals are unanimously opposed to anti-Chinese laws ; in this the most enlightened, moral and public-spirited part of the community is generally with them. This does not arise altogether, as a contemporary avers, from a sentimental desire to do them good at the expense of our own people. Such self-denial is great but too scarce. It arises from a faith in our own religion and institutions, and a feeling that an importation into our population of a surpassingly diligent and unrevolutionary element will introduce a wholesome balance against the anarchical tendencies of a large part of our European immigration. The Chinese, moreover, are the most crowded of peoples and are most frugal of space on the earth's surface. Surely those have as good a claim as any to fill the world's unoccupied room. We acknowledge that this clash of races opens one of the great problems of our day, one which cannot, we think, be solved by Act of Congress, and we are inclined rather to wait and see how Providence will work it out than to attempt to introduce an unjust and puny opposition to the free development of the human race or to assume the weakness of our own faith and constitution in the presence of the brood of Confucius—*Montreal Witness.*

Krupp's New Guns.

A CORRESPONDENT of the London *Standard*, writing from Berlin, notices certain novel artillery experiments of an apparantly highly important character which had previously taken place at Messrs. Krupp's great shooting ground near Meppen. Trials were made with both new cannons and projectiles. A new shell, called a "torpedo shell," was fired from a 21-centimetre gun. This shell is stated to afford a practical solution to a problem which has long engaged the attention of artillerists, namely, to construct missiles which, after piercing the objects aimed at, shall explode with torpedo-like effect. Of the new guns experimented with the most important was the pivot cannon, specially designed for the equipment of gun-boats. The pivot, upon the top of which the cannon is fixed, is prolonged right down into the hold of the vessel, where it is turned, and so moves with it the cannon above in any direction. This contrivance, it is asserted, quite obviates any rebound, even after the firing of a heavy charge. It also contributes greatly to insure the success of aim, and at the same time gives increased velocity to the projectile. This pivot system may, it is stated, even when the guns are of a large bore—such as thirty, thirty-five or forty centimetres—be employed for the equipment of small gun-boats. It is estimated that the cost and equipment of each of these pivot gun-boats would not be more than a tenth of a large frigate, and it is insisted that they would be far more effective instruments of destruction, on account of their swiftness and the facility with which they are managed.

Legal Beginning of Spring.

IN the recent suit in Philadelphia of Edward Samuel & Co., against the Phœnix Iron Company, for a breach of contract to receive 1,750 tons of old iron rails, purchased by the Phœnix Iron Company, the jury rendered a verdict for the full amount of damages claimed, $28,985.-33, in favor of Edward Samuel & Co. This suit has been one of much interest to the iron trade and to the legal profession, it being one of a number arising out of what is commonly known as the iron boom. The issue was upon whether the shipments were made in accordance with the contract, which specified for the early spring, the Phœnix Iron Company endeavoring to establish the fact that spring commenced on March 1, the plaintiffs contending that there was only one meaning, and that was that spring began March 20, and ended June 20 or 21. There was no defense except upon this technical meaning of spring.

Electricity Needing to be Taught.

THE recent advances in the application of electricity to daily life have created a clear demand for an institution where electrical engineers can be properly taught the theory and practice of their profession. At present there is no such training-school worthy of the name, and so long as the electric telegraph was the only field for electrical engineers there was little need of one ; for electricians were a very small body, and such as were required to go abroad on cable-laying expeditions, or to the foreign stations of submarine telegraph companies, could all be drafted without much trouble from the physical laboratories of our universities and the testing-rooms of our cable manufacturers. The natural philosophy class of Sir William Thomson, the distinguished Glasgow electrician, has supplied many young men to the electrical ranks in this way, and some of his pupils are not the least eminent in their profession. Indeed, they are among the most promising of the younger electricians, for the inspiration of their old master's example has abided with them. Times have changed

now, however, and the recent introduction of the telephone, the electric light, and the transmission of motive power by electricity, not to mention a thousand miscellaneous adaptations of the current, has rendered it necessary to have an efficient training-college for electricians. The interests of the electric light have already suffered by the incompetency of the persons to whom it has been intrusted, and serious accidents to life and property have resulted from the ignorance of those in charge. Electricity, above all other physical forces, is a thing which ought not to be dealt with by the unskilled, for it is instantaneous and powerful in its effects. The proposition of Lieutenant-Colonel Webber, Royal Engineers, President of the Society of Telegraph Engineers, to the effect that the society should take steps to found a college for the teaching of electrical science, is one to be welcomed, and we trust it will be realized ere long.—*London Globe.*

Bessemer Steel Production in Great Britain.

THE British Iron Trade Association, in a report upon the Bessemer steel production of 1881, shows that the increase during that year more than equaled the entire output of the United Kingdom in 1874, and was in excess of the total output of the world in 1868. There were twenty-three Bessemer works in Great Britain last year, with eighty-two converters in use, twenty-seven idle and fourteen in course of erection. The new converters, it is stated, will be much more effective than the old ones, and will make 60,000 tons per annum per pair. Of the total quantity of ingots produced (1,411,717 tons) 1,023,740 tons were rolled into rails, leaving 417,979 tons to be utilized in other forms. The exports of steel rails were 594,419 tons, or 130,018 tons more than in 1880. Of the 417,979 tons of ingots not used for rails 21,980 tons were rolled into plates, about 50,000 into tires, axles and general forgings, and about 15,000 tons were made into angles, etc., thus leaving about 330,000 tons for general use and for export as blooms, of which, it is said, there were about 100,000 tons shipped in excess of any former year. These figures show that the United Kingdom again leads the United States in Bessemer steel production. According to Mr. Swank, the total production by the Bessemer process last year was 1,374,248 gross tons, or 67,472 tons below the production of Great Britain. The London *Ironmonger* says that "whether we shall maintain our lead during 1882 remains to be proved, seeing that six new converters are being erected in the States." Against these are fourteen constructing in England, with an aggregate annual capacity of 840,000 tons; "but it is admitted," says the *Ironmonger*, "that American practice yields far more per converter than our own;" seeing that the total product in America last year was turned out in 1881 by thirty converters, against eighty-two in England. The United States is, however, far ahead of their trans-Atlantic cousins in the production of steel rails, having turned out about 95,000 tons in excess of the output of British mills in 1881, not including about 100,000 tons rolled by iron rail mills here from imported blooms. The English journal quoted thinks that "if, therefore, the American demand for blooms and rails should be slack this year, the United States may be expected to regain the foremost position in the Bessemer steel trade, so far as statistics are in question."

Warming Houses by the Sun's Rays.

PROF. E. S. MORSE, of the Essex Institute, has devised an ingenious arrangement for utilizing the heat in the sun's rays in warming our houses. His invention consists of a surface of blackened slate under glass, fixed to the sunny side or sides of a house, with vents in the walls so arranged that the cold air of a room is let out at the bottom of the slate and forced in again at the top by the ascending heated column between the slate and the glass. The outdoor air can be admitted also if desirable. The thing is so simple and apparently self-evident that one only wonders that it has not always been in use. Its entire practicableness is demonstrated in the heating of the Professor's study in his cottage at Salem. The value of the improvement for daily warming buildings like churches and school-houses, which, when allowed to get cold between using, consume immense quantities of heat before they are fairly warmed again, is evident. Of course some other means of heating must be available when the sun does not shine. But in the colder regions, say in the far Northwest, the sun shines a greater part of the time, and hence the saving of artificial heat would be very large if the sun-heat could be "turned on" for eight or ten hours out of the twenty-four.

The Delaware Peach Crop.

FROM present appearances the Delaware peach crop this year will be very large; larger than ever before, with the single exception of that of 1875, and the decrease now is not to be ascribed to the want of blossoms on the trees, for they are abundant, but to the fact that there are not nearly so many trees. After that disastrous crop very few trees were planted, while many old ones were pulled up. This has greatly diminished the peach area and insured the growers against the superabundant calamity of 1875. The whole crop that year, including what was marketed, canned, dried, and left to rot, was fully eight millions baskets. This year, even if the trees should be as full as then, it cannot exceed five million. The growers hope it will not be more than half so many, but all appearances now indicate a large crop.

Cleaning Horses by Steam.

A MACHINE is now in daily use at the stables of the Third Avenue Railroad Company, this city, which cleans horses by steam, thus replacing the currycomb. Its standard rate is 100 horses in ten hours, but in a recent trial 122 were cleaned between 7:30 A. M. and 5:46 P. M., with an hour's intermission for dinner. To test it, extra speed was on, and one horse was actually cleaned in 1m. 15s., and more thoroughly than by the ordinary process.

The horse is led under a bar, from which depend, upon each side of him, arms with universal joints. Turning on these arms are brushes a foot in circumference. These are revolved by steam through the arms and cross-bar at an ordinary rate of 800 revolutions a minute, which can be increased to 1,000. A man on each side takes hold of the arm close to the brush and applies the brush to the horse. The steam that whirls the brush makes a noise a good deal like the hissing of a hostler. The universal joints allow the arms and brushes to be moved in any direction.

Beginning at the head, the men move the brush along the sides, back, and belly, and down the legs of the horse to the feet. A cloud of dust arises in the air, and in two minutes the horse looks like a different creature. The horses were a little nervous at first, but after a few seconds all appeared to be pleased with the operation.

At the Third Avenue Railroad stable it takes six men 13½ hours to clean 128 horses by the ordinary process. If the steam brush is passed over the horse at a moderate speed once, each square inch is actually brushed more than if an ordinary brush had been passed over it 400 times. The dust settles on the floor, accumulates rapidly, and is shovelled into a wheelbarrow and carted away.

A Railway Nuisance.

THERE is nothing in this troublesome world that has not its disagreeable side, and it would therefore be unreasonable to expect railway travel to be all sunshine and no sorrow.

But there are a few things that the professional traveler has to put up with which it seems might be mitigated, if not annihilated. Railway companies have labored hard of late to abolish the disagreeable features of travel, and to insure comfort and pleasure, but there is still room for improvement.

In country towns the depot platforms and waiting-rooms, next to the hotel offices and bar-rooms, are the best loafing places for town loafers. The traveler would as soon expect to alight at a country railway station and find it virtually in possession of the town loafers, as he would expect to find a town without its quota of loafers.

These young hoodlums—and some are not young—fill the seats in the waiting-rooms, spew tobacco on the floors, fill the rooms with cheap tobacco smoke, bawl out profane and obscene language in the hearing of ladies, glare at travelers and make comments on them, and generally conduct themselves in a way that would disgrace a drove of hogs. These unclean specimens of the rising generation—born and reared in the pure country air!—infect country railway depots as "river-rats"—thieves—infect the shipping docks in cities. Town councils have passed laws punishing loafing at depots, and forbidding it, etc., and in some cases they are enforced enough to do some good; but many towns still allow their "professional loafers" to possess the depots and annoy railway men and travelers with their vile habits and behavior, to the detriment of both the town's and the railway company's reputation.

The young hoodlums of a town have no business at a railway station, and especially no

business to interfere with the comfort and peace of travelers.—*Hotel World, Chicago.*

Imports of Dry Goods at New York.

The Imports of Foreign Dry Goods at New York for the month of April, were :—

ENTERED FOR CONSUMPTION.

	1880.	1881.	1882.
Manufs. of wool....	$1,277,476	$717,670	$1,169,500
Manufs. of cotton...	2,018,185	1,554,770	2,046,507
Manufs. of silk.....	2,233,983	1,813,706	2,777,115
Manufs. flax.....	1,176,786	1,101,426	1,273,182
Miscell. dry goods...	854,100	765,669	790,995
Total ent. for consumption.....	$7,560,530	$5,953,241	$8,057,295

WITHDRAWN FROM WAREHOUSE.

	1880.	1881.	1882.
Manufs. of wool.....	$315,070	$593,435	$454,338
Manufs. of cotton...	189,862	345,319	210,262
Manufs. of silk.....	359,263	451,008	481,966
Manufs. of flax.....	267,100	362,717	258,258
Miscell. dry goods..	192,362	262,831	293,755
Total withdr'n from warehouse.....	$1,323,657	$2,015,310	$1,698,579
Add ent. for con....	7,560,530	5,953,241	8,057,299
Total thrown on the market.....	$8,884,187	$7,968,551	$9,755,878

ENTERED FOR WAREHOUSING.

	1880.	1881.	1882.
Manufs. of wool....	$748,662	$504,156	$585,264
Manufs. of cotton..	306,618	254,121	241,709
Manufs. of silk.....	563,109	391,122	521,224
Manufs. of flax....	659,131	301,705	247,124
Mis. dry goods.....	238,236	302,627	221,907
Total ent. for warehouse	$2,515,756	$1,753,731	$1,817,228
Add entered for consumption	7,560,530	5,953,241	8,057,299
Total ent. at port....	$10,076,286	$7,706,972	$9,874,527

The Imports of Foreign Dry Goods at New York for four months from January 1, were:—

ENTERED FOR CONSUMPTION.

	1880.	1881.	1882.
Manufs. of wool...	$7,698,577	$6,140,775	$8,268,880
Manufs. of cotton	10,055,009	9,134,665	10,642,270
Manufs. of silk....	11,605,400	9,444,719	13,318,254
Manufs of flax....	6,725,490	4,582,381	5,737,845
Mis. dry goods....	3,775,671	3,455,362	3,790,211
Total entered for consumption ...	$39,860,147	$32,757,962	$41,757,460

WITHDRAWN FROM WAREHOUSE.

	1880.	1881.	1882.
Manufs. of wool..	$2,161,266	$3,005,550	$2,458,257
Manufs. of cotton.	1,300,437	2,328,245	1,706,324
Manufs. of silk....	1,824,766	2,153,004	2,117,982
Manufs. of flax...	1,628,769	2,321,045	1,660,936
Mis. dry goods....	845,519	1,050,558	1,161,190
Total withdrawn from warehouse.	$7,760,757	$10,858,402	$9,104,689
Add entered for consumption ...	39,860,147	32,757,902	41,757,460
Total thrown on the market.....	$47,620,904	$43,616,304	$50,862,149

ENTERED FOR WAREHOUSING.

	1880.	1881.	1882.
Manufs. of wool...	$2,405,776	$2,503,256	$2,592,958
Manufs. of cotton.	1,217,204	1,831,028	1,668,176
Manufs. of silk....	1,810,945	1,873,801	1,867,213
Manufs. of flax....	2,490,500	1,713,291	1,490,420
Mis. dry goods....	931,520	1,220,513	1,026,495
Total entered for warehouse	$8,860,945	$9,141,889	$8,645,262
Add entered for consumption ...	39,860,147	32,757,902	41,757,460
Total ent. at port.	$48,721,092	$41,899,791	$50,402,722

Railway Signals.

An examination was made on Saturday last by a number of gentlemen into the practical working of the National Railway Signal Company's system of signals in use upon the New York and New England Railroad near Boston. The advantages claimed for the system are that no batteries are used, but the signals are operated by a mechanical generation of an electric current; that the signals cannot be operated by maliciously disposed individuals, the mechanical work being too great to be done by a force less than that of a locomotive or car; that the signals are automatic in action, requiring no winding up; that visible signals are thrown into position indicating danger by mechanical means, and that crossing signals are continuously operated during the passage of a train from the point where the "generator" is located to the signal itself, and are stopped by the action of the train. The signals have been in use on the New York and New England Road for nearly a year as follows: At Dudley street, "generator" for operating "crossing signal" on "out" track for protection of travel at Bird street; at Bird street, "crossing signals" on "in" and "out" tracks for protection of travel by teams or pedestrians; at Dorchester, "generator" for releasing "block or section" signal at Mattapan, and "generator" for operating "crossing signal" on "out" track at Mattapan; and at Mattapan, "crossing signals" on "in" and "out" tracks for protection of travel on Blue Hill avenue, and "block or section signal', for protection of "in" track. The various devices were examined quite closely by all the gentlemen, their working being practicably shown and explained in detail, and despite the unpleasant weather the exhibit proved quite interesting.

Ores for use in Making Bessemer Steel.

Major Edward S. Hutter has just closed a contract with the Crozer Steel and Iron Company for supplying it with 600,000 tons of ore. The ore contracted for is red hematite or specular ore, and by analysis shows: Metalic iron 67 14, phosphorus .078. The ore being so low in phosphorous, brings it within the limit for use in making Bessemer steel. The Crozer Steel and Iron Works Company, for the purpose of mining the ores contracted for, has formed a copartnership with Major E. S. Hutter, under the name and style of Houston, Hutter & Co., the contract and copartnership, and mining operations beginning May, 1882, and continue on for the period of ten years. E. S. Hutter has also been appointed superintendent of mines and mining by the Crozer Company. This contract and other valuable arrangements for the supply of steel ores, made by Col. D. F. Houston for the Crozer Company, will give that company an advantage over Pennsylvania furnaces in the manufacture of Bessemer steel not less than $10 or $12 per ton.—*Roanoke (Va.) News.*

Science and History.

M. Renan has, in an interesting passage of his own autobiography, given it as his belief that a century hence mankind will study very little else than physical science. The time, he thinks, will come when the historical sciences will be thrust into the background; all that they have to teach will be known, and men will feel comparatively little interested in their own past. On the other hand, the more they know of nature the more there will be to be known. Chemistry and physiology offer inexhaustible fields for research; and the truths which they reveal will prove more and more interesting to mankind. It is very difficult to say what men will think or do a hundred years hence; but it seems likely enough that this will be the tendency of study. Certainly, even now, the men of science are becoming more and more important factors in the life of all of us. They are little by little winning the fight against disease; they are giving us facts, and enabling us to found our beliefs on the sure ground of knowledge. Their influence must surely become greater and greater as time goes on; for humanity always reserves its highest honors for those who teach it to know.—*London Times.*

System.

Whatever you do, have system about it. It is the greatest labor-saving machine in the world, and the cheapest, but it is not the easiest governed. It requires reasoning and management to control and exercise it. Yet wherever it has been introduced, this great labor-saving machine has proved a success, demonstrating to the world that it has saved its operator unnecessary manual labor, a multitude of perplexities, kept his workshop in order, and enabled him to perform correctly more by far than in its absence would have been possible. It has many a time kept its possessor from exasperating entanglements. It has saved him time and trouble. It has kept his business rectified while others have been confused. System! It has ever been a victor in war, it is the powerful scepter that the true statement and political economists sway in government, and it has been and still is the commonest stepping-stone to individual fortunes. Have system in your management and you will find that eventually it will outweigh the physical forces of energy without it.

A man who lost an eye by a railway accident has sued the company and recovered $10,500, and says he can see his way better in the future than he ever could before.

"Porter," said a passenger from Albany, on the New York Central Railroad, as he stepped into his sleeping-berth, "call me at Lyons, sure." "All right, sah." Late next morning he called him. "Only 20 minutes from Buffalo, sah." "Why didn't you call me at Lyons?" "Lyons! 'Fore goodness, dat's it! You did say Lions for suah, boss, an' I done tought ober de whole circus, an' I hope to die ef I could ketch onto any animile higher dan Buffalo! I'll remember de cage next time, boss."

A story is told of an Englishman who was lately obliged to travel in Ireland—a duty he approached with fear and trembling. His affrighted senses were startled on hearing a fellow passenger in the railway carriage remark to another: "I'm just afther bein' over to Kilpatrick." "And I," replied the other, "am afther bein' over to Kilmary." "What murderers they are!" thought the Englishman. "And to think that they talk of their assassinations so publicly!" But the conversation went on. "And fhare are you goin' now?" asked assassin No. 1. "I'm goin' home, and then to Kilmore," was No. 2's reply. The Englishman's blood curdled. "Kilmore, is it?" added No. 1. "You'd bethar be comin' along wud me to Kilnmaule." It is related that the Englishman left the train at the next station.

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TRUNK LINES EAST AND WEST OF BUFFALO.

A DISPATCH purporting to originate in Chicago makes it appear that the Delaware, Lackawanna and Western Railroad Company, of which Mr. SAMUEL SLOAN is President, has proposed to Mr. WM. H. VANDERBILT to take off his hands the Canada Southern and Michigan Central railroads, and that there is some probability that the transfer may be made. It is safe to say that this is mere gossip, or, at the furthest, is merely an attempt to make better terms with one of the other lines between Buffalo and Chicago. To understand the very intricate plot that is now unfolding in that quarter the reader will bear in mind that there are four completed roads from Buffalo to Chicago, namely; the Lake Shore and Michigan Southern continuous, the Canada Southern and Michigan Central, the Grand Trunk, and the Great Western, which, in connection with the Wabash and Michigan Central, constitute the fourth. The New York, Chicago and St. Louis, now nearly completed, will form a fifth continuous line between the two places.

Between Buffalo and New York, however, there are but two completed lines, the New York Central and Hudson River, and the New York, Lake Erie and Western. A third line, the Delaware, Lackawanna and Western, first mentioned, will soon be completed; and in the course of a year a fourth, the New York, West Shore and Buffalo. The New York Central and Hudson River has complete proprietary control of two of the lines west of Chicago—those nearest to the opposite shores of Lake Erie, while the other New York trunk line, the New York, Lake Erie and Western, has no similar control over any line to Chicago, but keeps up a more or less friendly interchange with the two sets of independent lines for through business. The interesting query arises as to which of these unmated systems east and west of Buffalo will be the first to unite. A break in the status of the uncontrolled roads will be the signal for fresh alliances among the rest.

For instance, if it were conceivable that Mr. VANDERBILT may acquire control of the new "Seney" road, it would drive the Erie to an alliance with the Grand Trunk, or Great Western. Similarly, if the "Sloan" road and "Seney" road were to be joined in fortunes, as they are to be completed about the same time, it would result in the same choice for the Erie. If, on the other hand, the Erie and "Seney" roads should work together, it would drive Mr. SLOAN to an alliance with the Canadians. This latter is the more probable—where all is uncertain; but the Erie is not shut up to any such limited choice. The Erie has, as a close ally, the "McHenry" road now known as the New York, Pennsylvania and Ohio, extending from Salamanca west and south to Dayton, and has recently acquired a controlling interest in the Cincinnati, Hamilton and Dayton, and branches beyond.

From a point called Marion, in western Ohio, a new line is under construction to Chicago, in the same interest, which, though somewhat longer than the lines mentioned, will serve as a through line between New York and Chicago; and, it is claimed, as a line between Chicago and Cincinnati also. There will remain for each of the aspiring trunk lines between Buffalo and New York an independent through connection between Buffalo and Chicago, leaving the New York Central still with two strands west of Buffalo. Reckoning the Salamanca-Marion line, the Erie will this year have also alternative routes west of Hornellsville. It is thought by some that the "Seney" road will maintain its independence until the West Shore road is completed, and then unite with it. In that event it is not improbable that the Erie and the "Sloan" road will choose Canadian partners, the Great Western serving to connect the Wabash with the Lackawanna, both "Gould" roads for the time being. A consolidation of the Great Western with the Grand Trunk of Canada might interfere with these plans.

Pennsylvania Railroad.

FROM the report of General Manager Frank Thomson, just submitted to the President and Board of Directors of the Pennsylvania Railroad Company, the subjoined particulars are gathered in relation to the operations of that company during the past year on its lines east of Pittsburgh, which include the Main Line, the Philadelphia and Erie and the New Jersey divisions.

There are now in use on the Main Line and branches 2,201.80 miles of single track; 837.38 miles of single track on the New Jersey division, and 474.16 miles on the Philadelphia and Erie division, including the sidings in each, a total of 3,514.34 miles of single track in use east of Pittsburgh. The company has running over their track more than 1,000 locomotives and nearly 30,000 cars, exclusive of nearly 30,000 more cars that are owned by companies and individuals; 103 new locomotives: 93 passenger equipment, and 4,211 freight and maintenance of way cars were built during the year at the Altoona shops, where the company had, during the same period, 83,626 wheels cast. Three locomotives and 153 cars were also built at the Philadelphia and Erie division shops; 100 miles of single track were added during the year to the company's mileage. In the work of renewals during the year there were used on the main road and branches 11,973 tons of steel rails, 1,016 tons of iron rails, 1,069,814 pounds of spikes and 788,673 cross-ties, exclusive of 676 tons of steel rails used on the main line for construction.

On the United New Jersey Division there were used 2,958 tons of steel rails for renewals and 1,514 tons for construction; 263,871 pounds of spikes in renewals and 101,323 pounds in construction, with 187,200 cross-ties for renewals and 42,874 for construction.

Of the total number of tons of freight carried during the year, on the Main Line, 8.99 per cent was through freight east and 3.12 per cent was through freight west; 55.49 per cent was local freight east, and 32.40 per cent was local freight west; 21.50 per cent of the total earnings was on passenger and 76.79 per cent was on freight. The ratio of expenses to earnings was 55.95 per cent on the Main Line, 68.73 per cent on the United New Jersey Division and 70.35 per cent on the Philadelphia and Erie Division.

The total expended for new construction was $7,647,000, of which $1,020,000 was charged to construction of the new Philadelphia station in addition to $584.039 paid for real estate for the same purpose. The statement of the loaded cars passing West Philadelphia and other points on the Main Line during the year shows that 415,267 loaded cars arrived at West Philadelphia and 275,304 at Pittsburgh; 437,110 moved eastward and 157,729 westward at Columbia, and 460,635 moved eastward and 150,624 westward at Harrisburg. The statement shows that there was an improvement in both directions, principally due to increased shipments of oil, coke and coal.

ORGANIZATION.

THE directors of the Front and Union Streets (Wilmington, Del.) Passenger Railway Co. are: George W. Bush, Dr. Read J. McKay, H. B. Seidel, W. G. Gibbons, Joseph Pyle and J. R. Tantum.

THE directors of the Cheshire Railroad Company, elected on the 9th inst., are: William A Russell, Edward C. Thayer, John B. Meer, George W. Russell, Aurelius B. Turner, Royal M. Pulsifer, William H. Hill, Jr.

AT the annual meeting of the stockholders of the Nantasket Beach Railroad Company on the 4th inst., the following board of directors was chosen: J. B. Moores, R. M. Pulsifer, Geo. R. Eager, John L. Curtis, W. H. Hill, Jr.

THE directors of the Seaboard and Roanoke Railroad Company, elected on the 2d inst., are: John M. Robinson, president and general superintendent; N. Frazier, Enoch Pratt, R. C. Hoffman, D. A. Barnes, Richard Dickson and Moncure Robinson, Jr.

THE directors of the Pleasant Hill and Ocean City Railroad Company, elected on the 4th inst., are: George Wood, president; Strickland Kneass, John M. More, Charles P. Stratton, Israel S. Adams, William J. Sewell, S. G. Lewis, Walter Wood, N. P. Shortridge, D. Robinson and J. S. Adams.

AT the annual meeting of the stockholders of the Ashuelot Railroad Company, held at Keene, N. H., on the 9th inst., the following directors were elected: A. B. Harris, F. F. Lane, J. Mulligan, W. H. Haile, Oscar Edwards, J. A Rumrill. The officers are: A. B. Harris, president. E. F. Lane, treasurer; Seth Hunt, assistant treasurer; F. F. Lane, clerk; George E. Frink, auditor.

AN election for directors of the Windsor and Forest Line Railroad Company was held at Claremont, N. H., on the 10th inst., at which the former board, consisting of James Burnap, of Marlow, Hiram F. Morrill, Virgil C. Gilman, of Nashua, H. W. Parker, Otis F. R. Waite, of Clarement, Christopher Robb, of Stoddard, N. H., and D. C. Lindsay, of Burlington, Vt., was re-elected.

AT the recent annual meeting of the Mount Washington Railway Company, in Concord, N. H., the following directors were chosen for the ensuing year: Sylvester Marsh, J. Thomas Vose. Walter Aiken, John H. George, Emerson W. Raymond, Nathaniel White, Jr., Joseph A. Dodge. The officers are: Sylvester Marsh president, Frank E. Brown clerk, E. D. Harow, treasurer, and Walter Aiken and J. A. Dodge, managers.

THE directors of the Indiana, Bloomington and Western Railroad Company, elected at the annual meeting of the stockholders held in Indianapolis on the 9th inst. are: Austin Corbin, John L. Farwell, Benjamin J. Heming, Alfred Sully, Robert K. Dow, J. Rogers Maxwell, Henry W. Maxwell, F. W. Prent, Charles Hanford, George E. Leighton, Joseph Dorr, F. W. Denton and James D. Campbell.

AT the annual meeting of the Petroleum Exchange on the 9th inst., the following officers and directors were elected: L. H. Smith, president; W. W. Miller and C. F. Ackerman, vice-presidents; H. M. Curtis, treasurer; W. Fisher, secretary; L. Trube, D. R. Offiey, J. W. Capmann, H. Robbins, A. A. Sumner, J. Lombard, N. Mehlen, E. W. Arnold, F. Kimbold, G. W. Stahl, George F. Gregory and D. Goettel, directors.

AT the annual meeting of the Delaware and Hudson Canal Company, held on the 9th inst., Thomas Dickson was re-elected president, and the old board of directors was also re-elected. This consists of Abel A. Low, James M. Halstead, Legrand B. Cannon, James R. Taylor, Thomas Dickson, John Jacob Astor, Thomas Cornell, Robert S. Hone, James Roosevelt, Adolphus Hamilton, Abraham Van Nest, Hugh J. Jewett, and David Dows.

AT the annual meeting of the stockholders of the Little Rock and Fort Smith Railroad Company held at Little Rock, Ark., on the 1st inst., J. H. Converse, Elisha Atkins, T. M. Weed, F. Gordon Dexter, J. Turner, William M. Fishback, Colonel F. Clark, Dudley E. Jones and W. Slack were elected directors. The officers chosen were J. H. Converse, of Boston, president; Jesse Turner, of Arkansas, vice-president; J. Gay, of Arkansas, secretary; Joseph Kampman, of Boston, treasurer.

THE directors of the New York, Susquehanna and Western Railroad Company, elected on the 4th inst., are: F. A. Potts, W. S. Dunn, J. S. Rogers, Simon Borg, Charles Minzesheimer, Henry Marks, A. D. Juilliard, G. A. Hobart, Charles Seidler, Isaac T. Burr, R. K. Dow, John L. Farwell and R. T. McCabe. After the meeting of the stockholders the directors organized by the election of Frederic A. Potts, president; R. T. Chapel, treasurer; and John P. Rafferty, secretary.

THE annual meeting of the Hanover Junction, Hanover and Gettysburg Railroad Company was held at Hanover, York county, Pa., on the 8th inst. and the following board of directors elected: A. W. Eichelberger, president; William Grumbine, S. Keefer, R. Young, R. M. Wirt, Peter Flickinger and Henry A. Young, of Hanover; Charles W. Slagle and William Buehler, of Baltimore; Matthew Eichelberger and David A. Wills, of Gettysburg. A semi-annual dividend of two per cent was declared in April.

THE directors of the Duluth and Iron Range Railroad Company, recently elected, are: Charlemagne Tower, Sr., Charlemagne Tower, Jr. and R. R. Lee, all of Philadelphia; Geo. C. Stone C. P. Bailey, J. D. Ensign, B. Culver and H. F. Thompson, all of Duluth; T. L. Blood, St. Paul. The officers are: George C. Stone, president; H. F. Thompson, secretary and treasurer; R. R. Lee, of Philadelphia, chief engineer. At a meeting in March last, $500,000 was subscribed by Geo. C. Stone and Eastern capitalists, and a formal transfer made to them of all the rights of the original company.

THE directors of the Little Rock, Mississippi River and Texas Railway Company, recently elected, are: Elisha Atkins of Boston, Mass.; E. H. Winchester, Portsmouth, N. H.; F. Gordon Dexter, Boston; J. E. Redfield, Essex, Conn.; V. D. Wilkins, Pine Bluffs; D. E. Jones, C. F. Penzel, Little Rock; L. A. Pindall, Arkansas City; J. T. W. Tillar, Selma, Ark. The directors are: Elisha Atkins, president; J. A. Woodson, general superintendent and secretary; G. S. Daniels, treasurer; H. G. Ellis, general passenger agent and auditor; G. W. Hughes, chief engineer.

AT a meeting of the stockholders and directors of the proposed railroad between Milford, Franklin and Providence, held on the 4th inst., the following officers were elected: President, James P. Ray of Franklin; vice-president, W. F. Draper of Milford; treasurer, Joseph G. Ray of Franklin; clerk, George W. Wiggin of Franklin; directors, James P. Ray, Joseph G. Ray, Edgar K. Ray, James F. Ray, Moses Farnum and George W. Wiggin of Franklin; George Draper, W. F. Draper and George A. Draper of Milford. The directors voted to leave the building of the road and the letting of the contracts to the president. The capital stock amounts to $100,000, and it was voted to call in 10 per cent of that amount.

THE eleventh annual convention of the Conductors' Life Insurance Association of the United States was held in Philadelphia on the 10th inst. The report of the treasurer which was presented, stated that for the year ending February 28, 1882, the receipts had been $18,823.43, and the disbursements $18,802.80. Of this latter sum, $14,178 was paid out from the first series assessments, and $2,733 from the second series. There are now in the Association 877 members of the first series, and 290 of the second, and there were only eight death assessments in the first series during the year. The company is in the nature of a mutual benefit association, whose members pay a small assessment at each death, and who, by reason of their dangerous calling, are unable to secure life insurance policies from other companies at what are considered by them reasonable rates. Officers for the ensuing year were elected as follows: President, T. C. Jones, Toledo, Ohio. Vice-presidents—George Mogford, Jackson, Michigan; A. A. Sharp, Macon, Georgia; C. H. Wilsey, Toledo, Ohio. Non-resident directors—R. Hoyland, Louisville, Ky.; J. F. Peyton, Lynchburg, Va.; A. F. Barrett, Winona, Minnesota; J. F. Conant, Cincinnati, Ohio. Resident directors—W. H. Lummins, Chas. Parker, James Gordon, W. R. Kenney, Jos. A. Southwick. Secretary and treasurer—Walter Lackey. The next convention is to be held at Cincinnati.

PERSONAL.

W. H. YEOMANS has been appointed superintendent of the Housatonic Railroad Company, vice L. B. Stillson, resigned, to take effect the 17th inst.

S. H. LITTLE, the receiver of the Central

Railroad of New Jersey, has issued an official order announcing the retirement of Joseph S. Harris, the general manager of the company, and transferring the duties of his office to W. W. Stearns, the general superintendent.

During the absence of general superintendent Pugh, of the Pennsylvania Railroad Company, in Europe his place will be supplied by J. W. Latta.

Hon. Ginery Twitchell has been elected a director of the Boston, Hoosac Tunnel and Western Railway, to fill the vacancy caused by the death of Gen. Wm. L. Burt.

Harry G. Coltart, who has filled the position of train-dispatcher of the Mississippi and Tennesee railroad for the past few years, has been tendered the position of master of trains of the Mexican Central Railroad, with offices in the City of Mexico.

J. H. Gallagher, formerly with the Baltimore and Ohio Railroad Co., has accepted the position of train-master of the New York and New England Railroad, under S. M. Felton, formerly superintendent of the Pittsburgh, Cincinnati and St. Louis Railway.

A circular from the Atchison, Topeka and Santa Fe Railroad announces that S. W. Manning has been appointed New England agent, with office at 197 Washington street, Boston, vice H. L. Cargill, resigned, to accept another position in the company's service.

President Leland Stanford has issued an order appointing A. N. Towne general manager of the Central Pacific Railroad and leased lines, with headquarters at San Francisco. Under the direction of the president he will attend generally to the executive business of the company, having the supervision and direction of all of the departments of the company's service, the financial and accounting excepted. It is expected that much of the executive business heretofore attended to by the president will hereafter fall upon Mr. Towne, the new general manager.

CONSTRUCTION.

Regular trains began running on the Georgia Pacific on the 15th inst. to Douglasville.

The Buffalo Branch of the Buffalo, Pittsburgh and Western Railroad will be open to travel by the 20th of June.

The extension of the Buffalo, Pittsburgh and Western Railroad from Warren to Salamanca was completed on the 17th inst.

The new short line of the Chicago, Burlington and Quincy Railroad, from Chicago, Peoria and St. Louis to Denver, Col., will be opened about June 1.

The "Bradford Short Line," of the Buffalo Pittsburgh and Western Railroad, was formally opened on the 17th inst. by an excursion from Titusville to Bradford.

Work on the new connection of the Pittsburgh, Cleveland and Toledo Railroad from Newcastle, Pennsylvania, to Akron, Ohio, will be begun in a few days and pushed rapidly to completion.

On the Omaha extension of the Missouri Pacific Railway there are now laid 8½ miles of track south of Hiawatha and 6¾ miles north of Atchison Junction, leaving a balance to complete of about 22½ miles. This is expected to be ready by June 15.

The London, Ont., *Free Press* says that the Desseronto and Bay of Quinte Railway is a model road. The grade is almost as level as a house floor, the construction of the track superb, and shade trees are to line each side all the way from the junction to the Bay.

Six handsome passenger cars were shipped to the Lehigh Valley Railroad Company on the 17th inst. by Messrs. Bowers & Dure, of Wilmington, Del. The cars are beautifully upholstered in bronze and red plush, fitted Spear's patent heaters, while the lamps are of a new and beautiful design.

It is announced from Woodstock, Vt., that the subscription for the survey of the proposed railroad from that place to Rutland is completed, and that work will be begun at once and pushed forward to completion. Hon. S. S. Thompson of Woodstock will superintend the survey, and has secured competent engineers to do the work.

From Ottawa, Ont., we learn that the residents of the Gatineau Valley are jubilant over the assurance that the whole railway scheme to the Desert will be completed in two and a half years. The engineer in charge of the road has instructions to complete grading by next fall, so that ties, &c., can be got out during the winter and the cars be running by the first of July, 1883.

Only ninety miles of track-laying remained on the 13th inst. to be done in Texas in order to make a through railway connection between San Francisco and New Orleans. The largest force of men obtainable is being put at work, and it is expected that all will be completed by September 1. Twenty-five miles of the road are very difficult to build and require much trestle work.

The Chesapeake and Ohio Railway Company opened its new Louisville and Washington through line on the 14th inst. Trains, with Pullman coaches attached, will be run daily between the cities named, thus opening another great highway by the way of Washington between the East, West and Southwest. Between Charlottesville and Washington the trains will go over the Virginia Midland Railroad.

The Baltimore and Ohio Railroad Company are building a double track between Pittsburgh and Ellrod, 18 miles, 10 miles of which are about complete. They talk of extending the second track to Connellsville, which would give them double track facilities 57 miles. The freight east and west on this division is more than the road can handle, the Pittsburgh and Lake Erie being their important feeder.

The proposed extension of the Peninsula Railroad by the construction of a branch from Pocomoke City, Worcester county, Md., to Cherrystone, Northampton county, Va., from which latter point a line of steamers will be established to Norfolk, will soon be actively begun, and, although the road, which is to be about 50 miles long, is to be built by private enterprise, it will be operated in connection with the Pennsylvania system.

Arrangements have been completed by Mr. G. B. Wilson, of this city for the construction of the New Orleans and Mississippi Valley Railroad, from New Orleans, via Baton Rouge to Vicksburg, on the east bank of the Mississippi River. The work will begin as soon as the right of way is secured. The surveys will commence in a few days. The line continues to Memphis through Yazoo Valley. The company is composed of a syndicate of northern capitalists.

Mr. F. B. Gowen, President of the Philadelphia and Reading Railroad Company, in his recent address in London before the stock and bond holders in reference to the present condition and future prospects of that corporation, stated that Mr. Garrett, President of the Baltimore and Ohio Railroad Co. had assured him "that his company would construct a line from Baltimore to connect with us at Philadelphia, so that the business from Washington, Baltimore and the South will go to New York over our lines and those of the Central of New Jersey, with which we are connected. We shall then have this large additional traffic thrown upon our lines, and, in order to get anthracite coal to the southwest, we propose another connection west from Harrisburg, part of which is now being built, so that we shall get the benefit of traffic from that source, and also be able to send anthracite coal over the large market of the Southwest by means of the lines of the Baltimore and Ohio Railroad Company.

Peninsula Railroad.

The Peninsula Railroad Company of Maryland and Virginia have in contemplation the construction of a railroad from Pocomoke City, Worcester County, Md., to Cherrystone, Northampton County; Va., for the purpose of forming a connection with the Pennsylvania Railroad system for a direct line South. A corps of engineers is now at Eastville, Va., on the Westcott farm, opposite Cherrystone, locating a terminus, and another corps is at work surveying a road from Delmar, where the Pennsylvania system connects with the Eastern Shore Railroad, to Peninsula Junction, formerly called Newtown Junction. According to this plan the Eastern Shore Railroad, which runs from Delmar to Crisfield, will be somewhat ignored, as the proposed new line will run from Delmar to Cherrystone, via Pocomoke City. The present Peninsula Railroad of Maryland extends from Peninsula Junction, where it taps the Eastern Shore Railroad, to Pocomoke City. On May 25 the Peninsula railroad companies of Maryland and Virginia will be formally consolidated and the tracks of the former be used for side tracks for the latter when the new road is constructed, which will be done, it is said, within the next eight months. It is stated that plenty of money and energy are back of the enterprise. At Cherrystone a line of steamers will be established to run across to Norfolk, thus forming a direct route, which will be ten hours shorter than any other, it is claimed. The road will be equipped in first-class style. The local traffic will be a secondary consideration, it is said, but efforts will be made to develop the country.

A Bad Coupling.

She married a railroad man,
A locomotive spark;
He told her of his little plan
At the gate, out in the dark.

But long ere a year had gone,
The fire it died, alack!
Their coupling apart was drawn,
And he switched her off his track!

Anthracite Coal Tonnage.

THE following is an official statement of the anthracite coal tonnage for the month of April, 1882, compared with the same month in 1881 :—

	1882.	1881.
Reading Railroad	514,158	480,601
Lehigh Valley Railroad	435,540	403,682
Central Railroad of New Jersey	344,009	274,112
Delaware, Lackawanna and Western	312,211	286,483
Delaware and Hudson Canal	216,572	197,192
Pennsylvania Railroad	181,167	187,674
Pennsylvania Coal Co.	108,054	87,952
New York, Lake Erie and Western Railroad	24,089	28,156
Total	2,135,802	1,945,855

The following is the statement for the year 1882, compared with the year 1881 :—

	1882.	1881.
Reading Railroad	1,778,745	1,805,010
Lehigh Valley Railroad	1,557,835	1,598,317
Central Railroad of New Jersey	1,150,898	1,171,889
Delaware, Lackawanna and Western	1,222,952	1,278,836
Delaware and Hudson Canal	879,728	961,473
Pennsylvania Railroad	627,685	628,753
Pennsylvania Coal	368,362	374,384
New York, Lake Erie and Western Railroad	70,507	143,850
Total	7,676,715	7,962,516

The stock of coal on hand at tide-water shipping points, April 30, 1882, was 752,865 tons; on March 31, 1882, 666,318 tons—increase 86,547 tons.

A Pig Turned into Pork in Thirty-five Seconds.

A CORRESPONDENT of the New York *World* recently visited the Chicago stock yards, where he saw a pig put through its performances in thirty-five seconds. What happened was this: A lively piebald porker was one of a number grunting and quarreling in a pen. He was suddenly seized by the hind leg, firmly manacled and swung through the fatal door through which no pig ever returns. On the other side stood a man—

That two-handed engine at the door
Stands ready to smite once and smite no more—

and the dead pig shot across the trough and through another doorway, and then there was a splash as he went head-first into a vat of boiling water. Some unseen machinery passed him along swiftly to the other end of the terrible bath, and there a water-wheel took him up and flung him out on to a counter. Here another machine seized and scraped him, and down the counter he went, losing his head on the way, and then, presto! he was up again by the heels; in one dreadful handful a man emptied him, and while another squirted him with fresh water the pig (registering his own weight as he passed the teller's box) slid along the steel bar from which he hung, and was whisked around the corner into the ice-house. One long cut of a knife made two sides of pork out of the piebald pig, and two hacks of a hatchet brought away his backbone; and there, in thirty-five seconds from his last grunt—dirty, hot-headed, noisy—the pig was hanging up in two pieces, beautifully clean, tranquil, *iced!* The very rapidity of the whole process robbed it of all its horrors. It even added the ludicrous to it. Here was an opinionated, piebald pig making a prodigious fuss about having his hind leg taken hold of, and lo! before he had even made up his mind whether to squeal or only to squeak he was hanging up in an ice house, split in two.

That the whole process is virtually painless is beyond all doubt, for it is only for the first fraction of the thirty-five seconds that the pig is sentient, and I doubt if even electricity could as suddenly and painlessly extinguish life as the lightning of that unerring poniard, "the dagger of mercy," and the immediate plunge into the scalding bath.

Protecting Iron.

A NEW process for preserving iron is described by *Les Mondes*. It consists in treating the casting with dilute hydrochloric acid, which dissolves a little of the metal and leaves a skin of homogeneous graphite holding well to the iron. The article is then washed in a receiver with hot or cold water, or cooked in steam, so as to remove completely the chloride of iron that has been formed. Finally the piece is allowed to dry in the emptied receiver, and a solution of caoutchouc, gutta percha, or gum resin in essence of petroleum is injected, and the essence afterward evaporating leaves a hard and solid enamel on the surface of the iron work. Another plan is to keep the chloride of iron on the metal instead of washing it off, and to plunge the piece into a bath of silicate and borate of soda. Thus is formed a silico-borate of iron very hard and brilliant, which fills the pores of the metal skin. As for the chlorine disengaged, it combines with the soda to form chloride of sodium, which remains in the pickle.

New York Iron and Metal Exchange.

THE rooms of the New York Iron and Metal Exchange, Limited, at 69 Wall street, were formally opened on the 16th inst. This is an incorporated company, and among its stockholders are the Thomas Iron Company, B. F. Judson, Naylor & Co., James R. Thompson & Co., the Burden Iron Company, Crocker Brothers, J. B. & J. M. Cornell, Port Henry Iron Ore Company, Cooper, Hewitt & Co., David Thomson & Co., National Tube Works Company, Manhattan Iron Works Company, William H. Wallace & Co., Catasauqua Manufacturing Company, Witherbees, Sherman & Co., Thomas J. Pope & Brother, Edward Bech & Co., the Joliet Steel Company, the Albany & Rensselaer Iron and Steel Company, George A. Evans, E. S. Wheeler & Co., Abraham S. Patterson, O. E. Schmidt & Co., James Williamson & Co., The Lackawanna Iron and Coal Company, and Phelps, Dodge & Co. The opening exercises were under the superintendence of the company's Board of Directors, consisting of James B. Brinsmade, of Edward Bech & Co.; Edwin F. Bedell, of Cooper, Hewitt & Co.; Frederick L. Lehmann, of Naylor & Co.; Thomas J. Pope, of Thomas J. Pope & Brother; Benjamin G. Clarke, of the Thomas Iron Company; E. S. Wheeler, of E. S. Wheeler & Co.; William H. Wallace, of William H. Wallace & Co.; John B. Cornell, of J. B. & J. M. Cornell, and Chester Griswold, of the Albany & Rensselaer Iron and Steel Company. James B. Brinsmade is President, E. F. Bedell Secretary and Treasurer, and William Allen Smith Assistant Secretary. Mr. Brinsmade, the President of the Exchange, was in the chair, and made the opening address, explaining the purposes of the Exchange, which he said would be managed in the interests of the trades represented, and it was hoped that within a year all concerned would be able to learn just what good could be derived from it. Speeches were also made by General Stewart L. Woodford and Professor R. D. Raymond. Rules governing the Exchange were then adopted and a resolution increasing the capital stock of the company, which now amounts to $3,125, was adopted, the amount of the increase to be determined by the demands of subscribers, no person or firm connected with the trrde being permitted to take more than five shares. A large number of subscriptions for additional stock were taken during the afternoon. The rooms are to be open daily from 11 A. M. to 3 P. M., the exchange hour being from 12 to 1. The President said that it ha not yet been determined whether actual dealings should be transacted in the rooms or whether they should be used simply as a convenient place for exchange of information and opinions. The meeting then adjourned subject to the call of the Board of Directors, and a bounteous collation was served in the Beaver street room of the Exchange.

New Telephone.

MR. F. B. BROCK, in the *Journal* of the Franklin Institute, describes a mechanical telephone which, without the aid of a battery, transmits and reproduces sounds, loud, clear, and distinct, at long or short distances. It consists of a simple helix surrounding a soft iron core, having no magnetic connection, and acted upon by a thin strip of iron connected with the north or south pole of one or more magnets. The strip vibrates in unison with the transmitting or receiving diaphragm by means of a felt cushion or other connecting medium. This construction, it is said, constitutes a magneto-electric machine or generator, whereby the voice itself produces the electric current by which the sounds are transmitted to and reproduced by a similar or corresponding instrument at the other end of the line, there being no current in the helix or on the line excepting that so produced, and no other magnetism in the soft iron core inside the former.

A BILL has been introduced in the Canadian Parliament to abolish what is known as ticket scalping. A strong effort is to be made to crush out this illegitimate and pestiferous business. The bill provides that the railway companies shall be bound to redeem all unused tickets, and, in case of partially used tickets, to refund the proportion charged for distance untraveled. This is fair to the public, and it is hoped that they will give their moral support to the movement.—*Railway Review.*

The Stock Exchanges and Money Market.

New York Stock Exchange.

Closing Prices for the week ending May 17.

	Th.11.	F.12.	Sat.13.	M.15.	Tu.16.	W.17.
Adams Express	.....	140	139¾	139½	.....	.....
Albany and Susq	.....	....	134	.....	.....	.....
1st mortgage	.....	.....	.....	.....	....	.....
2d mortgage	.....	.....	.....	.....	.....	.....
American Express	.....	95	95	95¼	95⅜	96
Burl., C. R. & Nor	.....	.....	.....	.....	.....	.....
1st mortgage 5s	102	102¼	102¼	.....	.....	.....
Canada Southern	51½	51¾	51½	52	51¾	.....
1st mortgage guar	96	96¼	.....	.....	.....	.....
Central of N. Jersey	71¾	70¾	72½	71¾	71	71
1st mort. 1890	.....	118½	.....	118½	.....	.....
7s, consol. ass	110½	110½	.....	.....	110½	.....
7s, convertible ass	.....	.....	.....	110⅝	.....	.....
7s, Income	90	.....	.....	.....	.....	.....
Adjustment	106½	107	....	.....	106½	.....
Central Pacific	90¼	89⅞	90¾	90¾	90	91
6s, gold	.....	117	.....	117¼	117⅜	117⅜
1st M. (San Joaq)	.....	.....	109½	.....	.....	.....
1st M. (Cal. & Or.)	.....	.....	.....	.....	.....	.....
Land grant 6s	.....	.....	105	.....	.....	.....
Chesapeake & Ohio	....	.....	.....	.....	.....	21
1st pref	.....	.....	31	.....	.....	31
2d pref	.....	.....	24	.....	.....	.....
1st mort., series B	.....	81½	80¼	81¼	81½	82
Chicago and Alton	133	.....	133	133	132¾	.....
Preferred	.....	.....	.....	.....	.....	.....
1st mortgage	.....	.....	.....	.....	.....	.....
Sinking Fund	.....	.....	.....	.....	114⅞	.....
Chi., Bur. & Quincy	132⅜	132⅜	132	131⅞	132	132½
7s, Consol. 1903	129	128½	129	.....	128	.....
Chi., Mil. & St. Paul	112⅜	111⅞	112¼	112⅛	111⅞	111¾
Preferred	120⅜	121	121½	.....	121	121
1st mortgage, 8s	.....	.....	.....	.....	.....	.....
2d mort., 7 3-10s	.....	.....	.....	.....	.....	.....
7s, gold	.....	.....	.....	.....	.....	.....
1st M. (La. C. div)	.....	.....	.....	.....	.....	.....
1st M. I. & M. div.)	.....	.....	.....	.....	.....	.....
1st M. (I. & D. ext.)	.....	.....	.....	.....	.....	.....
1st M. (H. & D. div.)	.....	.....	.....	.....	.....	118
1st M. (C. & M. div.)	.....	.....	.....	.....	.....	.....
Consolidated S. F.	.....	.....	.....	122¼	121½	122¼
Chi. & Northwestern	129	130	131¼	130¼	130¼	130¼
Preferred	140½	140¾	143	143	141¼	141½
1st mortgage	.....	110	.....	109	.....	109
Sinking Fund 6s	.....	.....	.....	.....	.....	.....
Consolidated 7s	.....	.....	.....	.....	.....	.....
Consol. Gold bo'ds	.....	.....	128½	.....	.....	127
Do. reg	.....	.....	.....	.....	.....	.....
Chi., R. Isl. & Pac.	129½	129½	130	130	129	129¾
6s, 1917, C	.....	.....	.....	.....	128	.....
Clev., Col., Cin. & Ind.	75	.....	74½	.....	74	.....
1st mortgage	.....	.....	.....	.....	.....	.....
Clev. & Pittsburg gr.	.....	.....	.....	.....	.....	136½
7s, Consolidated	.....	.....	.....	.....	.....	.....
4th mortgage	.....	.....	.....	113½	.....	.....
Col., Chi., & Ind. Cent	.....	.....	12	.....	.....	.....
1st mortgage	.....	.....	.....	.....	.....	.....
2d mortgage	.....	.....	.....	.....	.....	.....
Del. & Hud Canal.	106	106	106½	106¼	105¼	106
Reg. 7s, 1891	.....	.....	.....	.....	116⅜	.....
Reg. 7s, 1884	.....	.....	.....	.....	.....	106
7s, 1894	.....	.....	.....	116½	.....	117
Del., Lack. & Western	121¾	121⅝	122	121	120⅞	120¾
2d mortgage 7s	.....	.....	.....	.....	.....	.....
7s, Consol. 1907	.....	.....	.....	.....	.....	.....
Erie Railway	.....	.....	.....	.....	.....	.....
1st mortgage	.....	.....	.....	.....	.....	.....
2d mort. 5s, ext	.....	.....	.....	.....	.....	.....
3d mortgage	.....	.....	.....	105¼	.....	.....
4th mort. 5s, ext	.....	.....	.....	.....	.....	107
5th mortgage	.....	.....	.....	.....	.....	.....
7s, Consol. gold	126⅞	.....	.....	.....	.....	.....
Great West. 1st mort	.....	.....	.....	.....	.....	.....
2d mortgage	100½	.....	.....	.....	.....	.....
Hannibal & St. Jo	.....	.....	.....	.....	.....	.....
Preferred	84	83	81	79¼	78½	78¼
8s, Convertible	.....	.....	.....	.....	.....	.....
Houston & Tex. Cen	.....	.....	73½	72¾	72	....
1st mortgage	.....	.....	.....	.....	.....	.....
2d mortgage	.....	119	.....	.....	.....	.....
Illinois Central	136¼	136	135½	136¼	136	.....
Lake Shore & Mich So	102⅞	102⅜	103⅝	102⅞	102⅝	103
Consol. 7s	.....	.....	.....	.....	.....	.....
Consol. 7s, reg	.....	.....	.....	.....	.....	.....
2d Consolidated	.....	.....	.....	.....	.....	126
Leh. & W. B. con. ass	.....	.....	106	.....	.....	105½
Long Dock bonds	.....	.....	.....	.....	.....	.....
Louisville & Nash.	76	75⅛	75⅞	74⅝	74⅛	73⅜
7s, Consolidated	.....	117½	.....	.....	.....	.....
Manhattan	54⅛	54½	55⅞	55⅛	55	54⅜
1st pref	.....	.....	.....	90	.....	.....
Met. Elevated	.....	.....	.....	.....	.....	.....
1st mortgage	102	102½	102⅛	101⅞	101⅞	101¾
Michigan Central	87	86⅞	87⅞	87¾	87⅞	87
7s, 1902	.....	.....	125⅛	.....	125	.....
Morris & Essex	.....	.....	.....	.....	124	.....
1st mortgage	.....	136	.....	.....	.....	.....
2d mortgage	.....	.....	.....	.....	.....	.....
7s of 1871	.....	.....	.....	.....	.....	.....
7s, Convertible	.....	.....	.....	.....	.....	.....
7s, Consolidated	.....	.....	.....	.....	126	.....
N. Y. Cen. & Hud. R.	127¼	126⅝	127⅞	127½	127½	127⅜
6s, S. F. 1883	.....	101	.....	.....	101½	.....
6s, S. F., 1887	.....	.....	.....	.....	112	.....
1st mortgage	134½	.....	.....	.....	.....	.....
1st mortgage, reg	134¼	.....	.....	.....	.....	.....
N. Y. Elevated	.....	.....	.....	110	.....	.....
1st mortgage	.....	118½	118⅜	.....	.....	117⅞
N. Y. & Harlem	.....	.....	.....	.....	.....	.....
Preferred	.....	.....	.....	.....	.....	.....
1st mortgage	.....	.....	.....	.....	.....	.....
1st mortgage, reg	.....	.....	.....	.....	.....	.....
N. Y., Lake Erie & W	35⅞	35¾	36⅜	36¼	35¾	35⅞
Preferred	.....	.....	.....	.....	.....	.....
2d Consolidated	95½	95¾	97	96½	95⅞	96
New 2d 5s fund	91	.....	93	92½	.....	.....
N. Y., N. Hav'n & Hart	176	.....	.....	180	.....	.....
North Mo. 1st mort	..	.....	.....	.....	.....	121½
Northern Pacific	40⅞	40¾	41½	41⅜	41⅛	41⅜
Preferred	79¼	78½	79½	79¼	79⅛	79
Ohio & Mississippi	34½	.....	.....	33⅛	.....	34¼
Preferred	.....	.....	.....	.....	.....	.....
2d mortgage	.....	.....	.....	.....	.....	.....
Consolidated 7s	.....	.....	.....	117	.....	.....
Consol. S. Fund	.....	.....	.....	.....	.....	.....
Pacific Mail S. S. Co	42¾	42⅛	43	43	43⅛	43
Pacific R. R. of Mo.	.....	.....	.....	.....	.....	.....
1st mortgage	.....	.....	.....	.....	107¾	.....
2d mortgage	115	.....	.....	.....	.....	115
Panama	.....	.....	.....	.....	.....	.....
Phila. & Reading	58¾	58½	59	58⅞	57½	57¼
Pitts, Ft. W. & Chi. gtd	.....	.....	138	....	.....	134¾
1st mortgage	.....	.....	.....	.....	.....	140
2d mortgage	.....	.....	.....	.....	.....	.....
3d mortgage	.....	.....	.....	.....	.....	.....
Pullman Palace Car	120	122½	122¾	123	123	123¾
Quicksil'r Min'g Co	.....	.....	10½	10⅜	10	9
Preferred	57¾	.....	.....	.....	57	.....
St. Louis & San Fran	.....	.....	.....	40¼	.....	.....
Preferred	50	.....	.....	51½	.....	.....
1st Preferred	.....	.....	.....	.....	.....	.....
St. L., Alt'n & T. H.	.....	.....	.....	.....	.....	.....
Preferred	.....	63	65	.....	.....	.....
1st mortgage	.....	.....	.....	.....	.....	.....
2d mort. pref	.....	.....	.....	.....	.....	.....
Income bonds	.....	.....	.....	.....	96	96½
St. L., Iron Mt. & S	.....	.....	.....	.....	.....	.....
1st mortgage	.....	.....	.....	.....	.....	110⅞
2d mortgage	.....	.....	.....	107	.....	.....
Toledo and Wabash	....	.....	.....	.....	.....	.....
1st mortgage	.....	.....	.....	.....	.....	.....
2d mortgage	.....	101	.....	101	101	.....
7s, Consolidated	.....	.....	.....	96	94¼	.....
St. Louis Division	.....	103	.....	.....	.....	.....
Union Pacific	113¼	113	113¾	113⅜	113⅜	113⅞
1st mortgage	.....	118	.....	117¾	.....	118
Land Grant 7s	.....	.....	.....	.....	.....	.....
Sinking Fund 8s	.....	.....	.....	.....	.....	.....
United States Ex	74½	.....	.....	.....	74	.....
Wabash, St. L. & Pac	30½	30¼	30⅝	30¾	30	30⅜
Preferred	53¾	53	53¾	53¼	52⅞	52⅞
New mort. 7s	.....	.....	.....	.....	.....	.....
Wells-Fargo Ex	.....	127½	.....	127½	.....	129
Western Pacific b'ds	.....	.....	.....	.....	.....	.....
Western Union Tel.	84½	83¾	84⅞	84⅞	85	84¾
7s., S.F conv., 1900	.....	.....	.....	.....	.....	.....
FEDERAL STOCKS :—						
U. S. 4s, 1907, reg	121	120⅝	120⅞	121	.....	120⅞
U. S. 4s, 1907, coup	121	120⅝	120¾	121	120⅞	120⅞
U. S. 4½s, 1891, reg	114½	.....	114⅜	.....	.....	.....
U. S. 4½s, 1891, coup	.....	.....	.....	.....	.....	.....
U. S. 5s, cont'd at 3½	.....	.....	.....	101½	101½	101⅜
U. S. 6s cont'd at 3½	.....	.....	.....	.....	.....	.....
Dt. of Col. 3-65s, reg	.....	.....	.....	.....	.....	.....
Dt. of Col. 3-65s, coup	.....	.....	110	.....	.....	.....

Boston Stock Exchange.

Prices for the Week Ending May 17.

	Th.11.	F.12.	Sat.13.	M.15.	Tu.16.	W.17.
Atch., Top. & San. Fe.	86⅛	86	88¾	87	86¾	86⅛
1st mortgage	.....	.....	118	.....	116¼	.....
Land Grant 7s	....	.....	.....	.....	.....	.....
Boston & Albany	166	.....	166½	.....	166	166¼
Boston and Lowell	.....	.....	103¾	.....	103	.....
Boston & Maine	143⅜	142½	143⅛	143¾	143	....
Boston & Providence	.....	166	.....	165	.....	.....
Bos'n, Hart. & Erie 7s	50¼	.....	.....	.....	.....	.....
Burl. & Mo. R. L. G. 7s	.....	.....	.....	.....	.....	.....
Burl. & Mo. R. in Neb	.....	.....	.....	.....	.....	.....
6s, exempt	.....	.....	.....	.....	.....	.....
4s	.....	.....	.....	.....	.....	.....
Chi., Burl. & Quincy	132⅛	132⅛	132¼	132⅛	132	131⅞
Cin., Sand. & Clev ($50)	.....	...	27	.....	27¼	27¼
Concord ($50)	.....	.....	.....	.....	98	.....
Connecticut River	.....	.....	.....	.....	.....	.....
Eastern	38⅛	37¾	37⅜	37	.....	37
New 4½ Bonds	108¼	.....	.....	.....	.....	108⅛
Fitchburg	.....	.....	.....	.....	.....	.....
N. Y. & New England	47⅛	....	.....	.....	48	.....
7s	113¾	114	113¾	....	113¾	113⅞
Northern N. H	.....	.....	.....	.....	.....	.....
Norwich & Worcester	.....	.....	.....	.....	.....	....
Ogden & Lake Cham	.....	36	.....	.....	.....	36
Old Colony	.....	133	132½	.....	.....	132½
Ph., Wil. & Balt. ($50)	.....	.....	.....	.....	.....	.....
Portl'd, Saco & Ports	115	.....	.....	.....	.....	116
Pueblo & Ark Val 7s	....	113	.....	113	.....	113
Pullman Palace Car	123½	123	123	123	122¾	....
Union Pacific	113⅜	113⅜	113⅜	113¾	113½	113⅜
6s	....	.....	.....	115½	.....	.....
Land Grant 7s	...	.....	.....	.....	.....	.....
Sinking Fund 8s	.....	.....	119	119¼	119¼	.....
Vermont & Mass	.....	.....	.....	.....	.....	.....
Worcester & Nashua	....	.....	.....	.....	.....	.....
Cambridge (Horse)	....	....	111¾	.....	111	.....
Metropolitan (Horse)	.....	75	.....	75	75	.....
Middlesex (Horse)	.....	.....	.....	.....	.....	.....
Cal. & Hecla Min'g Co	238	237	238	.....	237	237
Quincy	52	49	50	50	51	51½

Philadelphia Stock Exchange.

Closing Prices for the Week Ending May 16.

	W.10.	Th.11.	F.12.	Sat.13.	M 15.	Tu 16.
Allegh'y Val. 7 3-10s	.....	122	122	.....	.....	.....
7s, Income	50½	52	52	.....	.....	52
Buff., Pitts & West.	16	16¼	.....	16⅛	16⅜	16¼
Camd'n & Am. 6s, '83	.....	.....	.....	.....	.....	.....
6s, 1889	.....	.....	.....	.....	.....	.....
Mort. 6s, 1889	113	.....	.....	.....	.....	.....
Camden & Atlantic	.....	.....	.....	.....	.....	.....
Preferred	.....	.....	40½	.....	.....	.....
1st mortgage	.....	.....	.....	.....	.....	.....
2d mortgage	.....	.....	.....	.....	.....	.....
Catawissa	.....	.....	.....	.....	.....	.....
Preferred	55	.....	.....	.....	.....	.....
2d pref	.....	.....	.....	.....	.....	.....
7s, new	.....	.....	.....	.....	.....	.....
Del. & Bound Brook	....	.....	.....	.....	.....	.....
7s	.....	.....	.....	.....	.....	.....
Elmira & Williamsp't	.....	.....	.....	.....	.....	.....
Preferred	.....	.....	.....	.....	.....	.....
Hunt. & B. Top Mt.	...	.....	.....	.....	.....	.....
Preferred	25	.....	.....	24	.....	.....
2d mortgage	.....	.....	.....	.....	.....	.....
Lehigh Navigation	39	39⅞	.....	.....	...	38¾
6s, 1884	.....	.....	.....	.....	105½	105¼
Gold Loan	.....	112¾	112¾	.....	.....	.....
Railroad Loan	...	...	...	115½	.....	.....
Conv. Gold Loan	.....	.....	.....	.....	.....	.....
Consol. Mort, 7s	119	.....	119	.....	.....	.....
Lehigh Valley	60¼	60½	60½	60¾	61	60¾
1st mort. 6s, coup	.....	.....	.....	.....	.....	.....
1st mort. 6s, reg	.....	.....	125	.....	.....	125
2d mort. 7s	.....	.....	133	.....	.....	.....
Consol mort. 6s	....	121¾	.....	122	.....	.....
Consol. mtg. 6s, reg	.....	.....	.....	123	122	.....
Little Schuylkill	58	.....	.....	.....	58	.....
Minehill & Sch. Hav'n	.....	63½	63	.....	63	63
North Pennsylvania	64	63½x	63½	63½	63¼	63¼
1st mortgage 6s	107	107	107	.....	107	.....
2d mortgage 7s	.....	.....	.....	.....	.....	.....
Genl. mtg. 7s, coup	.....	.....	.....	.....	.....	.....
Genl. mtg. 7s, reg	.....	.....	.....	.....	.....	.....
Northern Central	.....	.....	.....	49	49½	.. ..
5s	97¼	.....	.....	.....	98	.....
Northern Pacific	40¾	41	40¾	41½	41⅜	41
Preferred	79½	79¼	78⅞	79⅜	79⅜	78⅞
Pennsylvania R. R.	58¼	58⅝	58⅞	58¾	58⅝	58½
1st mortgage	.....	.....	.....	.....	.....	.....
Gen'l mort	.....	.....	.....	.....	.....	.....
Gen'l mort reg	.....	.....	.....	.....	.....	.....
Consol. mort. 6s	.....	.....	.....	.....	.....	.....
Consol. mort. reg	.....	.....	.....	.....	.....	...
Pa. State 5s, new	.....	118	.....	.....	.....	.....
do 4s, new	.....	.....	.....	.....	.....	.....
Phila. & Reading	29¼	29⅜	29¼	29⅜	29¼	28¾
1st mortgage 6s	.....	.....	.....	.....	.....	.....
7s of 1893	.....	.....	.....	.....	.....	.....
7s, new convert	.....	.....	.....	.....	.....	.....
Consol. mort. 7s	.....	.....	.....	...	126	.....
Consol. mort. reg	.....	.....	.....	.....	.....	.....
Gen'l mort. 6s	98	98¼	.....	98¼	98⅛	98
Def. Income bonds	....	.....	.....	.....	.....	.....
Philadelphia & Erie	.....	.....	14½	15	.....	.....
1st mortgage 5s	.....	.....	.....	.....	102	.....
2d mortgage 7s	.....	...	117½	117¼	.....	..
Pittsb., Cin. & St. L. 7s	.....	119	119	119	.....	.....
Pitts., Tit. & Buff. 7s	.....	.....	.....	.....	.....	.....
Schuylkill Navi't'n	. ..	.. ..	.....	.....	.....	.....
Preferred	12½	.....	12¾	.....	.....	.....
6s, 1895	.....	.....	.....	.....	.....	.....
6s, 1882	.....	.....	.....	.....	.....	91
United Co. of N. J.	188	.....	188	188	188	188⅜
Hestonville, (Horse)	19⅞	.....	.....	.....	.....	19
Chestnut & Wal. (do)	.....	.....	.....	.....	.....	.....
Green & Coates (do)	.....	.....	.....	...	....	...

Baltimore Stock Exchange.

Closing Prices for the Week Ending May 16.

	W. 10.	Th. 11.	F. 12.	Sat. 13.	M. 15.	Tu. 16.
Baltimore & Ohio..	.....	195	.....	196	.....	195
6s, 1885.....	.....	.. ..	.....	.....	.....	....
Central Ohio ($50)..	...	.....	.....	47	.....	46¾
1st mortgage.....	.....	.....	.....	.....	.....	.....
Marietta & Cincin'ti	.....	.....	.....	.....	.....	.....
1st mortgage, 7s..	.....	.....	.....	.....	...	....
2d mortgage, 7s..	.....	.....	.....	.....	.....	.....
3d mortgage, 8s..	.....	.....	.....	.....	.....	.....
Northern Cen. ($50)	.....	.....	.....	.....	49¼	.....
2d mort., 6s 1885..	.....	.....	.....	.....	.....	.....
3d mort., 6s, 1900.	.....	.....	.....	.....	.....	.....
6s, 1900, gold.....	.....	.....	116⅛	.....	.....	.....
6s, 1904, gold.....	.....	.....	.....	.....	.....	.....
Pitts. & Connellsv. 7s	.....	.....	124¼	...	.....	.....
Virginia 6s, Consol.	65	63¼	63⅜	64½	65	63¾
Consol. coupons..	.....	.....	.....	...	.....	.....
10 40 bonds.....	44⅛	43¾	.....	44	44½	44
Def'd Certificates.	.....	.....	.....	.....	.....	.....
Western Maryland..	.....	.....	.....	17½	.....	.....
1st M., end. by Balt	.....	.....	111	....	113	113
2d M. do .	.....	.....	.....	.....	.....	.....
3d M., do .	.....	.....	.....	.....	.....	.....
1st M., unendors'd	.....	.....	.....	.....	.....	.....
2d M., end. WashCo	.....	.....	.....	.....	.....	.....
2d M., preferred..	.....	.....	.....	.....	.....	.....
City Passenger R R.	....	.....	.....	....	....	.....

London Stock Exchange.

	Closing Prices			
	Apl. 21.		Apl. 28.	
Baltimore & Ohio (sterling).....	114	116	114	116
Central of N. J,, $100 shares....	93	98	93	98
Do. consol. mort.....	114	116	112	115
Do. Adjustment Bonds.....	101	106	101	106
Do. Income Bonds.....	93	97	93	97
Det., G'd Haven & Mil. Equip bds	112	115	113	115
Do. Con. M. sp. c., till '83 aft'r 6p. c	110	112	111	113
Illinois Central $100 shares.....	138	140	138	140
Lehigh Valley Cons. mortgage..	118	122	118	122
Louisville & Nashville mort 6s.	101	103	101	103
Do. Sink. Fund bds (S. & N. Ala)	100	102	100	102
Do. capital stock $100 shares.	76	78	76	78
N. Y. Cent. & Hud. R. mt. bds..	134	136	134	136
Do. $100 shares.....	126	130	130½	131½
Do mort. bonds (stg.).....	123	125	123	125
N. Y., Lake Erie & West., $100 shs	36	36½	36¾	37¼
Do. 6 p. c. pref. $100 shares ..	74	76	75	77
Do. 1st Con. Mort. bds (Erie) .	127	129	127	129
Do. do. Funded Coupon bds.	124	126	124	126
Do. 2d Consol Mort. bonds...	95	97	95	97
Do. do. Funded Coupon bds..	92	94	92	94
Do. Gold Income bonds.....	..	..	..	..
N. Y., Pa. & Ohio 1st mort. bonds.	46½	47½	46⅜	47⅜
Do. Prior Lien bds (sterling)..	101	105	101	105
Pennsylvania, $50 shares.....	63¼	64	62¼	62¾
Do. Con. Sink Fund Mort....	118	120	119	121
Philadelphia & Reading $50 shs	29¼	29¾	29¼	29¾
General Consol Mortgage.....	118	120	118	120
Do. Improvement Mortgage..	103	105	102	104
Do. Gen. Mtg. '74, ex-def'd coup.	99	101	99	101
Do. Scrip for the 6 def. ½ coup.	99	101	99	101
Pittsb., Ft. W. & Chi. Eq. bds....	104	106	104	106
St. L. Bridge 1st mort. gold b'd.	125	127	125	127
Do. 1st pref. stock.....	98	102	98	102
Union Pa. Land Grant 1st. mtg.	113	115	113	115
Wabash, St. L. & P. $100 shs.....	27	29	28	30
Do. $100 pref. shares.....	51	53	52½	53¼
Do. gen. mort. bonds.....	77	79	79	81

AMERICAN RAILROAD JOURNAL.

Financial and Commercial Review.

THURSDAY EVENING, May 18, 1882.

RATES for call loans this morning on stocks were 3@3½ per cent, and on United States bonds 2@2½ per cent. Time money could be had at 3@4 per cent up to October. Prime mercantile paper was 4½@5½ per cent, a few choice names going at 4 per cent. In the afternoon the quotation for call loans was 2½ per cent, and in the last hour fell to 2 per cent—the closing quotations being 2@2½ per cent.

The actual rates for prime bankers' sterling were 4.86½@4.87, and 4 89½@¾, with cable transfers 4.90¼@½, and prime commercial bills at 4.85½@¾. The actual rates for Continental bills are as follows: Francs, 5.16⅛@¼ and 5.14⅜@5.13¾, Marks, 95⅛@¼, and 95¼@⅜, and Guilders, 40¼@40⅜.

Hon. John Jay Knox, Controller of the Currency, has addressed a letter to Messrs. Fisk & Hatch, of this city, in which he says: "I can see no objection to the proposition for the gradual charging off by national banks of the amount of premiums paid upon United States bonds deposited for circulation, and hereafter national banks holding 4 per cent bonds will be instructed to charge off each year one-twentieth part of the amount of premium paid thereon and counted as an asset. Those holding 4½s will be instructed to charge off in a similar manner one-tenth of the premium, and those holding currency 6s to charge off, say, 1-15th in each case, one half of the yearly amount to be charged off semi-annually previous to the usual date for the declaration of dividends. This is to be done with the understanding that at no time shall the amount of premium counted as an asset exceed the market premium of the bonds held."

At Indianapolis, Ind., on the 13th inst., a decree of foreclosure of the second and third mortgages on the Indianapolis and St. Louis Railroad was entered in the United States Court. The second mortgage is for $1,000,000 and the third for $5,000,000. H. B. Hurlburt, trustee, brings the suit, asking for the foreclosure. The sale is subject to the first mortgage of $2,000,000. It is ordered that the money be paid into the court in ten days after the sale, and in case of failure in this the property will be sold within fifty days from the date of the entry of the decree.

A session of the United States Circuit Court will be held in Alexandria, Va., on the 23d inst., by Judge Hughes, to consider a motion to vacate the order for the appointment of a receiver in the case of Hay vs. the Washington and Alexandria Railroad Company. The receiver is Geo. C. Wilkins, general agent of the Baltimore and Potomac Railroad.

The United States consul at Amsterdam, Holland, in writing to the State Department at Washington, says that from forty to fifty million dollars of the railroad securities of the United States are in the hands of Dutch holders. State bonds and stocks and bonds of municipal corporations of the United States are also held in Holland to a large extent, but at this time very few United States bonds are held there.

A circular of a Baltimore banking firm, issued last week, says that the only obstacle in the way of the immediate reorganization of the Marietta and Cincinnati Railroad Company, is the refusal of the stockholders of the Cincinnati and Baltimore Railroad to endorse the plan which turns their eight per cent stock into 6 per cent bonds. The circular says it is understood the M. and C. Road has stopped paying the rents of the C. and B. Road, and that default will be made on the bonds and stock of the C. and B. Road. This will bring matters to a crisis. In 1877, when the M. and C. became insolvent, an Ohio court ordered that the leased ends should be kept up. This took about all the earnings of the M. and C., and if the bondholders had not shrunk from a costly fight it would no doubt by this time have been definitely settled whether it is legal to make it mandatory on an insolvent concern to keep up large interest payments in one direction while the mass of its creditors get nothing.

The chief of the Bureau of Statistics reports that the total values of the exports of domestic breadstuffs from the United States in April, 1882, were $9,835,205 and in April, 1881, $20,421,008. For the four months ended April 30, 1882, $45,402,206, and for the same period in 1881, $71,570,621.

The new Stock Exchange at Chicago was formally opened on the 15th inst. The rooms are in Grannis block, on Dearborn street. President Henrotin made an address and introduced the caller. Several sales were made, but none of very large amount. There was a large attendance of members, including some from New York. Joseph B. Wilkins, of Philadelphia, will be permanent chairman. There are 750 members, 450 in Chicago, the balance in New York, Philadelphia, Boston and other cities.

The revenue of the city of Pittsburgh, from all sources, for the year ending January 31, 1882, was $3,373,414.37, and the expenditures $2,464,402.13. Included in the expenditures are $53,904.85 for bonds retired, and $978,814.38 for interest on funded debt. The several sinking funds amount to $1,200,000. The bonded indebtedness of the city at the close of the fiscal year amounted to $14,629,575.44.

The receiver of the Ohio and Mississippi Railway Company reports the receipts for the month of April, 1882, (including $190,316.30 cash on hand at the commencement of the month) at $645,981.33 and the disbursements at $573,807.36, leaving cash on hand May 1, 1882, $72,173.97. The disbursements are for vouchers subsequent to Nov. 17, 1876, $302,072.48; Pay rolls, do., $136,413.62; Arrearages, do., $321.26; Coupons second mortgage bonds due April 1, 1882, $135,000—total, as above, $573,807.36.

The Chief of the Bureau of Statistics reports that the total values of the exports of domestic provisions, tallow and dairy products for the month of April, 1882, were $6,630,344, and for April, 1881, $8,199,186. The exports of dairy products for the twelve months ending April 30, 1882, amounted to $18,080,943, and for the corresponding period of the preceding year, $23,486,352.

A loan of $5,000,000 of the Atchison, Topeka and Santa Fe Railroad Company has been negotiated in London by Messrs. Kidder, Peabody & Co. The loan is in the form of six per cent trust mortgage bonds, the whole authorized issue of which is $10,000,000.

Dr. Koch, of Berlin, claims to have discovered the nature of the parasite which causes consumption. He has propagated it artificially, and killed animals with the parasites thus produced. The expectorations from the lungs of consumptive individuals are found to be swarming with the highly infective organisms. By working out the suggestion offered by Pasteur's recent achievements, Dr. Koch hopes to produce, through artificial culture, a harmless form of the parasite which by inoculation may prevent consumption.

Communications upon the subjects of "Ticket Scalping," "Railroad Surgical Departments," and the "First Train Between Albany and Schenectady," are published in another part of this week's issue; also an article from

the Montreal *Witness*, giving a Canadian view of "The Chinese Problem;" an extract from a letter of a San Francisco correspondent of the Baltimore *Sun* regarding the "Chinese Opposition Water Works," and an editorial upon the "Trunk Lines East and West of Buffalo"—all of which will attract attention.

The following quotations of sales of railway and other securities, for the week, are in addition to those given elsewhere in our columns:

New York.—Atchison, Colorado and Pacific 1st, 95; Atlantic and Pacific 1st, 98⅞; Albany and Susquehanna 1st consol., 123; Boston and New York Air Line pref., 63½; Chicago and Milwaukee 1st, 121; Chicago, St. Paul, Minneapolis and Omaha, 37¾; do. pref., 100⅞; do. consol., 104⅜; Columbia and Greenville pref., 73¾; Chicago, Milwaukee and St. Paul, Chicago and Pacific West div. 1st, 93⅞; do. Southern Minnesota div. 1st, 107½; Chicago and Northwestern S. F. 5s, 100; do. interest bonds, 103; Central Iowa 1st, 114½; Chesapeake and Ohio cur. int., 47½; Chicago, Burlington and Quincy, Iowa div. 4s, 86¾; Cairo and Fulton 1st, 109½; Cleveland, Painesville and Ashtabula 7s, 117; Dubuque and Sioux City, 84½; Denver and Rio Grande, 61⅛; do. 1st, 113; do. 1st consol., 107⅛; Delaware and Hudson 1st, Penn. div., 125⅛; East Tennessee, Virginia and Georgia, 11; do. pref., 20½; do. inc., 50; Evansville and Terre Haute, 68; do. 1st, 98; Flint and Pere Marquette 1st, 112¾, Green Bay, Winona and St. Peter 1st, 85; Gulf, Colorado and Santa Fe 1st, 108; Galveston, Harrisburg and San Antonio 1st, 106; Indiana, Bloomington and Western, 41½; do. 1st, 89¼; International and Great Northern 1st, 105; do. coupon 6s, 85; Indianapolis, Decatur and Springfield 1st, 102; Illinois and Southern Iowa 1st, 98½; Kansas Pacific 1st consol., 103; do. 6s, Denver div. ass., 109; Keokuk and Des Moines 1st, 104; Louisville and Nashville Gen'l mort. 6s, 99¾; do. Evansville, Henderson and Nashville 1st, 101; Louisville, New Albany and Chicago, 1st, 103; Lehigh and Wilkesbarre inc., 83½; Long Island, 53; do. 5s, 97½; Lake Erie and Western, 30; do. 1st, 102; Lafayette, Bloomington and Muncie 1st, 99¾; Mobile and Ohio, 23½; do. 1st deben., 81; Marietta and Cincinnati 1st pref., 10¾; Manhattan Beach, 33½; do. Imp. 7s, 90; Missouri, Kansas and Texas, 30⅝; do. gen'l mort. 6s, 83¼; do. consol. 7s, 106; Missouri Pacific, 92⅝; do. 1st consol., 100¾; do. 3d, 108¾; Minneapolis and St. Louis, 25½; do. 1st, Iowa ext., 114½; Milwaukee, Lake Shore and Western, 50¾; do. 1st, 101¾; Metropolitan Elevated 2d, 90; New York, Chicago and St. Louis, 12⅜; do. pref., 32; do. 1st, ex-June coupon, 88½; Nashville, Chattanooga and St. Louis, 59; New York, Ontario and Western, 25⅜; Norfolk and Western pref., 52; do. Gen'l mort., 101; New Orleans Pacific 1st, 86; Northern Pacific 1st, 101; Ohio Southern, 14; do. 1st, 87¼; do. inc., 31; Ohio Central, 14⅜; do. 1st, 96¼; Oregon Railway and Nav., 138½; Oregon Transp., 73½; Oregon Short Line 1st, 102; Peoria, Decatur and Evansville, 28¾; do. 1st, 105¼; Quincy and Toledo 1st, 101; Rome, Watertown and Ogdensburg 1st consol. Trust Co. certif., 89; Richmond and Alleghany, 16⅞; do. 1st, 86½; Richmond and Danville, 102; do. 1st, 100; do. 1st deben, 69; Richmond, Danville and West Point, 49; Rochester and Pittsburgh, 29; do. 1st, 103; St. Louis, Kansas City and Northern R. E., 7s, 105; do. Omaha div. 1st, 108; St. Paul and Sioux City 1st, 111; St. Paul and Duluth, 29; do. pref., 83¾; St. Paul, Minneapolis and Manitoba, 123½; do. 1st, 111; do. 2d, 108½; do. Dakota ext. 1st, 107; St. Louis and Iron Mountain 5s, 80⅝; Syracuse, Binghamton and New York 1st, 122; Southern Pacific of California 1st, 105; South Carolina 1st, 97¾; do. inc., 50; St. Louis and San Francisco 2d, Class B, 88½; do. C, 87½; Texas and Pacific, 40½; do. consol. mort. 6s, 99; do. inc. Land Grants, 63½; do. Rio Grande div. 1st, 81½; Texas and St. Louis, 17; Toledo, Delphos and Burlington, 12½; do. inc., 23; Texas Central 1st, 106½; Union Pacific Collateral Trust, 109; Wabash, St. Louis and Pacific, Gen'l mort. 6s, 82½; do. Chicago div. 1st, 83; do. Iowa div. 1st, 90; Louisiana consol., 7s, 68; Missouri 6s, 1886, 107; do. 6s, 1887, 108; do. 6s, 1888, 113; do. 6s, H. & St. J. issue, 1887, 108; South Carolina 6s, non-fund, 7; Tennessee 6s, 59; Colorado Coal and Iron, 50¾; do. 6s, 93; Cameron Coal, 34½; Sutro Tunnel, ⅜; Deadwood Mining Co., 6; Homestake, 18½; Ontario, 35; Standard, 16.

Boston.—Atlantic and Pacific blocks, 105; do. 6s, 97; do. inc., 28; Atchison, Topeka and Santa Fe guar., 113; Boston Water Power, 4½; Burlington and Missouri River in Nebraska 6s, non-exempt, 103¾; Chicago, Burlington and Quincy 4s, 86¾; do. 4s, Denver extension, 84½; Connotton Valley, 7½; do. 7s, 50; do. 7s, Straitsville, 40; Chicago, Milwaukee and St. Paul, Wisconsin Valley div. 6s, 98; do. Dubuque div. 6s, 102¾; Cincinnati, Sandusky and Cleveland 7s, 102½; Detroit, Lansing and Northern pref., 113; do. 7s, 118; Flint and Pere Marquette, 24; do. pref., 96½; Iowa Falls and Sioux City, 90; Kansas City, St. Joseph and Council Bluffs 7s, 115; Kansas City, Lawrence and Southern 5s, 102½; Kansas City, Fort Scott and Gulf, 70; do. 7s, 110¼; Little Rock and Fort Smith, 51; do. 7s, 108; Mexican Central 7s, 88⅜; do. Blocks, No. 2, 118; do. No. 3, 109½; Massachusetts Central, 7½; do. 6s, 48½; Marquette, Houghton and Ontonagon, 64; Maine Central, 59; New York and New England 6s, 104; New Mexico and Southern Pacific 7s, 112⅜; Oregon Short Line 6s, 102¼; do. Subscriptions, 114; Ogdensburg and Lake Champlain consol. 6s, 96; Rutland, 4½; do. pref., 25; do. 5s, 70; South Boston, Horse, 70⅜; Sonora 7s, 104⅜; Toledo, Delphos and Burlington Southeast div. inc., 17; Toledo, Cincinnati and St. Louis, 6½; do. 6s, 65; Wisconsin Central, 16⅜; Brunswick Antimony, 11; Franklin, 10⅞; Huron, 1½; Harshaw, 1¾; Napa Consol. Quicksilver, 5½; Osceola, 34; Pewabic, 10; Sullivan, 1½.

Philadelphia.—Allegheny Valley Income scrip, 50; Chesapeake and Delaware Canal 6s, 88⅝; Central Transportation, 33½; Cincinnati 7.30s, 130; Camden, N. J., 6s, 1887, 107; Huntingdon and Broad Top Mt. consol. 5s, 88⅞; Harrisburg and Lancaster 2d, 75; New Orleans Pacific 1st, 85¾; Pennsylvania and New York Canal and Railroad 7s, 1906, 127½; ; Pennsylvania allotments, 8¼; Pennsylvania Canal 6s, 94; Philadelphia, Wilmington and Baltimore 4s, 95; Perkiomen 6s, 100; Pittsburg Av. 7s, 1883, 102½; Philadelphia and Reading scrip, 100; St. Paul and Duluth pref., 81½; Steubenville and Indiana 6s, 105¼; Texas and Pacific consol. mort. 6s, 99¾; West Jersey and Atlantic, 27⅜; West Chester and Philadelphia consol. 7s, 118½. The latest quotations are: City 6s, 108@118; do. free of tax, 128@135; do. 4s, new, 108@113; Pennsylvania State 5s, new loan, 118@119; do. 4s, old, 108@112; do. 4s, new, 114@114½; Philapelphia and Reading R. R., 28¾@28⅞; do. consol. mort. 7s, reg., 125½@126; do. gen'l mort. 6s, coupon, 97½@98½; do. 7s, 1893, 117½@120; do. new conv., 74@76; United New Jersey R. R. and Canal, 188¼@188½; Buffalo, Pittsburg and Western, 16⅛@16¼; Pittsburg, Titusville and Buffalo 7s, 96½@97½; Camden and Amboy mort. 6s, 1889, 112½@113½; Pennsylvania R. R., 58½@58⅝; do. general mort. 6s, coupon, 125½@126; do. reg., 125½@126½; do. consol. mort. 6s, reg., 120@121; Little Schuylkill R. R., 57@58; Schuylkill Navigation, pref., 12@13; do. 6s, 1882, 90½@91½; Elmira and Williamsport pref., 57@60; do. 5s, 95@100; Lehigh Coal and Navigation, 38⅝@38⅞; do. 6s, 1884, 105@105½; do. R. R. loan, 115@116; do. Gold Loan, 112½@113; do. consol. 7s, 119@119½; Northern Pacific, 40¾@41; do. pref., 78⅞@79⅛; North Pennsylvania, 63@63½; do. 6s, 107@108; do. 7s, 120½@121½; do. 7s, General mort. reg., 120@122; Philadelphia and Erie, 14½@15; do. 7s, 117@118; do. 5s, 102@103; Minehill, 63@63½; Catawissa, 22@23; do. pref., 54@55; do. new pref., 53@54; do. 7s, 1900, 120@—; Lehigh Valley 60½@60¾; do. 6s, coupon, 124½@125½; do. reg., 124½@126; do. 7s, 132½@133½; do. consol. mort. 122½@123½; Fifth and Sixth streets (horse), 152@155; Second and Third, 110@112; Thirteenth and Fifteenth, 72½@75; Spruce and Pine, 45@47; Green and Coates, 70@75; Chestnut and Walnut, 90@92; Germantown, 70@75; Union, 110@115; West Philadelphia, 105@108; People's 9@10; Continental, 100@102.

Baltimore.—Atlanta and Charlotte, 1st, 110⅛; Atlantic Coal, 1.30; Baltimore City 6s, 1890, 118¼; do. 6s, 1886, 109⅛; do. 6s, 1900, 130¼; do. 5s, 1916, 125; do. 5s, 1894, 116; Canton Co. 6s, 104½; Columbia and Greenville 1st, 104½; George's Creek Coal, 9 6; Maryland 6s, 1885, 107; Marietta and Cincinnati 1st Trust certificate, 126; do. 2d do., 98½; do. 3d do., 53½; Ohio and Mississippi, Springfield div. 1st, 116¾; Parkersburg Branch, 10; Richmond and Danville gold bonds, 100⅜; Union R. R. 6s, end. by Canton Co., 117; Virginia Midland 2d mort., 109; do. 4th mort., 50½; do. 5th mort., 93½; Virginia and Tennessee 8s, 124; Virginia 10-40 coupons, 67; Virginia Peelers, 37; Wilmington, Columbia and Augusta, 112. The latest quotations are: Atlanta and Charlotte 1st, 110⅝@111½; do. inc. 84@86; Balt. and Ohio, 195@200; do. 6s, 1885, 105¼@—; Baltimore City 6s, 1890, 118¼@—; do. 6s, 1900, 130@—; do. 5s, 1900, —@118; do. 5s, 1916' 125@—; do. 4s, 1920, 113@15; Canton 6s, gold, 104⅜@104½; Columbia and Greenville 1st, 104½@—; do. 2d, 85½@87; Marietta and Cincinnati 1st, —@126; do. 2d, 98¼@98½; do. 3d, 53¼@53½; Northern Central, 48½@49; do. 6s, 1885, 108@—; do. 6s, 1900, 116½@—; do. 6s, 1904, gold, 116⅛@116½; do. 5s, 1926, 98@98⅜; Ohio and Mississippi, Springfield div. 1st, 11(¼@117; Pittsburg and Connellsville 7s, 123@125; Virginia Midland 5th, 93@94; do. inc., 60@65; Virginia and Tennessee 2d, 103@—; Virginia Consols, 63½@63⅝; do. 10-40s, 44@44; Western Maryland 2d pref., 107@112.

RAILROAD EARNINGS.—MONTHLY.

	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total.
BURL., CEDAR RAP. & NORTHERN:													
1880	184,316	165,170	188,325	141,652	149,504	153,378	143,432	160,160	179,804	204,991	189,330	193,419	2,053,484
1881	167,750	124,510	148,551	184,680	165,630	205,912	174,351	209,112	221,801	221,748	203,880	232,812	2,259,037
1882	252,823	225,631	224,107	178,304	.....	.....	.....	.....	.....	.....	.....	.....	.....
CENTRAL PACIFIC:													
1880	1,200,614	1,070,487	1,373,438	1,356,716	1,778,488	1,724,950	1,840,067	1,973,438	1,964,997	2,120,229	2,199,466	1,905,221	20,508,112
1881	1,602,907	1,454,218	1,709,637	1,872,370	2,068,000	2,063,000	1,859,000	2,059,000	2,293,000	2,514,000	2,267,000	2,110,000	23,947,951
1882	1,876,000	1,702,000	1,987,000	2,052,000	.....	.....	.....	.....	.....	.....	.....	.....	.....
CHESAPEAKE AND OHIO:													
1880	202,335	198,681	222,762	221,559	199,443	214,352	238,236	259,110	247,303	211,820	240,795	218,000	2,674,308
1881	162,540	184,389	228,479	227,343	252,235	241,135	225,096	262,858	247,144	237,303	235,585	203,562	2,707,762
1882	210,455	209,708	208,981	253,861	.....	.....	.....	.....	.....	.....	.....	.....	.....
CHICAGO AND ALTON:													
1880	534,054	497,013	626,473	542,961	616,128	617,524	708,906	761,120	767,349	785,199	696,776	574,695	7,718,198
1881	487,890	461,641	529,915	558,190	528,860	616,935	671,466	771,466	768,897	750,359	680,133	635,307	7,553,988
1882	579,447	530,480	584,483	561,787	.....	.....	.....	.....	.....	.....	.....	.....	.....
CHICAGO AND NORTHWESTERN:													
1880	1,154,632	1,131,683	1,361,725	1,294,573	1,875,608	1,671,177	1,699,686	1,767,938	2,020,245	2,105,217	1,855,671	1,477,902	19,416,067
1881	1,240,667	963,208	1,178,795	1,474,612	1,879,006	2,306,640	1,983,031	2,315,164	2,292,676	2,341,097	2,019,037	1,855,476	21,849,209
1882	1,620,336	1,471,945	1,696,568	1,634,819	.....	.....	.....	.....	.....	.....	.....	.....	.....
CHICAGO, BURLINGTON AND QUINCY:													
1880	1,432,740	1,411,870	1,732,518	1,489,894	1,909,627	1,682,956	1,773,643	1,834,321	1,862,285	1,934,762	1,837,860	1,552,018	20,454,494
1881	1,307,948	1,034,821	1,418,149	1,574,371	1,679,455	2,083,803	1,888,558	2,173,945	2,262,981	2,031,001	1,816,133	1,905,490	21,324,150
1882	1,658,834	1,457,300	1,566,217	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
CHICAGO, MILWAUKEE AND ST. PAUL:													
1880	764,298	738,749	900,675	871,041	1,134,745	1,037,958	1,026,708	991,297	1,257,677	1,493,620	1,472,037	1,397,308	13,086,119
1881	990,847	682,717	916,989	1,259,946	1,538,000	1,371,000	1,560,000	1,678,000	1,645,000	1,590,000	1,569,000	1,855,000	17,025,462
1882	1,435,000	1,377,000	1,561,000	1,518,000	.....	.....	.....	.....	.....	.....	.....	.....	.....
CHICAGO, ST. PAUL, MINNEAPOLIS AND OMAHA:													
1880	193,827	173,078	259,783	259,208	232,146	218,093	236,995	251,013	300,833	342,052	342,894	312,173	3,122,097
1881	257,786	158,594	251,648	261,211	350,124	404,562	392,702	385,586	363,685	382,714	380,733	391,950	3,981,296
1882	307,498	315,100	405,779	356,558	.....	.....	.....	.....	.....	.....	.....	.....	.....
CINCINNATI, INDIANAPOLIS, ST. LOUIS AND CHICAGO:													
1880	155,697	172,541	198,220	168,199	186,995	200,332	204,138	233,478	343,627	239,881	209,014	198,254	2,412,185
1881	182,523	171,511	191,005	183,710	188,794	188,256	178,861	229,858	219,977	212,606	194,805	192,623	2,296,916
1882	200,042	186,879	208,066	204,269	.....	.....	.....	.....	.....	.....	.....	.....	.....
DENVER AND RIO GRANDE:													
1880	124,759	126,922	160,883	164,882	193,925	295,455	373,132	400,133	406,583	473,318	408,562	349,196	3,478,007
1881	307,476	317,681	398,493	433,111	514,767	584,230	548,284	606,193	620,643	665,686	566,819	643,417	6,206,812
1882	491,914	412,987	535,055	559,917	.....	.....	.....	.....	.....	.....	.....	.....	.....
HANNIBAL AND ST. JOSEPH:													
1880	176,079	166,965	216,061	206,735	191,317	179,396	224,312	238,081	233,448	242,214	207,147	279,635	2,561,391
1881	154,401	122,874	176,356	190,812	177,002	194,949	198,110	215,308	202,567	313,433	201,782	180,376	2,230,966
1882	138,284	154,717	168,798	148,913	.....	.....	.....	.....	.....	.....	.....	.....	.....
ILLINOIS CENTRAL:													
1880	595,212	613,806	613,008	535,732	665,120	681,736	724,095	732,755	806,836	880,211	783,120	673,182	8,304,812
1881	631,281	524,499	557,789	662,493	673,259	803,887	720,004	868,407	828,847	815,238	737 218	763,475	8,586,397
1882	728,173	689,387	695,371	674,603	.....	.....	.....	.....	.....	.....	.....	.....	.....
INDIANA, BLOOMINGTON AND WESTERN:													
1880	80,498	89,690	116,185	90,374	85,733	106,954	103,438	116,732	110,622	121,343	96,621	104,619	1,233,079
1881	90,283	83,261	192,085	203,677	102,630	96,586	83,764	117,956	195,307	181,674	160,826	156,697	.....
1882	195,824	175,755	206,235	205,934	.....	.....	.....	.....	.....	.....	.....	.....	.....
LOUISVILLE AND NASHVILLE:													
1880	674,455	575,035	612,593	563,883	655,014	976,229	772,537	827,088	931,910	1,000,326	953,086	949,184	9,491,346
1881	816,960	805,124	947,959	850,862	828,726	1,227,885	817,135	876,192	951,566	1,002,950	1,065,223	1,122,285	11,326,859
1882	950,065	960,036	1,073,745	950,007	.....	.....	.....	.....	.....	.....	.....	.....	.....
MOBILE AND OHIO:													
1880	250,116	204,094	168,301	140,091	129,249	121,855	131,621	140,593	184,246	264,714	251,368	287,373	2,373,621
1881	224,347	216,768	230,916	163,551	145,803	136,517	131,009	159,348	209,044	252,921	252,434	262,025	2,406,437
1882	161,433	158,154	152,651	145,272	.....	.....	.....	.....	.....	.....	.....	.....	.....
NASHVILLE, CHATTANOOGA AND ST. LOUIS:													
1880	205,633	191,154	169.457	155,466	158,839	144,155	151,594	169,326	167,473	178,266	182,087	175,996	2,049,448
1881	178,143	190,866	207,710	183,525	104,430	154,549	150,430	168,317	179,979	172,121	152,059	173,127	2,075,256
1882	156,994	159,961	161,005	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
NEW YORK AND NEW ENGLAND:													
1880	164,232	149,907	183,845	179,689	183,701	219,891	205,056	249,885	235,642	215,491	210,856	198 108	2,396,302
1881	189,749	173,614	212,019	216,913	217,185	231,518	246,821	280,524	299,573	261,199	242,412	237,729	2,809,255
1882	215,624	213,791	256,674	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
NEW YORK, LAKE ERIE AND WESTERN:													
1879	1,147,173	1,207,391	1,356,780	1,372,755	1,350,574	1,230,419	1,273,533	1,450,223	1,492,497	1,713,697	1,515,835	1,398,224	16,509,127
1880	1,296,381	1,252,218	1,644,958	1,643,151	1,592,544	1,661,812	1,580,976	1,606,874	1,786,417	1,899,910	1,799,338	1,726,788	19,491,361
1881	1,443,437	1,425,765	1,847,261	1,709,057	1,776,891	1,794,982	1,787,081	1,772,895	1,734,200	.....	.....	.....	.....
NORTHERN CENTRAL:													
1880	334,494	330,860	415,325	386,130	329,788	419,193	450,298	453,923	464,093	512,918	459,054	494,310	5,050,387
1881	386,157	382,657	452,906	487,173	465,588	487,287	440,811	498,008	429,565	449,664	487,160	476,622	5,443,697
1882	407,368	413,551	430,194	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
NORTHERN PACIFIC:													
1880	81,300	77,259	119,357	185,700	217,613	253,105	241,277	223,500	330,300	358,456	300,822	220,993	2,629,710
1881	116,508	78,803	162,984	216,210	305,292	368,276	404,180	411,624	490,096	565,485	428,903	434,331	4,044,576
1882	239,800	269,000	384,000	438,000	.....	.....	.....	.....	.....	.....	.....	.....	.....
PHILADELPHIA AND ERIE:													
1880	224,307	245,372	327,678	334,947	311,470	331,024	308,699	347,532	322,737	367,082	324,966	281,919	3,727,733
1881	224,303	225,501	285,573	293,323	343,792	350,585	291,669	303,849	276,522	292,392	284,078	282,772	3,454,309
1882	252,727	246 246	265,311	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
ST. LOUIS AND SAN FRANCISCO:													
1880	198,091	195,948	193,146	176,164	167,664	173,607	213,297	259,995	280,873	328,194	290,329	226,063	2,698,371
1881	212,435	178,234	262,050	265,298	283,399	260,254	252,333	286,373	279,064	308,569	284,320	287,914	3,160,245
1882	256,784	244,654	274,959	242,806	.....	.....	.....	.....	.....	.....	.....	.....	.....
ST. LOUIS, ALTON AND TERRE HAUTE:													
1880	153,139	163,737	168,994	155,462	147,928	150,207	191,077	216,759	204,295	221,863	188,773	184,503	2,146,741
1881	175,725	166,012	201,137	197,447	163,285	165,896	158,674	189,295	187 299	179,921	162,544	153,852	2,112,801
1882	168,987	149,619	178,145	157,450	.....	.....	.....	.....	.....	.....	.....	.....	.....
ST. LOUIS, IRON MOUNTAIN AND SOUTHERN:													
1880	555,983	490,195	451,560	408,241	349,053	363,454	432,655	565,869	671,219	688,365	632,052	656,951	6,265,597
1881	570,957	560,791	704,002	548,300	479,075	474,302	533,512	644,386	690,400	719,239	687,280	709 498	7,319,744
1882	516,370	501,127	585,008	581,977	.....	.....	.....	.....	.....	.....	.....	.....	.....
ST. PAUL, MINNEAPOLIS AND MANITOBA:													
1880	180,239	137,645	261,798	333,014	281,899	243,407	272,089	232,579	274,188	345,057	300,675	297,641	3,160,231
1881	254,187	159,482	320,962	425,685	382,642	405,322	387,488	414,954	485,736	605,708	508,530	528,262	4,878,960
1882	395,461	418 358	531,004	570,890	.....	.....	.....	.....	.....	.....	.....	.....	.....
TEXAS AND PACIFIC:													
1880	245,785	219.165	215,070	174,177	141,083	153,066	195,711	226,073	266 570	303,666	312,184	301,858	2,754,408
1881	281,176	260,781	319,928	295,066	267,443	264,204	320,466	354,082	337,117	578,668	357,724	381,218	3,921,569
1882	310,785	255,644	332,911	359,543	.....	.....	.....	.....	.....	.....	.....	.....	.....
UNION PACIFIC RAILWAY:													
1880	1,433,636	1,393,992	1,730,509	1,937,220	2,027,269	1,928,528	1,934,215	1,913,035	2,270,179	2,707,860	2,251.148	1,869,335	23,448,445
1881	1,339,799	1,374,740	1,674,860	1,766,894	2,398,467	2,590,969	2.528,826	2,638,659	2,844,357	3,289 350	2,773,608	2,267,004	27,451,831
1882	1,961,088	1.759,863	2,226,832	2,462,004	.....	.....	.....	.....	.....	.....	.....	.....	.....
WABASH, ST. LOUIS AND PACIFIC:													
1880	776,790	759,451	978,629	892,024	948,773	953,468	1,966,742	1,189,478	1,178,950	1,501,203	1,131,787	1,050,816	12,428,112
1881	811,617	818,922	1,121,592	1,023,482	1,144,660	1,308,993	1,131,751	1,542,838	1,490,027	1,396,300	1,399,555	1,328,278	14,461,570
1882	1,229,965	1,134,768	1,315,776	1,378,194	.....	.....	.....	.....	.....	.....	.....	.....	.....

RAILROAD AND CANAL DIVIDEND STATEMENT.

Showing the amount of Stock Outstanding, the Dividend Periods and the date of last Dividend.

Marked thus(*)are leased roads.	Stock out-standing.	Divide'd Periods.	Last Dividend Payable.
Albany and Susq*...100	3,500,000	semi-an	Jan. '82 2
Ashuelot.....100	210,000	q'arterly	Oct. '81 3½
Atch., Top. and S. Fe100	54 000,000	q'arterly	May '82 1½
Atlanta and W. Point100	1,232,200	semi-an	Jan. '82 6
Atlantic and St. Law*100	5,840,000	semi-an	Mar. '82 3
Augusta and Savan'h100	1,022,900	semi-an	June'81 3½
Avon,Genesee&MtM*100	225,000	semi-an	July '81 3
Baltimore and Ohio..100	14,792,566	semi-an	May '82 5
" " pref.100	5,000,000	semi-an	Jan. '82 3
Washington Br....100	1,650,000	semi-an	Apl. '82 5
Berkshire*.....100	600,000	q'arterly	Apl. '82 1¾
Boston and Albany..100	20,000,000	q'arterly	Mar. '82 2
Bos.&N.Y.AirLine pf.100	2,795,227	q'arterly	June '82 1
Bos.,Cl.,F.&N.B.pref.100	1,750,100	.....	Apl. '82 3½
Bos.,Conc.&Mont.pf*100	800,000	semi-an	May '82 3
Boston and Lowell..500	3,940.000	semi-an	Jan. '82 2
Boston and Maine...100	6,921,274	semi-an	May '82 4
Boston & Providence100	4,000,000	semi-an	May '82 4
Attleborough Br...100	131,700	semi-an	Jan. '82 3½
Bos.,Revere B &Lynn100	419,400	semi-an	Jan. '82 3¼
Buffalo,N. Y. & Erie*.100	950,000	semi-an	Dec. '81 3
Camden & Atlantic.. 50	377,400	q'arterly	Apl '80 3s
" " pref. 50	880,650	q'arterly	Apl '80 3½s
Camden & Burl. Co..100	381,925	semi-an	July '81 3
Canada Southern....100	15,000,000	.....	Feb. '81 2½
Cape May &Millville* 50	447,000	semi-an	June'81 3
Catawissa*..... 50	1,159,500	annual	Oct. '81 $1½
" pref..... 20	2,200,000	semi-an	May '82 3½
" new pref.. 50	1,000,000	semi-an	May '82 3½
Cayuga and Susq.*.. 50	589,110	semi-an	July '81 4½
Cedar Rapids&Mo.R*100	6,850,400	q'arterly	May '82 1½
" " pref.100	769,600	semi-an	Feb. '82 3½
Central of Georgia...100	7,500,000	semi-an	Dec. '81 4
Central of New Jersey100	18,563,200	q'arterly	Apl. '76 2½
Central Ohio*..... 50	2,437,950	semi-an	Jan. '82 3
" pref.. . 50	411,550	semi-an	Jan. '82 3
Central Pacific 100	59,275,500	semi-an	Feb. '82 3
Chemung*.....100	380,000	q'arterly	July '81 1½
Cheshire preferred ..100	2,155,300	semi-an	Jan. '82 1½
Chicago and Alton...100	11,181,741	semi-an	Mar. '82 4
" " pref 100	2,425,400	semi-an	Mar. '82 4
Chi., Burl. & Quincy.100	55,337,455	q'arterly	June '82 2
Chi., Iowa & Nebras*.100	3,916,200	semi-an	Jan. '82 4
Chi., Mil. & St. Paul.100	20,404,261	semi-an	Apl. '82 3½
" " pref 100	14,401,483	semi-an	Apl. '82 3½
Chi. & N. Western...100	14,988,257	semi-an	Dec. '81 3
" pref.100	21,525,353	q'arterly	Mar.'82 1¾
Chi., R. I. & Pacific..100	41,960,000	q'arterly	May '82 1¾
Chi. and West Mich .100	6,151,000	semi-an	Feb. '82 2½
Chi., St. P., M. & O..100	10,390,000	q'arterly	Jan. '82 1¾
C., Ind., St. L. & Chi.100	6,000,000	q'arterly	Apl. '82 1½
Cin., Sand. & Clev.pf. 50	429,037	semi-an	May '82 3
Clev. and Mahoning* 50	3,759,200	semi-an	Nov. '81 3½
Clev. and Pittsburg* 50	11,244,336	q'arterly	June'82 1¾
Columbus & Xenia*. 50	1,786,200	q'arterly	Dec. '81 2
Colum.&HockingVal.100	2,500,200	semi-an	Aug.'81 20s
Concord 50	1,500,000	semi-an	May '82 5
Concord and Ports.*.100	350,000	semi-an	Jan. '82 3½
Conn.& Passump.Riv100	2,244,400	semi-an	Feb. '82 3
Connecticut River ..100	2,100,000	semi-an	Jan. '82 4
Cumberland Valley.. 50	1,292,950	q'arterly	Apl. '82 2½
" 1st pref 50	241,900	semi-an	Apl. '82 4
" 2d pref. 50	243,000	semi-an	Apl. '82 4
Danbury & Norwalk. 50	600,000	.....	Apl. '82 1½
Dayton and Mich.*.. 50	2,402,573	semi-an	Oct. '81 1¾
" " pref. 50	1,211,250	q'arterly	Oct. '81 2
Delaware*..... 25	1,468,940	semi-an	Jan. '82 3
Del. & Bound Brook*100	1,652,000	q'arterly	May '82 1¾
Del., Lack.& Western 50	26,200,000	q'arterly	Apl. '82 2
Denver & Rio Grande.100	29,160,000	q'arterly	Jan. '82 1½
Den.,South P. & Pac.100	3,500,000	.....	Aug.'80 4
Detroit, Lans. & Nor.100	1,825,600	semi-an	Aug.'80 2½
" " pref.100	2,503,380	semi-an	Feb. '82 3½
Dubuque&Sioux C'y*100	5,000,000	semi-an	Apl. '82 3
East Pennsylvania*.. 50	1,709,550	semi-an	Jan. '82 3
East Mahanoy*..... 50	392,950	semi-an	Jan. '82 3
Eastern (N. H.).....100	492,500	semi-an	Dec. '81 2½
Eel River.....100	3,000,000	q'arterly	Mar. '82 $1
Elmira.Jef.&Canand*100	500,000	annual	Sep. '80 5
Elmira&Williamsp't* 50	500,000	semi-an	May '82 1½
" " pref. 50	500,000	semi-an	Jan. '82 3½
Erie and Pitsburg*.. 50	1,998,490	q'arterly	Dec. '81 1¾
Evansville & Terre H.100	100,000	semi-an	Nov.'81 2
Fitchburg.....100	4,500,000	semi-an	Jan. '82 3
F. & P. Marquette pf.100	6,500,000	semi-an	Jan. '82 3
Ft.W. & Jackson pref.100	2,000,000	.....	May '82 2
Georgia. ..... .100	1,200,000	q'arterly	Apl. '82 2½
Granite 100	1,250,000	semi-an	Jan. '82 3
Han. & St. Jo. pref .100	5,083,024	semi-an	Feb. '82 3½
Harrisbg&Lancaster 50	1,182,500	semi-an	Jan. '82 3½
Housatonic pref. ...100	1,180,000	q'arterly	Apl. '82 2
Illinois Central.....100	49,000,000	semi-an	Mar. '82 3½
Ia.Falls & Sioux City*100	4,623,500	q'arterly	Mar. '82 1¾
Iowa R. Land Co....100	7,620,000	q'arterly	May '82 1
Jeffersonv. Mad.&Ind100	2,000,000	q'arterly	Feb. '82 1¾
Joliet and Chicago*..100	1,500,000	q'arterly	Mar. '82 1¾
Kan.C.,Ft.S.&Gulf...100	4,000,000	.....	Feb. '82 2
" " pref...100	2,750,000	semi-an	Feb. '82 4
Kentucky Central...100	500,000	semi-an	June'81 1
" " pref..100	5,583,500	semi-an	June'81 3
Lake Shore& Mich.So.100	49,466,500	q'arterly	May '82 2
" (guar.)100	533,500	semi-an	Feb. '82 5
Lawrence*..... 50	450,000	q'arterly	Apl. '82 2
Lehigh Valley..... 50	27,496,895	q'arterly	Apl. '82 1½
" " pref.50	106,300	q'arterly	Apl. '82 1½
Little Miami..... 50	4,637,300	q'arterly	Mar. '82 2
Little Rock & Ft. S..100	4,096,135	.....	July' 81 10s
Little Schuylkill*.. . 50	2,646,100	semi-an.	Jan. '82 3½
Louisville & Nashv..100	18,130,913	semi-an.	Feb. '82 3
Lowell & Andover....100	500,000	semi-an.	Jan. '82 3½
Lykens Valley.....100	600,000	q'rterly.	Oct,' 81 2½
Manchester & Law..100	1 000,000	semi-an.	May '82 5
Manhattan 100	13,000,000	.....	.....
" " 1st pref.100	6,500,000	q'rterly.	Apl. '82 1½
" " 2d pref.100	6,500,000	.....	Apl. '82 1½
Marietta& Cincinnati 50	1,386,350	.....	.....
" " 1st pref 50	8,105,600	semi-an.	Sep. '66 3s
" " 2d pref 50	4,440,100	semi-an.	Sep. '66 3s
Marq.Hout.&Ont.pf..100	2,259,026	.....	Feb. '82 4
Massawippi*..... .100	400,000	semi-an.	Feb. '82 3
Michigan Central....100	18,738,204	q'rterly.	Aug.'81 1
Middlesex Central...100	280,000	semi-an.	Feb. '82 3
Mill Creek&Minehill* 50	323,375	semi-an.	Jan. '82 5
M.Hill& Schuyl.Hav* 50	4,022,500	semi-an.	Jan. '82 3½
Missouri Pacific.....100	28,169,800	q'rterly.	Apl. '82 1½
Mobile&Montgomery100	3,022,517	semi-an.	Feb. '80 2½
Mont. & Wells River100	800,000	annual	Feb. '80 2
Morris and Essex.... 50	15,000,000	semi-an.	Jan. '82 3½
Mt Carbon&PtCarbon 50	282,350	semi-an.	Jan.. '82 6
Nashua and Lowell..100	800,000	semi-an.	May '82 4
Nashua & Rochester.100	1,305,800	semi-an.	Apl. '82 1½
Nashv. & Decatur...100	1,827,000	semi-an.	June'81 3
Nash.,Chat.&StLouis 25	6,670,325	semi-an.	Apl. '82 1½
Naugatuck.....100	2,000,000	semi-an.	Jan. '82 5
Nesquehoning Val'y* 50	1,300,000	semi-an.	Mar.'82 3
N.Castle&Beaver Val* 50	600,000	q'rterly.	Oct. '81 —
NewLondonNorth'n*100	1,500,000	q'rterly.	Jan. '82 1¾
N. Y. Cen. & Hud. R.100	89,428,330	q'rterly.	Apl. '82 2
N. Y. and Harlem....100	7,950,000	q'rterly.	Apl. '82 2
" " pref.100	1,500,000	q'rterly.	Apl. '82 2
" City Line.. —	.....	annual	Apl. '82 3
N.Y.,LakeErie&West.100	77,083,800	.....	.....
" " pref.100	8,156,725	.....	Jan. '82 6
N. Y., N. H. & Hart..100	15,500,000	semi-an.	Jan. '82 5
N. Y., Prov. & Boston100	3,000,000	q'rterly.	May '82 2
Niag.Bridg&Canand*100	1,000,000	semi-an.	July '81 3
North Carolina*.....100	3,000,000	semi-an.	Sep. '81 3
" " pref.100	1,000,000	semi-an.	Sep. '81 3
N. Eastern (S.C.) pref100	86,000	semi-an.	May '81 4
North Pennsylvania. 50	4,527,150	q'rterly.	May '82 1¾
Northern Central.... 50	6,142,000	semi-an.	Jan. '82 3
Northern N. Hampsh100	3,068,400	semi-an.	June'82 3
Northern N. Jersey* 100	1,000,000	semi-an.	July '80 2½
Norwich&Worcester*100	2,604,400	semi-an.	Jan. '82 5
Ohio 100	18,500,000	.....	.....
Ohio and Miss. pref..100	4,030,000	semi-an.	Mar.'75 3½
Old Colony.....100	7,333,800	semi-an.	Jan. '82 3
Oregon R'way&Nav.100	6,000,000	q'rterly.	May '82 2
Oswego & Syracuse..100	1,320,400	semi-an.	Aug.'81 4½
Panama..... 100	7,000,000	.....	Jan. '82 6
Paterson & Hudson*.100	630,000	semi-an.	Jan. '82 4
Paterson & Ramapo.100	248,000	semi-an.	Jan. '82 4
Pember.&Hightst'n*. 50	342,150	semi-an.	Jan. '82 3
Pennsylvania..... 50	77,672,750	semi-an.	May '82 4
Pennsylvania Co..... 50	20,000,000	semi-an.	June'81 2½
Peoria & Bureau Val*100	1,200,000	semi-an.	Feb. '82 4
Philadelphia & Erie*. 50	7,013,700	semi-an.	.....
" " pfd 50	2,400,000	semi-an.	Jan. '75 4
Phil,Ger.&Norrist'n* 50	2,231,900	q'rterly.	Mar '82 3
Phil. and Reading... 50	32,726,375	q'rterly.	Jan. '76 2½
" " pref. 50	1,551,800	q'rterly.	July '76 3½
Phila. and Trenton..100	1,259,100	q'rterly.	Apl. '82 2½
Phila., Wil. and Balt. 50	11,585,750	semi-an.	Jan. '82 4
Pittsb.,Ft. W. & Chi.*100	19,714,285	q'rterly.	Apl. '82 1¾
" Special Imp.100	6,770,900	q'rterly.	Apl. '82 1¾
Pittsfield&N.Adams..100	450,000	semi-an.	Jan. '82 2½
Portl., Saco & Portsm100	1,500,000	semi-an.	Jan. '82 3
Profile & Franconia..100	130,000	annual	Nov.'80 8
Providence &Worces.100	2,000,000	semi-an.	Jan. '82 3
Rensselaer&Saratog.*100	7,000,000	semi-an.	Jan. '82 4
Rhode Island& Mass.100	100,000	.....	Jan. '81 3
Richmond& Danv...100	3,866,000	q'rterly.	May '82 2
Richmond & Petersb100	1,009,300	semi-an.	Jan. '81 3
Roch.&Genesee Val.*100	555,200	semi-an.	Jan.'82 3
Rome,Watert.& Ogd..100	5,293,900	semi-an.	July '75 1½
Rutland preferred.. 100	4,000,000	semi-an.	Feb. '82 1
St.L.,Alt. & T.Haute.100	2,300,000	.....	.....
" pref.100	2,468,400	.....	May '82 3
St.L.&S.Fran.1st pref100	4,500,000	.....	Feb.'82 3½
St.L.,I.Mt.&South'n.100	21,459,821	semi-an.	Feb. '74 3
St. P. & Duluth pref.100	4,705,006	q'rterly.	Mar. '82 1¾
St. P., Minn. & Man..100	15,000,000	semi-an.	Feb. '82 3½
Schuylkill Valley*... 50	576,050	semi-an.	Jan. '82 2½
Seaboard & Roanoke.100	1,299,600	semi-an.	May '82 5
Shamokin V.&Pottsv 50	869,450	semi-an.	Feb.'82 3
Shore Line*.....100	1,000,000	semi-an.	Jan. '82 4
Sioux C.&Pacific pref100	169,000	semi-an.	Apl. '82 3½
South Br. (N. J.)*....100	438,300	semi-an.	Jan. '82 3
South Western (Ga.)*100	3,892,300	semi-an.	Dec. '81 3½
Stockbridge&Pitts.*.100	448,700	semi-an.	Oct. '81 1½
Summit Branch*.... 50	4,010,350	semi-an.	Feb. '76 3
Syr.,Bingham&N.Y.*100	2,500,000	semi-an.	Feb. '81 2
Terre Haute & Ind...100	1,988,150	semi-an.	Feb. '82 4
Troy and Boston....100	1,609,000	semi-an.	Feb. '80 2
Union Pacific 100	61,000,000	q'rterly.	pl. '82 1¾
United Cos of N. J.*.100	20,490,000	q'rterly.	pl. '82 2½
Utica, Shenango&S V100	4,000,000	semi-an.	Nov. '81 3
Utica and Black Riv.100	1,772,000	semi-an.	Mar. '82 2
Vermont and Mass..100	3,050,000	semi-an.	Apl. '82 3
Wab. St.L.& Pac.pref.100	22,615,100	q'rterly.	Nov.'81 1½
Ware River*.....100	750,000	semi-an.	Jan. '82 3½
Warren (N. J.).....100	1,800,000	semi-an.	Apl. '82 3½
Warwick Valley.....100	340,000	semi-an.	Jan. '82 2½
Westchest&Phil.pref100	821,300	semi-an.	July '80 2
West Jersey.....100	1,359,750	semi-an.	Apl. '83 3s
Wilmingt'n&Weld'n.100	1,456,200	semi-an.	Dec. '81 3
Wil., Col., & Aug 100	960,000	semi-an.	Dec. '81 3
Winchester&Poto'c.*100	180,000	semi-an.	Jan. '82 3
Winchester&Strasb.*100	74,700	semi-an.	Jan. 82 3
Worcester & Nashua. 75	1,789,800	semi-an.	Jan. '82 1½
HORSE-POWER R. R.			
Albany City.....100	200,000	annual	.....'80 5½
Baltimore City..... 25	1,000,000	semi-an.	Jan. '82 4
Balt.,Cat.&El. Mills..100	.....	semi-an.	Jan. '82 2
BleeckerSt.&Ful.F'y.100	900,000	semi-an.	July '81 3
Boston&Chelsea pref. 50	110,000	semi-an.	Apl. '82 3
Broadway (Brooklyn)100	250,000	q'arterly	Oct. '81 3
B'way&7th Av,(N.Y.)100	2,100,000	q'arterly	Oct, '81 2
B'klyn&Hunter's Pt.100	400,000	semi-an.	Apl. '79 3
Brooklyn City.....100	2,000,000	q'arterly	Dec.'81 3½
Bushwick (Brooklyn)100	309,000	semi-an.	July '81 2½
Cambridge.....100	908,000	q'arterly	Apl. '82 4½
Cen.Park,N.& E.Riv.100	1 ,800,000	q'rterly.	Jan. '82 2
Christoph'r&TenthSt100	650,000	semi-an.	Aug.'81 2½
Citizens' (Phil.)..... 50	192,500	q'rterly.	Jan. '82 2½
Citizens' (Pbg.)..... 50	200,000	annual..	.....'80 14½
Coney Island&Bklyn100	500,000	semi-an.	Oct. '80 5
Continental (Phil.) .. 50	580,000	semi-an.	Jan. '82 6
D.Dock,E.B'way&Bat100	1,200,000	q'arterly	Nov.'81 4
Eighth Av. (N. Y.)...100	1,000,000	q'rterly.	Oct. '81 3
42d St. & G. St. Ferry100	748,000	semi-an.	Nov.'81 6
Frankf.&Southw (Ph) 50	600,000	q'rterly.	Jan. '82 6
Germantown, (Ph.).. 50	572,860	q'rterly.	Apl. '82 2½
Girard College (Ph.) . 50	500,000	semi-an.	July '71 3
Grand St. & Newton.100	170,000	semi-an.	July '81 2½
Green&Coates St.(Ph) 50	150,000	q'rterly.	Apl. '82 3
Heston,Mantau&F'm 50	299,381	semi-an.	Jan. '75 4
Highland.....100	600,000	semi-an.	Jan. 82 4
Lomb.&SouthSts(Ph) 25	195,000	semi-an.	Oct. '79 4
Lynn and Boston....100	200,000	semi-an.	May '82 4
Malden and Melrose.100	165,500	.....	.....
Metropolitan (Bost.). 50	1,500,000	semi-an.	Jan. '82 4
Middlesex (Boston)..100	650,000	semi-an.	May '82 3½
N.Y.,Bay Ridge&Jam100	150,000	.....	Oct. '78 7
Ninth Av. (N. Y.)....100	797,320	.....	.....
Orange &Newark....100	282,555	.....	.....
People's (Phila.)..... 25	124,744	.....	Apl. '82 2
Philadelphia City... 50	475,000	semi-an.	Jan. '82 5
Phila. and Darby.... 20	200,000	semi-an.	July '81 3½
Phila.&Grey's Ferry. 50	308,000	semi-an.	Jan. '82 6
Pbg,Alleg.&Manches. 50	300,000	q'rterly.	Oct. '81 3
Ridge Avenue (Ph.).. 50	420,000	semi-an.	Oct. '81 11
Second Avenue (N.Y.)100	1,199,500	semi-an.	July '81 2½
Second&ThirdSt.(Ph) 50	771,076	q'rterly.	Jan. '82 4½
17th &19th sts (Ph.).. 50	250,000	semi-an.	July '81 3
Sixth Avenue (N. Y.)100	750,000	semi-an.	Oct. '81 5
Somerville (Boston).100	113,000	semi-an.	May '82 3
South Boston..... 50	600,000	semi-an.	Jan. '82 4
Third Avenue, N. Y..100	2,000,000	q'rterly.	Nov.'81 5
13th and 15th sts.,Ph 50	334,529	q'rterly.	Jan. '82 4
23d street, N. Y.....100	600,000	semi-an.	Aug.'81 4
Union, Boston.....100	374,300	semi-an.	Jan '82 4
Union, Phila..... 50	1,005,000	semi-an.	Jan. '82 7
West Philadelphia... 50	750,000	semi-an.	July '77 10
CANALS.			
Chesapeake and Dela 50	2,078,038	semi-an.	June'75 2
Delaware Division... 50	1,633,350	semi-an.	Feb. '82 $1
Delawa. and Hudson100	20,000,000	q'rterly	Mar. '82 1¾
Delaware & Raritan*.100	5,847,400	q'rterly	Apl. '82 2½
Lehigh Coal and Nav 50	11,204,250	q'rterly	Dec. '81 2
Monongahela Nav... 50	1,004,500	semi-an.	July '81 $2
Morris, consolidated.100	1,025,000	semi-an.	Feb. '81 2
" preferred....100	1,175,000	semi-an.	Feb. '81 5
Pennsylvania..... 50	4,501,200	.....	.....
Schuyl. Nav., com.*. 50	859,100	annual..	Au. '81 50c.
" " pref... 50	3,200,950	annual..	Aug. '81 $1
MISCELLANEOUS.			
Adams Express.....100	12,000,000	q'rterly.	June'82 2
American Express... 50	18,000,000	semi-an.	Jan. '82 3
Amoskeag Manuf.Co.100	3,000,000	semi-an.	June'81 5
Calumet&HeclaMin'g —	100,000 S.	q'rterly.	May '82 $5
Central Mining Co...100	.....	semi-an.	Feb. '82 2½
Consolidation Coal..100	10,250,000	semi-an.	Jan. '82 2
George's Creek C.&I.100	.....	semi-an.	Jan. '82 3
Maryland Coal.....100	4,400,000	semi-an.	Feb. '76 1½
Mariposa L. &Mining100	10,000,000	.....	.....
" pref100	5,000,000	.....	.....
Missouri Val.LandCo100	200,000	semi-an.	Jan. '82 7
National Tube Works100	1,000,000	q'rterly.	Apl. '82 3
Pac. Mail Steamship.100	20,000,000	q'rterly.	Sept.'69 3
Pennsylvania Coal... 50	5,000,000	q'rterly	May '82 3
Pullman Palace Car..100	10,023,800	q'rterly.	May '82 2
Quicksilver, com....100	5,708,700	.....	May '82 0.4
" pref....100	4,291,300	.....	May '82 6
Quincy Mining Co... 25	40,000shs	semi-an.	Feb. '82 $8
Quincy R. R. Bridge.100	1,750,000	semi-an.	Jan. '82 5
SiouxC.&I.F.L.&L.Co100	500,000	semi-an.	Jan. '82 4
Spring Mt. Coal.....100	1,500,000	semi-an.	Dec. '81 3½
Topeka Equip'nt Co..100	255,000	semi-an.	Apl. '82 5
United States Ex....100	7,000,000	q'rterly.	May '82 1
Wells-Fargo & Co. Ex100	6,250,000	semi-an.	Jan. '82 4
Western Union Tel..100	80,000,000	q'rterly.	Apl. '82 1½

New Through Line Between Boston and Chicago.

THE Central Vermont and Grand Trunk Line has taken a new departure in through passenger traffic between Boston and Chicago, and the inauguration of a fast-train system and through Pullman sleeping-car service this season over the Boston, Lowell and Concord, Northern, Central Vermont and Grand Trunk roads between these points is the natural outcome of the large passenger business developed last summer by the manager of this line. The first Chicago sleeper left Boston last night at 7 o'clock, and the first daily Pullman sleeping-car for Boston left Chicago at 9:30, and will arrive in Boston at 7 o'clock on Wednesday night. From Montreal the run to Boston is made in ten hours on a limited fast express train, which made the run of 334 miles yesterday, with twenty stops, on schedule time with ease. The roads interested in the Central Vermont Line between Boston and Montreal have entered into an arrangement to furnish a certain complement of passenger, smoking, mail and baggage coaches for service between the two cities. The cars are of first-class make and are painted a handsome dark olive color and marked, "Boston and Montreal Express, via Central Vermont Line." Close connection to and from the west is made at Montreal, and dining-cars are run on the Grand Trunk Railway, which is now steel railed into Chicago. A fast day express with through car service was also put on yesterday by the Central Vermont between Montreal and New York, leaving the former city at 7:15 A. M. This new move on the part of the northern lines for eastern and western and passenger business is not unexpected in view of the completion of an independent line into Chicago by the Grand Trunk Railway.—*Boston Journal, May* 16.

AN American traveler in Egypt writes: What a fertile country is Egypt! On each side of the car, as far as the eye can reach, stretches a sea of the greenest green, far surpassing the Emerald Isle, and leading us to wonder if here was not the site of the garden of Eden. Where the soil shows through, it is in every place as black as pitch, and as rich as guano. The crops of all kinds seem to grow like the famous gourd of the whale-eaten Jonah. Now we pass fields of cotton white with their bursting pods, now seas of clover, acres of beans, and now mile upon mile of sugar cane, followed by wheat and Indian corn. There are no fences to mar the beauty of this wonderful nature, and the groves of tall bunchy palm-trees look like bouquets set up for the ornamentation of it all. No daily watered and daily rolled garden of any kind can compare with it. The sky is so clear that you can almost see that the earth is round, and the sights of oriental life which fit into this world of color come in in harmony and vivify the landscape. * * * None of the natives use knives or forks or plates in eating. They have one dish for a family, and into this all dip with their fingers, using a little piece of bread to catch up the vegetables out of the soup. Some few of the richest are adopting the European style at present, but they only do when they have Europeans for their guests. In carving, the fingres are also used. Turkeys, sheep and beef are also torn apart with the fingers, and often a woman, before going to eat in this way, rolls up her sleeves and digs into the food with her nails. They think the using of forks great foolishness, and have considerable contempt for the eating manners of the infidel world, as they call us.

GETTING HIS ANSWER.—Young Tompkins, thinking to take a rise out of Pat, "Why, you've got that paper upside down, Paddy!" Pat, "Bedad! any fule cud rade it the other way oop!" Calmly goes on with his reading.

ADVERTISE

—IN THE—

AMERICAN Railroad Journal. ESTABLISHED 1831.

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☞Railroad companies, parties having plant, or others desirous of making arrangements for its manufacture and introduction, are invited to communicate with the patentee,

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CORRESPONDENCE.

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The First Train between Albany and Schenectady.

Editor American Railroad Journal.

In a number of your excellent paper dated April 29, 1882, page 278, which came to my hand by the kindness of a friend, I find an article with the above heading credited to the Minneapolis *Tribune*, which to my certain personal knowledge contains many inaccuracies, which with your consent I will endeavor to correct. In the first place, who am I, and what my means of knowledge of the facts mentioned? I was born in Schenectady in 1800, consequently am now nearly 82 years old. I am a regular machinist, and went into the employment as superintendent of foundry and machine-works of Clute & Bailey, (now J. B. Clute & Bro.,) in 1829, where I remained until 1835, this being then the only foundry and machine establishment in the city. I was acquainted then with nearly if not quite every resident in it; also with many in the city of Albany.

The Mohawk and Hudson Railroad was completed in 1830 or 1831; Wm. Young was the chief engineer in its construction, instead of John B. Jervis, whom I never knew or heard of. Wm. Young resided in Church street, Schenectady, next door to my brother-in-law, John Strong. I knew him very well, and saw him every day for several years. I never knew of such a man as William Marshall in Schenectady.

The Mohawk and Hudson Railroad was operated for two or three years after its completion entirely by horse power. A half-way house was built by the company on the line of the road, where the horses were changed for fresh ones in going both ways. Christopher Rose, of Schenectady, was contractor as long as I remained in that city, which was to November, 1835. Asa Whitney was master machinist and general superintendent. Thorp & Sprague, or Sprague & Powell, were the only livery stable keepers at that time, and for many years ran a line of stages to Utica, carrying the U. S. mail.

The first locomotive placed upon any railroad in the United States was put on the road known as the Schenectady and Saratoga Railroad in 1832. It was built by George Stephenson, at Newcastle-upon-Tyne, England, and imported by the Schenectady and Saratoga Railroad Company. A man by the name of Turner came with it as engineer, and your humble servant assisted him in setting up and driving it from time to time to and from Saratoga. All the repairs needed on the engine and road were made at the shops of Clute & Bailey, as before stated.

The first locomotive put on the Mohawk and Hudson Railroad was built by David Matthews, a young man from New York, at that company's works which they had just erected at Schenectady, and was named "Brother Jonathan." It was a four-wheeled engine, and somewhat larger and better constructed than the Stephenson engine above mentioned.

I was personally acquainted with a number of the gentlemen whose names are mentioned in the article published. John I. Degraff is the person whose recommendation induced me to come to Georgia, where I have resided for forty-two years. My brother, who lost his life in the Angola accident, married a daughter of John Meigs, the well-known chief of police in Albany for many years.

As to the exploits of Billy Marshall, I think they may be set down as a myth, for both locomotives carried a bell, and all necessary signals were given by it until the whistle was added, some 30 years afterward. The description of the coaches first used is very accurate. They were built by James Gould of Albany, and Ward & Ross of Schenectady.

I have been a resident of Clarksville, Ga., from 1839 up to the present time; am living on my small farm, have excellent health, and am the first and oldest locomotive engineer, I suppose, living, for I ran the first one placed upon a railroad in the United States.

Respectfully Yours, &c.,

J. Van Buren.

Clarksville, Ga., May 13, 1882.

P. S. Should my life and health be spared until next August, I intend to drive a locomotive from this place to Tallulah Falls. So that I can say I have driven the first and last locomotive up to date. J. V. B.

Editor American Railroad Journal.

I noticed a few days back some very stringent orders given by railroad agents in regard to what are called "Ticket Scalpers." Of course, if there is anything dishonest in their operations they ought to be put down at once. But are there not two sides to the question? In the first place, have railroad companies the right to be as arbitrary as they are in regard to tickets? I think, if my recollection is correct, it has been decided several times by law in different States that a ticket is good until it is used, and the one-sided contract, or rules, printed on them does not amount to anything. The railroad will say, don't buy them if you do not like the conditions. But how are we going to help ourselves? I speak as one of the people. We sometimes are bound to travel by railroad, and find that we cannot or do not want to go as far as we expected to when we set out. Must we lose the balance of our ticket? If the railroad companies would redeem all tickets not used, at a fair valuation or proportion, the occupation of the scalpers would be gone. If you think they will, try them once. Some of them may give a small amount—a mere pittance; others, nothing at all. This is one reason why the scalpers have a chance to make something in buying and selling tickets; and I cannot see why, if they do it honestly, they have not just as good a right to engage in this traffic as in anything else that has a value attached to it. Another great cause of the traffic in railroad tickets is the unjust discrimination against local travel. I can buy a ticket in your city to Chicago for very little more than I can buy one to Pittsburgh, and I do not know but sometimes for even less, and the same facts are true in a greater or less degree with all local travel. It ought to be just the reverse, for while the railroads are a great convenience to the public, they are often a source of loss and trouble to those in their immediate vicinity. They take our land, whether we want to sell or not; they kill our cattle, burn up our fences, and sometimes even our houses, and when we want to travel over them we are charged two or three times as much as the passenger that only uses them once in a lifetime. Do not understand me as finding any fault with railroads, but let justice be done if the sky falls. When a railroad passes through more than one State it is fairly an object of national legislation, and ought to be so regulated that all would fare alike. This would effectually put an end to buying and selling tickets by outsiders. J. O.

Watsontown, Pa., May 13, 1882.

Railroad Surgical Departments.

Editor American Railroad Journal.

The rapidity with which the whole complicated system of railroad management has sprung from the crudest beginnings to what may be well dignified by the name of a new science, is one of the surprising features of modern progress. Jonah's gourd and Jack the Giant-killer's bean-stalk have been completely thrown into the shade!

Evolution, generally, has been a very slow process, but here in the life-time of a single individual has been developed, from the embryo, a colossal system with so many and such varied details that no one mind can guess them all. Perfect organization, division of labor, and constant interchange of ideas between those engaged in each department have accomplished in a few years what in other spheres of life has been the growth of centuries.

We hear now constantly of master car-builder's associations, conventions of general freight and passenger agents, and societies of locomotive engineers, conductors, telegraph operators etc., in which the experience of each one placed at the disposal of all, and the best plans are selected and discussed. It is somewhat strange that while every department has been thus thoroughly organized, that of railroad surgical surpervision has been almost entirely neglected. That it will become an essential part of the perfected railroad system of the future needs no argument. Of course, as, according to the popular dictum "corporations have no souls," any plea on the ground of humanity would be useless, but it can be easily shown that,as a mere matter of business, it pays, and pays well, too. One fact alone ought to convince railroad directors of the truth of this assertion: Hundreds of thousands of dollars are unjustly extorted from railroad companies yearly as damages, from the fact that there is no method of collecting and recording evidence on the spot as to the cause, nature and extent of injuries alleged to have been received on their roads. A year or two is generally allowed to elapse after such an oc-

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New Passenger and Combination Cars, 3ft. Gauge, delivery 30 days.
Iron and Steel Rails, prompt delivery.
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currence—a suit is brought—patient and doctor are naturally anxious to make as much out of it as possible—the extent of the injury is exaggerated—witnesses are biassed and their memories at fault—and the jury, always ready to find against all such "grinding monopolies," of course bring in a verdict against the company and award damages.

That is but one aspect of the case. Other corporations have found it to conduce largely to their interest to take the entire medical as well as surgical supervision of their employes. The latter naturally became more attached to those who thus look after their welfare, and perform their duties in a more faithful and efficient manner. For the same reason it is well known that many corporations have found it a paying speculation to maintain reading-rooms, gymnasiums, night schools, lecture courses, etc., for the benefit of their employes. In the same proportion that the physical and mental condition of a body of men is looked after and kept in a healthy state, will the character of their work be improved. On very few of the roads in the United States do any surgical departments exist. A number have attempted something of the kind but, as in the case of those controlled by Mr. Vanderbilt, have abandoned it, mainly on account of want of faith in the undertaking and the lack of a proper system in striking contrast to the perfect organization of other departments. It remained for two western roads, the Wabash, St. Louis and Pacific, and the Chicago, Rock Island and Pacific, to add regular surgical departments to their equipment; and the results in both cases have been eminently satisfactory. At a recent convention of the surgeons of the eastern division of the former, held in Decatur, Illinois, Dr. I. T. Woods, chief surgeon, gave an account of the origin and history of the organization, and related the difficulties and discouragements which he encountered when in April, 1875, he first tried the experiment. But it is of the system pursued on the latter, the Chicago, Rock Island and Pacific Railway, as being that with which I am best acquainted, that I wish to speak more particularly. The service was first conceived by Dr. W. F. Peck, of Davenport, Iowa, in 1874, to whose ability and untiring zeal is due the high state of efficiency to which it has now arrived.

Like the Wabash, service is only rendered in case of injuries to employes and passengers received on the road. Dr. Peck is Surgeon-in-Chief of the entire line, aggregating 1,381 miles, with headquarters in Davenport, and is summoned by telegraph, whenever the local assistant surgeons feel the need of his advice and assistance. Assistant surgeons are appointed at every first-class station, who are known, of course, to the station agents, section-masters, etc., and lists of whom are kept by all the conductors. They are instantly called in the case of any accident on their division, and are required to return an accurate and full report, by the first passenger train after the occurrence, to the office of the Surgeon-in-Chief, printed blanks being furnished for the purpose. The train conductors, section-masters, and station agents are also enjoined to send in reports in any case coming under their cognizance, no matter how trivial, apparently, the injury may be, it having been found that the most trifling injuries have finally caused the company much trouble and expense. In this way very full and complete data are obtained and kept on file to be used in case of need; the responsibility is determined at once, and where the liability of the company is thus ascertained, steps are taken to satisfy the claim, which can be accomplished much more satisfactorily with full knowledge of all the attendant circumstances. Many law-suits are thus nipped in the bud, and unjust claims effectually guarded against.

I may add, as a just tribute to Dr. Peck, Surgeon-in-Chief, and as an illustration of how much a man of energy and force of character can accomplish, that besides attending to the varied duties of his office, requiring much time, and frequent trips over the road, he also holds the position of Dean of the Medical Department, Iowa State University, Iowa City, fifty miles from Davenport, lecture's there on surgery, and conducts surgical classes of two or three hours duration twice a week, for five months in the year; keeps up his practice in Davenport, and although a young man, has established such a reputation as an able surgeon and skillful operator that he receives frequent calls by telegraph to various points in Iowa and Illinois, to conduct difficult and dangerous operations.

WM. C. SCHULTZE, M. D.

MARENGO, IA., April 13, 1882.

Illinois Central Railroad.

DURING the month of April, 1882, the traffic on the lines operated by this Company was (estimated):—

In Illinois	$536,408 00
In Iowa (leased lines)	138,195 00
Total	$674,603 00

The traffic for the same month in 1881, on the same mileage, was (actual):—

In Illinois	$503,733 63
In Iowa (leased lines)	157,759 34
Total	$662,492 97

During April, 1882, the land sales were 627.23 acres for $3,807.66, and the cash collected on land contracts was $6,938.14.

L. A. CATLIN. *Secretary.*

Nubian and Soudan Railway.

ONE of the most magnificent of the late Khedive Ismail's projects, the Nubian and Soudan Railway, is now assuming something like a substantial form. The original idea seems only to have been to run a line from Assouan, below the First Cataract, to Wady Halfa, at the Second Cataract, thus saving the transport of merchandise either way from Nile boat to camel or vice versa, which at present takes place at both rapids. But already an extension 300 miles above Wady Halfa is contemplated by the scheme, and if that is carried out, in all probability the line will be lengthened some day to Khartoum, the capital of the Soudan, at the Blue and White Nile. "To some," says the London *Globe*, "this may seem a chimerical project; but there are few engineering difficulties in the way save at the Assouan end, which have been already pretty well overcome; and if it is ever carried to completion, it cannot fail to affect most propitiously the future both of Nubia and the Soudan. It is to be a single line, of which at present 75 miles are finished; and, as it leaves Assouan, it passes through a portion of the famous granite quarries, out of which the Gizah pyramids, near Cairo, and so many other Pharaonic works were made. The engineer, a Scotchman, has no European to assist him, and the ways of his Arab and Nubian laborers are anything but the ways of the English navvy. Nothing will induce them to use a wheelbarrow, and, as they work in gangs, with a task-master standing over them with whip in hand, either supporting great masses on their backs or carrying away the debris in baskets, they forcibly recall to mind the habits and customs of the ancient Egyptians as depicted on the sculptures at Thebes and Karnak."

Sold by his Sons.

A NEW JERSEY miller who had become old and rheumatic, one day called his sons about him and said:—

"Boys, I am growing stiff in the knees and faint at heart. My liver is out of order, and I can no longer distinguish between a peck and a half bushel when taking toll. This mill is worth ten thousand dollars. In order to form a stock company, and render my own burdens the lighter, I shall give Reuben two-tenths, Samuel the same, and Henry, who is my first-born, three-tenths. Bless you, my children, bless you! You may now go a fishing for half a day."

The three sons took the papers which the old man had made out, and instead of going a fishing, they went down to a lawyer's office, called a meeting of stockholders, and proceeded to business. The first-born was elected President, Reuben Treasurer, and Samuel Secretary, and the following resolution was passed:

"*Resolved*, That we bounce the old man, and run the mill after our own ideas!"

WHEN a man coins his own words, he does not necessarily make cents of them.

IN October, 1880, Charles S. Archer, a traveling salesman, arrived in Hartford, Conn., on a railroad train. It was the first time he had visited the place and it was night. He was walking on the platform to take a cab to go to a hotel, unconscious that on the outer edge of the platform, near which he was, ran the track of the New York, New Haven and Hartford Railroad Company. Suddenly a train of that company came around a curve only about five hundred feet distant, struck a large travelling bag which he carried, swung him around and threw him between the track and the platform. He received severe injuries on the head, and such injuries to one of his hands as necessitated its amputation. A suit brought by him against the company to recover damages was tried on the 25th ult. before Judge Larremore in Supreme Court, Circuit, when the jury found a verdict in his favor for $10,000. On motion of his counsel the judge granted him an extra allowance of five per cent on that sum. Damages were claimed in the suit for $50,000.

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THE ONLY LINE which runs a THROUGH SLEEPING-CAR from

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Through sleeping car for Buffalo, Toledo, Fort Wayne, Logansport, Lafayette, Danville Tolono, Decatur and St. Louis, making direct connection with through Express Trains for Kansas, Colorado, Texas, and all points in the

SOUTHWEST.

6.00 P.M. PACIFIC EXPRESS.

The only line running a through sleeping car *via* Buffalo and Detroit without change, arriving at Chicago at 8.00 A.M. second morning, making sure connections with through Express Trains for Iowa, Nebraska, Kansas, Colorado, the Pacific Coast, Wisconsin, Minnesota and all points in the

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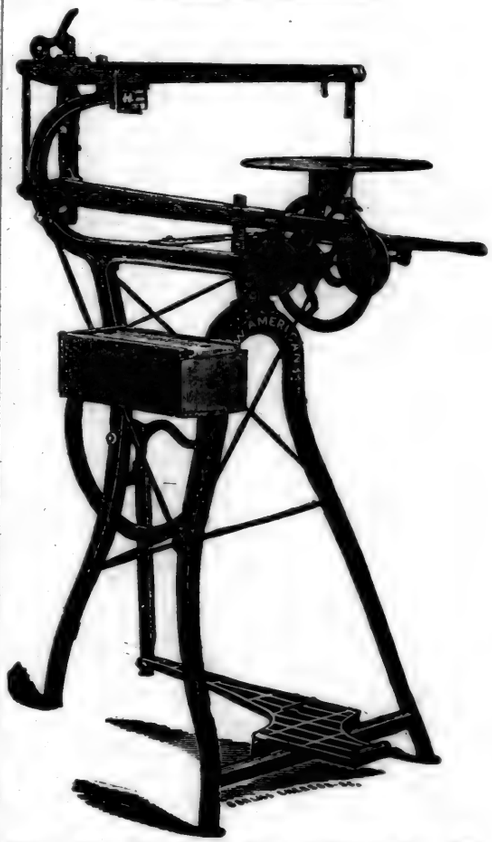
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Statement of the Public Debt of the United States, May 1, 1882.

DEBT BEARING INTEREST.

	Amount Outstanding.	Accrued Interest.
6 per cent loan, 1861-'81, continued at 3½ per ct.	$41,337,550 00	$482,271 42
6 per cent loan 1863-'81 continued at 3½ per ct	47,855,600 00	558,315 33
5 per cent funded loan of 1881	401,503,900 00	3,513,159 12
4½ per cent funded loan of 1891	250,000,000 00	1,875,000 00
4 per cent funded loan of 1907	738,854,800 00	2,462,849 33
4 per cent refunding certificates	493,000 00	1,643 33
3 per cent navy pension fund	14,000,000 00	140,000 00
Aggregate of debt bearing interest	$1,494,044,850 00	$9,033,238 53
Interest due and unpaid		2,244,926 38

DEBT ON WHICH INTEREST HAS CEASED SINCE MATURITY.

	Amount Outstanding.	Interest due and unpaid
4 to 6 per cent. old debt, 1837.	$57,665 00	$64,173 81
5 per cent. Mexican indemnity stock 1846.	1,104 91	85 74
6 per cent. bonds, 1847	1,250 00	22 00
6 per cent. bounty land scrip, 1847	3,275 00	213 06
5 per cent. Texas indemnity bonds, 1850	20,000 00	2,945 00
5 per cent. bonds, of 1858	8,000 00	....
5 per cent. bonds, of 1860	10,000 00	600 00
6 per cent. 5-20 bonds, 1862, called	370,050 00	8,348 64
6 per cent. 5-20 bonds, June 1864, called	58,650 00	107 95
6 per cent. 5-20 bonds, 1863, called	70,750 00	18,674 41
5 per cent. 10-40 bonds, 1864, called	410,550 00	106,034 82
6 per cent. Consol. bonds, 1865, called	386,350 00	13,979 33
6 per cent. Consol. bonds, 1867, called	1,025,100 00	196,516 07
6 per cent. Consol. bonds, 1868, called	287,050 00	23,165 27
6 per cent. loan, Feb. 8, 1861, matured Dec. 31, 1880	86,000 00	5,070 00
5 per cent. funded loan 1881, called	1,597,850 00	29,472 62
Oregon War Debt, March 2, 1881, matured July 1, 1881.	120,450 00	5,155 50
6 per cent loan of July 17 and Aug. 5, 1861, matured June 30, 1881	733,200 00	17,254 50
6 per cent loan of July 17 and Aug. 5, 1861, continued at 3½ per cent, matured Dec. 24, 1881, and Jan. 29, 1882, called	7,666,950 00	60,404 49
6 per cent. loan of March 3, 1863, matured June 30, 1881.	241,450 00	3,225 00
1-10 to 6 per cent. Treasury notes, prior to 1846	82,525 35	2,668 06
1-10 to 6 per cent. Treasury notes, 1846	6,000 00	206 00
6 per ct. Treasury notes, 1847.	950 00	57 00
3 to 6 per cent. Treasury notes, 1857	1,700 00	99 00
6 per ct. Treasury notes, 1861.	3,000 00	364 50
7 3-10 per cent. 3 years' Treasury notes, 1861	16,300 00	1,104 43
5 per cent. 1 year notes, 1863	42,205 00	2,122 35
5 per cent. 2 year notes, 1863.	32,900 00	1,643 55
6 per ct. compound interest notes, 1863-64	222,260 00	45,386 07
7 3-10 per cent. 3 years' Treasury notes, 1864-65	139,350 00	4,486 48
6 per cent. certificates of indebtedness, 1862-63	4,000 00	253 48
4 to 6 per cent. temporary loan, 1864	2,960 00	244 19
3 per cent. certificates, called.	5,000 00	394 31
Aggregated of debt on which interest has ceased since maturity	$13,714,845 26	$614,478 63

DEBT BEARING NO INTEREST.

Demand notes, 1861-62	$59,810 00	
Legal tender notes, 1862-63	346,681,016 00	
Certificates of Deposit	11,115,000 00	
Coin certificates, 1863	5,072,120 00	
Silver certificates, 1878	67,781,360 00	
Unclaimed interest		5,726 51
Fractional currency, 1862, '63 and 1864 $15,433,741 77		
Less amount estimated as lost or destroyed, act of June, 21, 1879 8,375,934 00		
	7,057,807 77	
Aggregate of debt bearing no interest	$437,767,113 77	$5,726 51

RECAPITULATION.

	Amount Outstanding.	Interest.
Debt bearing interest in coin, viz:		
Bonds at 6 per cent., continued at 3½ per cent.	$89,193,150 00	
Bonds at 5 per cent, continued at 3½ per cent.	401,503,900 00	
Bonds at 4½ per cent.	250,000,000 00	
Bonds at 4 per cent.	738,854,800 00	
Refunding certificates	493,000 00	
Navy pension fund, 3 p.c	14,000,000 00	
	$1,494,044,850 00	$11,278,164 91
Debt on which interest has ceased since maturity.	13,714,845 26	614,478 63
Debt bearing no int., viz:		
Old demand and legal-tender notes	$346,740,826 00	
Certificates of deposit	11,115,000 00	
Coin & silver certificates	72,853,480 00	
Fractional currency	7,057,807 77	
	$437,767,113 77	
Unclaimed interest		5,726 51
	$1,945,526,809 03	$11,898,370 05
Total debt, principal and interest to date, including interest due and unpaid	$1,957,425,179 08	

AMOUNT IN TREASURY.

Interest due and unpaid	$2,244,926 38	
Debt on which interest has ceased	13,714,845 26	
Interest thereon	614,478 63	
Gold and silver certificates	72,853,480 00	
U. S. notes held for redemption of certificates of deposit	11,115,000 00	
Cash balance available May 1, 1882	145,031,850 20	
	$245,574,580 47	
Debt, less am't in Treas'y May 1, 1882	$1,711,850,598 61	
Debt, less am't in Treasury April 1, 1882.	1,726,266,422 35	
Decrease of debt during the month	$14,415,823 74	
Decrease of debt since June 30, 1881	$128,748,213 37	

BONDS ISSUED TO THE PACIFIC RAILROAD COMPANIES, INTEREST PAYABLE IN LAWFUL MONEY.

	Amount Outstanding.	Accrued Interest not paid.
Central Pacific bonds, 1862-64	$25,885,120 00	$517,702 40
Kansas Pacific bonds, 1862-64	6,303,000 00	126,060 00
Union Pacific bonds, 1862-64	27,236,512 00	544,730 24
Cent. Branch Union Pacific bonds, 1862-64	1,600,000 00	32,000 00
West'n Pacific Bonds, 1862-64	1,970,560 00	39,411 20
Sioux City & Pacific bonds, 1862-64	1,628,320 00	32,566 40
Totals	$64,623,512 00	$1,292,470 24

Interest paid by the United States, $53,405,977.38; interest repaid by transportation of mails, &c., $15,096,048.68; interest repaid by cash payments: 5 per cent net earnings, $655,198.87; balance of interest paid by United States, $37,654,729.83.

The foregoing is a correct statement of the public debt, as appears from the books and Treasurer's returns in the Department at the close of business, April 29, 1882.

CHARLES J. FOLGER,
Secretary of the Treasury.

The Coal Trade.

THE leading coal-carrying companies make the following reports of their tonnage for the week ending May 6th, and for the year to same date, compared with their respective amounts carried to the same time last year:—

	Week.	1882.	1881.
Reading Railroad	123,083	3,081,448	2,956,951
Schuylkill Canal	6,404	87,111	60,265
Lehigh Valley	86,064	2,350,741	2,256,742
Delaware, Lackawanna and Western	60,950	1,285,774	1,355,874
Shamokin	18,394	291,750	345,796
Central R. R. of New Jersey	62,672	1,258,496	1,319,247
United R. R. of New Jersey	25,062	538,175	535,816
Pennsylvania Coal	14,950	335,652	367,492
Delaware and Hudson Canal	30,378	1,004,610	1,165,603
Huntingdon and Broad Top Mountain	5,095	172,798	151,078
Penn. and New York	22,317	598,052	563,769
Clearfield, Pa.	65,161	985,885	799,451

The total tonnage of anthracite coal from all the regions for the week ending May 6, as reported by the several carrying companies amounted to 389,208 tons, against 622,735 tons in the corresponding week last year, a decrease of 233,527 tons. The total amount of anthracite mined for the year is 8,119,013 tons, against 8,999,531 tons for the same period last year, a decrease of 880,518 tons. The quantity of bituminous coal sent to market for the week amounted to 77,751 tons, against 112,804 tons in corresponding week last year, a decrease of 35,053 tons. The total amount of bituminous mined for the year is 1,572,259 tons, against 1,599,478 tons for the corresponding period last year, a decrease of 27,219 tons. The total tonnage of all kinds of coal for the week is 466,959 tons, against 735,539 tons in corresponding week last year, a decrease of 268,580 tons, and the total tonnage for the coal year is 9,691,272 tons, against 10,599,009 tons to same date last year, a decrease of 907,737 tons. The quantity of coal and coke carried over the Pennsylvania Railroad for the week ending May 6th was 219,619 tons, of which 162,826 tons were coal and 56,793 tons coke. The total tonnage for the year thus far has been 3,813,504 tons, of which 2,720,724 tons were coal, and 1,092,778 tons coke. These figures embrace all the coal and coke carried over the road east and west. The shipments of bituminous coal from the mines of the Cumberland coal region for the week ending May 6 were 5,196 tons and for the year to that date 475,738 tons, a decrease of 119,693 tons as compared with the corresponding period of 1881. All the coal was carried by the Baltimore and Ohio Railroad, the shipments by which have been for the year to date 392,505 tons, a decrease of 88,300 tons as compared with 1881. The shipments by the Pennsylvania Railroad for the year have been 74,842 tons, an increase of 18,167 tons over 1881. The Reading Railroad shipment for last week, ending May 13, was about 128,500 tons, of which 26,000 tons were sent to and 29,000 tons shipped from Port Richmond, and 10,600 tons sent to and 11,500 tons shipped from Elizabethport.—*Phil. Ledger, May* 15.

A ROUND lot of New York city 6 per cents have been sold to London and Frankfort at 129 and interest.

KING KALAKAUA, of the Sandwich Islands cannot help being a good man. His ancestors ate so much missionary in their time that it worked into their systems and was transmitted to their descendants. Missionaries who are eaten are, after all, not wasted, it would appear.

THE best place for the cultivation of bananas is said to be on a side hill, where the sun has great power. Each tree bears a single bunch, which is ready to cut about nine months after setting out the plant. After removing the bananas the trees are cut off close to the ground, and from the old stumps three or four more trees will spring up, each of which will in about nine months yield a bunch. The trees grow about fifteen feet high. In setting out a new field, the roots of old trees are taken. These roots grow in clumps, and contain a number of eyes, from which new sprouts start. These roots are cut into pieces. The first crop of bananas is always the best. The bananas are larger and there are more on a bunch. They average about 250 on a bunch, and yield about 175 bunches per acre. The second crop is poorer in quality, the yield becomes less, and in four or five years the land runs out.

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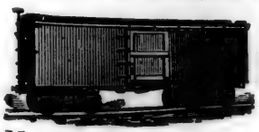
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Canadian Pacific Railway.

Mr. E. G. Tilton, of Yale, British Columbia, Contractor, Chief Engineer and General Superintendent of the Canadian Pacific Railway, visited Portland, Oregon, on the 3d inst., and while there was interviewed by an *Oregonian* reporter, in the course of which he gives the following information concerning that stupendous undertaking:—

"Last February a contract for building eighty-five miles from Emory Point, five miles below Yale, to Port Moody, the western terminus, at the head of Burrard Inlet, was let to Andrew Onderdonk and associates, and the work of clearing and bridging is already under way. Grading will be commenced about the 25th of this month. Arrangements have been made for the importation of 8,000 Chinese, to arrive within sixty days. Two vessels, with 1,200 coolies, arrived last month, and the men are now at work. Five thousand men will be put on the line between Emory and Port Moody, and a like number on the Frazer River. The work thus far on the Frazer has resulted in the completion of 23 miles of track, under a contract secured in 1880, northeast from Emory. Upon these 23 miles 1,200 men have been at work for 18 months, and the grade from the sixtieth to the ninetieth mile is nearly completed The work from Emory to Thompson's River, a distance of 60 miles, is probably the most difficult and expensive on the North American Continent. Frazer River is bordered with steep, rugged mountains of solid granite, from 5,000 to 8,000 feet high. In the first 17 miles there are 13 tunnels—four in one mile and six in another. In two miles on the division above Emory there are no less than 600 trestles and bridges, and in the last 85 miles more than 100 embankments, which at the foundation level are 17 feet wide, and the cuts 22 feet. The tunnels are 22 feet wide and 21 feet high. None other than 58-pound steel rails are used. In the upper section of the work there are 10,000,000 cubic yards of earth, an excavation of 3,000,000 cubic yards of rock, exclusive of the tunnel, and 2,000,000 cubic yards of rock and cemented gravel. Between 30,000,000 and 40,000,000 feet of timber, board measure, are required for the structures. Over the entire contracts the rock is of the hardest compact granite, in which often occur wide and extremely rich quartz veins. For miles the road is literally hewn out of the side of the cliffs. The approaches to many of the tunnels are galleries. At the eastern approach to tunnel No. 7, for over 100 feet, the bluff is galleried, and overhangs the roadway twenty-four feet in width, or two feet outside the roadbed, below which is an almost perpendicular precipice of 200 feet. The first tunnel is at the north end of Yale, and the first four happen with a mile and a half of the town. It required eighteen months to build the first two miles, working in the tunnel night and day. From one point six tunnels are visible at a glance. The grades and curves are moderate, the heaviest grade being fifty feet to the mile. The line follows the west bank of Frazer River to a point eight miles below Lytton, where Thompson's River empties into the Frazer. There the latter river will be crossed by an iron and steel bridge, to cost $300,000. The line will then follow the south bank of Thompson's River to Kamloops Lake. The contractors expect to have completed by the end of this year 120 miles of grade, and have 50 miles of track in operation. The first two miles north from Emory cost a little over $200,000 per mile, and the 11 miles from the eighteenth to the twenty-ninth cost $175,000. The average cost per mile of the upper division along the Frazer and Thompson's rivers will be over $75,000 per mile. This does not include the cost of rails and fastenings, which are furnished by the Government. The cost of the 212 miles from Port Moody to Kamloops Lake will be, exclusive of rails, $12,000,000. The company have at Yale erected nitro-glycerine and powder works, with a capacity of 11,000 pounds per day, and car and machine shops, and all the supply departments. A steamer is under construction, and will be launched in a few days, for the navigation of the upper Frazer between Boston Bar and the mouth of Thompson's River. The boat is intended for the transportation of supplies, and will be the first to ascend above Boston Bar."

Chinese Opposition Water-Works.

A correspondent of the Baltimore *Sun*, writing from San Francisco under date of May 8th, says that a forcible illustration has just been given of the business sagacity of Chinamen, and then adds:—

"The Chinese Quarter pays $4,000 a month to our water companies; $45 a month is the water tax on every Chinese washhouse. The Six Companies that rule Chinadom in California and provide for their necessities, have at times applied for reduction in vain. They have been studying our artesian water-system; and how those who have flourishing wells make money by supplying thirty to forty neighbors from their surplus at half our water-tax rates! Having quickly acquired the data, they quietly and unobserved drove down artesian tubes some 120 feet on the back end of their ground on Clay street, and got a fine flow of water of excellent, soft quality. Spring Valley Company's water is very hard and impure. A Chinaman called again about rates, and the unsuspecting president received him coolly: "We don't care to water you Chinamen any way. We have discharged all our Chinese workmen and don't intend to employ any more." To which the wily Mongolian retorted: "You dischargee Chinamen. Good! Chinamen dischargee you company. Good-by." Hastily inquiring around, the officer found the artesian well and a 60,000-gallon tank under construction. His astonishment was complete when informed that the $2,000 a month levied on the numerous wash-houses would soon be stopped also. The Chinese Companies are about putting down artesian tubes in a distant outskirt and building a wash house where all Chinamen can do their washing and have their homes convenient. Wagons will be provided to save the foot and back toil now imposed in gathering and delivering all over town. This makes long faces among the washerwomen of rival foreign extraction, who anticipated getting monopoly and trebling prices when the Mongolians should be driven out under the new law. People are finding out that two can play the game of "discharging," and that instead of going, the Chinamen are laying out for more permanent stay and more inroads upon existing business of white men. Quite as fast as discharged in any direction they set up for themselves and generate their own employment The last British steamer reports 80,000 Mongolians at Hong Kong offering big prices for passage to California."

Statistics for Girls.

A young English statistician who was paying court to a young lady, thought to surprise her with his immense erudition. Producing his note-book she thought he was about to indite a love sonnet, but was slightly taken aback on the following question:—

"How many meals do you eat a day?"

"Why, three, of course; but of all the oddest questions!"

"Never mind, dear, I'll tell you all about it in a moment."

His pencil was rapidly at work. At last, fondly clasping her slender waist:—

"Now, my darling, I've got it, and if you wish to know how much has passed through that adorable little mouth in the last seventeen years I can give you the exact figures."

"Goodness gracious! What can you mean?"

"Now, just listen," says he, "and you will hear exactly what you have been obliged to absorb to maintain those charms which are to make the happiness of my life."

"But I don't want to hear."

"Ah, you are surprised, no doubt, but statistics are wonderful things."

"Just listen: You are now seventeen years old, so that in fifteen years you have absorbed oxen or calves, 5; sheep and lambs, 14; chickens, 327; ducks, 204; geese, 12; turkeys, 100; game of various kinds, 824; fishes, 160; eggs, 3,240; vegetables (bunches), 700; fruit (baskets), 603; cheese, 103; bread, cake, &c. (in sacks of flour), 40; wine (barrels), 11; water (gallons), 3,000."

At this the maiden revolted, and jumping up, exclaimed:—

"I think you are very impertinent, and disgusting besides, and I will not stay to listen to you!" upon which she flew into the house.

He gazed after her with an abstracted air, and left saying to himself:—

"If she kept talking at that rate twelve hours out of twenty-four, her jaws would in twenty years travel at a distance of 1,332,124 miles."

The maiden, within two months, married a well-to-do grocer, who was no statistician.

"How often does the ferry-boat start?" asked the lady. "Ivery 15 minutes, mum." "How long since the boat left here?" "Ten minutes, mum." Lady waits 10 minutes, and then says, "Didn't you say the boat starts every 15 minutes?" "I did, mum." "Well, I have waited here 10 minutes since you said the boat had been gone 10 minutes!" "Yes, mum." "Then how do you make out that it starts every 15 minutes?" "Why, ye see, mum, it starruts from this soide wan 15 minutes, and from the other soide the nixt."

American Railroad Journal.

ESTABLISHED 1831.

Steam Navigation, Commerce, Finance, Banking, Machinery, Mining, Manufactures.

SECOND QUARTO SERIES.—VOL. XXXVIII., No. 20.] NEW YORK, MAY 27, 1882. [WHOLE No. 2,405.—VOL. LV.

The Silver Coinage.

THE country does not seem to be aware of the absurdity, as well as the danger, of the situation in regard to the silver coinage. For some years past the Treasury has been buying and coining silver at the rate of $2,000,000 a month, until, besides the $34,000,000 in circulation, there are $78,000,000 of silver in the Treasury, against a large part of which it has issued certificates of deposit. These certificates are of course receivable for customs and other disbursements of the Government, and as long as the Treasury has gold enough to give either metal at the pleasure of the creditors the silver certificates keep at par, a state of things which has been wonderfully favored by the course of our foreign trade and our large imports of gold in the last few years The tide has now turned, however, and we have and shall probably continue to have to settle our foreign balance of trade with specie. Of one thing we may be certain, that the foreigner will require gold and decline to take silver for his dues. The day may then come when the Government, having $100,000,000 or more of silver coin and no gold, may be unable to pay out the latter, and require its creditors to take silver under the law. Then would happen on a small scale that which happened with greenbacks during the war, that the whole currency of the country, greenbacks, bank notes and bank deposits, resting on a legal basis of silver, would be at a discount as compared with the gold currency of the world. If the Government persists in its present policy it is not impossible that within a few years that noble institution, the gold room, may begin again its operations in New York and treat the country to quotations of premiums fluctuating from 1 to 25 per cent.

It may be asked, If this is the effect of the policy, why did the Government adopt and why does it persist in it? Because certain silver mine owners wished the Treasury to support the market for their otherwise much less salable product. And the success of their skillful operations appears from the fact that it would cost the Government at least $10,000,000 loss to get rid of the burden which they have already placed upon it; and that the transfer of loss from their shoulders to the broader ones of the Treasury offers the most flattering prospects for the future.

The President and the Secretary of the Treasury have urgently recommended the repeal of the silver coinage act and the stoppage of the issue of certificates, and the Committee on Banking and Currency has prepared a bill bearing the stamp of a far from sanguine timidity. As for the chance of its passage, we remark that the calendar of the House is already buried thousands deep with bills of which it is not uncharitable to suppose that many may have been introduced on purpose; that no bill can be taken up out of its order unless by a two-thirds vote; and that the silver lobbyists are prepared to resort to any measure to prevent that two-thirds vote from being reached.

Is there no remedy, then? The only available one is to give the official who is the National guardian and responsible head of the Treasury as good a chance to defend his charge as any silver mine owner has to attack it; instead of sending written reports from outside and elbowing other lobbyists in the committee rooms, to let him stand on the floor of Congress, call the country to his rescue, and make every member of Congress declare plainly whether he is or is not a party to such a swindle.—*Boston Journal, May* 19.

The Assos Expedition.

A LECTURE was delivered on the 18th inst. at Cambridge, Mass., by Prof. Charles Eliot Norton on "The Assos Expedition," in which he said:—

"Assos is situated in Asia Minor, southwest of Troy. It is mentioned in the Acts of the Apostles, and that is almost the only place where even a very good reader would have been likely to have met its name. It is very curious that there are only a very few places in all ancient writings where it is even mentioned. It may be asked why a city of so little importance should have been selected as the objective point of the first archæological expedition sent out from America to these regions. Assos is situated in Asia Minor, a short distance southwest of Troy. Choiseul, a French traveler, was the first to bring the place into notice a century or so ago. About 1800 an English traveler visited the ruins and published the opinion that they probably exemplified the life of the times when the city flourished, better than the remains of any other ancient city. In 1835 another Frenchman—M. Texier—called attention to them, and several specimens of the Greek sculptures there found were brought to Paris and exhibited in the Louvre, where they attracted much attention. There is no more interesting subject of inquiry than the mode in which the Greeks reached their position at the head of the world in art. When, then, the question arose two years ago in America of what site should be chosen for the investigations of an expedition sent out from this country, Assos was at once thought of. In the excavations of Dr. Schliemann and Di Cesnola we had seen the real value of the work decidedly impaired by the mere splendor of the *material* discoveries. In our plans we laid down that we would not countenance any gambling in art; that we would go where our work would tend solely to the advancement of art. Two young men of marked ability and culture, who had recently been traveling in the vicinity, were chosen to take the lead in the expedition —Messrs. Clark and Bacon, the former of whom had received the greater part of his education in Germany, and the latter being one of the best of the graduates of the Massachusetts Institute of Technology. These gentlemen recommended Assos as the best place for a location, and their recommendation was adopted. The number of those who were to be their colaborers was finally sifted down to half a dozen. We made a mistake, I think, in sending out too many, for more hands were there than could well be utilized at first. In August, 1881, excavations were begun. Assos is situated on the top of a rocky volcanic hill, on the very summit of which stood the temple. The first work was to uncover the floor of this. The earth and debris over it varied from three to six feet, being the accumulations from Turkish garrisons which had been stationed there from time to time. This was removed with little trouble, and the whole plan of the temple was soon made clear. This plan showed that the date of its erection was of an early age, and also showed that the plans made by the early travelers are wholly worthless. There is reason to believe that the construction of the temple took place about the time of the final defeat of the Persians by the Greeks, i. e., about 479 B. C. How, then, is the extremely archaic character of the Assos work to be accounted for? By two things: first, the provincial situation of the place; and second, the influence of Oriental methods. There is no Greek city which presents a more superb line of walls and fortifications than Assos; no walls which are more full of historic and artistic interest. There is reason to believe that from these walls, &c., a more complete idea of the aspect and the delineation of the

old Grecian life can be obtained than from any other source. The work was continued till it became so rough and cold in the last months of the year that the workmen refused to stay longer, but by this time enough had been done to give all the members of the expedition plenty to study over and work with during the winter. Mr. Clark went to Munich and there prepared his report, which will be placed in the hands of the members of the institute next week. The present year has opened up with great promise, but the work cannot be long continued unless more financial support is received. The expedition has not received the support from the intelligence of America which was expected. Thirty-five hundred or $4,000 more is needed to complete the work, and it is earnestly hoped that this will be soon forthcoming." After the lecture a number of diagrams, views, etc., were thrown on the screen by a magic lantern, illustrating what has been already accomplished.

Economic Geology.

MR. V. BALL, of the Geological Survey of India, in his recent report on "Economic Geology," speaks of the native iron industries and mentions one magnificent piece of iron casting which remains to testify that the ancient Hindus were capable of very difficult feats in fine art. Iron ores have been worked by Hindu smelters time out of mind. "Practical men have sometimes spoken of the native furnaces and methods of working in a very contemptuous manner or have regarded them as merely objects of curiosity. But ought this to be so? Does not such a work as the famous iron pillar at the Kutab, near Delhi, indicate an amount of skill in the manipulation of a large mass of wrought iron which has ever been a marvel to all who have studied it. But a few years ago what iron foundry in Europe could have produced the like, and even now how many are there that could turn out such a mass? Of a total length of 23 feet 8 inches, just 22 feet thereof stand exposed over the ground. Over 16 feet in diameter at the base, it tapers to a little over a foot just below its capital, which is 3½ feet high. Its total weight is over six tons."

Considerable on Curves.

IT is said that there is a railroad in Pennsylvania so crooked that a man riding on a train there would be just as likely to put a chew of tobacco in his ear as in his mouth while the train was in motion. The trackmen after working on the road a few months, all get cross-eyed trying to find the rails. The above, which is from the Elmira *Free Press*, is partially the effort of an excited imagination. There are, however, a number of railroads in Pennsylvania on which there are numerous and well developed curves. There are several curves, for instance, on the Frackville branch of the Philadelphia and Reading Railroad, and considering that the grade is 187 feet to the mile they are necessary. There is a curve on the Catawissa branch of the same road known as the Horseshoe Bend. The story is told of a new engineer that in running around this curve one night, he looked back and saw what he supposed was an approaching train. To avoid a collision he pulled up. The other train stopped at the same moment. The engineer got out to investigate. He walked towards the other train, which showed a red light. He found the lantern hanging on the rear caboose of his own train.

Steel From Phosphoric Pig-iron.

A VERY interesting and important account of the process of manufacturing steel and ingot iron from phosphoric pig-iron was lately given by S. G. Thomas and P. C. Gilchrist before the Society of Arts, London. Nine-tenths of the iron ores of Europe are so phosphoric as to produce a pig-iron unfit for steel-making without a process of dephosphorization, but through the lime method steel can be made from a phosphoric pig of an actually purer nature than that obtained from hematite iron. The Bessemer basic process was peculiarly adapted to the manufacture of soft weldable iron, having all of the characteristics of puddled iron, with considerably greater strength, elasticity, and durability. This soft basic Bessemer steel could be made at a less price per ton than the ordinary puddled iron, and a further saving was secured in its subsequent treatment by the smaller loss it involves in rolling. Nearly half a million tons a year of the new metal were now being turned out, and on the Continent of Europe works were in course of construction having a capacity for making another half million tons annually, while in England the new special works erecting had a capacity for producing only 200,000 tons.

The Largest Fort in the World.

FORTRESS Monroe is the largest single fortification in the world. It has already cost over three millions of money. The water battery is considered to be one of the finest pieces of military construction in the world. Colonel Lodor, the instructor of the artillery school, has invented and perfected some astonishing appliances, that, when we shall have guns, will be of immense value in handling them. In one of the casemates inside the fort is his office. He can sit in it and, by an electric appliance, cause every gun in the fort to be fired simultaneously. He has perfected another set of instruments by which the exact distance of a ship from the shore may be accurately determined, the velocity and direction of the wind, the consequent deflection of the ball, and the precise point at which the ball will strike the ship. The guns are fired by electricity.

Keeping a Trade-Secret.

PROBABLY the most noted illustration of the successful keeping of a "trade-secret" is that of the manufacture of bronze powder, by Sir Henry Bessemer, in England, which has been kept for nearly forty years. Mr. Bessemer prepared working plans for machinery to manufacture this product, and had it made, piece by piece, at different establishments. With two trusted assistants he put the works into condition to do the work, and they are still in use. In this case Mr. Bessemer "was afraid to patent his invention," inasmuch as a pound package being so small it could easily be smuggled into use, and its illicit manufacture would be certain. The reason that particular processes of manufacture are sometimes kept secret, in preference to relying upon a patent, can be easily understood. Any one can obtain a copy of the specifications of a patent, and thus the way is open to an infringement.

Commerce of New York.

THE foreign imports at New York in the month of April were :—

	1880.	1881.	1882.
Ent. for cons.....	$22,064,758	$18,246,103	$20,804,002
Do. for warehousing	14,338,713	8,454,351	9,801,920
Free goods.....	10,890,473	10,755,417	11,348,511
Specie and bullion..	410,319	15,383,746	393,798
Total ent. at port....	$47,704,263	$52,839,617	$42,348,251
Withdrawn from warehouse.....	6,112,693	8,593,000	7,220,344

The foreign imports at New York for four months from January 1, were :—

	1880.	1881.	1882.
Ent. for cons.....	$88,189,358	$72,537,313	$90,740,758
Do. warehouse....	39,360,366	29,034,271	32,153,989
Free goods.....	43,763,273	42,031,040	43,911,494
Specie and bullion.	3,052,533	28,010,376	1,475,213
Total ent. at port..	$174,365,530	$171,663,000	$168,281,454
Withdrawn from warehouse	27,355,144	30,798,211	29,557,086

The foreign imports at New York for ten months ending April 30, were :—

	1880.	1881.	1882.
Six months ending January 1.....	$266,228,601	$280,770,515	$252,275,460
January.....	40,897,154	36,085,359	40,135,673
February.....	40,165,384	34,157,263	40,414,146
March.....	45,598,729	48,580,761	45,383,384
April.....	47,704,263	52,839,617	42,348,251
Total nine mos....	$440 594,131	$452,433,515	$420,556,914
Deduct specie.....	81,795,704	98,604,912	27,763,511
Total mdse.....	$358,798,427	$353,828,603	$392,793,403

The reports for Customs at the Port of New York for ten months ending with April were:—

	1880.	1881.	1882.
6 mos.ending Jan. 1.....	$59,271,080 94	$69,593,542 80	$75,083,478 15
In Jan.....	11,960,677 78	10,572,559 15	13,387,515 96
In Feb.....	12,254,602 24	11,217,766 87	13,585,053 25
In March....	14,469,557 65	13,122,964 03	13,999,138 76
In April.....	11,901,071 43	11,678,760 93	11,906,105 45
Total 10 mos	$109,856,990 04	$116,185,593 78	$127,961,291 57

The exports from New York to foreign ports for the month of April, were :—

	1880.	1881.	1882.
Dom. produce.....	$34,167,697	$29,156,110	$24,633,352
For. free goods.....	131,523	690,261	508,179
Do. dutiable.....	370,328	517,044	652,435
Specie and bullion...	194,633	1,206,984	2,183,083
Total exports.....	$34,669,548	$31,570,399	$27,977,049
Do. exclusive of specie.....	34,864,181	30,363,415	25,793,966

The exports from New York to foreign ports for four months from January 1, were :—

	1880.	1881.	1882.
Dom. produce.....	$115,272,408	$119,240,101	$100,689,096
For. free goods.....	953,825	3,391,249	2,014,611
Do. dutiable.....	1,377,488	1,883,972	2,262,043
Specie and bullion.	3,232,287	4,730,063	16,041,083
Total exports.....	$120,836,008	$129,785,385	$121,007,733
Do. exclusive of specie.....	117,603,721	125,055,322	104,966,650

The exports (exclusive of specie) from New York to foreign ports for ten months of the fiscal year were :—

	1880.	1881.	1882.
Six months ending January 1.....	$197,760,586	$220,830,350	$187,136,859
January.....	25,416,566	30,264,919	27,848,734
February.....	23,891,148	28,136,303	25,735,057
March.....	33,626,459	36,290,685	25,588,803
April.....	34,669,548	30,363,415	25,793,966
Total produce....	$315,364,317	$345,894,672	$292,103,509
Add specie.....	6,565,353	9,379,464	22,312,132
Total exports.....	$321,929,660	$355,274,136	$314,415,641

WHEN a railroader gets a divorce, he says he has "broken his coupling."

The Corinth Canal.

GROUND was formally broken on the 6th inst. for the construction of the canal across the Isthmus of Corinth, which will shorten materially the voyage for vessels trading between the west and the Ægean and Black seas. The concession for the work was signed in 1869, but nothing came of the project, and on the 31st of May last a new concession was made to General Turr and M. de Lesseps. Of the 19,145,106 tons of traffic annually passing that way it is estimated that 5,897,706 will follow the canal; and the tolls are placed at one franc for each "Adriatic" ton or passenger, and half that rate for "Mediterranean" traffic. A contract has been passed for the whole of the work for a sum of nearly $5,000,000. The length of the canal is 6,342 metres; its dimensions are those of the Suez Canal—eight metres depth of water, with a breadth at the bottom of 22 metres. The average height of the land is less than 100 feet, and the "backbone" of the isthmus, a ridge of limestone, is 78 metres in height. On either side of this the soil is an easy gravel. The excavations are estimated at 9,430,000 cubic metres. The company has issued 60,000 shares of 500 francs each, which were subscribed for three times over. Five per cent interest is to be paid during the four years occupied in cutting the canal.

Perhaps the most interesting feature of the work is to be found in the fact that General Turr is following without the variation of a foot the route laid out by the Roman engineers for Nero 1,800 years ago. Nero was not the earliest worker, however. Periander is said to have projected such a canal 2,500 years ago, and three centuries afterwards Demetrius Poliorcetes revived the scheme, but was dissuaded by the representations of his engineers that as the sea in the Gulf of Corinth was higher than in the Saronic gulf, the water would run through the canal and drown out Ægina and the other islands on the east. Cæsar had a plan for canalizing the isthmus, and Caligula sent an officer to explore the route, but went no further. Nero made a serious endeavor to perform the work. Having raised a hymn, Lucian tells us, to Amphitrite and Poseidon, and sung a brief song to Melicerte and Leucothea, he thrice struck the ground with a golden spade and set his army to work at the trench, while a corps of convicts tackled the rocky ridge. After twelve days' work, however, Nero left Greece to quell an insurrection, and the cutting was abandoned. The lines of the trench in the low-land still remain, the ditch being about 130 feet wide, and there are cuttings in the limestone at different levels, of all which, with the twenty-six wells sunk to try the rock and the large cistern to furnish water for the workmen, have been utilized by the French engineers. According to Dio Cassius, when Nero turned the first sod blood gushed from the earth and dismal groanings were heard, and Pausanias records that all presumptuous engineers and contractors had been slain by the gods. It is likely enough that the Corinthian priests worked on the fears of the superstitious to prevent the construction of a canal which would make the stay of visitors briefer and their offerings smaller in amount, but the people were always convinced of the importance of such a work, and indeed built a Diolcos or polished way across the isthmus, on which ships were drawn from one harbor to the other. As, according to Pausanias, the isthmian sanctuary was situated on or very near the shortest line across the isthmus, it is not unlikely that in the work of cutting the canal important Græco-Roman archæological discoveries may be made.

American Meat in England.

ACCORDING to the Board of Trade returns nearly 40,000 tons of fresh beef were imported into this country from America last year. The value of this enormous quantity of animal food was nearly £2,000,000, or a fraction over five pence per pound. What became of it? And what effect had it on the price of meat to the consumer? To the former question the general reply, it may be safely assumed, will be, "We have not the least idea," and to the latter, "None whatever." The people are few and far between who can say they have seen meat which the butcher admitted to be American offered for sale, and still less in number are those who can tell of any noteworthy fall in price for years past. Everywhere the butchers profess to know nothing of the meat which comes across the Atlantic, and everywhere joints and legs and chops and steaks are high in price. Ten pence per pound for the larger class and 14d. for the smaller are commonly paid, and if the customer wants anything below he must be content oftener than that with an article from which, notwithstanding severe treatment with the back of a knife and prolonged boiling or roasting, his teeth rebound as they would from a morsel of ink-eraser. How then? What shall be said? Simply this: That owing to a childish prejudice the British public—that "great, big stupid," as Thackeray used to say—are having sold to them as native produce the very article which they think they don't like at a price at least twenty-five per cent higher than they need pay if they would be sensible. A story told by Colonel Shaw, United States Consul at Manchester, in his latest report to the Department of State at Washington, is instructive in this connection. The Colonel asked a retail butcher in that city if he sold American meat. The butcher indignantly replied, "No, sir; I could not sell it here." The Colonel related this incident to a friend, who was prodigiously amused and said: "Two days ago I was coming down —— street, in Manchester, and saw the same butcher drop a paper. I picked it up, and it was a long bill of American meat, and when he assured you he sold no American beef he forgot that all his stock that day was American beef—American only." Five or six years ago large establishments were opened for the sale by retail of American beef in Manchester, Sheffield, Liverpool, and, indeed, in nearly all the towns in the manufacturing districts; but in a very short time, though they considerably undersold the ordinary butchers, they had to close their doors. People would not buy their meat because they openly announced where it came from, and now it would be hard to find an American meat store in any of those towns. Yet the railway companies are carrying American meat into them in great quantities daily from Liverpool and Hull, and the butchers' shops are always well filled. American meat comes into London, too, in vast quantities; but it is seldom heard of except at the stores under Cannon street station. Speak to a workman who appreciates the good quality and cheapness of the article which is avowedly imported—there are a few such—and he will tell you that his "missus" does not like American meat, and so he does not buy it. Another, shrewder, perhaps, will tell you he buys the American, and says nothing about it to his wife, leaving her to infer, being pleased with it the while, that it is English, whereas, if he told her the state of the case, she would take a fanciful dislike to it. Colonel Shaw says, however, that the prejudice against American meat is passing away. It is, in fact, difficult to account for its existence. The meat which is "raised" in America and sent over to this country is all around of better quality than the native article. Cattle destined for market feed in the summer on the finest grazing grounds in the world, and in the winter are fattened on Indian corn, which is more economical than oil-cake. They are nearly always young, and they are never overdriven. Hence, the beef which they produce is tender and juicy and sweet, and, above all, it has the recommendation of cheapness.—*London Echo.*

THE Railroad Yard Masters' Association will meet in Baltimore, June 14th, embracing representatives from all the railway centers in the country.

THE Ogdensburg and Lake Champlain Railroad Company has just received ten Tiffany Refrigerator Cars, which will be used on the special butter trains to Boston this summer.

AN electric railroad, 26 miles long, is proposed for a district in the South of England, which is well supplied with water-power to drive the dynamo-electric machines.

THE Keystone Bridge Company will commence the erection of the long span of the Pittsburgh, Virginia and Charleston Railroad bridge across the Monongahela at Brownsville about the 1st of June. The channel will be partially obstructed, but a span of 100 feet will be left open.

PRIVATE advices say the Supreme Court of the United States has just granted a rehearing of the arguments in the Chicago, Danville and Vincennes Railroad cases, against Forsdyck & Fish. This suit involves the ownership of the Chicago and Eastern Illinois Railroad. The owners of the latter corporation are greatly pleased at this preliminary victory.

AN engineer of the Pittsburgh Division of the Pennsylvania Railroad, who runs a freight locomotive between Pittsburgh and Derry, has contrived an apparatus which he has affixed to the whistle of the locomotive, whereby he can let the steam escape therefrom in such a way as to run the musical scale, producing the steam notes with considerable accuracy, but he has not yet learned to play a tune.

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THE CROPS AND RAILROAD SECURITIES.

SPECULATIVE eyes are now turned toward the growing crops with great attention as the one element that portends affecting prices; and speculation is no longer confined to middlemen; the manufacturer, producer, merchant, banker and transporter are by the force of competition compelled to look into the future course of prices. It is generally conceded that should there be short crops in America together with plentiful crops in Europe, there would be a severe revulsion in prices of most commodities except breadstuffs. The desire to anticipate and keep ahead of others in selling would tend to precipitate such a sudden decline as might result in a financial spasm, if such were the prospect. So rapidly is the news gathered from all parts of the civilized world that the markets are now as sensitive to the passing storm or sunshine as are the barometers. Fortunately it will require a concurrence of unfavorable weather of a large part of the United States, and a concurrence of favorable weather over the south and central parts of Europe, to bring about that condition of things which speculation is dreading. The season in this country, though backward, is by no means unfavorable to the growth of those commodities which Europe buys of us. All accounts agree that an increased area of small grain has been estimated in the northwest as high as 30 per cent, and averaging over the whole country at least 10 per cent. The harvest has begun in Texas, and in the great valley the plant is so far advanced as to give good hopes of successful maturing. California, with a much increased area, will have nearly a full crop. With the exception of the cattle trade, which can soon be brought up equal to the demand, no great agricultural industry is now depressed. The cotton, it is true, may be deficient in the lowlands but lately submerged, and Indian corn will be late in planting on account of the prolonged wet spring weather. On the whole the expectation of this year is hopeful. It is hardly reasonable to anticipate a continuance of the favorable conditions of the past two years, and it is not necessary for the stability of our trade.

The question as to how much we are to realize on that portion of our crop which is sent abroad depends for its answer on how much Europe will need to make good its deficienies. This goes to make up the question of price; for although only a tenth or a twentieth part of our wheat and its flour product is shipped abroad that exported fraction goes far to determine the price of that consumed at home as well. The question of foreign exchange is determined by the prices we obtain, and the quantity we ship; that again is reflected upon the money market and through the banks; the merchants, manufacturers, railroads, and all other affiliated industries are interested in the loanable capital available.

The railroads now completed and in operation are less concerned in this fluctuation of the money market, as most of them are doing a heavier business than at any previous period. Not until there was a general suspension and shutting down of mining and manufacturing works would they experience a sensible decrease. Exceptions must be made, however, in those lines which are now or are soon to experience the effect of a division of business by close competing lines.

On the other hand, though there should be less available capital to loan, it will of necessity diminish the number and demands of the borrowers, and thus tend again to equilibrium. Many of the railroad enterprises projected within the past two years have been already abandoned, or have had their dimensions curtailed. The old companies can either complete the branches under way, or halt short of the destination. No great enterprise requiring much capital from this market, unless it be the Northern Pacific and the Mexican enterprises, is likely to experience fatal disappointment from anything this year's crop can do. Most of the other great enterprises will have been pushed to completion within 90 days or six months at furthest. Money will doubtless be active at 5 to 7 per cent, and this is on the whole, healthy. Sound American railroad securities will not probably suffer much from commercial or crop considerations this year.

Standard Time.

AT a meeting in Washington on the 17th inst. of the American Society of Civil Engineers a report upon the subject of standard time was read by Sandford Fleming, of Ottawa, as chairman of a committee appointed by the society to consider the subject. By the scheme of the society it is proposed, first, to establish one universal standard time common to all peoples throughout the world, for the use of railways, telegraphs and steamboats, for the purpose of trade and commerce, for general scientific observations, and for every ordinary local purpose. Second, it is proposed that standard time everywhere shall be based on the one unit measure of time, denoted by the diurnal revolution of the earth, as determined by the mean solar passage, at one particular meridian, to be selected as a time zero.

Third—The time zero to coincide with the initial or prime meridian to be common to all nations for computing terrestrial longitude.

Fourth—The time zero and prime meridian of the world to be established with the concurrence of civilized nations generally.

Fifth—For the purpose of regulating time everywhere, it is proposed that the unit measure, determined as above, shall be divided into twenty-four equal parts, and that these parts shall be defined by standard time meridians established around the globe fifteen degrees of longitude or one hour distant from each other.

Sixth—It is proposed that standard time shall be determined and disseminated under Governmental authority; that time signal stations be established at important centers for the purpose of disseminating correct time with precision, and that all the railway and local public clocks be controlled electrically from the public time stations or otherwise kept in perfect agreement.

Seventh—The adoption of the system in the United States and Canada would, exclusive of Newfoundland and Alaska, have the effect of reducing the standards of time to four. These

four standards, precisely one hour apart, would govern the time of the whole country; each would have the simplest possible relation to the other, and all would bear equally simple relations to the other standards of the world.

Finally, it is proposed to have only one series of hours in the day, extending from midnight to midnight, and numbered from one to twenty-four without interruption, to number the hours between midnight and noon (one to twelve) precisely as at present, and to denote the hours between noon and midnight by letters of the alaphabet.

Mr. Fleming in his report said: "Upon the replies received to its questions, the committee is fully warranted in reporting that there is throughout the country a very strong sentiment in favor of establishing a system of standard time upon the basis of the scheme which the society now has under consideration."

The report of the committee was approved by the society, and resolutions were adopted requesting the Congress of the United States to take the initiative step by endeavoring to establish a prime meridian which shall be common to all nations.

ORGANIZATION.

At the recent annual meeting of the stockholders of the Flint and Pere Marquette Railroad Company the following board of directors was elected: Jesse Hoyt, A. M. Hoyt, Cornelius D. Wood, New York; W. W. Crapo, F. Hathorp, L. Snow, New Bedford; Lewis Pierce, Portland, Me.; A. G. Brower, Utica; W. L. Webber and H. C. Potter, East Saginaw.

At a meeting of the stockholders of the Georgia Railroad Company, held in Augusta, Ga., on the 10th inst., the following board of directors was elected: C. H. Phinizy, president, Augusta, Ga., James S. Hamilton, Stevens Thomas, E. P. Alexander, J. H. Alexander, L. M. Hill, Josiah Sibley, John Davison, H. D. McDaniel, George Hillyer, W. M. Reese, John H. James, Joel A. Billups, N. L. Hutchins, F. Phinizy, M. P. Stovall, H. H. Hickman.

The directors of the Virginia and Truckee Railroad Company, recently elected, are: D. O. Mills, W. Sharon, H. M. Yerington, I. L. Requa, B. C. Whitman, W. H. Blauvelt, D. L. Bliss, J. W. Eckley and H. P. Cohen. The officers are: D. O. Mills, president; H. M. Yerington, vice-president and general superintendent; E. B. Yerington, secretary; Bank of California, treasurer; D. A. Bender, general freight and passenger agent; B. C. Whitman, attorney.

The directors of the Louisville, Evansville and St. Louis Railroad Company, recently elected, are Jonas H. French, John Goldthwaite, H. C. Nutt, W. B. Strong, James H. Wilson, J. T. Burr, H. D. Hyde, Charles J. Paine, William T. Hart, F. B. White, all of Boston, and William Heilman, of Evansville, Ind.; W. F. Nesbet, of Evansville, Ind., and George B. Buchanan, of Louisville, Ky. President, Jonas H. French; general manager, Webster Snyder.

The trustees of the North American Silk Exchange of New York, a stock company recently incorporated, are: W. B. Smith, E. I. Gallagher, Hermann Rocke, F. Unbekant and J. W. Fleck. The other members are Charles Gallagher, J. W. Davidson, H. E. Hayes, L. Capsadell and O. Schuttrick. The officers are W. B. Smith, president; J. W. Fleck, vice-president; F. Unbekant, treasurer, and L. Capsadell, secretary. The office of the company is at 27 Bond street.

The annual stockholders' meeting of the Central Vermont Railroad Company resulted in the election of the following directors; J. Gregory Smith, of St. Albans; C. J. Langdon, of Berlin; B. P. Cheney, of Boston; George M. Rice, of Worcester; J. H. Kimball, of Bath, Me.; W. C. Smith, of St. Albans; J. P. Clark, of Milton; Jacob Edwards, of Boston; James W. Emery, of Portsmouth; Otis Drury, of Boston; B. B. Smalley, of Burlington; W. H. Dubois, of Randolph; and W. H. H. Bingham, of Stowe.

At the recent annual meeting of the stockholders of the Camden and Burlington County Railroad Company, the following gentlemen were elected directors for the ensuing year: John S. Frick, George W. Smith, John H. Gaskill, Strickland Kneass, William H. Gatzmer, Richard Ashurst, J. N. Du Barry, Richard C. Shreve, H. B. Smith, I. S. Buckalew, Edmund Smith, C. S. Sims, W. Budd Deacon, John C. Sims, Floyd Armstrong. The two latter in the place of George B. Roberts and Chas. Bispham.

The "New York Certificate Exchange" was organized in this city on the 20th inst. by the election of the following officers: President, Rufus L. Cole; vice-president, P. G. Weaver; second vice-president, H. D. Olsen; treasurer, W. H. Ludlam, secretary, James Wills; executive committee, A. H. Butler, M. B. Miller, C. F. Bogert, C. L. Rickerson, W. S. Temple, S. P. Barker, John J. Fredericks, and George Keeler. The executive committee, with the other officers, are to form the board of directors of the new exchange. The rooms of the exchange are at No. 190 Reade street.

At the annual meeting of the Nashua, Acton and Boston Railroad Company, held on the 19th inst., the following directors were elected: John C. Moulton, Frederick Smyth, James W. Johnson, Samuel N. Bell, Benjamin A. Kimball, Francis B. Hayes, Henry C. Sherburne, J. Thomas Vose, William P. Wilson, Dana Sargeant, Joseph B. Clark. The directors organized by the choice of John C. Moulton of Laconia, N. H., president; F. D. Cook, of Nashua, treasurer, and John B. Goodrick, of Boston, clerk.

The annual meeting of the stockholders of the Atlantic and Pacific Railroad was held in Boston on the 18th inst., and the following directors elected: H. C. Nutt, W. B. Strong, Thomas Nickerson, Levi C. Wade, T. J. Bun, B. P. Cheney, A. W. Nickerson, Edward F. Winslow, Jesse Seligman, C. P. Huntington, Jay Gould, James D. Fish and William F. Buckley. The new directors are A. W. Nickerson, Mr. Huntington, Mr. Gould and Mr. Buckley. The directors organized by electing the following officers: President, H. C. Nutt; vice-president, Edward F. Winslow; secretary and treasurer, C. F. Tuckerman; auditor, S. W. Cummings.

At the annual meeting in Boston on the 19th inst. of the New England Railway Passenger Conductors' Benevolent Association, the following officers and directors for the ensuing year were chosen: President, H. E. Paine, Old Colony; vice-president, J. B. Colby, Concord; secretary and treasurer, C. E. Dyer, Eastern. Directors: A. Colby, Boston and Maine; W. H. Hatch, Eastern; F. C. Cushman, New York and New England; E. Metcalf, Boston and Providence; E. G. Blodgett, Concord and Portsmouth; J. Cunningham, Boston and Albany; S. N. Holden, Fitchburg; S. F. Murry, Boston, Lowell and Nashua; J. E. Anderson, Maine Central.

At their annual meetings in Cedar Rapids, Iowa, last week, the following companies elected directors, namely: the Iowa Falls and Sioux City Railroad Company, officers and executive committee; Cedar Rapids and Missouri River Railroad Company, Iowa Railroad Land Company, Maple River Railroad Company, Western Railway Construction Company, Sioux City and Pacific Railway Company, Iowa Falls and Sioux City Railway Company, Missouri Valley Land Company, Blair Town Lot and Land Company, Sioux City and Iowa Falls Town Lot and Land Company and the Moingona Coal Company. The same stockholders are mainly interested in all the companies, and, with few exceptions, the same directors were elected to serve for each company, all being selected from the following-named gentlemen: Oliver and Fred. L. Ames, North Easton, Mass.; John Blair and Charles E. Vail, Blairstown, N. J.; D. C. Blair, Scranton, Pa.; Isaac T. Burr, F. Gordon Dexter, B. A. G. Fuller, William Glidden, David P. Kimball and S. Lothrop Thorndike, Boston; Edward Johnson, Belfast, Me.; J. Vandeventer and Horace Williams, Clinton, Ia.; and P. E. Hall, of Cedar Rapids, Ia.

Annual meetings were held in Jersey City on the 19th inst., and directors and officers chosen as follows: Jersey City and Bergen Railroad Company—Directors: William Keeney, Alfred L. Dennis, Edmund Smith, F. Wolcott Jackson, Job Falkinburgh, Charles B. Thurston, Strickland Kneass, John Price Wetherill, E. F. C. Young, Henry D. Welsh, James B. Vredenburgh. Officers: Charles B. Thurston, president; William Keeney, vice-president; Lansing Zabriskie, secretary; Charles B. Place, treasurer. Newark Plank Road Company—Directors: Alfred L. Dennis, Edmund Smith, Ira M. Harrison, Daniel Dodd, Theodore Macknet, F. Wolcott Jackson, Strickland Kneass, J. N. DuBarry, G. M. Dorrance, Henry D. Welsh, H. H. Houston. Officers: Alfred L. Dennis, president; F. Wolcott Jackson, vice-president; Charles B. Thurston, secretary; Charles B. Place, treasurer. Perth Amboy and Woodbridge Railroad Company—Directors: Alfred L. Dennis, James M. Chapman, Martin A. Howell, Strickland Kneass, Edmund Smith, Ashbel Welch, Mulford D. Valentine. Officers: Alfred L. Dennis, president; Charles B. Place, secretary and treasurer. Millstone and New Brunswick Railroad Company—Directors: Alfred L. Dennis, Isaac R. Cornell, Martin A. Howell, F. Wolcott Jackson, Strickland Kneass, Edmund Smith, Ashbel Welch, G. M. Dorrance, Warren E. Dennis, president; Charles B. Place, secretary and treasurer. New Jersey Warehouse & Guaranty Co.—Trustees: Strickland Kneass, Alfred L. Dennis, Charles B. Thurston, Edmund Smith, Wistar Morris, Henry D.

Welsh, Jno. Price Wetherill. Officers: Strickland Kneass, president; Charles B. Thurston, secretary and treasurer.

INCORPORATION.

THE following corporations filed certificates of incorporation on the 24th inst: The North and East River Steamboat Company, of New York, capital $135,000; the Quintera Mining Company, of New York, capital $3,000,000, and the Brush-Swan Electric Light Company, of New England, capital, $2,000,000.

THE Maryland and Charlotte Mining Company, of Baltimore City, has been incorporated by Joseph S. Smith, Joseph M. Cone, Lucius C. Polk, George E. S. Lansdowns, John W. Potts, Samuel F. Sharretts and J. H. Stump, directors. The corporation is for the purpose of mining copper and other metals, and has a capital stock of $500,000 divided into one hundred shares, each of $5,000 par value.

ARTICLES of incorporation have been filed at the office of the Secretary of State of Minnesota, of the St. Paul, Kasson and Iowa Railway Company, setting forth that the purpose of the company is to build a line of railway from St. Paul southward to Kasson, Dodge county, and from thence to the Iowa State line. The officers are: L. E. Cowdery, president; William Wheeler, vice-president; L. G. Nelson, secretary; George B. Arnold, treasurer.

PERSONAL.

J. C. JAMES, chief engineer of the Chicago and Grand Trunk, is appointed chief engineer of the Canadian Pacific, and will have charge of construction.

J. H. DEVEREUX has been appointed receiver of the Indianapolis and St. Louis Railway Company; he qualified on the 24th inst., giving a bond in $100,000.

THE Order of Railway Conductors was organized at Winnepeg, Manitoba, on the 18th inst., by Special Deputy Grand Chief Conductor Col. J. A. Mitchell, of St. Paul, Minn.

GEORGE W. HIBBARD, recently commissioner under the Southeastern and Central Vermont pooling arrangement, at Montreal, has been appointed general passenger agent of the Canadian Pacific Railway. Mr. Hibbard assumes the duties of his new office on June 1.

HON. A. S. HEWITT has been selected as Chairman of the Executive committee of the company which proposes to establish a new railroad from Camden to Cape May, in opposition to the West Jersey Railroad. The line proposed is known as the Blackwoodtown and Tuckahoe route.

THE Pennsylvania Railroad Mutual Benefit Association will hold its first annual convention in Altoona on June 13th. They desire to meet as many railroad men as possible at that time. This association was organized in Pittsburgh about year ago, on the same plan as that of the Pittsburgh, Fort Wayne and Chicago Railroad—where they have about twenty-five hundred members and pay the sum of $1,500 in case of death or permanent disability.

ARTHUR LEARY has been appointed by Judge Donohue receiver of the New York City and Northern Railroad Company, in a suit brought against that company by the New York Loan and Improvement Company for the seq estration of its property. The New York Loan and Improvement Company entered judgment on Tuesday against the railroad company for $92,934.74 in a suit brought to recover loans to that amount made in various sums during February, March and April last. Mr. Leary is directed in the order appointing him receiver to pay the wages due the employes of the company and certain bills for supplies.

CONSTRUCTION.

THE Omaha extension of the Missouri Pacific Railroad will be completed about the 1st of June.

THE contract for building the Valley Railroad extension, from Hartford, Conn., to Springfield, Mass., has been awarded to Adam Driesbeck & Co., of New York.

THE contract for the construction of the Pittsburgh and Monongahela Valley Railroad, from Pittsburgh to Finleyville, has been awarded to Charles Auchenheit & Co. They were instructed to push the work forward as rapidly as possible.

AT a meeting of the directors of the Connotton Valley Railroad Company, held in Boston, on the 24th inst., it was voted that measures be taken as soon as possible for the construction of the Straitsville division for a distance of fifty miles from Canton, Ohio.

THE new Bradford Short Line, composed of the Bradford and Kinsua Division of the Buffalo, New York and Philadelphia Railway, and the newly completed extension of the Buffalo, Pittsburgh and Western, was formally opened on May 17. The new line is ninety-six miles long.

THE last spike in the Denver extension of the Chicago, Burlington and Quincy was driven on Thursday. The company will begin operating freight trains between Chicago and Denver about June 1. The passenger service will probably not be inaugurated for a month or six weeks later.

THE Woodstown and Swedesboro' Railroad is rapidly approaching completion, and is expected to be in operation in about ten weeks. This is an extension of the Swedesboro' branch of the West Jersey Railroad. It will save a distance of ten miles between Philadelphia and Salem over the old route.

WORK on the Savannah Valley Railroad, to run from Anderson Court-house, S. C., to Dorn's gold mine, on the Augusta and Knoxville road, will be commenced immediately. The Greenwood, Laurens and Spartansburg Railroad is being graded. The directors of the Augusta and Knoxville Railroad Company subscribed for $35,000 worth of stock in the roads named. The three roads will be controlled in Augusta, Ga., and it is thought they will be consolidated.

KINGWOOD district, Preston county, West Va., has voted, 272 to 126, to subscribe $25,000 to aid in the construction of a narrow-gauge railroad from Tunnelton, on the Baltimore and Ohio Railroad, to Kingwood, which is the county seat of Preston county. A vote will be taken on the 20th of June whether or not Grafton district will subscribe $20,000 to the building of the narrow-gauge railroad from Grafton, Taylor county, to Phillippi, Barbour county, the object of this road being to have a line of road from Pittsburgh via Morganton, Grafton, Phillippi and Beveryly south.

THE officers of the Gulf, Colorado and Santa Fe Railway Company, operating five hundred miles in Texas, have submitted to the officials of the Chicago and Alton Railroad Company a proposition that the latter company extends its lines from Kansas City to the northern boundary of the Indian Territory; that the Gulf, Colorado and Santa Fe Railroad extend its lines from Fort Worth to the southern boundary of that territory, and that the two interests unite in a third company and build a line across the Territory, 100 miles west of the Missouri, Kansas and Texas Railroad.

St. Gothard Tunnel.

THE St. Gothard Tunnel, the formal opening of which was celebrated on the 21st inst., is thus described by a correspondent of the London *Telegraph*:

"The St. Gothard Tunnel is 14,900 metres long, being 2,667 metres more than that of Mont Cenis. It runs in a straight line from the village of Goschnen, on the Swiss side, to the Italian frontier locality of Airolo, thus placing Lucerne and Milan in communication by rail. The works were begun in October, 1872, and its construction has therefore extended over a period of ten years. The St. Gothard Tunnel, which has been largely subsidized by the German Government, is to Germany, for communication with Italy, what the Mont Cenis is to France. Henceforth Germany will be independent of France for traffic with Italy. From a commercial point of view its importance can scarcely be overrated. Apart from the enormous increase of local trade which may safely be reckoned upon, the new Alpine tunnel will be the most advantageous route to Italy, the Mediterranean, and the East for passengers and goods coming from England, Germany, Holland and Belgium. The overland mail will certainly take that road in preference to the Mont Cenis, and I have excellent authority for stating that traffic via the latter route is expected to be reduced by one-half. I am also in a position to give you a few interesting figures connected with the Mont Cenis, which—owing to that portion of the line situated between the Rhone (Culoz) and Mont Cenis being worked partly by the Paris, Lyons, and Mediterranean Company and partly by an Italian Company—are not to be found in any report hitherto published. The gross receipts per kilometre for traffic between the two above mentioned localities were, approximately: in 1877, 43,600 francs; in 1878, 46,900 francs; in 1879, 45,600 francs; in 1880, 51,150 francs; in 1881, 48,100 francs. Taking into consideration the distance traversed, and the traffic of branch lines, the Culoz—Mont Cenis line proper, minus the tunnel—must be put down in the preceding estimate for a sum of about

15,000 francs. The gross receipts of the Mont Cenis would subsequently be, for 1880, 36,000f. and for 1881, 33,000f. Some years ago the special delegates of the two Swiss Railway Companies chiefly interested in the St. Gothard tunnel, valued the annual gross receipts per kilometre at 48,000f. The working expenses they estimated at 21,000f., thus leaving the net receipts at 27,000f. This calculation was, however, made out at a time when traffic between this country and Italy was little more than one-half what it is at present, and, admitting that to double the above figures would be to exaggerate what may be expected; nevertheless they must prove considerably below the mark. Still, as a financial enterprise, the St. Gothard Tunnel does not meet with much favor in Switzerland, perhaps because the tariffs for passengers and goods—established in co-operation with some hundred and fifty railway companies, representing all Europe—are on a low scale. However, it would be hazardous to prophesy at present what the results of this great undertaking are likely to be. All that can be said in confidence, on the eve of its inauguration, is that the St. Gothard Tunnel is one of the most splendid and universally beneficial engineering achievements of this century."

Pennsylvania Railroad

THE statement of the business of all the lines of the Pennsylvania Railroad Company east of Pittsburg and Erie for April, 1882, as compared with the same month in 1881, shows

An increase in gross earnings of	$95,478
An increase in expenses of	431,977
A decrease in net earnings of	$336,499

The four months of 1882, as compared with the same period in 1881, show

An increase in gross earnings of	$558,711
An increase in expenses of	1,489,711
A decrease in net earnings of	$931,000

All lines west of Pittsburgh and Erie for the three months of 1882 show a deficiency in meeting all liabilities of $57,986, being a decrease as compared with the same period in 1881 of $1,467,298.

New Electric Railway at Berlin.

A CORRESPONDENT of the London *Daily News*, writing from Berlin, says that the new electric railway, which has been in use there for more than a year, has not proved a financial success, and then adds:

It has also been found that there is some inconvenience attending the transmission of the electric current through the rails. A horse while crossing this line, striking it with his shoe, received a severe shock. It is impossible, moreover, to repair or remove the rails without causing a suspension of traffic over the entire route, since such removal interrupts the current. Herr Siemens, to meet these and other objections devised his new system, which is far more practicable than the first. Over the entire line two cables are suspended parallel to and about twelve inches from each other on poles approximately sixteen feet above the ground. Along these cables a system of wheels passes, connecting with the tram car by another cable, which can be detached from the car at pleasure. The cables are charged with electricity, which is generated at a station about the middle of the route, and which is taken up by the apparatus as it runs over them. It then passes through the connecting cable, down beneath the tram car over a system of drums, which unites with the running-gear. The apparatus passing along the suspended cables either precedes or follows the car. The speed of the vehicle is regulated by a crank, and a complete stop can be made as readily as if it be drawn by horses. On Saturday, during the trial, two cars were run, first separately, and afterward together. In the first case two distinct connecting cables are necessary, while in the second one answers the same purpose, the electricity passing through the car couplings, the only difference being a diminution of velocity, owing to the additional weight. The length of the route run over on the trial trip is about three miles, a portion of the distance being up hill, an inclination of 1 to 28. A car can be run up this grade at the rate of from 15 to 20 miles an hour, while on a level it will make 30 miles to the hour. After having thoroughly tested the working of the railway, visitors were driven to the country to witness the operation of a road car which Herr Siemens has invented. It also is propelled by electricity on the same principles as those described for the tram cars. It runs as smoothly as a common carriage, and is perfectly manageable. It is directed by the driver, who sits in front, by turning a wheel very similar to those used in steering ships, and is started or stopped by a simple pressure made upon a lever. This car is intended to run between towns whose population is too small to make a railway profitable pecuniarily. "It appears to me," adds our correspondent, "calculated to meet this end when once the question of its economy over the running of stage coaches has been demonstrated."

Idaho's Educational Facilities.

WHEN he had finished with the climate, soil and productions of Idaho, one of the group asked: "How about education facilities?" "That's the only thing we lack," replied the old man with a mournful sigh. "We've got schools enough, but we can't keep no teachers." "What's the trouble?" "Well, take my school, for instance—only two miles from the nearest house, eminently situated on the top of a hill, and paying the highest salary. We can't keep a teacher over two weeks." "Do they die?" "Some do, though it's no place for dying. We had a young fellow from Ohio, and he met a grizzly and whistled for him. The grizzly cum. We had another, and a widder run him down and married him inside of a month. The third one was lame and the Injuns overtook him. Then we tried women folks. The first one got married the night she lit down there; I took the second about the middle of the third week, and the next one was abducted by a stage robber." "Why don't you get the ugliest, homeliest woman you can find—some perfect old terror, like that lantern-jawed, razor-faced female over by the ticket window?" "Why don't we? Stranger, you Eastern folks will never understand us pioneers in the world—never. That's my wife—the identical school teacher I married, and she was the handsomest one in the drove!"—*Detroit Free Press.*

WHEN the extension of the Peninsula Railroad of Maryland is completed, fruit and truck can be shipped to Philadelphia and New York in one day from Norfolk, thus saving fully 24 hours as compared with the present facilities for transportation.

A LETTER from Wilmington, Del., to the New York *Times* says that the business outlook there is encouraging. At the Harlan & Hollingsworth ship-yards there is much activity, and also in the car shops of the same firm. While ship and car building is more active than for some time, there is not that large press of orders felt several months ago. The firm reports that the present outlook compares very favorably indeed with the seasons of 1880 and 1881, and prospects for the near future are bright, there being no reason for, nor a probability of, an unfavorable reaction. The large freight steamer for the Morgan coast line, 385 feet in length, is on their docks in process of construction, and when finished will be the largest vessel ever constructed in this city.

STRANGE uses are being made of electricity. The *Iron Age* reports that it can be used to economical advantage in the reduction of zinc ores. In launching the gigantic English turret ship, appropriately named Colossus, on March 21, electricity was employed by means of an ingenious contrivance which connected the dog-shores with a large magnet; and in a similar manner the christening was performed. Simultaneously with the breaking of the bottle over the ship's nose, a musical instrument inside an ornamented box was set at work, and "Rule Britannia" was the result. By this time the course was reported clear, and, as the ship gave evidence of anxiety to leave the cradle, it was deemed advisable, though ten minutes before time, to let her go. The pressure of the launching button was followed by a heavy thud. The weight had fallen and the dog-shores had been knocked away. The ship moved instantly, and the huge mass of 4,420 tons—the heaviest ever launched from the Portsmouth yard—glided gracefully down the inclined plane into the harbor, amid the music of the bands and the enthusiastic cheers of the multitude.

THE differences existing between the Rochester and Pittsburgh and the New York, Lake Erie and Western Railroad companies, in reference to the right of way from Ridgway to the Little Tobey, were settled by each company agreeing to keep to its side of the Clarion River, the New York, Lake Erie and Western on the east and the Rochester and Pittsburgh on the west. The New York, Lake Erie and Western is to pay whatever has been expended by the Rochester and Pittsburgh on the grading from Ridgway south. The New York, Lake Erie and Western gives the Rochester and Pittsburgh the right to cross its tracks at Carrolton, the right of way through its Irvine Mills property, and the crossing under the big trestle. The grading of the Rochester and Pittsburgh is finished between Carrolton and Bradford, and the track can be laid in a few weeks. The iron bridges for the crossings and for the river crossing are on the ground and will be put up as soon as the masonry approaches can be completed. The increase of business on the Rochester and Pittsburgh is expected to be very great when the road reaches Bradford.

The Stock Exchanges and Money Market.

New York Stock Exchange.

Closing Prices for the week ending May 24.

	Th.18.	F.19.	Sat.20.	M.22.	Tu.23.	W.24.
Adams Express	.....	134	.....	.....	135	137
Albany and Susq	.....	....	.....	.....	.....	.....
1st mortgage	.....	.....	.....	.....	....	134
2d mortgage	.....	.....	.....	.....	.....	.....
American Express	97	.....	97	.....	97⅜	97
Burl., C. R. & Nor	.....	.....	.....	.....	.....	.....
1st mortgage 5s	.....	.....	.....	102	102	.....
Canada Southern	51¼	50	.....	51½	.....	50¼
1st mortgage guar	96	.....	.....	95½	.....	.....
Central of N. Jersey	71¾	71	71⅞	72¾	71⅞	70⅝
1st mort. 1890	.....	.....	.....	.....	..	.....
7s, consol. ass	110½	110½	.....	111	111	.....
7s, convertible ass	109½	108¾	.....	108⅞	....	.....
7s, Income	.....	.....	.....	.....	.....	.....
Adjustment	106	106½	....	.....	106½	.....
Central Pacific	89⅞	89¾	90⅞	90¾	90	89⅝
6s, gold	117½	117⅛	.....	.....	117⅛	117⅛
1st M. (San Joaq)	.....	.....	....	....	.....	.....
1st M. (Cal. & Or.)	.....	.....	.....	.....	.....	.....
Land grant 6s	..	.....	. ....	105½	.....	.....
Chesapeake & Ohio	21	20¾	20½	.....	21⅛	.....
1st pref	30½	30	....	30	.....	29
2d pref	.....	....	.....	.....	....	.....
1st mort., series B	.....	81	.....	81	80¾	.....
Chicago and Alton	131	130½	132¼	132¾	.....	.....
Preferred	.....	.....	.....	.....	.....	.....
1st mortgage	.....	.....	.....	.....	.....	.....
Sinking Fund	.....	.....	.....	.....	.....	112¼
Chi., Bur. & Quincy	131	132	132½	132⅞	132⅛	132⅝
7s, Consol. 1903	.....	....	.....	.....	.....	129
Chi., Mil. & St. Paul	110⅛	110⅛	111⅛	111⅛	110⅜	110⅛
Preferred	120	120	.....	.....	.....	120
1st mortgage, 8s	.....	134⅜	.....	.....	.....	....
2d mort., 7 3-10s	.....	121⅛	.....	.....	.....	.....
7s, gold	.....	.....	.....	.....	.....	.....
1st M. (La. C. div)	.....	.....	120	.....	.....	.....
1st M. I. & M. div.)	.....	.....	.....	.....	.....	.....
1st. M. (I. & D. ext.)	.....	.....	120	.....	.....	.....
1st M. (H. & D. div.)	.....	.....	118	.....	.....	.....
1st M. (C. & M. div.)	.....	.....	.....	.....	.....	.....
Consolidated S. F.	.....	.....	.....	.....	121⅞	.....
Chi. & Northwestern	129¾	129¾	130⅛	130⅛	130	129⅛
Preferred	143	142⅞	142⅛	142⅛	143	143
1st mortgage	.....	.....	.....	.....	110	110
Sinking Fund 6s	.....	.....	.....	.....	112½	.....
Consolidated 7s	.....	.....	.....	134	.....	.....
Consol. Gold bo'ds	128	.....	.....	.....	128¼	.....
Do. reg	126⅝	.....	.....	.....	.....	.....
Chi., R. Isl. & Pac	128½	128½	129	129¾	130	.....
6s, 1917, c	128¼	.....	127⅞	.....	.....	128
Clev., Col., Cin. & Ind	.....	.....	.....	74	74	73
1st mortgage	.....	.....	.....	.....	.....	.....
Clev. & Pittsburg gr	.....	136⅛	.....	.....	.....	137
7s, Consolidated	.....	.....	... .	.....	.....	.....
4th mortgage	.....	.....	.....	.....	.....	.....
Col., Chi., & Ind. Cent	.....	11⅜	.....	11	9⅛	9⅜
1st mortgage	.....	.....	.....	.....	.....	.....
2d mortgage	.....	.....	.....	.....	.....	.....
Del. & Hud Canal	106	106	106¼	104¼	104¼	104
Reg. 7s, 1891	.....	.....	.....	.....	113	..
Reg. 7s, 1884	.....	.....	.....	106½	.....	.....	106½
7s, 1894	.....	.....	.....	.....	.....	.....
Del., Lack. & Western	121	120¾	120¾	121¼	120⅞	119¼
2d mortgage 7s	.....	.....	.....	.....	.....	.....
7s, Consol. 1907	.....	.....	.....	.....	.....	.....
Erie Railway	.....	.....	.....	.....	.....	.....
1st mortgage	.....	127⅛	... .	.....	.....	.....
2d mort. 5s, ext	.. .	110	.....	.....	.....	.....
3d mortgage	.....	105¾	106	106	105¾	.....
4th mort. 5s, ext	.....	.....	.....	.....	.....	.....
5th mortgage	.....	.....	112½	.....	.....	.....
7s, Consol. gold	.....	.....	.....	.....	.....	.....
Great West. 1st mort	.....	.....	.....	.....	.....	.....
2d mortgage	.....	100	.....	.....	.....	.....
Hannibal & St. Jo	.....	.....	.....	.....	.....	.....
Preferred	78¼	78¼	.....	83	82¾	83½
8s, Convertible	106¾	.....	.....	.....	106½	.....
Houston & Tex. Cen	72¼	73	.....	72¾	... .	....
1st mortgage	.....	....	.....	.....	.....	.....
2d mortgage	.....	.....	.....	.....	.....	.....
Illinois Central	134½	133¾	135¼	.....	.....	.....
LakeShore & MichSo	102¾	102¾	102⅝	103	102¾	102¼
Consol. 7s	.....	.....	.....	125½	.....	125⅝
Consol. 7s, reg	126	.....	.....	.....	.....	.....
2d Consolidated	125½	.....	.....	121x	.....	.....
Leh. & W. B. con. ass	105	.....	.....	.....	.....	.....
Long Dock bonds	.....	.....	.....	.....	.....	.....
Louisville & Nash	73½	73⅞	74½	74⅝	74¼	73½
7s, Consolidated	118	.....	.....	117⅝	.....	.....
Manhattan	.....	53¼	.....	.....	53	.....
1st pref	.....	.....	.....	.....	.....	.....
Met. Elevated	.....	85½	.....	.....	86	85⅜
1st mortgage	.....	101	101⅜	101½	101	101⅜
Michigan Central	86⅜	86⅜	86⅜	86⅜	86¼	85⅜
7s, 1902	.....	.....	.....	.....	.....	.....
Morris & Essex	.....	.....	.....	.....	123⅜	.....
1st mortgage	.....	.....	.....	136	.....	.....
2d mortgage	.....	.....	.....	.....	.....	.....
7s of 1871	.....	122½	122½	.....	122⅛	.....
7s, Convertible	...	... .	.....	.....	.....	.....
7s, Consolidated	.....	.....	.....	.....	125	.....
N. Y. Cen. & Hud. R	127⅛	126⅞	127⅛	127⅜	127⅜	126⅛
6s, S. F. 1883	.....	.....	.....	101⅜	.....	.....
6s, S. F., 1887	.....	.....	.....	.....	.....	.....
1st mortgage	137	135	.....	.....	.....	.....
1st mortgage, reg	.....	.....	.....	.....	.....	.....
N. Y. Elevated	.....	... .	.....	.....	.....	.....
1st mortgage	.....	.....	117½	117½	... .	117⅛
N. Y. & Harlem	.....	.....	.....	.....	.....	.....
Preferred	.....	.....	.....	.....	.....	.....
1st mortgage	131½	131¾	131¼	.....	.....	.....
1st mortgage, reg	.....	.....	.....	.....	.....	.....
N. Y., Lake Erie & W	35¾	35¾	35¾	35⅞	35¾	35⅜
Preferred	73	74	73⅛	.....	.....	73
2d Consolidated	96	95½	96	95⅝	95⅜	95
New 2d 5s fund	92	91½	92	.....	.....	.....
N.Y., N.Hav'n & Hart	.....	180	.....	.....	.....	180
North Mo. 1st mort	..	122	.....	.....	.....	.....
Northern Pacific	40¾	40⅞	41⅜	42⅜	41⅞	41¾
Preferred	79	78⅞	79½	80⅜	80⅜	79⅜
Ohio & Mississippi	33	33	33	.....	33	31⅛
Preferred	.....	.....	.....	.....	.....	.....
2d mortgage	.....	... .	120	120½	....	.....
Consolidated 7s	.....	.....	.....	118	118	.....
Consol. S. Fund	.....	.....	.....	.....	.....	.....
Pacific Mail S. S. Co	43½	44	43¾	42½	42½	41¾
Pacific R. R. of Mo	.....	.....	.....	.....	.....	.....
1st mortgage	.....	.....	107¼	.....	.....	.....
2d mortgage	.....	.....	.....	.....	.....	.....
Panama	.....	.....	.....	.....	.....	.....
Phila. & Reading	57⅛	57⅛	57¼	57⅛	56⅜	54⅞
Pitts, Ft. W. & Chi. gtd	136	135¾	134⅛	136	135⅛	134
1st mortgage	.....	.....	139	140	.....	.....
2d mortgage	.....	.....	.....	.....	.....	.....
3d mortgage	.....	.....	.....	.....	.....	.....
Pullman Palace Car	.....	.....	121½	122	121⅛	121
Quicksil'r Min'g Co	.....	.....	.....	.....	8¾	9
Preferred	50	.....	.....	.....	.....	49⅛
St. Louis & San Fran	.....	.....	.....	38½	.....	.....
Preferred	50	.....	50	50	.....	50
1st Preferred	.....	.....	.....	.....	.....	.....
St. L., Alt'n & T. H.	.....	.....	.....	.....	.....	.....
Preferred	.....	.....	.....	.....	.....	.....
1st mortgage	.....	.....	.....	.....	.....	.....
2d mort. pref	.....	.....	.....	.....	.....	.....
Income bonds	.....	.....	96	.....	.....	.....
St. L., Iron Mt. & S	.....	.....	.....	.....	.....	.....
1st mortgage	.....	117	.....	.....	.....	.....
2d mortgage	107	.....	.....	.....	.....	.....
Toledo and Wabash	....	.....	.....	.....	.....	.....
1st mortgage	.. ..	.....	110	.....	.....	.....
2d mortgage	.....	.....	.....	.....	.....	.....
7s, Consolidated	.....	.....	.....	.....	.....	.....
St. Louis Division	.....	.....	.....	.....	.....	.....
Union Pacific	113¼	113	113⅜	113¼	113⅜	112⅛
1st mortgage	118	118	.....	.....	117⅜	118
Land Grant 7s	.....	.....	.....	.....	.....	.....
Sinking Fund 8s	121¾	121½	.....	.....	.....	.....
United States Ex	.....	.....	73	.....	.....	.....
Wabash, St. L. & Pac	29⅜	29¾	30¼	30¼	29⅞	28⅜
Preferred	52⅜	52⅜	53⅛	53⅛	52⅞	52⅜
New mort. 7s	.....	.....	95	.....	.....	.....
Wells-Fargo Ex	.....	.....	.....	129¼	.....	130
Western Pacific b'ds	.....	.....	.....	115	.....	115⅛
Western Union Tel	84½	83⅞	84⅛	84½	83⅞	83
7s, S.F conv., 1900	.....	.....	.....	.....	.....	.....

FEDERAL STOCKS :—

U. S. 4s, 1907, reg	120⅞	.....	120⅞	121	.....	120¾
U. S. 4s, 1907, coup	.....	120¾	120⅞	.....	120⅞	120¾
U. S. 4½s, 1891, reg	.....	.....	.....	.....	.....	.....
U. S. 4½s, 1891, coup	.....	.....	... .	.....	.....	115⅛
U. S. 5s, cont'd at 3½	101⅜	101⅜	.....	101⅛	101⅜	.....
U. S. 6s cont'd at 3½	.....	.....	.....	.....	.....	.....
Dt. of Col. 3-65s, reg	.....	.....	.....	.....	.....	.....
Dt. of Col. 3-65s, coup	110	.....	.....	.....	.....	.....

Boston Stock Exchange.

Closing Prices for the Week Ending May 24.

	Th.18.	F.19.	Sat.20.	M.22.	Tu.23.	W.24.
Atch., Top. & San. Fe	86⅛	86½	86¾	86	86	86
1st mortgage	.....	.....	118¼	.....	.....	118
Land Grant 7s	.....	.....	.....	.....	.....	.....
Boston & Albany	166½	166⅞	166½	166½	166¾	166½
Boston and Lowell	....	.....	....	.....	103	103
Boston & Maine	143½	143½	.....	143	143	144
Boston & Providence	.....	163¼	.....	.....	.....	.....
Bos'n, Hart. & Erie 7s	.....	49⅞	50	... .	49¾	.....
Burl. & Mo. R. L. G. 7s	.....	.....	.....	.....	.....	.....
Burl. & Mo. R. in Neb	.....	.....	.....	.....	.....	.....
6s, exempt	111	.....	.....	.....	.....	.....
4s	.....	.....	.....	.....	.....	.....
Chi., Burl. & Quincy	131¼	132	132½	132¾	132⅝	132⅛
Cin., Sand & Clev ($50)	.....	...	27	26¾	.....	....
Concord ($50)	.....	.....	.....	.....	.....	.....
Connecticut River	.....	.....	.....	.....	.....	.....
Eastern	37⅛	.....	. ...	37	36	36
New 4½ Bonds	.....	108½	108¾	.....	109	.....
Fitchburg	127	.....	127	.....	.....	128
N. Y. & New England	.....	.....	47	47	46	.....
7s	114	114	.....	114	.....	113¾
Northern N. H	.....	.....	.....	.....	.....	.....
Norwich & Worcester	.....	.....	.....	.....	.....	.....
Ogden & Lake Cham	.....	37	37	37	.....	.....
Old Colony	.....	.....	.....	133	133	.....
Ph., Wil. & Balt. ($50)	.....	.....	.....	.....	.....	.....
Portl'd, Saco & Ports	116	.....	.....	.....	116	.....
Pueblo & Ark Val 7s	....	113⅛	.....	.....	.....	.....
Pullman Palace Car	123	123¼	123	123	.....	123
Union Pacific	113½	113⅛	113⅛	113⅛	.....	112⅞
6s	115⅛	.....	.....	115⅜	.....	.....
Land Grant 7s	....	.....	.....	... .	.....	.....
Sinking Fund 8s	119¼	119⅜	119⅛	.....	.....	.....
Vermont & Mass	.....	.....	134⅛	.....	.....	.....
Worcester & Nashua	56	.....	.....	.....	.....	.....
Cambridge (Horse)	111	.....	.....	111	.....	111
Metropolitan (Horse)	.....	.....	.....	.....	.....	.....
Middlesex (Horse)	.....	.....	.....	.....	.....	.....
Cal. & Hecla Min'g Co	235	235⅛	236½	238	.....	.....
Quincy	50	50	50	50	50	49¾

Philadelphia Stock Exchange.

Closing Prices for the Week Ending May 23.

	W.17.	Th.18.	F.19.	Sat.20.	M.22.	Tu 23.
Allegh'y Val. 7 3-10s	122¼	.....	.....	.....	.....	122¼
7s, Income	.....	52	....	.....	53	52
Buff., Pitts & West	16½	16	.....	16	16	16
Camd'n & Am. 6s, '83	.....	103¼	.....	.....	.....	.....
6s, 1889	.....	.....	.....	.....	.....	.....
Mort. 6s, 1889	.....	113	.....	113	.....	121¼
Camden & Atlantic	.....	.....	.....	.....	.....	.....
Preferred	.....	.....	.....	.....	41	.....
1st mortgage	.....	.....	.....	.....	.....	.....
2d mortgage	.....	.....	.....	.....	.....	.....
Catawissa	.....	.....	.....	.....	.....	.....
Preferred	55	....	.....	.....	.....	.....
2d pref	53⅛	.....	.....	.....	.....	.....
7s, new	.....	.....	.....	.....	.....	.....
Del. & Bound Brook	.....	.....	.....	.....	.....	.....
7s	.....	.....	.....	.....	.....	125
Elmira & Williamsp't	.....	.....	.....	.....	.....	.....
Preferred	.....	41½	.....	.....	.....	.....
Hunt. & B. Top Mt.	... .	.....	.....	.....	.....	.....
Preferred	....	.....	.....	.....	.....	.....
2d mortgage	.....	.....	.....	.....	.....	.....
Lehigh Navigation	38¾	38	38	38⅝	38½	38¼
6s, 1884	105⅛	105⅛	105⅛	.....	105⅛	.....
Gold Loan	.....	.....	.....	.....	.....	.....
Railroad Loan	.....	... .	115½	115⅛	.....	.....
Conv. Gold Loan	.....	.....	.....	.....	. ...	.....
Consol. Mort, 7s	.....	119	....	119	.....	.....
Lehigh Valley	60¾	60¾	60¼	.....	60¼	60⅛
1st mort. 6s, coup	124	.....	.....	.....	.....	.....
1st mort. 6s, reg	.....	.....	.....	.....	.....	.....
2d mort. 7s	.....	.....	.....	.....	.....	.....
Consol mort. 6s	.....	.....	.....	.....	122¼	123⅛
Consol. mtg. 6s, reg	.....	.....	.....	....	121x	121
Little Schuylkill	58	.....	.....	.....	.....	.....
Minehill & Sch. Hav'n	63	.....	.....	.....	.....	.....
North Pennsylvania	63¼	.....	.....	.....	.....	.....
1st mortgage 6s	.....	.....	.....	.....	.	.....
2d mortgage 7s	.....	.....	.....	.....	.....	.....
Genl. mtg. 7s, coup	.....	.....	.....	.....	.....	.....
Genl. mtg. 7s, reg	.....	.....	.....	.....	.....	.....
Northern Central	.....	.....	.....	.....	.....	... .
5s	.....	.....	.....	.....	98¼	98¼
Northern Pacific	40⅞	40⅝	40¾	41¼	42¾	41⅞
Preferred	79	78⅞	78⅞	79⅛	80½	80
Pennsylvania R. R.	58¼	58¼	58	58	58¼	58
1st mortgage	.....	.....	.....	.....	.....	.....
Gen'l mort	127	.....	.....	.....	.....	.....
Gen'l mort reg	.....	.....	.....	.....	.....	.....
Consol. mort. 6s	.....	.....	.....	.....	.....	.....
Consol. mort. reg	.....	.....	.....	.....	.....	...
Pa. State 5s, new	119	.....	.....	.....	118½	.....
do 4s, new	.....	.....	.....	.....	.....	119
do 3½s, 1912	107⅜	.....	.....	..	....	.....
Phila. & Reading	28¾	28⅞	28⅝	28¾	28⅝	28¼
1st mortgage 6s	.....	.....	.....	.....	.....	.....
7s of 1893	.....	.....	.....	.....	.....	.....
7s, new convert	.....	.....	.....	.....	.....	.....
Consol. mort. 7s	.....	126	126¼	....	.....	.....
Consol. mort. reg	.....	.....	.....	.....	.....	.....
Gen'l mort. 6s	98	97⅞	97¾	97	97¾	97
Def. Income bonds	....	.....	.....	.....	.....	.....
Philadelphia & Erie	.....	.....	.....	.....	.....	.....
1st mortgage 5s	.....	.....	.....	102⅜	102	.....
2d mortgage 7s	.....	.....	.....	.....	.....	.....
Pittsb., Cin. & St. L. 7s	.....	.....	118¾	119	119	.....
Pitts., Tit. & Buff. 7s	.....	.....	.....	.....	.....	98
Schuylkill Navi't'n	.....	.....	.....	.....	.....	.....
Preferred	.....	.....	.....	12⅜	.....	.....
6s, 1895	66	.....	.....	.....	.....	.....
6s, 1882	.....	90¾	92	.....	.....	90
United Co. of N. J	188½	188½	188½	188½	188¼	.....
Hestonville, (Horse)	.....	.....	18	.....	.....	.....
Chestnut & Wal. (do)	.....	.....	.....	.....	.....	.....

Baltimore Stock Exchange.

Closing Prices for the Week Ending May 23.

	W. 17.	Th. 18.	F. 19.	Sat. 20.	M. 22.	Tu. 23.
Baltimore & Ohio..	.....	195	.....	.....	.....	.....
6s, 1885.....	105¼	. ..	.....	.....	.....	.....
Central Ohio ($50)..	...	.....	.....	.....	47	.....
1st mortgage.....	.....	110½	.....	.....	.....	.....
Marietta & Cincin'ti	.....	.....	.....	.....	.....	.....
1st mortgage, 7s..	.....	.....	.....	.....	....	....
2d mortgage, 7s..	.....	.....	.....	.....	.....	.....
3d mortgage, 8s..	54	53½	53⅝	53¾	.....	.....
Northern Cen. ($50)	.....	.....	.....	.....	.....	.....
2d mort., 6s 1885..	.....	.....	.....	.....	.....	.....
3d mort., 6s, 1900.	.....	.....	.....	.....	.....	.....
6s, 1900, gold.....	.....	.....	.....	.....	.....	.....
6s, 1904, gold.....	.....	.....	.....	.....	.....	.....
Pitts. & Connellsv. 7s	.....	.....	....	....	.....	.....
Virginia 6s, Consol.	63⅞	64	64⅛	63⅛	63⅛	63⅛
Consol. coupons..	....	67½	.....	....	70	.....
10 40 bonds.....	43½	43¼	.....	.....	42¼	.....
Def'd Certificates.	.....	13	43½	.....	.....	.....
Western Maryland..	.....	.....	.....	.....	.....	.....
1st M., end. by Balt	.....	.....	.....	....	.....	17
2d M. do	.....	.....	.....	.....	.....	....
3d M., do	.....	.....	.....	.....	.....	.....
1st M., unendors'd	.....	.....	.....	.....	.....	.....
2d M., end. WashCo	.....	.....	.....	.....	.....	.....
2d M., preferred..	.....	.....	.....	.....	.....	.....
City Passenger R R.	....	.....	.....	.....	....	.....

London Stock Exchange.

	Closing Prices — May 5.		Apl. 28.	
Baltimore & Ohio (sterling).....114	116	114	116
Central of N. J., $100 shares.... 93	98	93	98
Do. consol. mort.....114	115	112	115
Do. Adjustment Bonds.....101	106	101	106
Do. Income Bonds..... 93	97	93	97
Det., G'd Haven & Mil. Equip bds 113	115	113	115
Do. Con. M. 5p.c., till '83 aft'r 6p. c 111	113	111	113
Illinois Central $100 shares.....138	140	138	140
Lehigh Valley Cons. mortgage..118	122	118	122
Louisville & Nashville mort 6s. 101	103	101	103
Do. Sink. Fund bds (S. & N. Ala) 100	102	100	102
Do. capital stock $100 shares. 78	80	76	78
N. Y. Cent. & Hud. R. mt. bds..134	136	134	136
Do. $100 shares.....129	131	130½	131½
Do mort. bonds (stg.).....123	125	123	125
N. Y., Lake Erie & West., $100 shs 36¾	37¼	36¾	37¼
Do. 6 p. c. pref. $100 shares .. 73	75	75	77
Do. 1st Con. Mort. bds (Erie) .127	129	127	129
Do. do. Funded Coupon bds. 124	126	124	126
Do. 2d Consol Mort. bonds... 95	97	95	97
Do. do. Funded Coupon bds.. 92	94	92	94
Do. Gold Income bonds..... ..	..	..	..
N. Y., Pa. & Ohio 1st mort. bonds. 46½	47½	46½	47½
Do. Prior Lien bds (sterling)..101	105	101	105
Pennsylvania, $50 shares..... 62	63	62¼	62¾
Do. Con. Sink Fund Mort....120	122	119	121
Philadelphia & Reading $50 shs 29¼	29¾	29¼	29¾
General Consol Mortgage.....118	120	118	120
Do. Improvement Mortgage..102	104	102	104
Do. Gen. Mtg. '74, ex-def'd coup. 99	101	99	101
Do. Scrip for the 6 def. ½ coup. 99	101	99	101
Pittsb., Ft. W. & Chi. Eq. bds....104	106	104	106
St. L. Bridge 1st mort. gold b'd. 125	127	125	127
Do. 1st pref. stock..... 98	102	98	102
Union Pa. Land Grant 1st. mtg. 113	115	113	115
Wabash, St. L. & P. $100 shs..... 30	32	28	30
Do. $100 pref. shares..... 55	57	52½	53¼
Do. gen. mort. bonds..... 84	86	79	81

AMERICAN RAILROAD JOURNAL.

Financial and Commercial Review.

THURSDAY EVENING, May 25, 1882.

THE quotation for call loans this morning on stocks was 3 per cent, and on United States bonds 2@2½ per cent, and for time loans which mature this side of October 2½@4 per cent. Prime mercantile paper was 5@5½ per cent for four months' date and less. In the afternoon the rate for call loans was 3 per cent, but in the last hour it fell to 2½ per cent.

The actual rates for prime bankers' sterling are 4.86½@½, and 4.89½@½, with cable transfers 4.90@½, and prime commercial bills 4.85½@¾. The actual rates for Continental bills are as follows: Francs, 5.16¼@5.16¼ and 5.14⅜@5.13¾, Marks, 95⅛@⅜, and 95⅝@96, and Guilders, 40¼@40⅜.

A communication from W. W. Nevin, Secretary of the Mexican National Construction Company, to the New York *World*, says that the $3,000,000 additional subscription to the company closed on the 22d inst. This will complete the lines of the road respectively to Monterey, Celaya and Morelia on the main divisions now building. Completion to these points gives the system a mileage of 729 miles of track. Monterey will be reached on the 1st of September, the other points in October.

The members of the New York Stock Exchange adopted, on the 22d inst., the following: *Resolved*, That the Governing Committee be requested to adjourn the Saturday P. M. bond calls during June, July, August and September; and, WHEREAS, Monday, the 29th day of May, being Whit Monday, will be a close holiday in the Exchanges of Europe; therefore, *Resolved*, That the Governing Committee be requested to order that when the Exchange closes on Saturday, May 27, it will open on Wednesday, 31st inst., at 11 A. M., all of which has been acceded to by the Committee.

The members of the Produce Exchange have also voted to make Monday a holiday, in addition to Tuesday, which is a legal holiday in this State.

The following securities have been admitted to dealings at the Board:

Illinois Central Railroad Company—Mortgage six per cent currency bonds of Springfield division, $1,600,000; registered five per cent currency bonds of Middle division, $600,000.

Chicago, Milwaukee and St. Paul Railway Company—An additional $500,000 first mortgage five per cent bonds of Chicago and Western Pacific division.

Fort Worth and Denver City Railway Company—Capital stock, in shares of $100 each, $800,000, and first mortgage six per cent bonds, $800,000.

At the close of business on Wednesday United States called bonds had been redeemed at the Treasury as follows: Under the 106th call, $19,607,300; under the 107th call, $17,487,350; under the 108th call, $18,090,400; under the 109th call, $4,027,750; under the 110th call, $3,662,000; and under the 111th call, $3,425,100.

The gross receipts of the Buffalo, Pittsburgh and Western Railroad Company, for the four months ending April 30, were $201,987: expenses, $113,107; net earnings, $127,980—an increase, as compared with the corresponding period of last year, of $78,792, or 160 per cent.

At the meeting of the Directors of the Central Railroad Company, of New Jersey, on the 24th inst., the election recently ordered by Chancellor Runyon was fixed for June 23. In accordance with the charter of the company and the order of the Chancellor, the transfer books were ordered closed on June 2. They will be reopened three days after the election.

The new penal code of New York, which will go into effect on the 1st of December next, makes the selling of railroad tickets by other than authorized agents a misdemeanor, punishable by imprisonment.

Tennessee State bonds, which are now selling at about 59, have a par value of $1,000, and carry thirteen 6 per cent semi-annual coupons, making the nominal value of each bond $1,390.

The New York *Herald* says editorially that, with or without the action of Congress or of the public, care will be taken of the widow and orphan of De Long, and not of them alone, but of every widow and every orphan of the men who sailed with the Jeannette and have perished.

The Directors of the Georgia Railroad Company met on the 10th inst., and declared a dividend of two and a half per cent, payable in July, and another of two and three-quarters per cent, payable in October.

The bondholders of the Columbus, Chicago and Indiana Central Railroad met in this city on the 22d instant, and ratified the agreement made by the bondholders' committee for the foreclosure of $11,950,000 of the consolidated mortgage bonds of the road. The plan provides for the forming of a new company, with a capital of $10,000,000 in common stock and $20,000,000 in preferred stock. First mortgage bonds for $22,000,000, payable at the end of 50 years in gold coin at the rate of 5 per cent per annum will be issued. Of these bonds, $12,878,000 will be issued in exchange for old bonds and receipts; $5,500,000 will be reserved to provide means for paying underlying sectional bonds as they become due, and the remaining $3,622,000 will be used to raise money for necessary improvements. The second mortgage bonds will be converted into income bonds, to be taken up with cash and preferred and common stock. The road extends from Columbus to Chicago, and forms the greatest part of what is known as the Vandalia line to St. Louis. It was built in sections, and its construction was begun in 1856. In 1869 it was leased to the Pittsburgh, Cincinnati and St. Louis Railway Company, and the Pennsylvania Company, which controls the latter, guaranteed the lease. The business of the road ceased to be profitable in 1875; the Pennsylvania Company refused to longer guarantee the lease, and litigation began. The courts upheld the Pennsylvania Company. The Columbus, Chicago and St. Louis raised $2,000,000 to discharge obligations, and then the courts decided that the rental of the road must be paid. An appeal was taken, which is now pending.

In the United States Court at Memphis, Tenn., Judge Hammond decided, on the 20th inst., in two cases that the "taxing district" is the successor of the old city, and this makes the present city government of Memphis liable for the old debts.

James McHenry has applied for an injunction rsstraining the further issue of bonds on account of the interest due January 1 on the first mortgage bonds of the New York, Pennsylvania and Ohio Railroad Company. The first issue of the first mortgage bonds has been added to by the required semi-annual redemption of deferred warrants to the extent of $930,000, and there still remain deferred warrants for coupons due January 1, 1882, of $1,497,565, subject to exchange into first mortgage bonds.

By an instrument filed in this city on the 20th inst., it is shown that at a meeting of the stockholders of the Mutual Union Telegraph Company, held in May, 1881, the directors were empowered to borrow $5,000,000 for the purpose of extending the lines of the company 5,000 miles, including those built at the time

The instrument gave the Central Trust Company a first mortgage on all property belonging to the company, as security for the payment of 5,000 six per cent bonds, aggregating $5,000,000, or $1,000 each, which will come due in 1911.

The following quotations of sales of railway and other securities, for the week, are in addition to those given elsewhere in our columns:

New York.—Atlantic and Pacific 6s, 100; Albany and Susquehanna consol., 125½; Am. Dock and Imp. 5s, 96; Boston and New York Air Line pref., 64½; Cedar Rapids, Iowa Falls and Northern 1st, 104; Chicago, Burlington and Quincy 8s, 105½; Chicago, St. Paul, Minneapolis and Omaha, 37; do. pref., 100⅜; do. consol., 105; Chesapeake and Ohio 1st, Series A, 100½; do. cur. int., 47½; Columbus, Chicago and Indiana Central inc., 45; do. Trust Co. certif. ass. sup., 115; Chicago, Milwaukee and St. Paul, South West div. 6s, 109; do. Southern Minnesota div. 1st, 108; do. Chicago and Pacific West div. 1st, 94½; Chicago and Northwestern S. F. 5s, 100; do. interest bonds, 102½; Cleveland and Toledo S. F., 108½; Chicago and Milwaukee 1st, 122; Central Iowa 1st, 114½; Chicago, St. Paul and Minneapolis 1st, 113; Dubuque and Sioux City, 84; Denver and Rio Grande, 58⅜; do. 1st, 113½; do. consol., 106½; East Tennessee, Virginia and Georgia, 10⅛; do. pref., 19½; do. inc., 50; do. 5s, 76¾; Gulf, Colorado and Santa Fe 1st, 108½; Green Bay, Winona and St. Peter, 9; do. 1st, 85; do. inc., 20; Houston, East and West Texas 1st, 97½; Indiana, Bloomington and Western, 41⅞; do. 1st, 90; do. 1st pref., 117⅜; International and Great Northern 1st, 105⅝; do. 6s, coupon 86; Keokuk and Des Moines 1st, 104; Kansas Pacific 1st consol., 102½; do. Denver div. ass., 109¼; do; 6s, 1896, 113½; Long Island, 54¾; do. consol. 5s, 97½; Lake Erie and Western, 29¾; Louisville, New Albany and Chicago, 58; do. 1st, 103¼; Louisville and Nashville Gen'l mort. 6s, 99¾; do. St. Louis div. 2d, 54; Lafayette, Bloomington and Muncie 1st, 99⅞; Metropolitan Elevated 2d, 90; Milwaukee, Lake Shore and Western, 48½; do. 1st, 101; Manhattan Beach, 32¾; Minneapolis and St. Louis, 25; do. pref., 63; do. 2d, 100, Mobile and Ohio, 23; do. 1st deben., 110¼; Missouri, Kansas and Texas, 29⅝; do. gen'l mort. 6s, 82; do. consol., 106; Missouri Pacific, 92⅜; do. 1st consol., 100⅜ do. 3d, 108⅛; New Jersey Midland 1st, 89⅞; New York, Chicago and St. Louis, 11; do. pref., 30½; do. 1st, ex-June coupon, 87; Nashville, Chattanooga and St. Louis, 60; do. 1st, 117½; New York, Ontario and Western, 24¾; Norfolk and Western pref., 52¾; do. Gen'l mort., 101; Northern Pacific 1st, 101¾; New Orleans Pacific 1st, 87½; New York City and Northern, Gen'l mort., 50; Ohio Central, 14; do. 1st, 96½; do. Terminal Trust 6s, 93; do. inc., 33; Oregon Transp., 72½; Oregon Railway and Nav., 138; Ohio Southern 1st, 87; Peoria, Decatur and Evansville, 28⅝; do. 1st, 116; do. Evansville div. 1st, 101; Pennsylvania Company's 4½s, 97½; Rome, Watertown and Ogdensburg 1st consol., 90; Rochester and Pittsburgh, 28⅛; Richmond and Alleghany, 16½; do. 1st, 87¾; Richmond and Danville, 108; do. 1st, 100; do. deben, 72; Richmond, Danville and West Point, 52½; South Pacific of Mo. 1st, 106; Southern Pacific of California 1st, 105⅛; South Carolina inc., 48½; St. Paul and Duluth, 32⅜; do. pref., 84¾; St. Paul, Minneapolis and Manitoba, 129; do. 1st, 111; do. 2d, 108¼; do. Dakota ext. 1st, 107; St. Louis, Iron Mountain and Southern, Arkansas Branch 1st, 111; do. 5s, 82; do. Cairo and Fulton 1st, 109¼; do. Cairo, Ark. and Texas 1st, 108; St. Louis, Kansas City and Northern, Omaha div. 1st, 107⅞; St. Paul and Sioux City 1st, 110¾; Texas and Pacific, 38⅞; do. inc. Land Grants, 62½; do. Rio Grande div. 1st, 80½; Toledo, Delphos and Burlington, 13; Utah Southern Gen'l mort. 7s, 107; Virginia Midland 7s, 65; Winona and St. Peter 1st, 110; Wabash, St. Louis and Pacific, Gen'l mort. 6s, 82; do. Iowa div. 1st, 90; do. Chicago div. 1st, 83; do. Toledo, Peoria and Western 1st, 110; Alabama, Class C, 85½; Louisiana consol. 7s, 68⅝; Missouri 6s, 1882@1883, 103; do. 1887, 108¼; do. H. & St. J. issue, 1887, 108; North Carolina 6s, S. T., 3d class, 7; do. Chatham R. R. issue, 5⅛; Tennessee 6s, 59; Colorado Coal and Iron, 49½; do. 6s, 93; New Central Coal, 13½; Sutro Tunnel, ⅜; Excelsior, 1⅞; Standard, 17½.

Boston.—Atlantic and Pacific blocks, 108; do. 6s, 97; Boston Water Power, 4⅜; Boston Land, 7¼; Boston, Clinton, Fitchburg and New Bedford pref., 130; Burlington and Missouri River in Nebraska 6s, non-exempt, 103½; Chicago, Burlington and Quincy 4s, 86⅜; do. 4s, Denver extension, 84½; California Southern 6s, 84; Connotton Valley, 7⅛; Chicago, Milwaukee and St. Paul, Dubuque div. 1st, 103½; Eastern (N. H.) R. R., 94; Flint and Pere Marquette, 23; do. pref., 96½; Iowa Falls and Sioux City, 89¼; Kansas City, St. Joseph and Council Bluffs 7s, 113¾; Kansas City, Fort Scott and Gulf, 70; do. pref., 120; do. 7s, 110½; Louisiana and Missouri River pref., 32½; Little Rock and Fort Smith, 49¾; do. 7s, 107½; Marquette, Houghton and Ontonagon, 63; do. pref., 117; Mexican Central 7s, 87⅝; do. Block, No. 2, 117½; do. No. 3, 109; Massachusetts Central, 7⅛; do. 6s, 45¼; Maine Central, 63; Northern Pacific 6s, 99½; New Mexico and Southern Pacific 7s, 113; New York and New England 6s, 104; Oregon Short Line 6s, 102¾; do. Subscriptions, 114; Rutland, 4; do. pref., 24; do. 5s, 70; Summit Branch, 11; Sonora 7s, 103¾; Toledo, Delphos and Burlington Southeast div. 6s, 59½; do. inc., 15; Toledo, Cincinnati and St. Louis, 6; do. 6s, 64; Wisconsin Central, 16; do. 2d Series, 45; Allouez Mining Co., 2; Brunswick Antimony, 11; Franklin, 9½; Harshaw, 1⅝; Huron, 1⅛; Osceola, 33; Silver Islet, 17; Sullivan, 1½.

Philadelphia.—Am. S. S. Co. 6s, 105; Belvidere Delaware 2d, 106½; Central Transportation, 34; Camden and Atlantic pref. scrip, 80; Elmira and Williamsport 6s, 116; Huntingdon and Broad Top Mt. consol. 5s, 88; Harrisburg 6s, 103¾; Morris Canal Boat Loan 7s, 104; New Orleans Pacific 1st, 85½; Nesquehoning Valley, 52¾; Norfolk and Western pref., 53; Perkiomen 6s, 105; Philadelphia, Wilmington and Baltimore 4s, 94¾; Philadelphia and Reading Income 7s, 98; Pennsylvania Canal 6s, 91; Pennsylvania Co. 4½s, 97; Pennsylvania allotments, 7⅜; Sunbury, Hazleton and Wilkesbarre 1st, 95; Schuylkill Nav. 6s, 1872, ex-int., 106¼; Texas and Pacific consol. mort. 6s, 100; Union and Titusville 7s, 98¼; Warren and Franklin 7s, 110; West Jersey R. R., 48½. The latest quotations are: City 6s, 108@118; do. free of tax, 128@135; do. 4s, new, 108@113; Pennsylvania State 5s, new loan, 118@119; do. 4s, old, 108@112; do. 4s, new, 114@115; Philadelphia and Reading R. R., 28⅛@28⅜; do. consol. mort. 7s, reg., 126@127; do. gen'l mort. 6s, coupon, 97@97½; do. 7s, 1893, 118@120; do. new conv., 74@76; United New Jersey R. R. and Canal, 188@188½; Buffalo, Pittsburg and Western, 15⅞@16½; Pittsburg, Titusville and Buffalo 7s, 97½@98½; Camden and Amboy mort. 6s, 1889, 112@113; Pennsylvania R. R., 58@58⅛; do. general mort. 6s, coupon, 125@127; do. reg., 125@127; do. consol. mort. 6s, reg., 120@121; Little Schuylkill R. R., 57½@58½; Schuylkill Navigation, pref., 12@13; do. 6s, 1882, 89½@90½; Elmira and Williamsport pref., 58@60; do. 5s, 95@100; Lehigh Coal and Navigation, 38¼@38⅜; do. 6s, 1884, 105@106; do. R. R. loan, 115@116; do. Gold Loan, 112@113; do. consol. 7s, 118½@119½; Northern Pacific, 41¾@42; do. pref., 80@80⅛; North Pennsylvania, 63@63½; do. 6s, 107@108; do. 7s, 120@121; do. 7s, General mort. reg., 121@122; Philadelphia and Erie, 14@15; do. 7s, 117@118; do. 5s, 102@102½; Minehill, 63@63½; Catawissa, 22@23; do. pref., 54@55; do. new pref., 53@54; do. 7s, 1900, 120@—; Lehigh Valley 60¼@60⅝; do. 6s, conpon, 123@125; do. reg., 123@125; do. 7s, 132½@133½; do. consol. mort. 120@122; Fifth and Sixth streets (horse), 152@155; Second and Third, 110@112; Thirteenth and Fifteenth, 72@75; Spruce and Pine, 45@46; Green and Coates, 80@85; Chestnut and Walnut, 90@93; Germantown, 70@75; Union, 103@110; West Philadelphia, 106@108; People's 8½@9½; Continental, 100@102.

Baltimore.—Atlanta and Charlotte, 1st, 110½; Atlantic Coal, 1.25; Baltimore City 6s, 1886, new, 110; do. 6s, 1890, 118½; do. 5s, 1916, 126½; Baltimore and Ohio 1st pref., 126; do. 2d pref., 123; Charlotte, Columbia and Augusta, 42; Columbia and Greenville 1st, 104½; do. 2d, 86; Canton Co. 6s, 104½; Maryland Defense 6s, 105⅛; Marietta and Cincinnati 1st Trust certificate, 126; do. 2d do., 98½; do. 3d do., 53¾; Ohio and Mississippi, Springfield div. 1st, 116¾; Richmond and Danville gold bonds, 100; South Side (Va.) 2d mort., 1884, 102½; do. 1886, 102¾; Union R. R. 6s, end. by Canton Co., 117; Virginia Midland 1st mort., 110; do. 2d mort., 109½; do. 3d mort., 50; do. 4th mort., 52½; do. 5th mort., 93¾; Virginia Peelers, 36½; do. coupons, 37½; Virginia Black Scrip, 30¾; Virginia and Tennessee 8s, 126; Wilmington, Columbia and Augusta, 100. The latest quotations are: Atlanta and Charlotte 1st, 110⅛@111; Baltimore and Ohio, 193@197; do. 6s, 1885, 105¼@—; Baltimore City 6s, 1884, 104@—; do. 6s, 1886, 109½@—; do. 6s, 1890, 117½@—; do. 5s, 1894, 116@—; do. 5s, 1916, 126@—; do. 4s, 1920, —@115; Columbia and Greenville 1st, 104@105½; do. 2d, 85½@87; Canton 6s, gold, 104½@105; Cincinnati and Baltimore 7s, 122@126; Charlotte, Columbia and Augusta 1st, 109@110; Marietta and Cincinnati 1st, 125½@126½; do. 2d, 98½@98¾; do. 3d, 53½@53⅝; Northern Central, 48@49; do. 6s, 1885, 108@109; do. 6s, 1900, 116@—; do. 6s, 1904, gold, 116½@118; do. 5s, 1926, 99@100; Ohio and Mississippi, Springfield div. 1st, 116⅝@117; Virginia Consols, 63@64; do. 10-40s, 43½@44; do. consol. coupons, 67½@—; Virginia Midland 5th mort., 93@93½; Virginia and Tennessee 8s, 125@—; do. 2d, 103@—; Wilmington and Weldon 7s, 117@—.

RAILROAD EARNINGS—MONTHLY.

	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total.
BURL., CEDAR RAP. & NORTHERN:													
1880	184,316	165,170	188,325	141,652	149,504	153,378	143,432	160,160	179,804	204,991	189,330	193,419	2,053,484
1881	167,750	124,510	148,551	184,680	165,630	205,912	174,351	209,112	221,801	221,748	203,880	232,812	2,259,037
1882	252,823	225,631	224,107	178,304	.....	.....	.....	.....	.....	.....	.....	.....	.....
CENTRAL PACIFIC:													
1880	1,200,614	1,070,487	1,373,438	1,356,716	1,778,488	1,724,950	1,840,067	1,973,438	1,964,997	1,120,229	2,199,466	1,905,221	20,508,112
1881	1,602,907	1,454,218	1,709,637	1,872,370	2,068,000	2,063,000	1,859,000	2,059,000	2,293,000	2,514,000	2,267,000	2,110,000	23,947,951
1882	1,876,000	1,702,000	1,987,000	2,052,000	.....	.....	.....	.....	.....	.....	.....	.....	.....
CHESAPEAKE AND OHIO:													
1880	202,335	198,681	222,762	221,559	199,443	214,352	238,236	259,110	247,303	211,820	240,795	218,009	2,674,308
1881	162,540	184,389	228,479	227,343	252,235	241,135	225,096	262,858	247,144	237,303	235,585	203,562	2,709,762
1882	210,455	209,708	208,981	253,861	.....	.....	.....	.....	.....	.....	.....	.....	.....
CHICAGO AND ALTON:													
1880	534,054	497,013	626,473	542,961	616,128	617,524	708,906	761,120	767,349	785,199	696,776	574,695	7,718,198
1881	487,890	461,641	529,915	558,190	528,860	616,935	671,466	771,466	768,897	750,359	680,133	635,307	7,553,988
1882	570,447	530,480	584,483	561,787	.....	.....	.....	.....	.....	.....	.....	.....	.....
CHICAGO AND NORTHWESTERN:													
1880	1,154,632	1,131,683	1,361,725	1,294,573	1,875,608	1,671,177	1,699,686	1,767,938	2,020,245	2,105,217	1,855,671	1,477,902	19,416,007
1881	1,240,667	963,208	1,178,795	1,474,612	1,879,006	2,306,640	1,983,031	2,315,164	2,292,676	2,341,097	2,019,037	1,855,476	21,849,209
1882	1,620,336	1,471,945	1,696,568	1,634,819	.....	.....	.....	.....	.....	.....	.....	.....	.....
CHICAGO, BURLINGTON AND QUINCY:													
1880	1,432,740	1,411,870	1,732,518	1,489,894	1,909,627	1,682,956	1,773,643	1,834,321	1,862,285	1,934,762	1,837,860	1,552,018	20,454,494
1881	1,307,948	1,034,821	1,418,149	1,574,371	1,679,455	2,083,803	1,888,558	2,173,945	2,262,981	2,031,001	1,816,133	1,905,490	21,324,150
1882	1,658,834	1,457,300	1,566,217	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
CHICAGO, MILWAUKEE AND ST. PAUL:													
1880	764,298	738,749	900,675	871,041	1,134,745	1,037,958	1,026,708	991,297	1,257,677	1,493,620	1,472,037	1,397,308	13,086,119
1881	990,847	682,717	916,989	1,259,946	1,538,000	1,371,000	1,560,000	1,678,000	1,645,000	1,590,000	1,569,000	1,855,000	17,025,462
1882	1,435,000	1,377,000	1,561,000	1,518,000	.....	.....	.....	.....	.....	.....	.....	.....	.....
CHICAGO, ST. PAUL, MINNEAPOLIS AND OMAHA:													
1880	193,827	173,078	259,783	259,208	232,146	218,093	236,995	251,013	300,833	342,052	342,894	312,173	3,122,097
1881	257,786	158,594	251,648	261,211	350,124	404,562	392,702	385,586	363,685	382,714	380,733	391,950	3,981,296
1882	307,498	315,100	405,779	356,558	.....	.....	.....	.....	.....	.....	.....	.....	.....
CINCINNATI, INDIANAPOLIS, ST. LOUIS AND CHICAGO:													
1880	155,697	172,541	198,220	168,199	186,995	200,332	204,138	233,478	343,627	239,881	209,014	198,254	2,412,185
1881	182,523	171,511	191,005	183,710	188,794	188,256	178,861	229,858	219,977	212,606	194,805	192,623	2,296,916
1882	200,042	186,879	208,066	204,269	.....	.....	.....	.....	.....	.....	.....	.....	.....
DENVER AND RIO GRANDE:													
1880	124,759	126,922	160,883	164,882	193,925	295,455	373,132	400,133	406,583	473,318	408,562	349,196	3,478,007
1881	307,476	317,681	398,493	433,111	514,767	584,230	548,284	606,193	620,643	665,686	566,819	643,417	6,206,812
1882	491,914	412,987	535,055	559,917	.....	.....	.....	.....	.....	.....	.....	.....	.....
HANNIBAL AND ST. JOSEPH:													
1880	176,079	166,965	216,061	206,735	191,317	179,396	224,312	238,081	233,448	242,214	207,147	279,635	2,561,391
1881	154,401	122,874	176,356	190,812	177,002	194,949	198,110	215,308	202,567	313,433	201,782	180,376	2,230,966
1882	138,284	154,717	168,798	148,913	.....	.....	.....	.....	.....	.....	.....	.....	.....
ILLINOIS CENTRAL:													
1880	595,212	613,806	613,008	535,732	665,120	681,736	724,095	732,755	806,836	880,211	783,120	673,182	8,304,812
1881	631,281	524,499	557,789	662,493	673,259	803,887	720,004	868,407	828,847	815,238	737 218	763,475	8,586,397
1882	728,173	689,387	695,371	674,603	.....	.....	.....	.....	.....	.....	.....	.....	.....
INDIANA, BLOOMINGTON AND WESTERN:													
1880	80,498	89,690	116,185	90,374	85,733	106,954	103,438	116,732	110,622	121,343	96,621	104,619	1,233,079
1881	90,283	83,261	192,085	203,677	102,630	96,586	83,764	117,956	195,307	181,674	160,826	156,697	.....
1882	195,824	175,755	206,235	205,934	.....	.....	.....	.....	.....	.....	.....	.....	.....
LOUISVILLE AND NASHVILLE:													
1880	674,455	575,035	612,593	563,883	655,014	976,229	772,537	827,088	931,910	1,000,326	953,086	949,184	9,491,346
1881	816,960	805,124	947,959	850,862	828,726	1,227,885	817,135	876,192	951,566	1,002,950	1,065,223	1,122,285	11,326,859
1882	950,065	960,036	1,073,745	950,007	.....	.....	.....	.....	.....	.....	.....	.....	.....
MOBILE AND OHIO:													
1880	250,116	204,094	168,301	140,091	129,249	121,855	131,621	140,593	184,246	264,714	251,368	287,373	2,373,621
1881	224,347	216,768	230,916	163,551	145,803	136,517	131,009	159,348	209,044	252,921	252,434	262,025	2,406,437
1882	161,433	158,154	152,651	145,272	.....	.....	.....	.....	.....	.....	.....	.....	.....
NASHVILLE, CHATTANOOGA AND ST. LOUIS:													
1880	205,633	191,154	169.457	155,466	158,839	144,155	151,594	169,326	167,473	178,266	182,087	175,996	2,049,448
1881	178,143	190,866	207,710	183,525	104,430	154,549	150,430	168,317	179,979	172,121	152,059	173,127	2,075,256
1882	156,994	159,961	161,005	154,155	.....	.....	.....	.....	.....	.....	.....	.....	.....
NEW YORK AND NEW ENGLAND:													
1880	164,232	149,907	183,845	179,689	183,701	219,891	205,056	249,885	235,642	215,491	210,856	198,108	2,396,308
1881	189,749	173,614	212,019	216,913	217,185	231,518	246,821	280,524	299,573	261,199	242,412	237,729	2,809,255
1882	215,624	213,791	256,674	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
NEW YORK, LAKE ERIE AND WESTERN:													
1879	1,147,173	1,207,391	1,356,780	1,372,755	1,350,574	1,230,419	1,273,533	1,450,223	1,492,497	1,713,697	1,515,835	1,398,224	16,509,127
1880	1,296,381	1,252,218	1,644,958	1,643,151	1,592,544	1,661,812	1,580,976	1,606,874	1,786,417	1,899,910	1,799,338	1,726,788	19,491,361
1881	1,443,437	1,425,765	1,847,261	1,709,057	1,776,891	1,794,982	1,787,081	1,772,895	1,734,200	.....	.....	.....	.....
NORTHERN CENTRAL:													
1880	334,494	330,860	415,325	386,130	329,788	419,193	450,298	453,923	464,093	512,918	459,054	494,310	5,050,387
1881	386,157	382,657	452,906	487,173	465,588	487,287	440,811	498,008	429,565	449,664	487,160	476,622	5,443,697
1882	407,368	413,551	430,194	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
NORTHERN PACIFIC:													
1880	81,390	77,259	119,357	185,700	217,613	253,105	241,277	223,500	330,300	358,456	300,822	220,993	2,629,710
1881	116,508	78,803	162,984	216,210	305,292	368,276	404,180	411,624	490,096	565,485	428,903	434,331	4,044,576
1882	239,800	269,000	384,000	438,000	.....	.....	.....	.....	.....	.....	.....	.....	.....
PHILADELPHIA AND ERIE:													
1880	224,307	245,372	327,678	334,947	311,470	331,024	308,699	347,532	322,737	367,082	324,966	281,919	3,727,733
1881	224,303	225,501	285,573	293,323	343,792	350,585	291,669	303,849	276,522	292,392	284,078	282,772	3,454,309
1882	252,727	246 246	265,311	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
ST. LOUIS AND SAN FRANCISCO:													
1880	198,091	195,948	193,146	176,164	167,664	173,607	213,297	259,995	280,873	328,194	290,329	226,063	2,698,371
1881	212,435	178,234	262,050	265,298	283,399	260,254	252,333	286,373	279,064	308,569	284,320	287,914	3,160,243
1882	256,784	244,654	274,959	242,806	.....	.....	.....	.....	.....	.....	.....	.....	.....
ST. LOUIS, ALTON AND TERRE HAUTE:													
1880	153,139	163,737	168,994	155,462	147,928	150,207	191,077	216,759	204,295	221,863	188,773	184,503	2,146,741
1881	175,725	166,012	201,137	197,447	163,285	165,896	158,674	189,295	187 299	179,921	162,544	153,852	2,112,801
1882	168,987	149,619	178,145	157,450	.....	.....	.....	.....	.....	.....	.....	.....	.....
ST. LOUIS, IRON MOUNTAIN AND SOUTHERN:													
1880	555,983	490,195	451,560	408,241	349,053	363,454	432,655	565,869	671,219	688,365	632,052	656,951	6,265,597
1881	570,957	560,791	704,002	548,300	479,075	474,302	533,512	644,386	690,400	719,239	687,280	709 498	7,319,744
1882	516,370	501,127	585,008	581,977	.....	.....	.....	.....	.....	.....	.....	.....	.....
ST. PAUL, MINNEAPOLIS AND MANITOBA:													
1880	180,239	137,645	261,798	333,014	281,899	243,407	272,089	232,579	274,188	345,057	300,675	297,641	3,160,231
1881	254,187	159,482	320,962	425,685	382,642	405,322	387,488	414,954	485,736	605,708	508,530	528,262	4,878,960
1882	395,461	418 358	531,004	570,890	.....	.....	.....	.....	.....	.....	.....	.....	.....
TEXAS AND PACIFIC:													
1880	245,785	219.165	215,070	174,177	141,083	153,066	195,711	226,073	266 570	303,666	312,184	301,858	2,734,408
1881	281,176	260,781	319,928	295,066	267,443	264,204	320,466	354,082	337,117	578,668	357,724	381,218	3,921,569
1882	310,785	255,644	332,911	359,543	.....	.....	.....	.....	.....	.....	.....	.....	.....
UNION PACIFIC RAILWAY:													
1880	1,433,636	1,393.992	1,730,509	1,937,220	2,027,269	1,928,528	1,934,215	1,913,035	2,270,179	2,707,860	2,251.148	1,869,335	23,448,445
1881	1,339,799	1,374,740	1,674,860	1,766,894	2,398,467	2,590,969	2,528,826	2,638,659	2,844,357	3,289 350	2,773,608	2,267,004	27,451,831
1882	1,961,088	1 759,863	2,226,832	2,462,004	.....	.....	.....	.....	.....	.....	.....	.....	.....
WABASH, ST. LOUIS AND PACIFIC:													
1880	776,790	759,451	978,629	892,024	948,773	953,468	1,966,742	1,189,478	1,178,950	1,501,203	1,131,787	1,050,816	12,428,110
1881	811,617	818,922	1,121,592	1,023,482	1,144,660	1,308,993	1,131,751	1,542,838	1,490,027	1,396,300	1,399,555	1,328,278	14,461,570
1882	1,229,965	1,134,768	1,315,776	1,378,194	.....	.....	.....	.....	.....	.....	.....	.....	.....

RAILROAD AND CANAL DIVIDEND STATEMENT.

Showing the amount of Stock Outstanding, the Dividend Periods and the date of last Dividend.

Marked thus(*)are leased roads.	Stock out-standing.	Divide'd Periods.	Last Dividend Payable.
Albany and Susq*...100	3,500,000	semi-an	Jan. '82 2
Ashuelot.....100	210,000	q'arterly	Oct. '81 3½
Atch., Top. and S. Fe100	54 000,000	q'arterly	May '82 1½
Atlanta and W. Point100	1,232,200	semi-an	Jan. '82 6
Atlantic and St. Law*100	5,840,000	semi-an	Mar. '82 3
Augusta and Savan'h100	1,022,900	semi-an	June'81 3½
Avon,Genesee& MtM*100	225,000	semi-an	July '81 3
Baltimore and Ohio.100	14,792,566	semi-an	May '82 5
" " pref.100	5,000,000	semi-an	Jan. '82 3
Washington Br....100	1,650,000	semi-an	Apl. '82 5
Berkshire*.....100	600,000	q'arterly	Apl. '82 1¾
Boston and Albany..100	20,000,000	q'arterly	June'82 2
Bos.&N.Y.AirLine pf.100	2,795,227	q'arterly	June'82 1
Bos.,Cl.,F.&N.B.pref.100	1,750,100	.....	Apl. '82 3½
Bos.,Conc.&Mont.pf*100	800,000	semi-an	May '82 3
Boston and Lowell..500	3,940,000	semi-an	Jan. '82 2
Boston and Maine...100	6,921,274	semi-an	May '82 4
Boston & Providence100	4,000,000	semi-an	May '82 4
Attleborough Br...100	131,700	semi-an	Jan. '82 3½
Bos.,Revere B&Lynn100	419,400	semi-an	Jan. '82 3½
Buffalo,N. Y. & Erie*.100	950,000	semi-an	Dec. '81 3
Camden & Atlantic.. 50	377,400	q'arterly	Apl '80 3s
" " pref. 50	880,650	q'arterly	Apl '80 3½s
Camden & Burl. Co..100	381,925	semi-an	July '81 3
Canada Southern....100	15,000,000	.....	Feb. '81 2½
Cape May &Millville* 50	447,000	semi-an	June'81 3
Catawissa*..... 50	1,159,500	annual	Oct.'81$1½
" pref..... 20	2,200,000	semi-an	May '82 3½
" new pref.. 50	1,000,000	semi-an	May '82 3½
Cayuga and Susq.*.. 50	589,110	semi-an	July '81 4½
Cedar Rapids&Mo.R*100	6,850,400	q'arterly	May '82 1½
" " pref.100	769,600	semi-an	Feb. '82 3½
Central of Georgia...100	7,500,000	semi-an	Dec. '81 4
Central of New Jersey100	18,563,200	q'arterly	Apl. '76 2½
Central Ohio*..... 50	2,437,950	semi-an	Jan. '82 3
" pref.. . 50	411,550	semi-an	Jan. '82 3
Central Pacific 100	59,275,500	semi-an	Feb. '82 3
Chemung*..... 100	380,000	q'arterly	July '81 1½
Cheshire preferred ..100	2,155,300	semi-an	Jan. '82 1½
Chicago and Alton*..100	11,181,741	semi-an	Mar. '82 4
" " pref 100	2,425,400	semi-an	Mar. '82 4
Chi., Burl. & Quincy.100	55,337,455	q'arterly	June '82 2
Chi., Iowa & Nebras*.100	3,916,200	semi-an	Jan. '82 4
Chi., Mil. & St. Paul.100	20,404,261	semi-an	Apl. '82 3½
" pref 100	14,401,483	semi-an	Apl. '82 3½
Chi. & N. Western...100	14,988,257	semi-an	Dec. '81 3
" pref.100	21,525,355	q'arterly	Mar.'82 1¾
Chi., R. I. & Pacific..100	41,960,000	q'arterly	May '82 1¾
Chi. and West Mich .100	6,151,000	semi-an	Feb. '82 2½
Chi., St. P., M. & O..100	10,390,000	q'arterly	Jan. '82 1¾
C., Ind., St. L. & Chi.100	6,000,000	q'arterly	Apl. '82 1½
Cin., Sand. & Clev.pf. 50	429,037	semi-an	May '82 3
Clev. and Mahoning* 50	3,759,200	semi-an	Nov.'81 3½
Clev. and Pittsburg* 50	11,244,336	q'arterly	June'82 1¾
Columbus & Xenia*. 50	1,786,200	q'arterly	Dec. '81 2
Colum.&HockingVal.100	2,500,200	semi-an	Aug.'81 20s
Concord 50	1,500,000	semi-an	May '82 5
Concord and Ports.*.100	350,000	semi-an	Jan. '82 3½
Conn.& Passump.Riv100	2,244,400	semi-an	Feb. '82 3
Connecticut River ..100	2,100,000	semi-an	Jan. '82 4
Cumberland Valley.. 50	1,292,950	q'arterly	Apl. '82 2½
" 1st pref 50	241,900	semi-an	Apl. '82 4
" 2d pref. 50	243,000	semi-an	Apl. '82 4
Danbury & Norwalk. 50	600,000	.....	Apl. '82 1½
Dayton and Mich.*.. 50	2,402,573	semi-an	Oct. '81 1¾
" " pref. 50	1,211,250	q'arterly	Oct. '81 2
Delaware*..... 25	1,468,940	semi-an	Jan. '82 3
Del. & Bound Brook*100	1,652,000	q'arterly	May '82 1¾
Del., Lack.& Western 50	26,200,000	q'arterly	Apl. '82 2
Denver & Rio Grande.100	29,160,000	q'arterly	Jan. '82 1½
Den.,South P. & Pac.100	3,500,000	.....	Aug.'80 4
Detroit, Lans. & Nor.100	1,825,600	semi-an	Aug.'80 2½
" " pref.100	2,503,380	semi-an	Feb. '82 3½
Dubuque&Sioux C'y*100	5,000,000	semi-an	Apl. '82 3
East Pennsylvania*., 50	1,709,550	semi-an	Jan. '82 3
East Mahanoy*..... 50	392,950	semi-an	Jan. '82 3
Eastern (N. H.).....100	492,500	semi-an	Dec. '81 2½
Eel River.....100	3,000,000	q'arterly	Mar. '82 $1
Elmira.Jef.&Canand*100	500,000	annual	Sep. '80 5
Elmira&Williamsp't* 50	500,000	semi-an	May '82 1½
" " pref. 50	500,000	semi-an	Jan. '82 3½
Erie and Pitsburg*.. 50	1,998,400	q'arterly	Dec. '81 1¾
Evansville & Terre H.100	100,000	semi-an	Nov. '81 2
Fitchburg..... 100	4,500,000	semi-an	Jan. '82 3
F. & P. Marquette pf.100	6,500,000	semi-an	Jan. '82 3
Ft.W. & Jackson pref.100	2,000,000	.....	May '82 2
Georgia. 100	4,200,000	q'arterly	July '82 2½
Granite 100	1,250,000	semi-an	Jan. '82 3
Han. & St. Jo. pref .100	5,083,024	semi-an	Feb. '82 3½
Harrisbg&Lancaster 50	1,182,500	semi-an	Jan. '82 3½
Housatonic pref. ...100	1,180,000	q'arterly	Apl. '82 2
Illinois Central.....100	39,000,000	semi-an	Mar. '82 3½
Ia.Falls & Sioux City*100	4,623,500	q'arterly	Mar. '82 1¾
Iowa R. Land Co....100	7,620,000	q'arterly	May '82 1
Jeffersonv. Mad.&Ind100	4,000,000	q'arterly	Feb. '82 1¾
Joliet and Chicago*..100	1,500,000	q'arterly	Mar. '82 1¾
Kan.C.,Ft.S.&Gulf...100	4,000,000	.....	Feb. '82 2
" " pref..100	2,750,000	semi-an	Feb. '82 4
Lentucky Central...100	500,000	semi-an	June'81 1
" " pref..100	5,584,500	semi-an	June'81 3
Lake Shore&Mich.So.100	49,466,500	q'arterly	May '82 2
" (guar.)100	533,500	semi-an	Feb. '82 5
Lawrence*..... 50	450,000	q'arterly	Apl. '82 2
Lehigh Valley..... 50	27,496,895	q'arterly	Apl. '82 1¾
" " pref.50	106,300	q'arterly	Apl. '82 1¾

Marked thus(*)are leased roads.	Stock out-standing.	Divid'd Perio'ds	Last Dividend Payable.
Little Miami..... 50	4,637,300	q'arterly	Mar. '82 2
Little Rock & Ft. S..100	4,096,135	.....	July' 81 10s
Little Schuylkill*.. . 50	2,646,100	semi-an.	Jan. '82 3½
Louisville & Nashv..100	18,130,913	semi-an.	Feb. '82 3
Lowell & Andover....100	500,000	semi-an.	Jan. '82 3½
Lykens Valley.....100	600,000	q'rterly.	Oct,' 81 2½
Manchester & Law..100	1 000,000	semi-an.	May '82 5
Manhattan 100	13,000,000	.....	.....
" " 1st pref.100	6,500,000	q'rterly.	Apl. '82 1½
" " 2d pref.100	6,500,000	.....	Apl. '82 1½
Marietta& Cincinnati 50	1,386,350	.....	.....
" " 1st pref 50	3,105,600	semi-an.	Sep. '66 3s
" " 2d pref 50	4,440,100	semi-an.	Sep. '66 3s
Marq.Hout.&Ont.pf..100	2,259,026	.....	Feb. '82 4
Massawippi*.....100	400,000	semi-an.	Feb. '82 3
Michigan Central....100	18,738,204	q'rterly.	Aug.'81 1
Middlesex Central...100	280,000	semi-an.	[illegible]'82 3
Mill Creek&Minehill* 50	323,375	semi-an.	Jan. '82 5
M.Hill& Schuyl.Hav* 50	4,022,500	semi-an.	Jan. '82 3½
Missouri Pacific.....100	28,169,800	q'rterly.	Apl. '82 1½
Mobile&Montgomery100	3,022,517	semi-an.	Feb. '80 2½
Mont. & Wells River100	800,000	annual	Feb. '80 2
Morris and Essex.... 50	15,000,000	semi-an.	Jan. '82 3½
Mt Carbon&PtCarbon 50	282,350	semi-an.	Jan.. '82 6
Nashua and Lowell..100	800,000	semi-an.	May '82 4
Nashua & Rochester.100	1,305,800	semi-an.	Apl. '82 1½
Nashv. & Decatur...100	1,827,000	semi-an.	June'81 3
Nash.,Chat.&StLouis 25	6,670,325	semi-an.	Apl. '82 1½
Naugatuck.....100	2,000,000	semi-an.	Jan. '82 5
Nesquehoning Val'y* 50	1,300,000	semi-an.	Mar.'82 3
N.Castle&Beaver Val* 50	600,000	q'rterly.	Oct. '81 —
NewLondonNorth'n*100	1,500,000	q'rterly.	Jan. '82 1½
N. Y. Cen. & Hud. R.100	39,428,330	q'rterly.	Apl. '82 2
N. Y. and Harlem....100	7,950,000	q'rterly	Apl. '82 2
" " pref.100	1,500,000	q'rterly.	Apl. '82 2
" City Line.. —	.....	annual	Apl. '82 3
N.Y.,LakeErie&West.100	77,083,800	.....	.....
" " pref.100	8,156,725	.....	Jan. '82 6
N. Y., N. H. & Hart..100	15,500,000	semi-an.	Jan. '82 5
N. Y., Prov. & Boston100	3,000,000	q'rterly.	May '82 2
Niag.Bridg&Canand*100	1,000,000	semi-an.	July '81 3
North Carolina*.....100	3,000,000	semi-an.	Sep. '81 3
" " pref.100	1,000,000	semi-an.	Sep. '81 3
N. Eastern (S.C.) pref100	86,000	semi-an.	May '81 4
Norfolk & Western pref 100	15,000,000	q'rterly.	June '82 $1
North Pennsylvania. 50	4,527,150	q'rterly.	May '82 1¾
Northern Central.... 50	6,142,000	semi-an.	Jan. '82 3
Northern N. Hampsh100	3,068,400	semi-an.	June'82 3
Northern N. Jersey*.100	1,000,000	semi-an.	July '80 2½
Norwich&Worcester*100	2,604,400	semi-an.	Jan. '82 5
Ohio 100	18,500,000	.....	.....
Ohio and Miss. pref..100	4,030,000	semi-an.	Mar.'75 3½
Old Colony.....100	7,333,800	semi-an.	Jan. '82 3
Oregon R'way&Nav.100	6,000,000	q'rterly.	May '82 2
Oswego & Syracuse..100	1,320,400	semi-an.	Aug. '81 4½
Panama..... 100	7,000,000	.....	Jan. '82 6
Paterson & Hudson*.100	630,000	semi-an.	Jan. '82 4
Paterson & Ramapo.100	248,000	semi-an.	Jan. '82 4
Pember.&Hightst'n*. 50	342,150	semi-an.	Jan. '82 3
Pennsylvania..... 50	77,672,750	semi-an.	May '82 4
Pennsylvania Co..... 50	20,000,000	semi-an.	June'81 2½
Peoria & Bureau Val*100	1,200,000	semi-an.	Feb. '82 4
Philadelphia & Erie*. 50	7,013,700	semi-an.	.....
" " pfd 50	2,400,000	semi-an.	Jan. '75 4
Phil,Ger.&Norrist'n* 50	2,231,900	q'rterly.	Mar '82 3
Phil. and Reading... 50	32,726,377	q'rterly.	Jan. '76 2½
" " pref. 50	1,551,800	q'rterly.	July '76 3½
Phila. and Trenton..100	1,259,100	q'rterly.	Apl. '82 2½
Phila., Wil. and Balt. 50	11,585,750	semi-an.	Jan. '82 4
Pittsb. Ft. W. & Chi.*100	19,714,285	q'rterly.	Apl. '82 1¾
" Special Imp.100	6,770,900	q'rterly.	Apl. '82 1¾
Pittsfield&N.Adams..100	450,000	semi-an.	Jan. '82 2½
Portl., Saco & Portsm100	1,500,000	semi-an.	Jan. '82 3
Providence & Worces.100	2,000,000	semi-an.	Jan, '82 3
Rensselaer&Saratog.*100	7,000,000	semi-an.	Jan. '82 4
Rhode Island& Mass.100	100,000	.....	Jan. '81 3
Richmond& Danv...100	3,866,000	q'rterly.	May '82 2
Richmond & Petersb100	1,009,300	semi-an.	Jan. '81 3
Roch.&Genesee Val.*100	555,200	semi-an.	Jan. '82 3
Rome, Watert.& Ogd.100	5,293,900	semi-an.	July '75 1½
Rutland preferred.. 100	4,000,000	semi-an.	Feb. '82 1
St.L.,Alt. & T.Haute.100	2,300,000	.....	.....
" " pref.100	2,468,400	.....	May '82 3
St.L.&S.Fran.1st pref100	4,500,000	.....	Feb.'82 3½
St.L.,I.Mt.&South'n.100	11,459,821	semi-an.	Feb. '74 3
St. P. & Duluth pref.100	4,705,000	q'rterly.	Mar.'82 1¾
St. P., Minn. & Man..100	15,000,000	semi-an.	Feb,'82 3½
Schuylkill Valley*... 50	576,050	semi-an.	Jan. '82 2½
Seaboard & Roanoke.100	1,299,600	semi-an.	May '82 5
Shamokin V.&Pottsv 50	869,450	semi-an.	Feb.'82 3
Shore Line*.....100	1,000,000	semi-an.	Jan. '82 4
Sioux C.&Pacific pref100	169,000	semi-an.	Apl. '82 3½
South Br. (N. J.)*....100	438,300	semi-an.	Jan. '82 3
South Western (Ga.)*100	3,892,300	semi-an.	Dec. '81 3½
Stockbridge&Pitts.*.100	448,700	semi-an.	Oct. '81 1½
Summit Branch*.... 50	4,010,350	semi-an.	Feb. '76 3
Syr.,Bingham&N.Y.*100	2,500,000	semi-an.	Feb. '81 2
Terre Haute & Ind...100	1,988,150	semi-an.	Feb. '82 4
Troy and Boston....100	1,609,000	semi-an.	Feb. '80 2
Union Pacific 100	51,000,000	q'rterly.	Apl. '82 1¾
United Cos of N. J.*.100	20,490,000	q'rterly.	Apl. '82 2½
Utica, Shenango&S V100	4,000,000	semi-an.	Nov. '81 3
Utica and Black Riv.100	1,772,000	semi-an.	Mar. '82 2
Vermont and Mass..100	3,050,000	semi-an.	Apl. '82 3
Wab. St.L.& Pac.pref.100	22,615,100	q'rterly.	Nov.'81 1½

Markedthus(*)are leased roads.	Stock out-standing.	Divide'd Periods.	Last Dividend Payable.
Ware River*.....100	750,000	semi-an.	Jan. '82 3½
Warren (N. J.).....100	1,800,000	semi-an.	Apl. '82 3½
Warwick Valley.....100	340,000	semi-an.	Jan. '82 2½
Westchest&Phil.pref100	821,300	semi-an.	July '80 2
West Jersey.....100	1,359,750	semi-an.	Apl. '83 3s
Wilmingt'n&Weld'n.100	1,456,200	semi-an.	Dec. '81 3
Wil., Col., & Aug 100	960,000	semi-an.	Dec. '81 3
Winchester&Poto'c.*100	180,000	semi-an.	Jan. '82 3
Winchester&Strasb.*100	74,700	semi-an.	Jan. '82 3
Worcester & Nashua. 75	1,789,800	semi-an.	Jan. '82 1½
HORSE-POWER R. R.			
Albany City.....100	200,000	annual	..... '80 5½
Baltimore City..... 25	1,000,000	semi-an.	Jan. '82 4
Balt.,Cat.&El. Mills..100	....	semi-an.	Jan. '82 2
BleeckerSt.&Ful.F'y.100	900,000	semi-an.	July '81 ¾
Boston&Chelsea pref. 50	110,000	semi-an.	Apl. '82 3
Broadway (Brooklyn)100	250,000	q'arterly	Oct. '81 3
B'way&7th Av,(N.Y.)100	2,100,000	q'arterly	Oct, '81 2
B'klyn&Hunter's Pt.100	400,000	semi-an.	Apl. '79 3
Brooklyn City.....100	2,000,000	q'arterly	Dec.'81 3½
Bushwick (Brooklyn)100	309,000	semi-an.	July '81 2½
Cambridge.....100	908,000	q'arterly	Apl. '82 4½
Cen.Park,N.& E.Riv.100	1,800,000	q'rterly.	Jan. '82 2
Christoph'r&TenthSt100	650,000	semi-an.	Aug.'81 2½
Citizens' (Phil.)..... 50	192,500	q'rterly.	Jan. '82 2½
Citizens' (Pbg.)..... 50	200,000	annual..	....'80 14½
Coney Island&Bklyn100	500,000	semi-an.	Oct. '80 5
Continental (Phil.).. 50	580,000	semi-an.	Jan. '82 6
D.Dock,E.B'way&Bat100	1,200,000	q'arterly	Nov.'81 4
Eighth Av. (N. Y.)...100	1,000,000	q'rterly.	Oct. '81 3
42d St. & G. St. Ferry100	748,000	semi-an.	Nov.'81 6
Frankf.&Southw (Ph) 50	600,000	q'rterly.	Jan. '82 6
Germantown, (Ph.).. 50	572,860	q'rterly.	Apl. '82 2½
Girard College (Ph.) . 50	500,000	semi-an.	July '71 3
Grand St. & Newton.100	170,000	semi-an.	July '81 2½
Green&Coates St.(Ph) 50	150,000	q'rterly.	Apl. '82 3
Heston,Mantau&F'm 50	299,381	semi-an.	Jan. '75 4
Highland.....100	600,000	semi-an.	Jan. 82 4
Lomb.&SouthSts(Ph) 25	195,000	semi-an.	Oct. '79 4
Lynn and Boston....100	200,000	semi-an.	May '82 4
Malden and Melrose.100	165,500	....	..... .
Metropolitan (Bost.). 50	1,500,000	semi-an.	Jan. '82 4
Middlesex (Boston)..100	650,000	semi-an.	May '82 3½
N.Y.,Bay Ridge&Jam100	150,000	..... .	Oct. '78 7
Ninth Av. (N. Y.).....100	797,320	....	.....
Orange &Newark.....100	282,555	....	.....
People's (Phila.)..... 25	124,744	..... .	Apl. '82 2
Philadelphia City... 50	475,000	semi-an.	Jan. '82 5
Phila. and Darby.... 20	200,000	semi-an.	July '81 3½
Phila.&Grey's Ferry. 50	308,000	semi-an.	Jan. '82 6
Pbg,Alleg.&Manches. 50	300,000	q'rterly.	Oct. '81 3
Ridge Avenue (Ph.).. 50	420,000	semi-an.	Oct. '81 11
Second Avenue (N.Y.)10	1,199,500	semi-an.	July '81 2½
Second&ThirdSt.(Ph) 50	771,070	q'rterly.	Jan. '82 4½
17th &19th sts (Ph.).. 50	250,000	semi-an.	July '81 3
Sixth Avenue (N. Y.)100	750,000	semi-an.	Oct. '81 5
Somerville (Boston).100	113,000	semi-an.	May '82 3
South Boston..... 50	600,000	semi-an.	Jan. '82 4
Third Avenue, N. Y..100	2,000,000	q'rterly.	Nov.'81 5
13th and 15th sts.,Ph 50	334,520	q'rterly.	Jan. '82 4
23d street, N. Y.....100	600,000	semi-an.	Aug.'81 4
Union, Boston.....100	374,300	semi-an.	Jan '82 4
Union, Phila..... 50	1,005,000	semi-an.	Jan. '82 7
West Philadelphia... 50	750,000	semi-an.	July '77 10
CANALS.			
Chesapeake and Dela 50	2,078,038	semi-an	June'75 2
Delaware Division... 50	1,633,350	semi-an	Feb. '82 $1
Delawa. and Hudson100	20,000,000	q'rterly.	June'82 1¾
Delaware & Raritan*.100	5,847,400	q'rterly	Apl. '82 2½
Lehigh Coal and Nav 50	11,204,250	semi-an	June'82 2
Monongahela Nav... 50	1,004,500	semi-an	July '81$2
Morris, consolidated.100	1,025,000	semi-an.	Feb. '81 2
" preferred....100	1,175,000	semi-an	Feb. '81 5
Pennsylvania..... 50	4,501,200	.....	.....
Schuyl. Nav., com.*. 50	859,100	annual.	n. '81 50c.
" " pref... 50	3,200,950	annual.	Aug. '81 $1
MISCELLANEOUS.			
Adams Express.....100	2,000,000	q'rterly.	June'82 2
American Express.... 50	8,000,000	semi-an.	July '82 3
Amoskeag Manuf.Co.100	3,000,000	semi-an	June'81 5
Calumet&HeclaMin'g —	00,000 S	q'rterly	May '82 $5
Central Mining Co...100	.....	semi-an	Feb. '82 2½
Consolidation Coal..100	0,250,000	semi-an	Jan. '82 2
George's Creek C.&I.100	.....	semi-an.	Jan. '82 3
Maryland Coal.....100	4,400,000	semi-an.	Feb. '76 1½
Mariposa L. &Mining100	0,000,000	..... .	.....
" pref100	5,000,00	..... .	.....
Missouri Val.LandCo100	200,00	semi-an.	Jan. '82 7
National Tube Works100	1,000,000	q'rterly.	Apl. '82 3
Pac. Mail Steamship.10	0,000,000	q'rterly.	Sept.'69 3
Pennsylvania Coal... 50	5,000,000	q'rterly	May '82 3
Pullman Palace Car..10	0,023,800	q'rterly.	May '82 2
Quicksilver, com....10	5,708,700	..... .	May '82 0.4
" pref....100	4,291,300	..... .	May '82 6
Quincy Mining Co... 25	0,000shs	semi-an.	Feb. '82 $8
Quincy R. R. Bridge.100	1,750,000	semi-an.	Jan. '82 5
SiouxC.&I.F.L.&L.Co100	500,000	semi-an.	Jan. '82 4
Spring Mt. Coal.....10	1,500,000	semi-an.	Jan. '82 3½
Topeka Equip'nt Co..100	255,000	semi-an.	Apl. '82 5
United States Ex....10	7,000,000	q'rterly.	May '82 1
Wells-Fargo & Co. Ex100	6,250,000	semi-an.	Jan. '82 4
Western Union Tel..100	30,000,000	q'rterly.	Apl. '82 1½

Railroad Between Meriden and Cromwell.

PRESIDENT WILCOX, of the Meriden Britannia Company, and President Babcock, of the Connecticut Valley Railroad, visited Cromwell, Conn., on the 17th inst. in furtherance of a project of connecting Meriden with Cromwell by rail, which will give water facilities as well as additional railroad facilities to Meriden. They found no topographical objection to the project. The little Meriden mountain has been fitted by nature with a notch or ravine for the road to run through, so that but very little work will be required there. The distance from Meriden to Cromwell is about nine miles, and the mountain notch is about three miles from Meriden. There will be one stream and one highway to bridge. The stream is known as Little or Sebetha River, and it will have to be bridged at a point above the Westfield station of the Consolidated branch road, and the branch will also be crossed here. The stream here is about 40 feet wide. One highway in Westfield will have to be bridged, and the other highways can be crossed at grade.

The proposed road will cross the Valley road at Cromwell, near Buckley Adams' hotel, and the track will run to the river, where Meriden capitalists have already purchased a water frontage of 1,000 feet. The purchase includes the entire front from Stocking's store to Quarry dock where wharves will be built for transferring coal from barges to the cars, and such other freight as may be shipped from New York.

By connecting with the Valley at Cromwell the new road will give the Meriden people, when the Valley extension is completed to Springfield, freighting facilities east, west and south, and make them quite independent of the Consolidated road. With this road completed to Cromwell, the next move which has been talked of is to build a road to Cheshire, and from there to Waterbury, connecting with the New York and New England and Naugatuck railroads at that point and crossing the Canal road to Cheshire. There is no doubt that this scheme will be of great benefit to Meriden, and it looks now as though our wide-awake neighbors had about made up their minds to put it through.

At all events the purchase of the water frontage at Cromwell and the calling in of President Babcock to consult as to the practicability of the project looks like business, and before long our Meriden friends may be open to congratulations over its consummation.—*Hartford Times.*

The Cable Cars Not Free of Accidents.

THE festive grip-car is likely to become an odious institution in the city. The inquest upon the death of John Turner resulted in finding that the protections against accidents were insufficient, and in censuring the company for negligence. So long as this new system was an experiment people were inclined to overlook an occasional accident, in the hope that a few weeks' experience would avoid them. But accidents seem to increase rather than diminish, and people begin to feel anxious to know how long this death-dealing apparatus is to be allowed to plow its way up and down the crowded streets, irrespective of the rights of others. Accidents are more uncommon in San Francisco upon the grip-car line than those where horses are used, and equal care should make them so here.—*Chicago News.*

A CORRESPONDENT of the New York *Herald*, alluding to an article which had previously appeared in that paper upon the subject of the "Nuisance of Whistling," says: Nearly every omnibus and street car has its half idiotic whistler. Music may have charms to soothe the savage breast. If the insolent whistler would confine his charms to the savages and relieve those as much civilized as himself he would confer a boon upon the civilized.

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CORRESPONDENCE.

[We pay no attention to communications unless the name and address of the writer are given, though the same will not be published if so requested. We assume no responsibility for statements made by correspondents, and we do not necessarily endorse ideas advanced by them. Under these conditions we think it of value to our readers to devote a liberal space to the free discussion by others—whose opinions may be at variance with our own—of subjects pertinent to our department of journalism.]

[For the American Railroad Journal.]

Reminiscences of Traveling and Transportation.

STAGING.

In the palmy days of staging on the National Road, first between Frederick City and Wheeling, and more especially afterwards, when the Baltimore and Ohio Railroad was extended to Cumberland, there was no place in this country, perhaps not in the world, where stage operations were reduced to such perfect system and regularity. The Stockton line and the Good Intent are still talked of by the old stagers, now fast passing away. L. W. Stockton has been dead many years, but his name and the man are still remembered along the old road, once teeming with life, but now overgrown with grass. Some of the proprietors of the Good Intent are still living, notably Mr. Thos. Shrion, of New York City, who could fill a book with the incidents and accounts of staging on the now forsaken highway. He could tell you of the dark and gloomy shades of death, with its legends and tales, of the driver who beat off the robbers with no other weapon than his whip, leaped their barricade, horses, stage and all, and brought in his passengers safe and on time, and many others which space forbids even the mention. In its best days it was no unusual sight to see eighteen to twenty coaches in a line, each carrying from ten to twelve passengers, nine inside and the rest hanging on outside as best they could.

They would also tell you of the famous mail robber, Brady, who so long eluded the efforts of the United States detectives, the man who said that it made his knife laugh to see a leather mail bag with a lock on it, more famous in his day perhaps than Jesse James of modern times, or Capt. Kidd of yore, for people are hardly done yet looking for money said to have been hidden by him.

Brady's exploits, mail robbing, and trunk robbing, if all could be told, would fill a volume, but they can only be mentioned here. The great points were to make the cars at Cumberland going east, and the boat at Brownsville for Pittsburgh going west. The trip was made mostly in the night both ways, and often on very close time. Many were the anxious inquiries, "Driver, are we late?" "Driver, can you make it?" Cunning fellows the drivers were, always very doubtful, until a purse was made up for them; then it was another thing altogether. Doubts vanished, horses were whipped up, and everything lovely, the jolly fellows knowing all the time that it was as much as their place was worth not to get their coach in on time. While the road most of the time was the best perhaps in the country, yet in the spring, or during a long continuance of wet weather, the bottom would sometimes drop out. The heavy transportation wagons, some of them carrying hundreds of pounds, soon made staging anything but pleasant. Mr. Brown, the general road agent of the Good Intent line, often had as much as he could do to keep the weary, worn out passengers from open rebellion. One instance in particular: The stage with a heavy load had been worrying along all night, the passengers walking up the mountains, occasionally having to pry the coach out of a hole deeper than usual, and having a bad time generally. They happened on Mr. Brown at the hotel where they stopped for breakfast, and at once let out on him. As soon as there was a lull he told them that he was very sorry, and the only consolation he could give them was, that they might be thankful that they did not have to carry a rail as they did out in Ohio. This raised a laugh, which, with a good breakfast, sent them on their way in a better humor.

My first trip across the Allegheny mountains was in 1834, or, as the almanacs say, the year before or the year after. We were going to Harrisburg from Fayette county, Pa. This was before the Baltimore and Ohio road was extended beyond Frederick City. We were two nights and a day or more reaching Hagerstown. From that place we crossed over to Chambersburg in a hack, and then took the stage again on the Pittsburgh and Philadelphia line to Harrisburg.

CANALING.

I returned to Fayette county by the Pennsylvania canal, being four or five days on the trip from Harrisburg to Pittsburgh (don't drop the *h* in Pittsburgh; that is one of the smoky city's foibles), being fed and lodged on the canal boat, and re-crossing the mountains on the old Portage Railroad. Think of the weary time as those days dragged their slow length along, especially to men actively engaged in business, or having urgent need for their presence at the other end of the line. A journey that is now made in almost as many hours as it then took days. Any one predicting such a thing at that time inside of fifty years would have been hooted at as crazy. How true the old proverb, "there is nothing new under the sun." The mountains were passed by means of inclined planes, and the cars were hauled up and let down by means of ropes thousands of feet in length, worked by stationary engines—exactly the same principle they are now applying to the street cars, but with better machinery perhaps. Bad accidents sometimes happened by the cars getting away, and rushing down with almost lightning speed, bringing death and destruction to everything in their course. The Pennsylvania Canal, and the New York and Erie were for a long time the only means of transportation for merchandise between the east and the west. Goods were loaded into the cars at Philadelphia and taken to Columbia on the Susquehanna by rail. Here commenced the canal. They were loaded into boats and taken to Hollidaysburg. Here they were loaded into cars again and taken over the Portage Road to Johnstown, at which place they were again loaded into boats and taken to Pittsburgh. At Pittsburgh they were transferred to steamboats on the different rivers, to the Erie Canal, or distributed over the country by wagons. Our company had their canal boats made in sections. They were loaded in Philadelphia and not unloaded again until they reached Pittsburgh. The sections were put on railroad trucks for *land* carriage, and put together to make about the ordinary size of a canal boat, the end sections fashioned for bow and stern.

Why could not something like this be done for the transportation of freight across the Isthmus of Darien? Have the ships built to hold the car bodies entire loaded with merchandise, then transfer them to railroad trucks by means of steam derricks without unloading them. Would it not be easier than Ead's plan of taking the whole ship across. But this is a digression.

RAILROADS.

My first ride behind a regular passenger locomotive for any distance, was from Frederick City to Baltimore, in 1836. The rails were strap iron, two or two and a half inches wide and five-eighths or three-quarters thick. The stringers were of wood scantling, about six inches square. The iron rails had holes in them about every eighteen or twenty inches for spikes. These stringers were laid on cross ties, as they were also for the T rails when they first came in use. Twenty miles per hour was considered a wonderful speed. I do not know where the engine was built. Baldwin built his first locomotive in 1832, but it was nothing like those on the Baltimore and Ohio Road. Whether they were built in this country or not, I cannot tell. The records of the company would, no doubt, inform us in this matter, and I, for one, would like to know where they were built. Anyhow, they stood up to the work better than Baldwin's, as they were in regular service long after his were discarded. Nothing like them are in use at present. The engines were upright boilers, placed on a four-wheeled truck; the forward pair were the drivers. The rest of the machinery was placed in front of the boiler. The walking-beam, if I may so call it, was fastened at one end to the boiler, and to the other end the pitman was attached, connecting it with the crank shaft. On this crank shaft was a cog-wheel geared into another cog-wheel on the front axle or drivers. The power was applied by means of two upright cylinders, connected with the walking-beam near the middle, between the boiler and the pitman. Comical looking locomotives they were, compared with the beauties of the present day.

The popular name was "Grasshoppers," from the fancied resemblance of these walking-beams or arms working up and down in front, to the long hind-legs of that insect. They were said to work well and economically, and were still in use as late as 1857, and may be yet for aught I know. The cars were small, four-wheeled affairs, nearly square, and divided up into compartments running across the cars, and were no doubt copied after the English plan, which they still use. The divisions were made with glass, however, above the seats. The conductor collected the fares and tickets by hanging on a rod, supporting himself on a narrow board along the sides—rather an unpleasant position at best, but especially in wet

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weather, with the rain off the roof dripping down his back. How would he have handled the ticket punch if it had been in use then? He would have had to hold on with his teeth while using it.

The long cars, in the style of the present day, were then in use on the Philadelphia and Columbia Railroad. I cannot tell which was built first, but think it was the Baltimore and Ohio Road, at least part of the way. About the beginning of the fourth decade of this century, the Baltimore and Ohio Road was completed to Cumberland, Md., and that in connection with the stage coaches to Brownsville, as before mentioned, and the steamboats to Pittsburgh, became the great through passenger route between the East and the West.

The Philadelphia Road had been extended to Harrisburg, and the Cumberland Valley had been built to Chambersburg about the same time, or soon after. From Chambersburg to Pittsburgh the distance *by land* was greater, and the road not so good, so that this route was never as popular as the Cumberland route. The Cumberland route also had the advantage of the great national road which extended into Indiana. The now great Pennsylvania Company was then in its infancy, but had begun to loom up pretty strongly. Even at that early day it had sufficient influence in the Pennsylvania Legislature to keep the Baltimore and Ohio Road out of the State, and force it to build its road through the mountains of Maryland and Virginia, an everlasting monument to the genius of the late Benjamin F. Latrobe, who was the chief engineer. From this success of the far-seeing officers of the Pennsylvania Company, Pittsburgh has not recovered to this day, and which also kept back the development of Southwestern Pennsylvania fifteen or twenty years. They are now reaping the benefits of their foresight and sagacity in one of the best-paying branches of their great road.

Terrible accidents sometimes happened when the timbers began to get old and the spikes loose. One in particular comes to my remembrance distinctly, that occurred on the Philadelphia and Columbia Road. One of the rails got loose and curled up, coming through the bottom of the car and taking the head of a lady, seated by the side of her husband, off completely, while he escaped unhurt. It was no unfrequent thing for the engineer to stop the train and call on the conductor to go forward and hold down the rail until the train got over.

SLEEPING-CARS.

A few words more, about sleeping-cars, will close this article, already too long perhaps. It is going the rounds of the newspapers and railroad journals that the first sleepers were used in 1859. This is entirely a mistake. They must have been in use as far back as 1840, and perhaps before. I saw them myself in 1844, and they were comparatively old-looking cars then. They were on the Cumberland Valley Road, and ran between Chambersburg and Harrisburg, in connection with the stage coaches, to Pittsburgh. Some of the officers of the old road, now owned by the Pennsylvania Company, are still living in Carlisle, and could no doubt give the exact date of their being first put on the road. I send you a sketch of the cars as they were then constructed. Referring again to the old proverb, Pullman's splendid cars of the present time are nothing more than the old idea more elaborately carried out. I could never understand what it was exactly that he got his patents on. Certainly it was not on the general arrangement. Only half the car was used for sleeping purposes, and I believe was reserved exclusively for the stage passengers. The berths were arranged then in tiers, as Pullman's were at first. The upper and middle ones were suspended from the roof of the car in front and hinged to the side of the car. The lower one was a kind of locker, used for keeping the coverings in. During the day the upper tier was raised up in front and fastened to the roof, sloping; the middle one was dropped down against the side of the car, forming the back of the seat made out of the lower tier, running lengthwise of the car. At night the conductor arranged the whole thing for sleeping in a few minutes. The upper tiers were lowered into a horizontal position, the middle ones were raised up, and the lower one left as it was. They did not have any mattresses. The cushions were hair, covered with cloth. The conductor gave the passengers a blanket or comforter and a pillow, and they arranged for their sleeping as best suited themselves; but if you think there was not some sound sleeping done on these narrow, hard couches, just try a journey of a week or more in a stage coach. The soft side of a plank is a luxury, if one can stretch himself. The idea of these sleeping-berths on the cars was, no doubt, first taken from the old-fashioned berths on steamboats, or still farther, and I do not know how far, from the berths on shipboard on old ocean. I have hardly made a beginning, but must stop, as this article is already too long. J. O.

WATSONTOWN, Pennsylvania.

The Coal Trade.

THE leading coal-carrying companies make the following reports of their tonnage for the week ending May 13th, and for the year to same date, compared with their respective amounts carried to the same time last year:—

	Week.	1882.	1881.
Reading Railroad	132,254	3,213,702	2,077,637
Schuylkill Canal	7,782	94,893	73,472
Lehigh Valley	90,582	2,441,323	2,326,340
Delaware, Lackawanna and Western	61,410	1,347,184	1,418,587
Shamokin	23,404	315,155	365,569
Central R. R. of New Jersey	65,801	1,324,297	1,405,834
United R. R. of New Jersey	24,156	562,332	560,449
Pennsylvania Coal	21,719	357,371	390,313
Delaware and Hudson Canal	40,835	1,045,447	1,218,000
Huntingdon and Broad Top Mountain	6,089	178,886	158,819
Penn. and New York	20,500	618,553	587,190
Clearfield, Pa.	61,663	1,047,548	845,757

The total tonnage of anthracite coal from all the regions for the week ending May 13, as reported by the several carrying companies, amounted to 423,757 tons, against 424,228 tons in the corresponding week last year, a decrease of 471 tons. The total amount of anthracite mined for the year is 8,542,770 tons, against 9,423,759 tons for the same period last year, a decrease of 880,989 tons. The quantity of bituminous coal sent to market for the week amounted to 75,894 tons, against 100,055 tons in corresponding week last year, a decrease of 24,161 tons. The total amount of bituminous mined for the year is 1,648,162 tons, against 1,701,938 tons for the corresponding period last year, a decrease of 53,776 tons. The total tonnage of all kinds of coal for the week is 499,651 tons, against 524,283 tons in corresponding week last year, a decrease of 24,632 tons; and the total tonnage for the coal year is 10,190,932 tons, against 11,125,697 tons to same date last year, a decrease of 934,765 tons. The quantity of coal and coke carried over the Pennsylvania Railroad for the week ending May 13th was 210,791 tons, of which 153,606 tons were coal and 57,185 tons coke. The total tonnage for the year thus far has been 4,024,293 tons, of which 2,874,330 tons were coal, and 1,149,963 tons coke. These figures embrace all the coal and coke carried over the road east and west. The shipments of bituminous coal from the mines of the Cumberland coal region for the week ending May 13 were 5,046 tons, and for the year to that date 480,078 tons, a decrease of 157,000 tons as compared with the corresponding period of 1881. The Reading Railroad shipment for last week, ending May 20, was about 181,000 tons, of which 36,300 tons were sent to and 33,000 tons shipped from Port Richmond, and 18,000 tons sent to and 15,500 tons shipped from Elizabethport.—*Phil. Ledger, May* 22.

Photography Made Easy.

EVERY MAN HIS OWN TAKER OF PICTURES—WHAT A TRAVELER MAY DO.

ANOTHER advance has been made in photography. Every traveler, or every person whatsoever, must have wished at some time or other that he or she was an artist—a painter, sketcher, or draughtsman or draughtswoman; that this mountain, that lake, this here or that there could be put down in black and white and carried away. It may or may not be true, but it is said that art studies are pursued with more zeal in picturesque places, and that pupils in drawing and sketching are more numerous and more diligent after the summer travel is completed. A pupil remarked: "By next season I shall be able to sketch the glen!" Nature is the great teacher, and inspires the student to imitate and to equal.

But this striving with the pencil to reproduce nature or anything else is now unnecessary. A photographic apparatus has been invented by which every traveler or any one may sketch by photography. The outfit weighs about two pounds, and can be carried by a strap over the shoulders like the game bag or fish basket. When a bit of scenery comes in view that is worth taking away, or an old mill, barn, house, group, or anything takes your fancy, you unharness, place the camera on a tripod, and in a twinkling you have the object in view transferred to a prepared plate, which may be "developed" when your travels are over. Every time the train stops for lunch, which is often in the west, for the people must be supported, the photographic artist may "take" the whole town while the other passengers are lunching. Very far west the conductor of the train would wait, probably, for the artist to photograph, develop, sell and realize on the spot before he went on to the next station.

This photographer's outfit is very moderate

in cost and can be operated by any one, though he may have no knowledge previously of photography. There is revolution in labor-saving machines.—*Providence Journal.*

The Production of Quicksilver.

Consul Mosby reports to the Department of State at Washington that the estimated stock of quicksilver on hand in Hong Kong is 5,500 flasks and that the amount imported during 1881 was 14,010 flasks, at $56.75 to $59 per picul. Mosby says the consumption per month is estimated at about 1,600 flasks in the manufacture of vermillion. Prices are governed by speculative transactions, and are consequently unsteady, at one time being run up as high as $100 per picul. In the consular report just issued, Ferdinand Vogeler, Consul General at Frankfort-on-the-Main, makes a statement regarding quicksilver in Europe. He says the production for the world in 1879 was 123,000 flasks, California making 73,000, Almaden, Spain, 40,000, and Idria, Austria, 10,000 flasks. In 1878-9, California produced more than one-half of all the quicksilver consumed in the world. Vogeler says: "Owing to the excess of production over consumption, brought about by the development of California mines, the general tendency of the market seems to be downward, although the interests of the Rothschilds of London, who control the Almaden mines, is to maintain the price."

For the fourth time Cyrus H. McCormick has obtained a verdict against the Pennsylvania Railroad Company for the loss of his baggage. In 1862 it was forwarded to Chicago from Philadelphia without his consent, and was destroyed in the burning of the depot at the former place. The judgments in the previous rials were reversed for error on the trials. The present verdict, which was rendered before Judge Barrett, in Supreme Court, Circuit, on the 12th inst., was for $13,248.55.

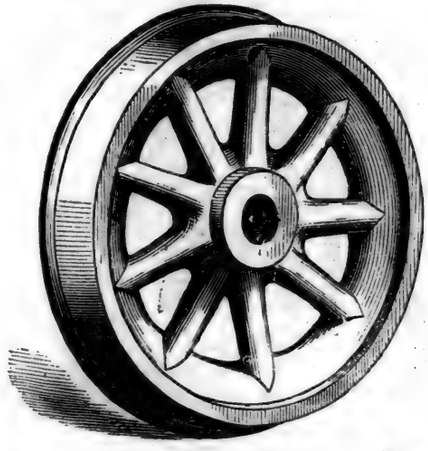
A file is a file to most people, nothing more and nothing less; but a recently published trade circular gives a list of no fewer than 50 different kinds of files and 14 different kinds of rasps, each kind being made in several sizes. A good mechanic could get along, perhaps, with half a dozen kinds but time, which is money to productive industry, is saved by having tools exactly suited to the particular work they are intended to do.

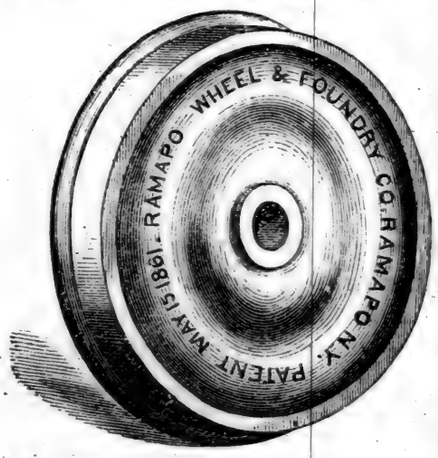
The lock in which were placed the charges of dynamite that were fired by the Queen of Greece at the Corinth canal ceremony on the 6th inst. was the same in which the Roman Emperor Nero began the work of cutting a Corinth canal in the first Christian century. Other parts of the canal ceremony were carried out as announced beforehand. The event was favored with brilliant weather.

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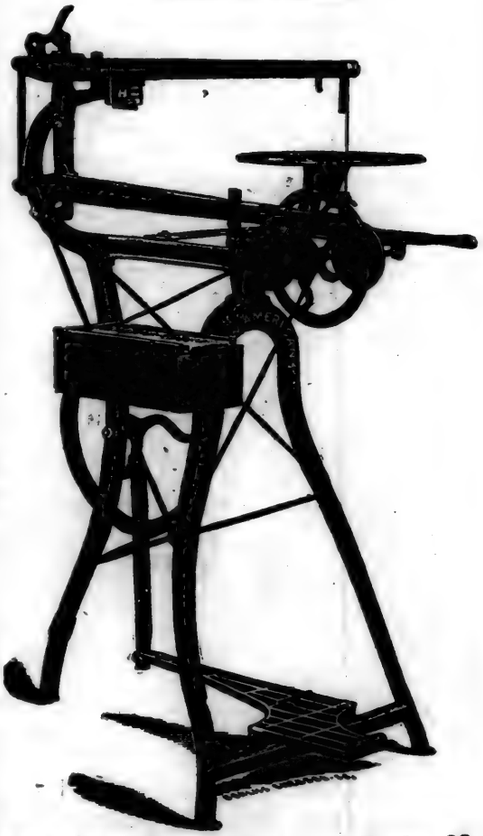
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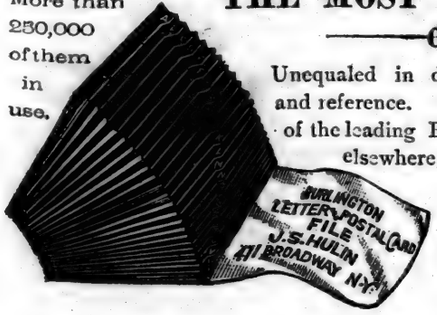
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American Railroad Journal.

ESTABLISHED 1831.

Steam Navigation, Commerce, Finance, Banking, Machinery, Mining, Manufactures.

SECOND QUARTO SERIES.—VOL. XXXVIII., NO. 21.] NEW YORK, JUNE 3, 1882. [WHOLE NO. 2,406.—VOL. LV.

The American River.

STEAMBOATS went up the American River as far as Brighton in 1852, and also in 1862. Since that time no steamboat has entered the American. J. T. Cardwell some time since conceived the idea that he could navigate the river from Sacramento to Folsom, a distance by river of thirty-six miles. He endeavored to get the American Bridge Company to put in a draw, so as to enable him to navigate the stream. The bridge company refused. Cardwell brought suit against the company, claiming that the American was a navigable stream, and that the bridge company in question must, according to law, maintain a draw. The bridge company refused to put in a draw. Cardwell bought a steamer—the Daisy—at Stockton, brought her to Sacramento, and demanded to be permitted to pass up stream. The bridge company refused, from the fact that they had no draw in their bridge. This necessitated Cardwell to place his steamer above the bridge. By the use of rollers and house-moving apparatus he succeeded in taking his boat from the river and conveying it around the bridge into the river. Wednesday, about 1:30 P. M., the boat left the Twelfth street bridge for Folsom. J. T. Cardwell was the captain and Jesse Waddle pilot. When they started there were about sixty-five invited guests aboard. The Central Pacific Railroad Company's Bridge was reached in fifteen minutes from the time of starting. The smoke-stack was lowered and the boat passed under the same without difficulty. Persons standing on the upper deck of the steamer could not touch the bridge with their hands. The run to Brighton was made in an hour and fifteen minutes. At the ranches of Dr. Manlove, John Shields, and many others along the bank of the river the people assembled on the river's bank and cheered. No difficulty was found in navigating the river so far as depth of water was concerned. There is a good channel and plenty of water at all points. In the upper portion of the river, say six miles from Folsom, the current in the river is very strong. A steamer, in order to combat and overcome this current, will have to be built specially for that purpose. At this time there is high water in the American, and it is the most seasonable season of the year for any vessel which wishes to reach Folsom by water.

About ten miles this side of Folsom the north bank of the river is changed into steep bluffs. These bluffs vary in height from 100 to 300 feet. Perhaps there is not another river in America, except the Hudson, for the same distance, which presents such picturesque scenery.—*Sacramento Record-Union*, May 20.

The First American Railroad.

THURLOW WEED'S STORY OF THE FIRST TRIP FROM ALBANY TO SCHENECTADY.

THE controversy in regard to the first steam railroad train operated in this country is as yet unsettled, but the preponderance of the evidence would seem to show that it was the train run over the Albany and Schenectady Road in 1831. The charter for this road was granted in 1826 to the Mohawk and Hudson River Railroad Company, and work upon it was begun in 1830. It was completed in 1831, and in September of that year the first passenger train, which is also claimed to be the first steam passenger train ever run in this country, was sent over the rails from Albany to Schenectady and back. Among the passengers on this memorable excursion was the venerable Thurlow Weed, and his memory of the event is still very vivid. In speaking of it to a *Times* reporter, Mr. Weed said: "It is still a more or less disputed point whether the Albany and Schenectady Road, or a short road near Charleston, S. C., was the first railroad operated in this country, but I am inclined to think that the claim of the South Carolina road has been pretty well disposed of, and that history will decide that the Albany and Schenectady line was the first one completed and operated. There is no doubt that both roads were constructed almost simultaneously, but I have a very strong impression that the first train was run over the New York line. The road was narrow gauge, and followed the same route as it does now that it has been consolidated and forms the eastern terminus of the New York Central, but in 1831 the country through which it passes was very lightly settled. It ran through a pine forest, and I suppose there were not half a dozen houses between Albany and Schenectady, a distance of 16 miles. There was a hill at both the Albany and Schenectady ends of the line, and the cars were drawn up and let down these hills by a strong rope, which was worked by a stationary engine, so that the locomotive did not enter either of the cities. The locomotive was a queer-looking arrangement, and would create a sensation in these days. It was imported from England, weighed four tons, and was named John Bull. The cars of the first train were also peculiar-looking vehicles, according to our modern notions of railway coaches, but in 1831 they were looked upon as marvels. They were two in number, and consisted of the bodies of the old stage coaches, taken from the lumbering wheels and transferred to railroad trucks.

"I remember that first excursion very well, and most of those who enjoyed it," continued Mr. Weed. "The gentlemen who made the trip were Lewis Benedict; James Alexander, President of the Commercial Bank of Albany; Charles E. Dudley, of the Dudley Observatory; Jacob Hayes, High Constable of New York; Major Meggs, Sheriff of Albany; Judge Marvin, of Saratoga; John J. DeGraff, Mayor of Schenectady; Edward Croswell, editor of the Albany *Argus;* John Townsend; Billy Winne, the penny postman at Albany; ex-Gov. Joseph C. Yates, myself, and two or three others whom I do not now recall. Our engineer was John Hampson, an Englishman, who, I have been told, is still living, but with the exception of him and myself every one of the persons who made the trip are dead. I was 34 years old then, and all the rest, except Croswell, who was about my age, were from five to ten years older than I. A great crowd of people assembled at the foot of the hill in Albany to see us start, and among them was an artist by the name of Brown, I think. It took about three-quarters of an hour to get ready for the start, and during that time Brown managed to secure a picture of the party, the portraits of which are remarkable for their fidelity. Several copies of this picture are in existence, and I have one of them myself. The original is in the possession of the Connecticut Historical Society, at Hartford. When all was ready the coaches were pulled up the hill by the stationary engine, the locomotive was attached when the summit had been reached, and we went thundering along toward Schenectady. We made the trip of about 16 miles in between 60 and 70 minutes, and we thought we had done an extraordinary thing, as indeed we had for those early days of the century. The idea of the modern express train running at the rate of 50 and 60 miles an hour would have seemed preposterous then. We took dinner in Schenectady and returned by the road to Albany, making the trip in a little over an hour."

The only stockholders of the Mohawk and Hudson Railroad whom Mr. Weed could remember were Mr. De Wolf, of this city, the father of Catherine De Wolf; John Townsend,

of Albany; and Mayor John J. De Graff, of Schenectady. The old narrow-gauge road was torn up when the consolidation with the New York Central was made, and the stationary engine was dispensed with, the locomotives running directly into Albany and Schenectady. The route of the line was not changed, however, and travelers from Albany to Schenectady over the New York Central now passes through the same country, although it is much more thickly settled, that was looked out upon by the passengers on the first railroad train that ever made a trip in America.

The Inventor of the Babcock Fire Extinguisher.

This morning, in the Police Court, the name of Doctor Babcock was called, and in response a terrible wreck tottered to the bar.

"What is your name?" asked the Court.

"Babcock—Doctor D. Babcock," was the answer.

When asked to plead to a charge of drunkenness, he said that he wished to explain the circumstances. He had, indeed, taken two drinks—two small drinks—but he had been paralyzed and could not walk. He was not drunk. He had been in the hospital, but was a doctor, and thought he could make a living, and did not wish to be a charge on the public. "I invented," he said, "the fire and water proof paint and the chemical fire-extinguisher that bear my name."

It was, indeed, the wreck of Dr. Babcock, the inventor of the Babcock fire-extinguisher.

"Have you a family?" asked the Court.

"Yes, sir, but not here," was the reply.

"Where are they?"

"Up North—I don't know where. I fixed them up—my children—and sent them off, and I don't know just where they are. I have been in the hospital twenty days, and I came out too soon, and I cannot live in jail—I thought I should die there last night."

The Court remarked that the case seemed to be one calling for sympathy rather than severity, entered a plea of not guilty, and allowed the old man to go on his own recognizance, it being understood that he would be sent back to the hospital.—*Stockton (Cal.) Mail.*

A Tree of Iron.

A correspondent of the Syracuse *Standard*, writing from Charleston, S. C., says that the iron palmetto is the greatest work of art in the State House yard in that city. It is a casting wholly of iron, commemorating the death of many of Carolina's slain, whose names are found in raised letters on two brass tablets at the base. The success of this casting consists in its perfect imitation of the living palmetto, the favorite tree of South Carolina. We had heard of this statue in other places, but had never been able to believe the stories of the flexible leaves bending in the breeze, supposing this phenomena an optical delusion, but such is really the case. The long leaves of iron, and life-like fibers of the twigs and branches, wave tremulously in every zephyr, and the whole tree, painted artistically, has so close a resemblance to the real tree as to deceive the acutest observer at the distance of five rods. These sad mementos of a sadder past cause all the petty triumphs of victorious arms to sink into pitiable insignificance, and only this pathetic tribute to the memory of fallen believers in the lost cause, whose faith was sealed in their own blood, remains to tell of the woe and heart-breaking sorrow which has fallen like a pall of midnight darkness over all the South.

An Underground Telegraph.

Last winter a patent was obtained by a Mr. Warrell, of Pittsburgh, Penn., for an underground telegraph cable. A company was formed there, and an ordinance passed by the City Council giving the incorporators the right of way under all the streets of the city. The ordinance provides that cables shall be laid at least six inches below the pavement, and shall not be laid nearer the centre of the street than three feet from the curb. It also reserves to the city the right to use the conduits for Police and fire-alarm purposes. The company gave bond in the sum of $10,000, and on the 25th ult. broke ground for an experimental underground telegraph line to test the invention. This test line will begin at Negley's Run, and terminate in the centre of the city, a distance of seven miles. The cable to be used in this experiment is of corrugated lead 1 inch in diameter, perforated with five small holes, each of which is insulated in a composition which is the inventor's secret; and wrapped in cotton is a fine copper wire. This cable is capable of being increased in size and capacity, and if it is operated successfully wires can be so laid underground at less expense than they can be stretched on poles. The experiment is being watched with interest by capitalists.

Slowly Learning How To Do It.

One of the things Americans can never understand in England is the necessity for taking railway tickets at the station just in the bustle of starting. They usually buy their tickets for any considerable journey the day before, and use them for any train they please, and the crush and delay which sometimes take place at our chief railway stations are consequently almost unknown in the United States. Perhaps the chief difficulty in getting a similar system to work in England lies with the public. Two or three of the railways have for some time had ticket offices in some of the chief thoroughfares, and yesterday a notice-board appeared outside a railway office in Holborn informing all whom it might concern that tickets for the London and Northwestern Railway and its connections might be procured there. The Great Northern has a similar ticket depot in the same thoroughfare, and there have long been offices for some of the southern lines in the chief centers of traffic. The system is gradually taking root in London, and it will spread rapidly when the public thoroughly understands it convenience. At present these offices are chiefly resorted to at holiday times, but if all the railways followed the examples of the lines we have named, the public would soon appreciate the advantage of buying their tickets at leisure instead of rushing for them just as the train is starting. It is a very common thing at urban stations for passengers to miss the train while they are waiting in the cue for their turn with the ticket clerk. At certain times of the day at some of the stations the pressure and delay are great. It is curious that neither of these "omnibus lines," as they are called, has ever struck out a mode of taking and checking the fares which would save their own time and that of their passengers. It seems ridiculous that for a two-penny or three-penny ride on a London railway a ticket should have to be taken at a pigeon-hole where half a score of people are pressing to be served, should be inspected and punched at the platform gateway, and formally delivered up at the arrival station. —*London Daily News.*

A New Implement of War.

According to the London *Times*, Major N. Willoughby Wallace, of the King's Royal Rifles, has invented and patented in England and on the Continent a spade to meet the requirements of the authorities—first, that it shall render men independent of any ground; secondly, that it shall cut roots; thirdly, that it shall be able to lever up stones; fourthly, that it shall be useful in camp life, and, if necessary, be capable of breaking open boxes of ammunition or provisions; fifthly, that it shall be able to loop-hole a wall; and, sixthly, that it shall combine lightness and durability. The tool may be described generally as a small pick-head, about seven inches long, formed by steel armoring which surrounds a wooden crutch-head, and is securely fastened by rivets and screws both to the crutch and to the handle, which are of ash. One end is a pick, the other a grubber, both of solid steel. The blade is of peculiar shape, flat at the bottom for cutting purposes, and hollow in the upper portion. A protection guards the knuckles and forms a fulcrum when the tool is being used as a lever. The length over all is twenty-three inches, and the weight is only two and a quarter pounds. The tool is also specially useful for military mining purposes when men have to work with spade and pick in confined spaces; and it would be a very formidable weapon of defence at close quarters.

Electric Clocks.

All the clocks in the waiting-rooms at the Broad Street Station, Philadelphia, of the Pennsylvania Railroad are run by electricity and register the standard time of the company. There are eleven of these clocks at the station and each is connected with a standard Howard regulator, whose long pendulum, as it swings with measured stroke, breaks the electric circuit every second and makes the hands on the eleven dials move ever so slightly. This standard clock is finely adjusted to overcome the jarring about the depot and keep uniform time in hot or cold, wet or dry weather. It is regulated every day by the standard time of the company, which is sent over the road at 4 o'clock P. M. from the observatory at Allegheny City. It has not shown a total variation of ten seconds since it has been running. All the com-

pany's electric clocks are under the care of Cook & Jacques, of Trenton, N. J. Every Monday the clocks at the different stations in Philadelphia and Camden are examined, and any variations from standard time corrected.

A Whistle to be Heard Fifty Miles.

THE Eaton, Cole & Burnham Company, of Bridgeport, Conn., have constructed the largest steam whistle ever made, and recently placed it on exhibition at their office, No. 58 John street, this city. It is a brass whistle, and has a diameter of 20 inches. The bell is 27 inches long, while the whole whistle is four feet and nine inches in length and weighs 400 pounds. This monstrous tooter—which looked, as it lay in repose in its huge packing-box, more like the cylinder of a steam-engine than a whistle—will require a boiler of 150-horse power, having a pressure of 150 pounds of steam, to blow it. When it is once started its mellow notes may not be entirely linked sweetness, but what sweetness there is will be long drawn out—to a distance of fifty miles, in fact. This thing of brass which will blow so long and loud, the makers assure the public of New York and its vicinity, will not be placed over their John st. office to call their men to work in the factory at Bridgeport. Nervous people hereabouts, they say, may therefore be calm and confine their attention to abolishing church bells, whose sound is mere tinkling compared to the blast of their trump of doom, as it will no doubt seem to be to many a luckless wight in the Canadian pineries, whither it is going. For Canada—a large part of it at least—is to hear the stentorian tones of this brazen-throated monster several times a day. It will sound from the roof of a saw-mill and will wake the echoes of four counties, terrifying women and children, and clearing the region of wolves, bears and catamounts.

Redemption of Bonds.

THE Secretary of the Treasury at Washington issued, on the 27th ult., the 114th call for the redemption of continued six per cent bonds of the loan of March 3, 1863, in which notice is given that the principal and accrued interest of the bonds herein-below designated will be paid at the Treasury of the United States, in the City of Washington, D. C., on the 1st day of August, 1882, and that the interest on said bonds will cease on that day, viz.:

Registered bonds of the act of March 3, 1863, continued during the pleasure of the Government under the terms of Circular No. 42, dated April 11, 1881, to bear interest at the rate of 3½ per centum per annum, from July 1, 1881, as follows: $50—No. 748 to No. 800, both inclusive; $100—No. 5,238 to No. 5,500, both inclusive; $500—No. 3,360 to No. 3,600, both inclusive; $1,000—No. 17,157 to No. 19,000, both inclusive; $5,000—No. 6,075 to No. 6,400, both inclusive; $10,000—No. 10,441 to No. 12,500, both inclusive. Total, $15,000,000.

Many of the bonds originally included in the above numbers have been transferred and cancelled, leaving outstanding the amount above stated. The six months' interest due July 1, 1882, on the above described bonds, will be paid, as heretofore, by checks sent to the address of the payees, and the interest from that date to August 1, 1882, will be paid with the principal when the bonds are redeemed.

Bonds forwarded for redemption should be addressed to the "Secretary of the Treasury, Division of Loans, etc., Washington, D. C.," and all the bonds called by this circular should be assigned to the "Secretary of the Treasury for redemption." Where checks in payment are desired in favor of any one but the payee, the bonds should be assigned to the "Secretary of the Treasury for redemption for account of——" (here insert the name of the person or persons to whose order the check should be made payable).

A City of Great Wealth.

Frankfort-on-the-Main, containing a population of about 100,000, is said to be the richest city of its size in the world. If its wealth were equally divided among the inhabitants, every man, woman and child would have, it is said, 20,000 marks or some $4,000 apiece. There are, as may be supposed, many poor people in the town, but the citizens are, as a whole, in unusually comfortable circumstances—more so, probably, than the citizens of any other capital in Germany or Europe. It is stated there are 100 Frankforters worth from $4,000,000 to $7,000,000 each, and 250 who are worth $3,000,000 and upwards. The city is one of the great banking centres of the globe. Its aggregate banking capital is estimated at $2,000,000,000, more than one-fourth of which the famous Rothschilds—whose original and parent house is there—own and control. The annual transactions in bills of exchange are in excess of $100,000,000.

How Lost Cars are Traced.

Travelers up and down any line of railway see daily hundreds of fugitive freight cars extending in broken lines along the side tracks and reaching many miles out of the city. They belong to a hundred different railway companies, each bearing the initials of the proprietary road; and in the general office of the company, whether it be in New York, Pittsburgh or San Francisco, there are records that show just where the car is standing and why it is there. For instance, if the car is detained an unwarranted length of time at Germantown Junction, the Pennsylvania Railway receives a "searcher," either by telegraph or train service, asking why the car is not sent home. In this way a great railway stretching half way across the continent, and with its rolling-stock scattered over every State in the Union, keeps an account of its stock, numbering in the case of the Pennsylvania Railway more than 30,000 freight cars of all kinds. Occasionally one of the number is lost altogether, and the complicated railway detective service is set at work. The last clue to its whereabouts is traced out, and in time the lost car is found somewhere between Texas and Montreal. As soon as a car is unloaded it should be started back to the road from which it came, but in New England they turn it over as the common property of the road, and it is run back and forth, carrying local freight. It is not an uncommon thing when a car is loaded and sent to an eastern point that it is not again heard from for three or four months. In the meantime there are more than a hundred clerks employed on the car accounts, and week after week searchers are sent out for the missing car. A fair idea of the magnitude of these accounts may be had from the fact that the entire movement over the Pennsylvania railway exceeds over 40,000 per day. Lost freight cars, which were formerly hunted by traveling agents, are now traced by "searchers"—official documents, which contain the number and description of the lost car, and the date at which it was last seen on the Pennsylvania road. These documents are forwarded in the wake of the car, receiving many official signatures on the way, and finally overtake an agent who has the car in charge. —*Philadelphia Press.*

A LETTER from Rome announces that a priest of Ravenna, named Ravaglia, has constructed an electrical apparatus which can be set in operation by simply pressing a button, and by which the doors of a large building can be instantaneously opened. The apparatus was tried during the last week of April at the Alighieri Theater, in Ravenna, with the most satisfactory result. All the nine doors opened simultaneously, as if through some spiritual agency. The inventor hopes to improve his apparatus so that should a fire break out on the stage of a theater the rise in temperature would itself set the machinery in motion.

THE largest desert is that of Sahara, a vast region of Northern Africa, extending from the Atlantic Ocean on the west to the valley of the Nile on the east. The length from east to west is about 3,000 miles, its average breadth about 900 miles, its area 2,000,000 square miles. The town of Timbucto, about eight miles from the Niger River, is surrounded by desert, but at a distance of a few days' journey to the northeast and north are the oases of Mabrook and Arawan. Rain falls in torrents in the Sahara at intervals of five, ten and twenty years. In summer the heat during the day is excessive, but the nights are often cold. In winter the temperature is sometimes below freezing point.

MAGNETIC PROPERTIES OF STEEL AND IRON.—Many investigations upon the relation between the molecular conditions of iron and steel produced by heat, by torsion, and by annealing processes, and the resulting changes in magnetic conditions, have been made. It appears from the paper of Louis M. Cheesman that the effect of mechanical hardening has not been properly investigated, and this paper contains the results of his investigation upon this point. The method of research consisted simply in determining the magnetic moment of the magnetic bar after it had been subjected to well devised mechanical pressures. The result of his investigations is summed up as follows: Iron in a mechanically hard condition can receive more permanent magnetism than in a soft condition. The magnetic moment of a steel magnet in a mechanically hard condition is greater or smaller than in a soft condition according as the ratio of its diameter to its length is less or greater than a certain limit.—*Ann. der Physik und Chemie.*

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CHAS. T. VALENTINE, *Secretary.*

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COMMERCE AND THE TARIFF

AS is well known, Congress has adopted the resolution for the appointment of a Commission to revise the Tariff of Customs duties upon imports, the selection of members being left with the President, and speculation is rife as to the composition of the Commission. EDWARD ATKINSON and DAVID A. WELLS are mentioned as the eastern representatives, ex-Secretary of the Interior KIRKWOOD it appears is ineligible as the western member, and opinion has not settled upon the southern member. No doubt a commission of fair ability will be found, and the result will be a recommendation to amend the existing scale of imports in several respects—which is a step in real progress.

It is not necessary that we should be an apologist for the present tariff to be a friend of the principle of protection to American industry. The Morrill tariff was the outgrowth of war times, and was at best only a rough approximate settlement between conflicting interests. It is full of gross inequalities and inequities; but under it American manufactures have, on the whole, prospered. Compared with the German tariff, which has been again and again changed to meet emergencies, it is nearly perfection.

In many particulars the present tariff has been outmarched by the course of events; in others it is a concession to demagoguery. For example, the virtual removal of the duty from tea and coffee under the cry of a "free breakfast table" relieved two of our chief articles of consumption from the impost, which was a senseless sacrifice of national resources. These two articles are not in any sense necessities; they are things which have come into fashion within the memory of men now living; they are not food, but as agreeable and not very dangerous stimulants have grown into use so common as to be regarded as commodities. By the same reasoning all duties might be removed fro a sugar, pepper and spices. But to be consistent our legislators should go further, and, on the principle of conciliating the wishes of the majority, furnish tobacco, spirits, beer and beef to the people at cost. In the days of the Roman Republic the competing factions so outbid each other for popular favor that breadstuffs were furnished to the people of Rome at a loss to the public Treasury. This is the drift of things to-day and here. As an illustration we may refer to the carriage of four-pound packages of merchandise through the mails, which is not only a loss to the Government but is a gross outrage upon the rights of railroad owners and express companies.

The growth of our metallic industries furnishes another example of the obsoleteness of our tariff, when a duty of 1¼ cents per pound was laid upon steel rails, and of 1 cent upon iron rails, the former were selling at about one hundred dollars per ton, and the duty represented about 28 per cent. Iron rails were from sixty to seventy dollars per ton. Since then the progress of the mechanic arts has enabled us to convert the pig iron directly into steel, and by this and other less important improvements the price of steel rails has been reduced to fifty dollars per ton in this country, and to about half that in England and Germany. The specific duty has become an onerous charge, and it is time it was removed. Ten dollars a ton is high enough to insure our own rolling mills against the force of outside competition. The mills and furnaces in this country are at present adequate to furnishing the natural demands for rails; but not enough to supply the extraordinary demands of a period of active railroad building like the past two years. A premium of 20 per cent to American iron masters ought to be sufficient margin of protection.

The free traders continually remind us that the decadence of our foreign commerce is due to the high tariff, and are never weary of drawing the contrast between English foreign trade and American. Besides the fallacies of the argument, consisting in drawing parallels between an old and stable community and a new and unstable one, the free traders overlook the fact that England is a little island, a great part of whose supplies, whether of raw material or food, must be derived from other countries. Her interchange of goods within her own borders resembles the retail trade in our cities. Much of the transportation, which in England is done by ships, and so appears in her Custom House returns, is in America done by railroad. Should we draw a comparison between the number of locomotives and tonnage capacity of cars in the two countries, it would be a not unfair offset to the talk about England's vessel tonnage. England is perforce obliged to use vessels, and she produces them and uses them, as she mines coal, with cheap labor and cheap capital, but by the sacrifice of hundreds of human lives per annum.

There is another element of the cost of English products that does not appear on the surface. On the 1st of January, 1881, there were in receipt of "poor relief," drawn from taxation, 803,126 persons in England, 98,608 in Scotland, and 109,655 in Ireland. Human life and human labor are so cheap in the British Isles that the manufacturers are able to undersell other nations. It is a Government of and for property pre-eminently; whereas it is the aim of the United States Government not merely to buy cheap and sell dear, but also to protect life and liberty, and promote the general happiness. The bookish logic of the free trade advocates, who lately held their annual dinner at Delmonico's, ignores such immaterial calculations as these. They are not reducible to figures. In other words, the world the young American is born in is not quite as endless and hopeless a condition of slavery to toil as that of the average Briton—a part of this difference at least is reflected by and due to the contemplation of a tariff law incidentally protective in its operation.

JUDGE PRATT has appointed James W. Smith Receiver of the New York and Sea Beach Railroad.

SHORT EXCURSION TRAVEL OF THE FUTURE.

THERE are within a radius of ten miles of the New York City Hall not less than two millions and a half of inhabitants. The census of 1880 gives to New York, Brooklyn, Jersey City and Newark together 2,030,467 of this total. If a radius of fifty miles were taken, within which area New York virtually spreads itself to work or sleep, the full three millions might be counted. In the course of a generation New York and its environs will outrank London, and nothing in the future of human affairs seems more certain than that the overshadowing metropolis of American is to dwarf the capitals or commercial cities of all other continents. Whether this drift of such a mass of humanity together is a wholesome tendency or not is not now under consideration; but by means of the railroad, telegraph and steamship it is much more practicable now than at any former period of the world's history. The supply of water, fuel, shelter, food, clothing, and the various requirements of social and industrial occupation, keep pace with the fresh occasions. Along with the aggregation of numbers comes the aggregation of wealth. Already it is conspicuous for the very rich and very poor, there being more millionaires in New York than in London, but not near so many paupers. Nowhere else are the masses so well fed, well housed, well clad or comfortable, and, it might be added, so well provided with sanitary and educational surroundings.

It is a fortunate circumstance, also, that besides being a city by the sea, New York is a city by the mountains. The full value of this site only now begins to be appreciated. All along the Long Island and New Jersey shores for fifty miles seaside resorts are springing up, which draw and will continue to draw for half the year not merely the dwellers in the crowded city but the residents of the western prairies and forests. Less is said at the moment about the unusually attractive Catskill region, which is equally accessible and far more inviting. The Long Branch or Coney Island caravansaries are places to see—for an hour; not places to stay—especially for families. The same may be said of Saratoga and Cape May—they are places for the swell mob; too crowded for comfort.

In Ulster, Orange, Rockland and Sullivan counties of this State, between the Hudson River and the line of the New York, Lake Erie and Western Railroad are a thousand pretty rural villages and towns, close by brook, waterfall or mountain view, where numerous summer tourists may find that change and diversity which is the charm of country recreation. In the future this class of short-trip travel must assume dimensions surpassing the present accommodations as far as the Brighton Beach surpasses the Coney Island of old. The hill country has a perpetual attraction for the city family, and the great unapproachable advantage of good water, pure milk, fresh fruits, and cheap board—without the jostling of selfish or unruly crowds.

To the administration of the New York, Lake Erie and Western Railroad Company belongs the credit of discerning the great possibilities of this nearby excursion traffic. Already this picturesque region is traversed by nine separate branches, or spurs, all made readily accessible by means of a "Short Cut" to the city. The business of entertaining city guests is popularized, not only among the numerous hotels, but by private families and farm-houses. The business man will be able to send his family to the country and visit them by a two hours' ride by rail daily or weekly. In the time to come a quarter of a million of people will be whirled out of the city every summer-week for this alternation of country with city life. The illustrated guide books the railroad companies are now circulating are sowing the seed and preparing the way for a mighty movement of population to and fro which will be as natural and regular as the recurrence of the seasons.

The Financial Status of the Philadelphia and Reading R. R. Co.

MR. WILLIAM ABBOTT, of London, on behalf of many of his clients who are largely interested in the securities of the Philadelphia and Reading Railroad Company, addressed a letter under date of May 25th to Mr. Franklin B. Gowan, President of that company, then in London, asking whether there be any truth in the rumor which had been industriously circulated that a strike of miners had taken place in Pennsylvania, which would have a very serious effect on the property of the company; also, whether anything had happened to justify the fall in the quotation for the deferred income bonds, about which adverse rumors had prevailed, etc.; to which Mr. Gowen is reported to have replied under same date as follows:—

"I have to say that there is nothing whatever, either in the traffic returns or the financial condition and prospects of the company, to warrant a fall in the price of the deferred income bonds or any other of its securities. The net earnings are fully up to my expectations. The gain for five months is $363,486, of which $128,263 was made in April. I expect an increase of $1,000,000 in the year, or net earnings of $11,000,000, against $10,051,888 last year, and see no reason to doubt the correctness of the prediction I made at the Cannon street meeting on the 23d ult., that by July 1 the company would be prepared to resume full payment on all its obligations and to terminate the receivership. The threatened strike in the iron districts of Pennsylvania is in the coke and not in the anthracite region. I have no knowledge of it except what I gather from the newspapers; and while I do not give much credence to the report, I can say that if the rumor is well founded the Reading Railroad Company, which supplies the anthracite iron district, would be as great a gainer from the stoppage of the coke iron manufacture as the British iron masters would be if a strike prevented the production of iron in Belgium.

"Mr. Vanderbilt informed me yesterday that the new line he is constructing to connect the New York Central and Reading systems will be completed in December.

"Mr. Garrett, of the Baltimore and Ohio Railroad Company, designs connecting his system with our own and has only been waiting the termination of the legal contest about the control of the Central Railroad of New Jersey, which was decided on Monday last by a decree of the Chancellor of New Jersey in our favor. The new line from Harrisburg to Pittsburgh, a part of which is now under construction, may be expected to be finished within two years. I estimate the increase of net earnings from these new avenues of traffic to be equal to 5 per cent upon the share capital of the company; but, irrespective of these new sources of revenue, I confidently expect the company to earn a dividend upon its common shares this year, and a further dividend upon the deferred income bonds in 1883."

ORGANIZATION.

THE directors of the Concord Railroad Company, elected on the 30th ult., are: Frederick Smyth, Samuel N. Bell, J. Thomas Vose, Benjamin A. Kimball, Francis B. Hay, Henry C. Sherburne, James W. Johnson.

AT the annual meeting of the Illinois Central Railroad Co., held in Chicago on the 31st ult., W. H. Gebbard, A. R. Van Nest, John Elliott and Sidney Webster, all of New York, were elected directors to serve until May, 1885.

THE directors of the Pacific Mail Steamship Co., elected on the 31st ult., are: J. B. Houston, Jay Gould, Trenor W. Park, Sydney Dillon, Russell Sage, C. P. Huntington, E. H. Perkins, Jr., Henry Hart and Edward Dauterbach.

THE directors of the Boston, Concord and Montreal Railroad Company elected at a meeting of the stockholders held in Plymouth, N. H., on the 30th ult., are: J. T. Vose, J. P. Pitman, Peter Butler, D. N. Bell, J. A. Dodge, J. P. Spaulding and W. F. Daniel.

THE directors of the Mutual Union Telegraph Co., elected on the 29th ult., are: John G. Moore, George F. Baker, George William Ballou, Harris G. Fahnestock, Charles S. Peck, George H. Holt, George C. Haven, Jay Gould, George J. Gould, George S. Scott and Russell Sage.

THE directors of the United Railroad and Canal Companies of New Jersey, elected on the 30th ult., are: John Jacob Astor, John C. Barron, Jos. D. Bedle, Wm. Bucknell, A. L. Dennis, Charles E. Green, Robt. Lenox Kennedy, Thos. McKean, John G. Stevens, R. F. Stockton, Ashbel Welch, Samuel Welsh.

AT the recent annual meeting of the Columbus and Maysville Railroad held at Hillsboro, O., C. S. Bell, J. H. Richards, D. F. Scott, J. H. Tolly, W. R. Smith, F. J. Picard and R. T. Hough were chosen directors. The board re-elected Hon. C. S. Bell, president; Colonel F. J. Picard, general superintendent and chief engineer; ex-governor Alphonso Hart, attorney.

AT the annual meeting of the Suncook Valley Railroad Co., held in Manchester, N. H., on the 27th ult., the following-named directors were chosen: Samuel N. Bell, Manchester; Natt Head, Hookset; Reuben L. French, Pittsfield; Frederick Smyth, Manchester; Charles H. Carpenter, Chichester; Lemuel B. Tower, Epsom; M. V. B. Edgerly, Manchester. The board or-

ganized by the choice of Samuel N. Bell, president; B. P. Cilley, clerk. Voted, to adopt the act of the Legislature passed last session extending the time for the construction of the road to Hookset.

At the annual meeting of the Baltimore and Hanover Railroad Co. at Hampstead, Md., on the 25th ult., the following board of directors was elected: A. W. Eichelberger, L. F. Melsheimer and S. Keefer, of Hanover, Pa.; Charles W. Slagle and W. H. Vickery, of Baltimore City; Wm. J. Hoffman, of Baltimore county, and C. C. Wooden, of Carroll county. Capt. A. W. Eichelberger was re-elected president.

The directors of the Manchester and Lawrence Railroad Co., recently elected, are: Benjamin F. Martin, Edward A. Abbott, Joseph W. Smith, Nathan Parker, William A. Tower, Asa Fowler and John A. White. The board was organized by the choice of Benjamin F. Martin of Manchester as president, and Samuel N. Bell of Manchester as clerk. G. Byron Chandler, treasurer, holds over from last year.

At the recent annual meeting of the stockholders of the Peterboro' Railroad Co., the following directors were elected: James Scott of Peterboro' president, Thomas B. Eaton, George A. Ramsdell, John H. George, Edward Spalding and Frank A. McKear. The road is leased to the Boston and Lowell Railroad Co., and the report of the treasurer, John G. Kimball, showed that the rental is promptly paid and the affairs of the corporation are in a satisfactory condition.

At the annual meeting of the stockholders of the Nashua and Rochester Railroad Company, held in Nashua, N. H., on the 27th ult. the following gentlemen were elected directors: Francis H. Kinnicutt, J. C. Eastman, Francis H. Dewey, E. B. Stoddard, Chas. W. Smith, Chas. S. Turner, Aaron W. Sawyer, R. H. Dunlap, Benjamin Fletcher, Jr., Joseph C. Burley, Edwin Wallace, B. W. Hoyt, N. J. Pillsbury. Subsequently the board organized by electing F. H. Kinnicutt of Worcester, Mass., president, and Aaron F. Stevens clerk.

The Columbus and Cincinnati Railroad Company was organized on the 22d ult. by the election of the following board of directors: Daniel McLean, George Melvin, C. H. Brownell, Miles Gardner and J. D. Stuckey, all of Washington, C. H., Ohio. The board elected George Melvin, president; Manfred Williard, secretary; and R. D. Robinson, treasurer. The road is to run from Columbus to a point on the Marietta and Cincinnati Railway between New Lexington and Clinton Valley, a distance of sixty miles. The capital stock is two million dollars.

At the thirty-seventh annual meeting of the stockholders of the Northern Railroad Co. of New Hampshire the annual report of the directors was presented, adopted and placed on file. A ballot for directors resulted in the choice of the following gentlemen: Henry C. Sherburne, of Concord, George W. Nesmith, of Franklin; Uriel Crocker, of Boston; Francis B. Hayes, of Boston; Josiah H. Benton, of Boston; George E. Todd, of Concord; and Alvah W. Sulloway, of Franklin. The act of the Legislature authorizing the union of the Northern and the Concord and Claremont railroads was accepted, and the directors were authorized to arrange the terms, conditions and guarantee of such union.

Three of the largest manufacturing companies in Taunton, Mass., held their annual meetings on the 29th ult., and each declared a 10 per cent dividend, disbursing among stockholders over $100,000. The following officers were elected: Taunton Copper Manufacturing Company—President, Charles R. Vickery; treasurer, S. L. Crocker; directors, Charles R. Vickery, S. L. Crocker, Edmund L. Baylies and E. S. Tisdale. Old Colony Iron Company—President, S. L. Crocker; treasurer and Agent, O. A. Washburn, Jr.; clerk, Charles T. Robinson; directors, S. L. Crocker, Nahum Stetson, Chas. T. Robinson, Enoch Robinson and O. A. Washburn, Jr. Taunton Locomotive Manufacturing Company—President, S. L. Crocker; agent, treasurer and superintendent, P. I. Perrin; directors, S. L. Crocker, Nahum Stetson, P. I. Perrin, Harrison Tweed and Enoch Robinson.

PERSONAL.

Fred. L. Parker has been appointed General Freight and Passenger Agent of the Mexican Central Railroad.

W. W. Hungerford has been appointed General Manager of the Connotton Valley Railroad, with headquarters at Canton, Ohio.

T. S. Bullock has been appointed General Southern Agent of the Mobile and Ohio Railroad, with headquarters in Mobile, Ala.

John B. Mumford has been appointed General Superintendent of the Sabine and East Texas Railroad, with office at Beaumont, Texas.

Colonel Thomas R. Sharp has been re-elected president of the Danville, Macksville and Southwestern Railroad Company, in North Carolina.

F. S. Urie, formerly Treasurer, has been appointed Superintendent of the Philadelphia and Atlantic City Narrow Gauge Railroad, vice Ellis Clark, resigned.

Charles J. Werner, of New York, has been chosen Secretary and Treasurer of the Washington and Western Railroad Company, now owning the late Washington and Ohio Railroad.

Capt. John C. Dudrow, the "lightning bridge builder" and "quick trestle constructor," of Baltimore, foreman of the hands that were employed on the Richmond end of the Petersburg trestle of the new railroad bridge recently completed at Richmond, Va., was presented with a handsome silver watch and chain on the 27th ult., by his employes in that city.

R. W. Johnston, postmaster of the City District of London, England, in a recent lecture stated that 50,000 miles of wire in 1870 had increased to considerably more that 100,000 in 1882; 2,200 instruments worked by all the companies have increased to nearly 9,000 worked by the post office; and 2,500 telegraph offices under the old system have increased to more than 5,500 under the new. Four thousand persons of all classes employed by the companies have increased to nearly 12,000 employed by the post office, and of these about 1,600 are women.

CORRESPONDENCE.

[We pay no attention to communications unless the name and address of the writer are given, though the same will not be published if so requested. We assume no responsibility for statements made by correspondents, and we do not necessarily endorse ideas advanced by them. Under these conditions we think it of value to our readers to devote a liberal space to the free discussion by others—whose opinions may be at variance with our own—of subjects pertinent to our department of journalism.]

[For the American Railroad Journal.]

Heating and Lighting Railroad Cars.

The season of railroad barbecues is over, the annual sacrifice of baked and roasted victims has been offered up, and the American public, with characteristic indifference, has laid the whole subject on the table. Next winter millions of travelers will allow themselves to be whirled over the country, sandwiched between a couple of red-hot stoves ready to scatter death and destruction on the very possible contingency arising of the breaking of a rail, wheel, or axle, the mistake of a telegraph operator, or the blunder of a brakeman. When such a disaster happens, as happen it certainly will, there will be the usual spasmodic chattering from the magpies of the press, until what remains of the victims have been decently buried out of sight, when the whole horde will relapse into silence.

It would seem that now is the proper time to agitate the subject and endeavor to solve the problem, before "the evil days come" when another such dire calamity as that which sacrificed Senator Wagner and so many others will send a thrill of horror thorough the country. Much has been said and written on the subject, but we seem no nearer its solution than before. It may as well be taken for granted at once that all such European devices as chemical soda stoves, hot-water apparatus of all kinds, renewed at intervals, railway rugs, etc. are totally unable to contend against the severity of our winters in the Northern States, and even on Southern lines would never meet the exacting demands of the American public. We are accustomed to keep our houses, not warm, but hot, and no other temperature in the cars will suit our fastidious tastes. The chilly discomfort of English and Continental railway "coaches" in winter, would raise howls of indignation from a train-load of average Yankees and make it exceedingly lively for the conductor and brakeman.

On the other hand, it may also be taken for granted that no form of apparatus containing live coals on board the passenger car itself can ever be made to answer the purpose consistent with safety. No matter how admirably it may be seemingly planned with reservoirs of water, carbonic acid gas, and other devices to put out the fire in case of accident, the very first collision would knock the most beautiful theory into a "cocked hat" and scatter the burning coals among the unfortunate passengers. These premises being admitted, it will be necessary to look for plans depending upon sources of heat apart from the cars containing the passengers. The use of any portion of the baggage or mail cars for such a purpose is not to be

thought of; not only because there is generally but little room to spare. but also on account of the danger of destruction to their contents in the event of an accident.

We are thus limited to two possible sources of supply—the locomotive itself or the employment of an iron fire-proof car especially constructed to supply light and heat to the entire train. As for the first method, various plans have been suggested to employ the exhaust steam from the engine, but so far without success.

The causes of failure are generally understood to be the necessity, when a locomotive is under full headway, for a very free and rapid escape of the steam from the cylinders, which it cannot obtain if compelled to pass through a long series of pipes, such as is adapted for heating purposes. In fact a very appreciable amount of force is required to do so, detracting just so much from the speed and efficiency of the engine, especially at high velocities. Moreover, the steam, as it issues forcibly from the cylinders, is made to answer the indispensable purpose of a steam-chest to the furnace fires—a happy thought of Stephenson's—without which the modern locomotive would be impossible.

It does seem as if the ingenuity of the age might overcome these difficulties, and thus turn to account for heating purposes the vast amount of heat in the shape of steam and hot gases from the furnace, escaping through the funnel of a locomotive at every puff, and wastefully dissipated in the air. If the only obstacles are those mentioned, the writer can see no difficulty in devising a plan which would not only sufficiently warm the cars from these sources, but also place at the head of our passenger trains an apparently smokeless and steamless locomotive, thus contributing materially to the comfort and enjoyment of the travelers. The plan contemplated would also, instead of retarding, actually augment the draft of the furnace. It would be well, in order to direct the efforts of inventors, for some one thoroughly conversant with the subject in all its bearings, to state the obstacles to be overcome, the precise causes of previous failures, and the conditions to be met.

The second method mentioned, should the first prove impracticable, is one that seems entirely feasible, viz.: the use of a separate fire-proof car on every passenger train, especially constructed to provide light and heat for the entire train.

But little need be said in regard to the mode of lighting cars in the immediate future. The successful introduction of the electric light on a French railway train has settled that question in a very satisfactory way. In that case the dynamo-electric generator is attached to the engine. In the plan above suggested, the "heat and light car" would contain a set of boilers to supply the steam-heating radiators of the whole train, and also to drive dynamo machines of sufficient power to furnish abundant light to every car, including of course the baggage and mail cars; and also to provide a powerful head-light for the locomotive. If thought best, the new method of storing electricity, by means of the Faure accumulator, might be employed, and the dynamo machines dispensed with.

There does not appear to be any valid reason why steam-heating apparatus, arranged in the way proposed, cannot be as successfully employed in heating a train of cars adequately, as in the case of large dwelling-houses, school-houses, factories, etc. The amount of coal required to run two stoves in each car would be much more than sufficient to operate such a system; a more equable temperature could be maintained; the offensive gases so often emanating from the stoves in use at present avoided; the large amount of space occupied by them utilized; but, above all, the fearful danger which every traveler in winter runs of being first trussed and spitted, and then roasted whole, would be entirely avoided. Even if such a system was somewhat costlier, the burning of a car or two, and the damages paid to the survivors, would much more than balance the account. Moreover, it is easy to be seen that the first railroad offering immunity from such a horrible possibility will obtain the precedence over all rivals.

WILLIAM C. SCHULTZE, M. D.

MARENGO, Iowa, May 26, 1882.

[For the AMERICAN RAILROAD JOURNAL.]

Railroad Surgical and Medical Service.

I HAVE read with great interest the communication of Dr. Schultze in your issue of May 20 on "Railroad Surgical Departments," and fully concur in his views upon the value of the service to sufferers from railroad accidents, and upon its expediency to the companies, as a matter of policy quite apart from benevolence. But a railroad service, once organized, could readily be extended so as to include other objects more beneficial to employes than relief in case of accident. One of these is medical attendance in case of ordinary sickness occurring in the line of duty; and this feature is now in successful operation on the Central Pacific and Baltimore and Ohio railroads. The former company has erected a hospital at Sacramento costing $64,000, where all the employes of the road may have attendance for surgical injuries and ordinary sickness contracted while in the discharge of duty. Fifty cents a month are reserved from the pay of every employe, and thus a fund is raised sufficient to meet current expenses and pay interest on the cost of the hospital.

The employes of the Baltimore and Ohio Railroad Company have organized a Relief Association, under the auspices of the company, which began by contributing $100,000 as a foundation. The members contribute monthly from one to five dollars each, according to the amount of their monthly pay, and are entitled to a daily cash allowance, varying from 50 cts. to $2.50, for the time of actual disablement for duty. Their families or representatives are also entitled to an allowance of $500 to $2,500, at their death, according to the class of contributors to which they belonged. The salaries of the secretary, medical inspectors, and clerk are paid by the company, and the beneficiaries are at no expense for the management of their association. During the first eight months, ending Dec. 31, 1880, the receipts (including

The annual reports of both these schemes show that their working has been satisfactory to the officers of the roads and to the employes. There can be no question that an organized service will conduce greatly to the welfare of the contributors, will save the company much expense and annoyance in the shape of law-suits, and will promote community of interest and friendly feeling between employers and employes. If such a service had been in operation upon a large number of the leading roads five years ago, they might have been spared the damage and the public the inconvenience and disgrace of the great railroad strikes of 1877. It thus appears that these two companies have taken an important step beyond the simple surgical relief service of the two companies mentioned by Dr. Schultze. I could also show that other companies have gone further still, in recognition of the principle that prevention of accidents is no less important and practicable than relief for their consequences; but this must be reserved for a future communication.

S. S. H.

New Orleans, May 25, 1882.

Philadelphia and Erie Railroad.

THE Philadelphia and Erie Railroad Company makes the following exhibit of business for the month of April, 1882:

Gross earnings	$277,850 69
Gross expenses	188,061 74
Net earnings	$89,788 95
Net earnings, 1881	104,784 84
Decrease	$14,995 89
Net earnings four months of 1882	$317,423 64
Net earnings four months of 1881	338,354 63
Decrease	$20,930 99

THE *Baltimore Journal of Commerce and Manufacturers' Record*, with its issue of May 27, 1882, completed the thirty-second year of its existence. It is edited by R. H. EDMOND, Esq.

Northern Central Railway.

THE Northern Central Railway Company furnishes the following comparative statement of its gross earnings and operating expenses for the month of April :—

	1882.	1881.
Gross earnings	$435,129 03	$487,272 85
Operating expenses	268,363 64	267,273 00
Extraordinary expenses	4,084 06	2,168 09
Total expenses	$272,447 70	$269,441 09
Net earnings	$162,681 33	$217,831 76

For four months ended April 30 :—

	1882.	1881.
Gross earnings	$1,686,241 95	$1,708,992 55
Operating expenses	1,056,332 03	1,011,429 02
Extraordinary expenses	119,943 70	9,027 11
Total expenses	$1,176,275 82	$1,020,456 13
Net earnings	$509,966 13	$688,536 42

A LAW was passed by the Legislature of Massachusetts, on the 1st of May, providing that after incorporation a railroad company must apply to the Board of Railroad Commissioners for a certification that public convenience and necessity require the construction of a road as proposed in the articles of association of such railway company. If the Commissioners assent, construction may proceed, but if they refuse a certificate the enterprise must be dropped, although it may be revived and the application renewed after one year from the date of refusal.

The Stock Exchanges and Money Market.

New York Stock Exchange.

Closing Prices for the week ending May 31.

	Th.25.	F.26.	Sat.27.	M.29.	Tu.30.	W.31.
Adams Express	.....	140	.....	.....	.....	.....
Albany and Susq	.....	....	.....	.....	.....	.....
1st mortgage	.....	.....	.....	.....	.....	.....
2d mortgage	.....	.....	.....	.....	.....	.....
American Express	96	96	97¼	.....	.....	.....
Burl., C. R. & Nor	.....	.....	75	.....	.....	.....
1st mortgage 5s	.....	.....	101¼	.....	.....	102
Canada Southern	48¾	49¾	49	.....	.....	.....
1st mortgage guar	.....	95	94¾	.....	.....	.....
Central of N. Jersey	70⅝	70⅜	71⅛	.....	.....	73¼
1st mort. 1890	.....	.....	.....	.....	.....	117¼
7s, consol. ass	.....	.....	110½	.....	.....	.....
7s, convertible ass	.....	.....	.....	.....	.....	.....
7s, Income	.....	.....	.....	.....	.....	.....
Adjustment	106½	107	....	.....	.....	.....
Central Pacific	89	89	89	.....	.....	90
6s, gold	117½	.....	.....	.....	.....	.....
1st M. (San Joaq)	.....	110	....	.....	.....	.....
1st M. (Cal. & Or.)	.....	.....	.....	.....	.....	.....
Land grant 6s	..	105½	...	.....	.....	.....
Chesapeake & Ohio	20½	.....	....	.....	.....	20⅜
1st pref	.....	29¾	28½	.....	.....	30
2d pref	23¼	.....	.....	.....	.....	.....
1st mort., series B	81	.....	.....	.....	.....	.....
Chicago and Alton	131¼	131	.....	.....	.....	.....
Preferred	.....	.....	.....	.....	.....	.....
1st mortgage	.....	.....	.....	.....	.....	.....
Sinking Fund	.....	.....	...	.....	.....	.....
Chi., Bur. & Quincy	130x	129¾	129¾	.....	.....	130¼
7s, Consol. 1903	.....	....	129⅛	.....	.....	.....
Chi., Mil. & St. Paul	110¾	110¼	110⅝	.....	.....	111⅝
Preferred	120	.....	.....	.....	.....	120⅛
1st mortgage, 8s	.....	.....	.....	.....	.....	....
2d mort., 7 3-10s	.....	.....	.....	.....	.....	.....
7s, gold	.....	.....	.....	.....	....	.....
1st M. (La. C. div)	.....	.....	.....	.....	.....	.....
1st M. I. & M. div.)	.....	.....	.....	.....	.....	....
1st. M. (I. & D. ext.)	121	.....	.....	.....	.....	.....
1st M. (H.&D. div.)	.....	.....	.....	.....	.....	.....
1st M. (C. & M. div.)	.....	.....	.....	.....	.....	.....
Consolidated S. F.	121½	.....	121½	.....	.....	.....
Chi. & Northwestern	129⅛	129¼	129½	.....	.....	130⅜
Preferred	143	.....	142¼	.....	.....	144
1st mortgage	.....	.....	.....	.....	.....	.....
Sinking Fund 6s	.....	.....	.....	.....	.....	.....
Consolidated 7s	.....	.....	.....	.....	.....	.....
Consol. Gold bo'ds	.....	.....	.....	.....	.....	.....
Do. reg	.....	.....	.....	.....	.....	.....
Chi., R. Isl. & Pac	.....	.....	129⅛	.....	.....	129¼
6s, 1917, c	.....	.....	.....	.....	.....	.....
Clev., Col., Cin. & Ind	.....	73	71½	.....	.....	71½
1st mortgage	.....	.....	.....	.....	.....	....
Clev. & Pittsburg gr	.....	.. ..	.....	.....	.....	137
7s, Consolidated	.....	.....	...	.....	.....	.....
4th mortgage	.....	.....	.....	.....	.....	.....
Col., Chi., & Ind. Cent	9	9	9	.....	.....	8⅝
1st mortgage	.....	.....	.....	.....	.....	.....
2d mortgage	.....	.....	.....	.....	.....	.....
Del. & Hud Canal	103½	103½	.....	.....	.....	104½
Reg. 7s, 1891	.....	.....	.....	.....	.....	..
Reg. 7s, 1884	.....	.....	.....	.....	.....	.....
7s, 1894	.....	.....	.....	.....	.....	116½
Del., Lack. & Western	119	118⅞	119	.....	.....	120½
2d mortgage 7s	.....	.....	.....	.....	.....	.....
7s, Consol. 1907	.....	...	.....	.....	.....	.....
Erie Railway	...	.....	.....	.....	.....	.....
1st mortgage	.....	.....	.....	.....	.....	.....
2d mort. 5s, ext	..	.....	.....	.....	.....	.....
3d mortgage	106	106	.....	.....	.....	105⅞
4th mort. 5s, ext	.....	.....	.....	.....	.....	.....
5th mortgage	.....	.....	.....	.....	.....	.....
7s, Consol. gold	.....	.....	126½	....	.....	.....
Great West. 1st mort	.....	106½	.....	...	.....	.....
2d mortgage	.....	.....	.....	.....	.....	99
Hannibal & St. Jo	.....	.....	.....	.....	.....	.....
Preferred	82¾	79½	.....	.....	.....	82
8s, Convertible	.....	107	.....	.....	.....	107
Houston & Tex. Cen	72	.....	.....	.....	.....	.....
1st mortgage	....	....	.....	.....	.....	.....
2d mortgage	.....	.....	.....	.....	.....	.....
Illinois Central	134¾	134¼	.....	.....	.....	135¼
LakeShore&MichSo	101⅞	101¼	101½	.....	.....	103¾
Consol. 7s	.....	.....	.....	.....	.....	.....
Consol. 7s, reg	.....	.....	.....	.....	.....	.....
2d Consolidated	.....	.....	.....	.....	.....	123
Leh. & W. B. con. ass	.....	103	.....	.....	.....	104
Long Dock bonds	.....	.....	.....	.....	.....	.....
Louisville & Nash	73½	73⅛	73¾	.....	.....	74⅝
7s, Consolidated	.....	117½	.....	.....	.....	117½
Manhattan	55½	55	55½	.....	.....	54⅞
1st pref	89¾	.....	.....	.....	.....	91⅛
Met. Elevated	85	88	.....	.....	.....	.....
1st mortgage	101¾	101½	101¾	.....	.....	.....
Michigan Central	85¼	84¾	85	.....	.....	87
7s, 1902	..	.....	.....	.....	.....	.....
Morris & Essex	124	...	.....	.....	.....	.....
1st mortgage	.....	.....	.....	.....	.....	.....
2d mortgage	...	116¾	.....	.....	.....	.....
7s of 1871	.....	.....	.....	.....	.....	.....
7s, Convertible	..	..	.....	.....	.....	.....
7s, Consolidated	125	125	.....	.....	.....	126
N. Y. Cen. & Hud. R	126¾	125⅞	126¼	.....	.....	128⅛
6s, S. F. 1883	101¾	.....	.....	.....	.....	101¾
6s, S. F., 1887	...	.....	.....	.....	.....	.....
1st mortgage	.....	134½	.....	.....	...	.....
1st mortgage, reg	.....	.....	.....	.....	.....	...
N. Y. Elevated	.....	101	.....	.....	.....	.....
1st mortgage	.....	118	.....	.....	...	.....
N. Y. & Harlem	.....	205	.....	.....	.....	.....
Preferred	.....	.....	.....	.....	.....	.....
1st mortgage	.....	.....	.....	.....	.....	.....
1st mortgage, reg	....	.....	.....	.....	...	.....
N. Y., Lake Erie & W	35⅛	34½	34¾	.....	.....	35⅝
Preferred	72½	72⅝	72¾	.....	.....	73
2d Consolidated	94⅜	95	94⅞	.	..	95¾
New 2d 5s fund	.....	...	.....	.....	.....	91⅝
N. Y., N. Hav'n & Hart	.....	.....	.....	....	.....	.....
North Mo. 1st mort	..	.....	.....	.....	.....	121
Northern Pacific	41¼	41	41⅜	.....	.....	42⅛
Preferred	79⅛	79⅛	79¼	.....	.....	80¼
Ohio & Mississippi	31¾	32⅛	31⅞	.....	.....	....
Preferred	100	.....	.....	.....	.....	.....
2d mortgage	...	.. ..	.....	....	.....	120¼
Consolidated 7s	.....	.....	.....	.....	.....	.....
Consol. S. Fund	.	..	.....	.....	.....	.....
Pacific Mail S. S. Co	41½	41⅜	41½	.....	.....	42
Pacific R. R. of Mo	.....	.....	.....	...	.....	....
1st mortgage	.....	.....	108	.....	.....	.....
2d mortgage	.....	.....	.....	.....	.....	.....
Panama	...	.....	.....	.....	.....	.....
Phila. & Reading	55⅛	55⅛	55⅛	.....	.....	56¼
Pitts, Ft. W. & Chi. gtd	135	.....	.....	.....	.....	134⅜
1st mortgage	.....	.....	.....	.....	.....	.....
2d mortgage	...	.....	.....	.....	.....	.....
3d mortgage	.....	.....	.....	.....	.....	.....
Pullman Palace Car	120	120½	120	.....	.....	120⅞
Quicksil'r Min'g Co	.....	8¾	.....	.....	.....	9
Preferred	.....	.....	.....	.....	.....	.....
St. Louis & San Fran	.....	.....	.....	.....	.....	.....
Preferred	.....	.....	40½	.....	.....	50¼
1st Preferred	86	86½	. ...	.....	.....	.....
St. L., Alt'n & T. H.	.....	23¾	24	.....	.....	26⅛
Preferred	.....	60	.....	.....	.....	63
1st mortgage	.....	.....	.....	.....	.....	.....
2d mort. pref	108½	.....	108½	.....	.....	108½
Income bonds	.....	....	.....	...	.....	.....
St. L., Iron Mt. & S	.....	.....	.....	.....	.....	.....
1st mortgage	.....	. ...	.....	.....	.....	.....
2d mortgage	.....	.....	.....	.....	.....	.....
Toledo and Wabash	....	.....	.....	.....	.....	.....
1st mortgage	.. ..	.....	.....	.....	.....	109½
2d mortgage	100	.....	.....	.....	.....	.....
7s, Consolidated	99	.....	.....	.....	.....	.....
St. Louis Division	.....	102½	.....	.....	.....	.....
Union Pacific	112	111⅞	112¼	.....	.....	113
1st mortgage	118¼	.....	118½	.....	.....	118
Land Grant 7s	.....	.....	113¼	.....	.....	113⅛
Sinking Fund 8s	.....	.....	.....	.....	.....	113½
United States Ex	.....	.....	.....	.....	.....	72
Wabash, St. L. & Pac	28¼	27¾	28⅜	.....	.....	29¼
Preferred	52¼	50⅜	51⅛	.....	.....	52⅞
New mort. 7s	.....	.....	.....	.....	.....	...
Wells-Fargo Ex	....	.....	.....	.....	.....	129½
Western Pacific b'ds	.....	.....	115⅛	.....	.....	.....
Western Union Tel	81⅝	81½	82¼	.....	.....	83⅞
7s., S.F conv., 1900	.....	.....	.....	.....	.....	.....

FEDERAL STOCKS:—

U. S. 4s, 1907, reg	123¾	.....	.....	.....	.....	....
U. S. 4s, 1907, coup	120¾	.....	120¾	.....	.....	.....
U. S. 4½s, 1891, reg	....	.....	.....	.....	.....	.....
U. S. 4½s, 1891, coup	115½	.....	. ...	.....	.....	.....
U. S. 5s, cont'd at 3½	.....	.....	.....	.....	...	101¼
U. S. 6s cont'd at 3½	.....	101¾	.....	.....	.....	.....
Dt. of Col. 3-65s, reg	.....	.....	.....	.....	.....	.....
Dt. of Col. 3-65s, coup	.....	.....	.....	.....	.....	.....

Boston Stock Exchange.

Closing Prices for the Week Ending May 31.

	Th.25.	F.26.	Sat.27.	M.29.	Tu.30.	W.31.
Atch., Top. & San. Fe	85⅛	85⅞	85¾	.....	.....	86½
1st mortgage	118¼	.....	118¼	.....	.....	.....
Land Grant 7s	114	.....	.....	.....	.....	.....
Boston & Albany	166¾	167	167	.....	.....	.....
Boston and Lowell	....	102½	....	.....	.....	.....
Boston & Maine	144	.....	143¾	.....	.....	144
Boston & Providence	.....	.....	.....	.....	.....	.....
Bos'n, Hart. & Erie 7s	....	.....	47½	...	.....	.....
Burl. & Mo. R. L. G. 7s	.....	.....	.....	.....	.....	.....
Burl. & Mo. R. in Neb	.....	.....	.....	.....	.....	.....
6s, exempt	....	.....	.....	.....	.....	.....
4s	.....	.....	.....	.....	.....	81¾
Chi., Burl. & Quincy	130x	130¼	129⅞	.....	.....	130½
Cin., Sand. & Clev ($50)	26½	26	.....	.....	.....	....
Concord ($50)	.....	98	.....	.....	.....	.....
Connecticut River	.....	.....	.....	.....	.....	.....
Eastern	.....	36	. ....	.....	.....	36
New 4½ Bonds	.....	.....	108½	.....	.....	.....
Fitchburg	.....	.....	.....	.....	.....	128½
N. Y. & New England	45	....	45¼	.....	.....	46
7s	114	114	114	.....	.....	114
Northern N. H	.....	.....	.....	.....	.....	108
Norwich & Worcester	.....	.....	.....	.....	.....	.....
Ogden & Lake Cham	.....	.....	.....	.....	.....	.....
Old Colony	133	.....	.....	.....	.....	.....
Ph., Wil. & Balt. ($50)	.....	.....	.....	.....	.....	.....
Portl'd, Saco & Ports	116	118	116	.....	.....	.....
Pueblo & Ark Val 7s	....	.....	.....	.....	.....	.....
Pullman Palace Car	122	120	.....	.....	.....	121
Union Pacific	112⅛	112⅛	112¼	.....	.....	.....
6s	...	....	115½	.....	.....	.....
Land Grant 7s	.....	.....	.....	...	.....	.....
Sinking Fund 8s	119½	...	.....	.....	.....	.....
Vermont & Mass	.....	.....	.....	.....	.....	135
Worcester & Nashua	.....	.....	.....	.....	.....	.....
Cambridge (Horse)	.....	...	.....	.....	.....	.....
Metropolitan (Horse)	.....	.....	.....	.....	...	.....
Middlesex (Horse)	.....	.....	.....	.....	.....	.....
Cal. & Hecla Min'g Co	.....	.....	240	.....	.....	241
Quincy	49¼	.....	50	.....	.....	50

Philadelphia Stock Exchange.

Closing Prices for the Week Ending May 30.

	W.24.	Th.25.	F.26.	Sat.27.	M.29.	Tu 30.
Allegh'y Val. 7 3-10s	122	.....	.....	.....	.....	.....
7s, Income	51	50	51¾	.....	.....	.....
Buff., Pitts & West	15⅛	15⅛	15⅝	15½	.....	.....
Camd'n & Am. 6s, '83	.....	.....	.....	.....	.....	.....
6s, 1889	109	.....	.....	.....	.....	.....
Mort. 6s, 1889	112⅛	.....	.....	.....	.....	.....
Camden & Atlantic	.....	.....	.....	.....	.....	.....
Preferred	.....	.....	.....	.....	.....	.....
1st mortgage	.....	.....	.....	.....	.....	.....
2d mortgage	.....	.....	.....	.....	.....	.....
Catawissa	.....	.....	.....	.....	.....	.....
Preferred	.....	.....	55	.....	.....	.....
2d pref	.....	.....	53½	.....	.....	.....
7s, new	.....	.....	.....	.....	.....	.....
Del. & Bound Brook	....	.....	.....	.....	.....	.....
7s	.....	.....	.....	.....	.....	.....
Elmira & Williamsp't	.....	.....	.....	.....	.....	.....
Preferred	.....	.....	.....	..	.....	.....
Hunt. & B. Top Mt.	12	12	12	.....	.....	.....
Preferred	....	25¼	26½	26⅞	.....	.....
2d mortgage	.....	.....	.....	.....	.....	.....
Lehigh Navigation	37⅞	37⅞	37¾	36⅞x	...	.....
6s, 1884	105¼	.....	105	.....	.....	.....
Gold Loan	.....	.....	113	.....	.....	.....
Railroad Loan	..	..	..	115½	.....	.....
Conv. Gold Loan	.....	.....	.....	.....	.....	.....
Consol. Mort, 7s	119	.....	.....	.....	.....	.....
Lehigh Valley	60¾	60¾	60¾	.....	.....	.....
1st mort. 6s, coup	125	.....	.....	.....	.....	.....
1st mort. 6s, reg	.....	.....	121½	.....	.....	.....
2d mort. 7s	.....	.....	.....	.....	.....	.....
Consol mort. 6s	....	.....	...	.....	.....	.....
Consol. mtg. 6s, reg	...	.....	.....	.....	.....	.....
Little Schuylkill	57½	.....	.....	.....	.....	.....
Minehill & Sch. Hav'n	63	63	.....	.....	.....	.....
North Pennsylvania	63⅛	.....	63⅛	.....	.....	.....
1st mortgage 6s	.....	107⅛	...	.....	.....	.....
2d mortgage 7s	.....	.....	.....	.....	.....	.....
Genl. mtg. 7s, coup	.....	.....	.....	.....	.....	.....
Genl. mtg. 7s, reg	.....	.....	.....	.....	.....	.....
Northern Central	49	48⅞	.....	.....	.....	.....
5s	.....	.....	98½	98½	....	.....
Northern Pacific	41¼	41⅜	41	41⅜	.....	.....
Preferred	79⅜	79½	79¼	79⅜	.....	.....
Pennsylvania R. R.	57	56¼	56	55⅞	.....	.....
1st mortgage	.....	.....	.....	107	.....	.....
Gen'l mort	126½	.....	.....	.....	.....	.....
Gen'l mort reg	.....	.....	.....	.....	.....	.....
Consol. mort. 6s	.....	.....	120	.....	.....	.....
Consol. mort. reg	.....	.....	.....	.....	.....	...
Pa. State 5s, new	118	119	.....	.....	.....	.....
do 4s, new	.....	.....	.....	.....	.....	.....
do 3½s, 1912	.....	.....	.....	.....	.....	.....
Phila. & Reading	27⅜	26½	27½	27¾	....	.....
1st mortgage 6s	.....	.....	.....	.....	.....	.....
7s of 1893	.....	.....	.....	120	.....	.....
7s, new convert	.....	.....	.....	...	.....	.....
Consol. mort. 7s	123⅛x	.....	.....	...	..	.....
Consol. mort. reg	123⅛x	.....	.....	.....	.....	.....
Gen'l mort. 6s	96¾	96¾	96½	96½	.....	.....
Def. Income bonds	....	.....	.....	.....	.....	.....
Philadelphia & Erie	.....	14	.....	.....	.....	.....
1st mortgage 5s	.....	.....	.....	102⅜	...	.....
2d mortgage 7s	.....	.....	...	117	.....	.....
Pittsb., Cin. & St. L. 7s	.....	.....	.....	.....	...	.....
Pitts., Tit. & Buff. 7s	98	.....	.....	.....	.....	.....
Schuylkill Navi't'n	..	..	..	.....	.....	.....
Preferred	.....	.....	.....	.....	.....	.....
6s, 1895	.....	.....	...	.....	.....	.....
6s, 1882	.....	.....	.....	.....	.....	.....
United Co. of N. J	188	188	.....	.....	.....	.....
Hestonville, (Horse)	.....	.....	.....	.....	.....	.....
Chestnut & Wal. (do)	.....	.....	.....	.....	.....	.....

Baltimore Stock Exchange.

Closing Prices for the Week Ending May 30.

	W.22.	Th.25.	F.26.	Sat.27.	M.29.	Tu.30.
Baltimore & Ohio..	.....	.....	193	.....	.....	.....
6s, 1885.....	106	106	.....	106⅛	.....	....
Central Ohio ($50)..	...	.....	.....	.....	.....	.....
1st mortgage.....	.....	.....	.....	.....	.....	.....
Marietta & Cincin'ti	.....	.....	.....	.....	.....	.....
1st mortgage, 7s..	.....	.....	.....	.....	...	....
2d mortgage, 7s..	.....	.....	.....	.....	.....	.....
3d mortgage, 8s..	.....	.....	.....	.....	.....	.....
Northern Cen. ($50)	.....	....	49¼	.....	.....	.....
2d mort., 6s 1885..	.....	.....	.....	.....	.....	.....
3d mort., 6s, 1900.	.....	.....	.....	.....	.....	.....
6s, 1900, gold.....	.....	.....	.....	.....	.....	.....
6s, 1904, gold.....	.....	.....	.....	.....	.....	.....
Pitts.& Connellsv.7s	....	.....	....	124⅛	.....	.....
Virginia 6s, Consol.	62½	63¼	62¼	62½	.....	.....
Consol. coupons..	.....	.....	.....	.....	.....	.....
10 40 bonds.....	...	43¾	43⅜	43⅜	.....	.....
Def'd Certificates.	.....	.....	.....	.....	.....	.....
Western Maryland..	.....	.....	.....	.....	.....	.....
1st M.,end.by Balt	.....	.....	.....	.....	.....	.....
2d M. do	.....	.....	.....	.....	.....	....
3d M., do	.....	.....	.....	.....	.....	.....
1st M.,unendors'd	.....	.....	.....	.....	.....	.....
2d M.,end.WashCo	.....	.....	113½	.....	.....	.....
2d M., preferred..	.....	.....	.....	.....	.....	.....
City Passenger R R.	....	.....	.....	.....	.....	....

London Stock Exchange.

	Closing Prices May 5.		Apl. 28.	
Baltimore & Ohio (sterling).....114	116	114	116	
Central of N. J,. $100 shares.... 93	98	93	98	
Do. consol. mort.....114	115	112	115	
Do. Adjustment Bonds.....101	106	101	106	
Do. Income Bonds..... 93	97	93	97	
Det.,G'd Haven & Mil. Equip bds113	115	113	115	
Do.Con.M.5p.c.,till'83aft'r6p.c111	113	111	113	
Illinois Central $100 shares.....138	140	138	140	
Lehigh Valley Cons. mortgage..118	122	118	122	
Louisville & Nashville mort 6s..101	103	101	103	
Do. Sink. Fund bds (S.&N.Ala)100	102	100	102	
Do. capital stock $100 shares. 78	80	76	78	
N. Y. Cent. & Hud. R. mt. bds..134	136	134	136	
Do. $100 shares.....129	131	130⅛	131½	
Do mort. bonds (stg.).....123	125	123	125	
N.Y.,Lake Erie & West.,$100 shs 36¾	37¼	36¾	37¼	
Do. 6 p. c. pref. $100 shares .. 73	75	75	77	
Do. 1st Con. Mort. bds (Erie) .127	129	127	129	
Do. do. Funded Coupon bds.124	126	124	126	
Do. 2d Consol Mort. bonds... 95	97	95	97	
Do. do. Funded Coupon bds.. 92	94	92	94	
Do. Gold Income bonds..... ..	..	..	..	
N.Y.,Pa.& Ohio 1st mort. bonds. 46½	47½	46½	47½	
Do. Prior Lien bds (sterling)..101	105	101	105	
Pennsylvania, $50 shares..... 62	63	62¼	62¾	
Do. Con. Sink Fund Mort....120	122	119	121	
Philadelphia & Reading $50 shs 29¼	29¾	29¼	29¾	
General Consol Mortgage.....118	120	118	120	
Do. Improvement Mortgage..102	104	102	104	
Do.Gen.Mtg.'74,ex-def'd coup. 99	101	99	101	
Do. Scrip for the 6 def. ½ coup. 99	101	99	101	
Pittsb., Ft. W. & Chi. Eq. bds....104	106	104	106	
St. L. Bridge 1st mort. gold b'd.125	127	125	127	
Do. 1st pref. stock..... 98	102	98	102	
Union Pa. Land Grant 1st. mtg.113	115	113	115	
Wabash, St. L. & P. $100 shs..... 30	32	28	30	
Do. $100 pref. shares..... 55	57	52½	53⅝	
Do. gen. mort. bonds..... 84	86	79	81	

AMERICAN RAILROAD JOURNAL.

Financial and Commercial Review.

THURSDAY EVENING, June 1, 1882.

THE rates for call loans this morning were on stocks 3 per cent, and on United States bonds 2@2½ per cent. It so continued during the afternoon, but in the last hour was run up to 5 per cent. In the last hour, however, the rate receded to 3 per cent, which was the ruling rate for the day.

The actual rates for prime bankers' sterling were 4.86½@¾, and 4.89¼@½, with cable transfers 4.89¾@4.90, and prime commercial bills 4.85½@¾. The actual rates for Continental exchange are as follows: Francs, 5.17½@5.16¾ and 5.14⅜@5.13¾, Marks, 95⅛@¼, and 95¾@⅞, and Guilders, 40¼@40⅜.

At the annual meeting of the stockholders of the Boston, Concord and Montreal Railroad Company, held at Plymouth, N. H., on the 30th ult., a resolution was adopted stating that if, after paying the dividends at the rate of 3 per cent semi-annually, on the preferred stock, there shall be in any year an excess of the net earnings applicable to dividends, that such excess be divided among the different classes of stock in the proportion of 1 per cent on the preferred stock, 7 per cent on the new stock and 2 per cent on the old stock, and if any excess shall then exist, the same may be divided in the proportion of 1 per cent of each of the classes of stock named, until the dividends paid on the preferred and new stock shall be equal to semi-annual dividends of 3 per cent, from the time of the respective issue of said preferred and new stock.

From the report of the directors of the Manchester and Lawrence Railroad Company, presented at the recent annual meeting of the stockholders, we learn that the gross earnings of the road for the year ending March 31, 1882, were $199,848.38, the expenses $99,648.52, and the net earnings $100,199.86; from which, deducting 10 per cent dividend of $100,000, left a balance of $199. The number of passengers carried during the year was 155,088, of which 99,085 were local and 56,003 through. The number of tons of local freight carried was 28 783, through 50,193, making a total of 78,976 tons.

It is estimated that he decrease of the public debt for May is about $11,000,000, being less than usual, on account of heavy pension payments made during the month.

The stockholders of the Illinois Central Railroad Company, at their annual meeting in Chicago on the 31st ult., approved the lease of the Chicago, St. Louis and New Orleans Railroad, extending from Cairo, Ill., the southern terminus of the Illinois Central, to New Orleans, 567 miles, for 400 years, to go into effect July 1. The Illinois Central is to pay the interest on the debt and four per cent per annum on the $10,000,000 of stock; to provide for the principal of all the underlying bonds; to indorse a guarantee of the payment of interest upon all the five per cent gold bonds, and to issue its four per cent perpetual annuities in even exchange for such stock as may be tendered to it within a resonable time. They also approved of the construction of two short branch lines running east and west from the Chicago, St. Louis and New Orleans Railroad, and which will be built as feeders—the first as the Canton, Aberdeen and Nashville Railroad, and the other as the Yazoo and Mississippi Valley Railroad, for both of which special charters has been granted. Messrs. Gebhard, Vanness and Elliott, of New York, were re-elected directors, to serve until May 1, 1885, and Sidney Webster, of New York, was elected in place of William Tracey.

The stockholders of the Peninsular Railroad of Maryland have confirmed the consolidation with the Peninsular Railroad of Virginia, thus making one line down to Cherrystone, which will be controlled by the Pennsylvania Railroad.

The following quotations of sales of railway and other securities, for the week, are in addition to those given elsewhere in our columns:

New York.—Atlantic and Pacific 1st, 100¼; Boston and New York Air Line pref., 63; Chesapeake and Ohio cur. int., 45½; Chicago, St. Paul, Minneapolis and Omaha, 37⅞; do. pref., 101; do. consol., 105½; Chicago, Burlington and Quincy 8s, 105; do. 4s, Iowa div., 87½; Cleveland, Painesville and Ashtabula 7s, 118; Chicago, Milwaukee and St. Paul, Southwest div. 6s, 109; do. Chicago and Pacific West div. 1st, 94½; do. Southern Minnesota div. 1st, 108; do. Chicago and Pacific div., 110½; Chicago and Northwestern interest bonds, 102¾; Columbus, Chicago and Indiana Central 1st, Trust Co. certif., ass. sup., 115; Denver, South Park and Pacific 1st, 100; Delaware and Hudson Canal 1st, Penn. div., 122⅛; Denver and Rio Grande, 60½; do. 1st, 113¼; do. consol., 105¼; Evansville and Terre Haute 1st, 97; East Tennessee, Virginia and Georgia, 10½; do. pref., 18; do. inc., 46½; Fort Worth and Denver, 90⅜; do. 1st, 91½; Green Bay, Winona and St. Peter 1st, 85; Hannibal and St. Joseph 6s, consol., 103; Illinois and Southern Iowa 1st, 98½; Indiana, Bloomington and Western, 41; do. 1st, 90; do. 2d, 74; International and Great Northern 1st, 105⅝; do. 2d inc., 88¾; Joliet and Chicago, 140; Kansas Pacific 1st consol., 102½; do. 6s, Denver div. ass., 108¾; do. 6s, 1896, 114; Louisiana and Missouri River, 15; do. 1st, 113; Louisville, New Albany and Chicago, 58; do. 1st, 103½; Long Island, 59; do. 1st, 116⅛; Lake Erie and Western, 29; do. 1st, 101¾; Louisville and Nashville Gen'l mort. 6s, 100; Manhattan Beach, 31½; Mobile and Ohio, 22½; do. 1st mort., 110½; Missouri, Kansas and Texas, 30⅜; do. gen'l mort. 6s, 82; do. consol. 7s, 106; Missouri Pacific, 93½; do. 3d, 109; Milwaukee, Lake Shore and Western, 49; do. 1st, 101; New York City and Northern, Gen'l mort., 50⅛; Northern Pacific 1st, 102½; New York, Chicago and St. Louis, 11¼; do. pref., 30½; do. 1st, ex-June coupon, 85½; Nashville, Chattanooga and St. Louis, 60; do. 1st, 116½; New York, Ontario and Western, 25; Norfolk and Western pref., 51; New Orleans Pacific 1st, 87; Ohio Central, 13½; Oregon Railway and Nav., 137; Oregon Transp., 72; Oregon Short Line 6s, 103½; Ohio Southern 1st, 87; Peoria, Decatur and Evansville, 29¼; do. 1st, 106; Pennsylvania Company's 4½s, 97; Richmond and Alleghany, 17; do. 1st, 87½; Richmond and Danville, 103; do. 6s, 100½; do. deben, 71½: Richmond, Danville and West Point, 52¾; Rensselaer and Saratoga, 138; Rochester and Pittsburgh, 28; St. Louis, Jacksonville and Chicago 1st, 113; St. Louis and San Francisco 2d, Class B, 84; St. Paul, Minneapolis and Manitoba, 134½; do. 1st, 111½; do. 2d, 108⅞; do. Dakota ext. 1st, 106⅜; St. Paul and Duluth, 32; do. pref., 83¾; St. Louis, Iron Mountain and Southern 1st pref. inc., 95; do. 2d, do., 88¾; St. Louis, Kansas City and Northern, Omaha div. 1st, 106½; do. R. E. 7s, 104; South Carolina Inc., 48⅛; Toledo, Delphos and Burlington, 11½; Texas and Pacific, 38⅝; do. inc. Land Grants, 61¾; do. Rio Grande div. 1st, 79⅛; Wabash, St. Louis and Pacific, Gen'l mort. 6s, 82; Winona and St. Peter 1st, 120; Alabama, Class A, 80¾; do. B, 102; Arkansas 7s, L. R., P. B. and N. O., 20; Georgia 7s, new, 109½; do. gold, 118; North Carolina 4s, consol., 80; Tennessee 6s, 58¾; Am. Dist. Tel., 47; Sutro Tunnel, ½; Cameron Coal, 33½; Colorado Coal and Iron, 48½; Excelsior Mining, 1½; Ontario, 35½; Robinson, 2; Standard, 18.

Boston.—Atchison, Topeka and Santa Fe plain 5s, 88; do. mort. 5s, 97; Atlantic and Pacific blocks, 108¾; Boston Land, 7; Boston Water

Power, 3½; Burlington and Missouri River in Nebraska 6s, non-exempt, 103¾; Boston and Maine 7s, 124; Chicago, Burlington and Quincy 4s, 86¾; do. 4s, Denver extension, 84½; do. 5s, 1919, 104¾; Connotton Valley, 7; California Southern blocks, 105; do. 6s, 83; Connecticut and Passumpsic Rivers R. R., 90; Flint and Pere Marquette, 22⅛; do. pref., 96½; Iowa Falls and Sioux City, 88½; Kansas City, St. Joseph and Council Bluffs 7s, 115; Kansas City, Fort Scott and Gulf 7s, 111; Kansas City, Lawrence and Southern 5s, 102; Marquette, Houghton and Ontonagon, 61; Mexican Central 7s, 87⅞; do. Block, No. 2, 116¾; do. No. 3, 108; Massachusetts Central, 7; Maine Central, 63; do. 6s, 45; New York and New England 6s, 103¾; Northern Pacific 6s, 99¼; New Mexico and Southern Pacific 7s, 113; Oregon Short Line 6s, 102; Sonora 7s, 103⅝; Toledo, Delphos and Burlington Southeast div. 6s, 61; do. inc., 16; Toledo, Cincinnati and St. Louis, 5¾; do. 6s, 59; do. inc., 15; Wisconsin Central, 15½; do. 2d Series, 45; Aztec Mining Co., 40c.; Brunswick Antimony, 11; Franklin, 11; Huron, 1⅛; Harshaw, 1½; Osceola, 33; Pewabic, 10; Sullivan, 1¾; Silver Islet, 17.

Philadelphia.—Central Transportation, 34; Nesquehoning Valley, 54; Perkiomen 6s, 104; Philadelphia and Reading Income 7s, 100; do. scrip, 98; Pennsylvania allotments, 6; Pittsburg 7s, W. L., 1895, 124; Philadelphia, Wilmington and Baltimore 4s, 94½; Schuylkill Nav. 6s, 1897, 106; Susquehanna Canal 6s, 60½; Texas and Pacific consol. mort. 6s, 100; do. Rio Grande div. 1st, 80. The latest quotations are: City 6s, 108@118; do. free of tax, 128@132; do. 4s, new, 108@116; Pennsylvania State 5s, new loan, 118½@119½; do. 4s, old, 108@112; do. 4s, new, 114@115; Philadelphia and Reading R. R., 28@28¼; do. consol. mort. 7s, reg., 123@126; do. gen'l mort. 6s, coupon, 96½@97; do. 7s, 1893, 119½@120½; do. new conv., 72@74; United New Jersey R. R. and Canal, 187¾@188¼; Buffalo, Pittsburg and Western, 15½@15⅝; Pittsburg, Titusville and Buffalo 7s, 97½@98½; Camden and Amboy mort. 6s, 1889, 112½@113½; Pennsylvania R. R., 56@56⅛; do. general mort. 6s, coupon, 125@126; do. reg., 125@126; do. consol. mort. 6s, reg., 120@121; Little Schuylkill R. R., 57@58; Schuylkill Navigation, pref., 12@13; do. 6s, 1882, 90@91; Elmira and Williamsport pref., 57@60; do. 5s, 95@100; Lehigh Coal and Navigation, 36⅛@36⅝; do. 6s, 1884, 104½@105½; do. R. R. loan, 115@116; do. Gold Loan, 112½@113½; do. consol. 7s, 118½@119½; Northern Pacific, 42⅛@42¼; do. pref., 80@80¼; North Pennsylvania, 63@63½; do. 6s, 107@108; do. 7s, 120@121; do. 7s, General mort. reg., 121@122; Philadelphia and Erie, 14@15; do. 7s, 117@118; do. 5s, 102@103; Minehill, 62½@63½; Catawissa, 22@23; do. pref., 54@55; do. new pref., 53@54; do. 7s, 1900, 120@—; Lehigh Valley 60@60¼; do. 6s, coupon, 124@125; do. reg., 121@122; do. 7s, 133@133½; do. consol. mort. 121@122; Fifth and Sixth streets (horse), 152@155; Second and Third, 109@112; Thirteenth and Fifteenth, 72@75; Spruce and Pine, 45@47; Green and Coates, 80@85; Chestnut and Walnut, 90@93; Germantown, 70@75; Union, 110@115; West Philadelphia, 105@107; People's 11½@12; Continental, 100@102.

Baltimore.—Atlanta and Charlotte, 1st, 110½; Baltimore City 6s, 1890, 118⅝; do. 6s, 1900, 130¼; do. 5s, 1894, 116¾; do. 5s, 1916, 127; do. 4s, 1920, 112; Central Ohio 6s, 110¾; Columbia and Greenville 1st, 104½; Canton Co. 6s, 105; George's Creek Coal, 97½; Maryland Defense 6s, 105¼; Marietta and Cincinnati 1st Trust certificate, 125; do. 2d do., 99¾; do. 3d do., 53⅞; Northern Central 5s, 108; Richmond and Danville gold bonds, 100⅜; Western Maryland 1st, unindorsed, 114½; Virginia Midland 5th mort., 94¾; Virginia 10-40s, 40; do. consols, 62; do. Peeler coupons, 38.

Walsh's Metal Can-Seaming Machine.

The important position which canned goods have attained among American articles of commerce, gives a decided value to anything which aids in securing perfection in metal cans, for the packing of articles for domestic and general use. One of the chief difficulties connected with this branch of trade has been the unsatisfactory way in which the seams of the cans have heretofore been made. F. A. Walsh, machinist and die maker, of 24 West Washington street, Chicago, has invented a can-seaming machine, which makes a perfectly tight seam in cans without the use of solder or cement. It is said to work excellently in double seaming the tops and bottoms of tin cans, saving time and avoiding the inconvenience of using soldering irons, charcoal and solder. The value of a machine which dispenses with the dirt of charcoal and lessens the fire risk, which always attends the use of hand furnaces, will be readily appreciated as an iuvention of great value. We have recently seen a very strong endorsement of its practical merits from the Chicago White Lead and Oil Company, who are using it with most satisfactory results.

Articles of incorporation were filed at Albany on the 27th ult., of the Central American Pacific Railway and Transportation Company. The road is to run from the city of Esquintla, in Guatemala, Central America, to the city of Guatemala; and from Esquintla to the port of San Jose. The capital is $1,000,000.

Articles of incorporation have been filed with the Secretary of State of Illinois by the Seneca, Ottawa and Mendota Railroad Company, which proposes to construct a railroad from Seneca to Mendota, both in La Salle county. Its capital stock is to be $100,000, and the corporators are Francis L. Fiske, Thos. D. Catlin, William H. Hull and Marshall H. Armstrong, all of Ottawa; Alexander Bruce, Marseilles; Dwight Lawrence, Prairie Centre, and Arthur C. McIntyre, Mendota.

Articles of association of the St. Joseph and Nebraska Railroad Company have been filed with the Secretary of State of Missouri. Capital, $200,000; length of road about ten miles, beginning at a point on the main line of the Kansas City, St. Joseph and Council Bluffs Railroad, about four miles from Bigelow Station, in Holt county, Mo., and extending thence in a westerly direction through Holt county to the Missouri River, at or near a point opposite the town of Rulo, Neb., on the Missouri River. The following are the incorporators and directors: T. S. Howland, W. D. Eaton, H. B. Scott and C. E. Perkins, of Burlington, Ia.

The Housatonic R. R. Co. passenger receipts for the 7 months ending April 30, 1882 of the present fiscal year show the large increase of $7,500 over the receipts for the corresponding time of the previous year. The beautiful parlor cars to be placed upon this line during the coming season will no doubt largely increase its revenue. Appearances indicate an unprecedentedly heavy summer travel from New York to the romantic Berkshire Hills, the "Switzerland of America."

The most remarkable natural bridge is probably the Jisrel Hajar, which spans a gorge not far from the ruins of the Temple of Adonis, in the province of Lebanon, in Syria. It is a flat piece of limestone rock from ten to fifteen feet thick, perfectly arched on the under side. The gorge is about 150 feet across, and the bridge is about 100 feet from the bed of the torrent below. The bridge is so broad and level that a good carriage road might be made over it. This bridge is surpassed in height by the natural bridge in Rockbridge county, Va., about 125 miles west of Richmond and about two miles from the James River. It extends over Cedar Creek. The height of the arch is 200 feet, and the upper surface of the bridge is 240 feet above the stream.

One of the most annoying accidents that can happen to the steam-engine runner is to have his water-supply pipes choked up with lime and other solid incrustations. Especially in the hot-water pipe lime is apt to settle and incrust on the iron pipes till they become completely filled up, so that no water whatever can pass to the pump or injector which forces it into the boiler. In such cases it is customary to take up the pipes and try to loosen the solid matter by pounding on the pipe and breaking it out, or by making a fire along its whole length and burning it out. In a recent very obstinate case one end was stopped up with a plug, and, standing it upon end, coal oil was poured in as long as any would go in, and the whole was left to stand till morning, when the whole mass slid out in a solid core.

An actor at the Carlo Theatre, in Vienna, has just passed away who had held a life engagement as the monkey in pantomimes, and who was simply indispensable in such parts as required remarkable agility and suppleness. When he was a young man and first called on the manager to seek an engagement, he was refused with scant courtesy by that official, who was very busy, and who paid no attention to the young actor's plea that he did not know what he should do to earn his bread were employment refused him. Sadly and silently the youth turned away, and paused at the door in deep dejection, as if he hoped the manager might reconsider his decision, but the manager made no sign; and with a melancholy sigh the actor languidly scratched his ear with his foot, as if in perplexity what to do next. Every one burst into uncontrollable laughter at this unexpected action, and he was engaged instantly.

RAILROAD EARNINGS.—MONTHLY.

	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total.
BURL., CEDAR RAP. & NORTHERN:													
1880	184,316	165,170	188,325	141,652	149,504	153,378	143,432	160,160	179,804	204,991	189,330	193,419	2,053,484
1881	167,750	124,510	148,551	184,680	165,630	205,912	174,351	209,112	221,801	221,748	203,880	232,812	2,259,037
1882	252,823	225,631	224,107	178,304	.....	.....	.....	.....	.....	.....	.....	.....	.....
CENTRAL PACIFIC:													
1880	1,200,614	1,070,487	1,373,438	1,356,716	1,778,488	1,724,950	1,840,067	1,973,438	1,964,997	1,120,229	2,199,466	1,905,221	20,508,112
1881	1,602,907	1,454,218	1,709,637	1,872,370	2,068,000	2,063,000	1,859,000	2,059,000	2,293,000	2,514,000	2,267,000	2,110,000	23,947,951
1882	1,876,000	1,702,000	1,987 000	2,052,000	.....	....	.....	.....	.....	.....	.....	.....	.....
CHESAPEAKE AND OHIO:													
1880	202,335	198,681	222,762	221,559	199,443	214,352	238,236	259,110	247,303	211,820	240,795	218,000	2,674,308
1881	162,540	184,389	228,479	227,343	252,235	241,135	225,096	262,858	247,144	237,303	235,585	203,562	2,702,762
1882	210,455	209,708	208,981	253,861	.....	.....	.....	.....	.....	.....	.....	.....	.....
CHICAGO AND ALTON:													
1880	534,054	497,013	626,473	542,961	616,128	617,524	708,906	761,120	767,349	785,199	696,776	574,695	7,718,198
1881	487,890	461,641	529,915	558,190	528,860	616,935	671,466	771,466	768,897	750,359	680,133	635,307	7,553,988
1882	579,447	530,480	584,483	561,787	.....	.....	.....	.....	.....	.....	.....	.....	.....
CHICAGO AND NORTHWESTERN:													
1880	1,154,632	1,131,683	1,361,725	1,294,573	1,875,608	1,671,177	1,699,686	1,767,938	2,020,245	2,105,217	1,855,671	1,477,902	19,416,007
1881	1,240,667	963,208	1,178,795	1,474,612	1,879,006	2,306,640	1,983,031	2,315,164	2,292,676	2,341,097	2,019,037	1,855,476	21,849,209
1882	1,620,336	1,471,945	1,696,568	1,634,819	.....	.....	.....	.....	.....	.....	.....	.....	.....
CHICAGO, BURLINGTON AND QUINCY:													
1880	1,432,740	1,411,870	1,732,518	1,489,894	1,909,627	1,682,956	1,773,643	1,834,321	1,862,285	1,934,762	1,837,860	1,552,018	20,454,494
1881	1,307,948	1,034,821	1,418,149	1,574,371	1,679,455	2,083,803	1,888,558	2,173,945	2,262,981	2,031,001	1,816,133	1,905,490	21,324,150
1882	1,658,834	1,457,300	1,566,217	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
CHICAGO, MILWAUKEE AND ST. PAUL:													
1880	764,298	738,749	900,675	871,041	1,134,745	1,037,958	1,026,708	991,297	1,257,677	1,493,620	1,472,037	1,397,308	13,086,119
1881	990,847	682,717	916,989	1,259,946	1,538,000	1,371,000	1,560,000	1,678,000	1,645,000	1,590,000	1,569,000	1,855,000	17,025,462
1882	1,435,000	1,377,000	1,561,000	1,518,000	.....	.....	.....	.....	.....	.....	.....	.....	.....
CHICAGO, ST. PAUL, MINNEAPOLIS AND OMAHA:													
1880	193,827	173,078	259,783	259,208	232,146	218,093	236,995	251,013	300,833	342,052	342,894	312,173	3,122,097
1881	257,786	158,594	251,648	261,211	350,124	404,562	392,702	385,586	363,685	382,714	380,733	391,950	3,981,296
1882	307,498	315,100	405,779	356,558	.....	.....	.....	.....	.....	.....	.....	.....	.....
CINCINNATI, INDIANAPOLIS, ST. LOUIS AND CHICAGO:													
1880	155,697	172,541	198,220	168,199	186,995	200,332	204,138	233,478	343,627	239,881	209,014	198,254	2,412,185
1881	182,523	171,511	191,005	183,710	188,794	188,256	178,861	229,858	219,977	212,606	194,805	192,623	2,296,916
1882	200,042	186,879	208,066	204,269	.....	.....	.....	.....	.....	.....	.....	.....	.....
DENVER AND RIO GRANDE:													
1880	124,759	126,922	160,883	164,882	193,925	295,455	373,132	400,133	406,583	473,318	408,562	349,196	3,478,007
1881	307,476	317,681	398,493	433,111	514,767	584,230	548,284	606,193	620,643	665,686	566,819	643,417	6,206,812
1882	491,914	412,987	535,055	559,917	.....	.....	.....	.....	.....	.....	.....	.....	.....
HANNIBAL AND ST. JOSEPH:													
1880	176,079	166,965	216,061	206,735	191,317	179,396	224,312	238,081	233,448	242,214	207,147	279,635	2,561,391
1881	154,401	122,874	176,356	190,812	177,002	194,949	198,110	215,308	202,567	313,433	201,782	180,376	2,230,966
1882	138,284	154,717	168,798	148,913	.....	.....	.....	.....	.....	.....	.....	.....	.....
ILLINOIS CENTRAL:													
1880	595,212	613,806	613,008	535,732	665,120	681,736	724,095	732,755	806,836	880,211	783,120	673,182	8,304,812
1881	631,281	524,499	557,789	662,493	673,259	803,887	720,004	868,407	828,847	815,238	737 218	763,475	8,586,397
1882	728,173	689,387	695,371	674,603	.....	.....	.....	.....	.....	.....	.....	.....	.....
INDIANA, BLOOMINGTON AND WESTERN:													
1880	80,498	89,690	116,185	90,374	85,733	106,954	103,438	116,732	110,622	121,343	96,621	104,619	1,233,079
1881	90,283	83,261	192,085	203,677	102,630	96,586	83,764	117,956	195,307	181,674	160,826	156,697	.....
1882	195,824	175,755	206,235	205,934	.....	.....	.....	.....	.....	.....	.....	.....	.....
LOUISVILLE AND NASHVILLE:													
1880	674,455	575,035	612,593	563,883	655,014	976,229	772,537	827,088	931,910	1,000,326	953,086	949,184	9,491,346
1881	816,960	805,124	947,959	850,862	828,726	1,227,885	817,135	876,192	951,566	1,002,950	1,065,223	1,122,285	11,326,859
1882	950,065	960,036	1,073,745	950,007	.....	.....	.....	.....	.....	.....	.....	.....	.....
MOBILE AND OHIO:													
1880	250,116	204,094	168,301	140,091	129,249	121,855	131,621	140,593	184,246	264,714	251,368	287,373	2,373,621
1881	224,347	216,768	230,916	163,551	145,803	136,517	131,009	159,348	209,044	252,921	252,434	262,025	2,406,437
1882	161,433	158,154	152,651	145,272	.....	.....	.....	.....	.....	.....	.....	.....	.....
NASHVILLE, CHATTANOOGA AND ST. LOUIS:													
1880	205,633	191,154	169.457	155,466	158,839	144,155	151,594	169,326	167,473	178,266	182,087	175,996	2,049,448
1881	178,143	190,866	207,710	183,525	104,430	154,549	150,430	168,317	179,979	172,121	152,059	173,127	2,075,256
1882	156,994	159,961	161,005	154,155	.....	.....	.....	.....	.....	.....	.....	.....	.....
NEW YORK AND NEW ENGLAND:													
1880	164,232	149,907	183,845	179,689	183,701	219,891	205,056	249,885	235,642	215,491	210,856	198 108	2,396,302
1881	189,749	173,614	212,019	216,913	217,185	231,518	246,821	280,524	299,573	261,199	242,412	237,729	2,809,255
1882	215,624	213,791	256,674	264,673	.....	.....	.....	.....	.....	.....	.....	.....	.....
NEW YORK, LAKE ERIE AND WESTERN:													
1879	1,147,173	1,207,391	1,356,780	1,372,755	1,350,574	1,230,419	1,273,533	1,450,223	1,492,497	1,713,697	1,515,835	1,398,224	16,509,127
1880	1,296,381	1,252,218	1,644,958	1,643,151	1,592,544	1,661,812	1,580,976	1,606,874	1,786,417	1,899,910	1,799,338	1,726,788	19,491,361
1881	1,443,437	1,425,765	1,847,261	1,709,057	1,776,891	1,794,982	1,787,081	1,772,895	1,734,200	.....	.....	.....	.....
NORTHERN CENTRAL:													
1880	334,494	330,860	415,325	386,130	329,788	419,193	450,298	453,923	464,093	512,918	459,054	494,310	5,050,387
1881	386,157	382,657	452,906	487,273	465,588	487,287	440,811	498,008	429,565	449,664	487,160	476,622	5,443,697
1882	407,368	413,551	430,194	435,129	.....	.....	.....	.....	.....	.....	.....	.....	.....
NORTHERN PACIFIC:													
1880	81,390	77,259	119,357	185,700	217,613	253,105	241,277	223,500	330,300	358,456	300,822	220,993	2,629,710
1881	116,508	78,803	162,984	216,210	305,292	368,276	404,180	411,624	490,096	565,485	428,903	434,331	4,044,576
1882	239,800	269,000	384,000	438,000	.....	.....	.....	.....	.....	.....	.....	.....	.....
PHILADELPHIA AND ERIE:													
1880	224,307	245,372	327,678	334,947	311,470	331,024	308,699	347,532	322,737	367,082	324,966	281,919	3,727,733
1881	224,303	225,501	285,573	293,323	343,792	350,585	291,669	303,849	276,522	292,392	284,078	282,772	3,454,309
1882	252,727	246 246	265,311	277,851	.....	.....	.....	.....	.....	.....	.....	.....	.....
ST. LOUIS AND SAN FRANCISCO:													
1880	198,091	195,948	193,146	176,164	167,664	173,607	213,297	259,995	280,873	328,194	290,329	226,063	2,698,371
1881	212,435	178.234	262,050	265,298	283,399	260,254	252,333	286,373	279,064	308,569	284,320	287,914	3,160,245
1882	256,784	244,654	274,959	242,806	.....	.....	.....	.....	.....	.....	.....	.....	.....
ST. LOUIS, ALTON AND TERRE HAUTE:													
1880	153,139	163,737	168,994	155,462	147,928	150,207	191,077	216.759	204,295	221,863	188,773	184,503	2,146,741
1881	175,725	166,012	201,137	197,447	163,285	165,896	158,674	189,295	187 299	179,921	162,544	153,852	2,112,801
1882	168,987	149,619	178,145	157,450	.....	.....	.....	.....	.....	.....	.....	.....	.....
ST. LOUIS, IRON MOUNTAIN AND SOUTHERN:													
1880	555,983	490,195	451,560	408,241	349,853	363,454	432,655	565,869	671,219	688,365	632,052	656,951	6,265,597
1881	570,957	560,791	704,002	548,300	479,075	474,302	533,512	644,386	690,400	719,239	687,280	709 498	7,319,744
1882	516,370	501,127	585,008	581,977	.....	.....	.....	.....	.....	.....	.....	.....	.....
ST. PAUL, MINNEAPOLIS AND MANITOBA:													
1880	180,239	137,645	261,798	333,014	281,899	243,407	272,089	232,579	274,188	345,057	300,675	297,641	3,160,231
1881	254,187	159,482	320,962	425,685	382,642	405,322	387,488	414,954	485,736	605,708	508,530	528,262	4,878,960
1882	395,461	418 358	531,004	570,890	.....	.....	.....	.....	.....	.....	.....	.....	.....
TEXAS AND PACIFIC:													
1880	245,785	219.165	215,070	174,177	141,083	153,066	195,711	226,073	266,570	303,666	312,184	301,858	2,754,408
1881	281,176	260,781	319,928	295,066	267,443	264,204	320,466	354,082	337,117	578,668	357,724	381,218	3,921,569
1882	310,785	255,644	332,911	359,543	.....	.....	.....	.....	.....	.....	.....	.....	.....
UNION PACIFIC RAILWAY:													
1880	1,433,636	1,393,992	1,730,509	1,937,220	2,027,269	1,928,528	1,934,215	1,913,035	2,270,179	2,707,860	2,251.148	1,869,335	23,448,445
1881	1,339,799	1,374,740	1,674,860	1,766,894	2,398,467	2,590,969	2,528,826	2,638,659	2,844,357	3,289 350	2,773,608	2,267,004	27,451,831
1882	1,961,088	1.759,863	2,226,832	2,462,004	.....	.....	.....	.....	.....	.....	.....	.....	.....
WABASH, ST. LOUIS AND PACIFIC:													
1880	776,790	759,451	978,629	892,024	948,773	953,468	1,966,742	1,189,478	1,178,950	1,501,203	1,131,787	1,050,816	12,428,112
1881	811,617	818,922	1,121,592	1,023,482	1,144,660	1,308,993	1,131,751	1,542,838	1,490,027	1,396,300	1,399,555	1,328,278	14,461,570
1882	1,229,965	1,134,768	1,315,776	1,378,194	.....	.....	.....	.....	.....	.....	.....	.....	.....

RAILROAD AND CANAL DIVIDEND STATEMENT.

Showing the amount of Stock Outstanding, the Dividend Periods and the date of last Dividend.

Marked thus(*)are leased roads.	Stock out-standing.	Divide'd Periods.	Last Dividend Payable.
Albany and Susq*...100	3,500,000	semi-an	Jan. '82 2
Ashuelot.....100	210,000	q'arterly	Oct. '81 3½
Atch., Top. and S. Fe100	54 000,000	q'arterly	May '82 1½
Atlanta and W. Point100	1,232,200	semi-an	Jan. '82
Atlantic and St. Law*100	5,840,000	semi-an	Mar. '82 3
Augusta and Savan'h100	1,022,900	semi-an	June'81 3½
Avon,Geneseo&MtM*100	225,000	semi-an	July '81 3
Baltimore and Ohio.100	14,792,566	semi-an	May '82 5
" " pref.100	5,000,000	semi-an	Jan. '82 3
Washington Br....100	1,650,000	semi-an	Apl. '82 5
Berkshire*.....100	600,000	q'arterly	Apl. '82 1¾
Boston and Albany..100	20,000,000	q'arterly	June'82 2
Bos.&N.Y.AirLine pf.100	2,795,227	q'arterly	June '82 1
Bos.,Cl.,F.&N.B.pref.100	1,750,100	.....	Apl. '82 3½
Bos.,Conc.&Mont.pf*100	800,000	semi-an	May '82 3
Boston and Lowell..500	3,940.000	semi-an	Jan. '82 2
Boston and Maine...100	6,921,274	semi-an	May '82 4
Boston & Providence100	4,000,000	semi-an	May '82 4
Attleborough Br...100	131,700	semi-an	Jan. '82 3½
Bos.,Revere B&Lynn100	419,400	semi-an	Jan. '82 3½
Buffalo,N. Y. & Erie*.100	950,000	semi-an	June'82 3
Camden & Atlantic.. 50	377,400	q'arterly	Apl '80 3s
" " pref. 50	880,650	q'arterly	Apl '80 3½s
Camden & Burl. Co..100	381,925	semi-an	July '81 3
Canada Southern....100	15,000,000	.....	Feb. '81 2½
Cape May &Millville* 50	447,000	semi-an	June'81 3
Catawissa*..... 50	1,159,500	annual	Oct.'81$1½
" pref..... 20	2,200,000	semi-an	May '82 3½
" new pref.. 50	1,000,000	semi-an	May '82 3½
Cayuga and Susq.*.. 50	589,110	semi-an	July '81 4½
Cedar Rapids&Mo.R*100	6,850,400	q'arterly	May '82 1½
" " pref.100	769,600	semi-an	Feb. '82 3½
Central of Georgia...100	7,500,000	semi-an	Dec. '81 4
Central of New Jersey100	18,563,200	q'arterly	Apl. '76 2½
Central Ohio*..... 50	2,437,950	semi-an	Jan. '82 3
" pref.. . 50	411,550	semi-an	Jan. '82 3
Central Pacific 100	59,275,500	semi-an	Feb. '82 3
Chemung*.....100	380,000	q'arterly	July '81 1½
Cheshire preferred ..100	2,155,300	semi-an	Jan. '82 1½
Chicago and Alton...100	11,181,741	semi-an	Mar. '82 4
" " pref 100	2,425,400	semi-an	Mar. '82 4
Chi., Burl. & Quincy.100	55,337,455	q'arterly	June '82 2
Chi., Iowa & Nebras*.100	3,916,200	semi-an	Jan. '82 4
Chi., Mil. & St. Paul.100	20,404,261	semi-an	Apl. '82 3½
" " pref 100	14,401,483	semi-an	Apl. '82 3½
Chi. & N. Western...100	14,988,257	semi-an	Dec. '81 3
" " pref.100	21,525,353	q'arterly	June'82 1¾
Chi., R. I. & Pacific..100	41,960,000	q'arterly	May '82 1¾
Chi. and West Mich .100	6,151,000	semi-an	Feb. '82 2½
Chi., St. P., M. & O..100	10,390,000	q'arterly	Jan. '82 1¾
C., Ind., St. L. & Chi.100	6,000,000	q'arterly	Apl. '82 1½
Cin., Sand. & Clev.pf. 50	429,037	semi-an	May '82 3
Clev. and Mahoning* 50	3,759,200	semi-an	Nov. '81 3½
Clev. and Pittsburg* 50	11,244,336	q'arterly	June'82 1¾
Columbus & Xenia*. 50	1,786,200	q'arterly	Jun e '8 2
Colum.&HockingVal.100	2,500,200	semi-an	Aug.'81 20s
Concord 50	1,500,000	semi-an	May '82 5
Concord and Ports.*.100	350,000	semi-an	Jan. '82 3½
Conn.& Passump.Riv100	2,244,400	semi-an	Feb. '82 3
Connecticut River ..100	2,100,000	semi-an	Jan. '82 4
Cumberland Valley.. 50	1,292,950	q'arterly	Apl. '82 2½
" 1st pref 50	241,900	semi-an	Apl. '82 4
" 2d pref. 50	243,000	semi-an	Apl. '82 4
Danbury & Norwalk. 50	600,000	.....	Apl. '82 1½
Dayton and Mich.*.. 50	2,402,573	semi-an	Oct. '81 1¾
" " pref. 50	1,211,250	q'arterly	Oct. '81 2
Delaware*..... 25	1,468,940	semi-an	Jan. '82 3
Del. & Bound Brook*100	1,652,000	q'arterly	May '82 1¾
Del., Lack.& Western 50	26,200,000	q'arterly	Apl. '82 2
Denver & Rio Grande.100	29,160,000	q'arterly	Jan. '82 1½
Den.,South P. & Pac.100	3,500,000	.....	Aug.'80 4
Detroit, Lans. & Nor.100	1,825,600	semi-an	Aug.'80 2½
" " pref.100	2,503,380	semi-an	Feb. '82 3½
Dubuque&Sioux C'y*100	5,000,000	semi-an	Apl. '82 3
East Pennsylvania*., 50	1,709,550	semi-an	Jan. '82 3
East Mahanoy*..... 50	392,950	semi-an	Jan. '82 3
Eastern (N. H.).....100	492,500	semi-an	June'82 2½
Eel River.....100	3,000,000	q'arterly	June '82 $1
Elmira.Jef.&Canand*100	500,000	annual	Sep. '80 5
Elmira&Williamsp't* 50	500,000	semi-an	May '82 1½
" " pref. 50	500,000	semi-an	Jan. '82 3½
Erie and Pitsburg*.. 50	1,998,490	q'arterly	Dec. '81 1¾
Evansville & Terre H.100	100,000	semi-an	Nov.'81 2
Fitchburg.....100	4,500,000	semi-an	Jan. '82 3
F. & P. Marquette pf.100	6,500,000	semi-an	Jan. '82 3
Ft.W. & Jackson pref.100	2,000,000	.....	May '82 2
Georgia 100	4,200,000	q'arterly	July '82 2½
Granite 100	1,250.000	semi-an	Jan. '82 3
Han. & St. Jo. pref .100	5,083,024	semi-an	Feb. '82 3½
Harrisbg&Lancaster 50	1,182,500	semi-an	Jan. '82 3½
Housatonic pref. ...100	1,180,000	q'arterly	Apl. '82 2
Illinois Central 100	39,000,000	semi-an	Mar. '82 3½
Ia.Falls & Sioux City*100	4,623,500	q'arterly	June'82 1¾
Iowa R. Land Co....100	7,620,000	q'arterly	May '82 1
Jeffersonv. Mad.&Ind100	2,000,000	q'arterly	Feb.'82 1¾
Joliet and Chicago*..100	1,500,000	q'arterly	June'82 1¾
Kan.C.,Ft.S.&Gulf...100	4,000,000	.....	Feb. '82 2
" " pref..100	2,750,000	semi-an	Feb. '82 4
Lentucky Central...100	500,000	semi-an	June'81 1
" " pref..100	5,583,500	semi-an	June'81 3
Lake Shore&Mich.So.100	49,466,500	q'arterly	May '82 2
" (guar.)100	533,500	semi-an	Feb. '82 5
Lawrence*..... 50	450,000	q'arterly	Apl. '82 2
Lehigh Valley..... 50	27,496,895	q'arterly	Apl. '82 1½
" " pref. 50	106,300	q'arterly	Apl. '82 1¾

Marked thus(*)are leased roads.	Stock out-standing.	Divide'd Periods.	Last Dividend Payable.
Little Miami..... 50	4,637,300	q'arterly	June'82 2
Little Rock & Ft. S..100	4,096,135	.....	July' 81 10s
Little Schuylkill*.. . 50	2,646,100	semi-an.	Jan. '82 3½
Louisville & Nashv..100	18,130,913	semi-an.	Feb. '82 3
Lowell & Andover...100	500,000	semi-an.	Jan. '82 3½
Lykens Valley.....100	600,000	q'rterly.	Oct,' 81 2½
Manchester & Law..100	1 000,000	semi-an.	May '82 5
Manhattan 100	13,000,000	.....	.....
" " 1st pref.100	6,500,000	q'rterly.	Apl. '82 1½
" " 2d pref.100	6,500,000	.....	Apl. '82 1½
Marietta& Cincinnati 50	1,386,350	.....	.....
" " 1st pref 50	8,105,600	semi-an.	Sep. '66 3s
" " 2d pref 50	4,440,100	semi-an.	Sep. '66 3s
Marq.Hout.&Ont.pf..100	2,259,026	.....	Feb. '82 4
Massawippi*.....100	400,000	semi-an.	Feb. '82 3
Michigan Central....100	18,738,204	q'rterly.	Aug.'81 1
Middlesex Central...100	280,000	semi-an.	[illegible] 3
Mill Creek&Minehill* 50	323,375	semi-an.	Jan. '82 5
M.Hill& Schuyl.Hav* 50	4,022,500	semi-an.	Jan. '82 3½
Missouri Pacific.....100	28,169,800	q'rterly.	Apl. '82 1½
Mobile&Montgomery100	3,022,517	semi-an.	Feb. '80 2½
Mont. & Wells River100	800,000	annual	Feb. '80 2
Morris and Essex.... 50	15,000,000	semi-an.	Jan. '82 3½
Mt Carbon&PtCarbon 50	282,350	semi-an.	Jan.. '82 6
Nashua and Lowell..100	800,000	semi-an.	May '82 4
Nashua & Rochester.100	1,305,800	semi-an.	Apl. '82 1½
Nashv. & Decatur...100	1,827,000	semi-an.	June'81 3
Nash.,Chat.&StLouis 25	6,670,325	semi-an.	Apl. '82 1½
Naugatuck.....100	2,000,000	semi-an.	Jan. '82 5
Nesquehoning Val'y* 50	1,300,000	semi-an.	Mar. '82 3
N.Castle&Beaver Val* 50	600,000	q'rterly.	Oct. '81 —
NewLondonNorth'n*100	1,500,000	q'rterly.	Jan. '82 1½
N. Y. Cen. & Hud. R.100	89,428,330	q'rterly.	Apl. '82 2
N. Y. and Harlem....100	7,950,000	q'rterly.	Apl. '82 2
" " pref.100	1,500,000	q'rterly.	Apl. '82 2
" City Line.. —	.....	annual	Apl. '82 3
N.Y.,LakeErie&West.100	77,083,800	.....	.....
" " pref.100	8,156,725	.....	Jan. '82 6
N. Y., N. H. & Hart..100	15,500,000	semi-an.	Jan. '82 5
N. Y., Prov. & Boston100	3,000,000	q'rterly.	May '82 2
Niag.Bridg&Canand*100	1,000,000	semi-an.	July '81 3
North Carolina*.....100	3,000,000	semi-an.	Sep. '81 3
" " pref.100	1,000,000	semi-an.	Sep. '81 3
N. Eastern (S.C.) pref100	86,000	semi-an.	May '81 4
Norfolk & Western pref.	15,000,000	q'rterly.	June '82 $1
North Pennsylvania. 50	4,527,150	q'rterly.	May '82 1¾
Northern Central.... 50	6,142,090	semi-an.	Jan. '82 3
Northern N. Hampsh100	3,068,400	semi-an.	June'82 3
Northern N. Jersey*.100	1,000,000	semi-an.	July '80 2½
Norwich&Worcester*100	2,604,400	semi-an.	Jan. '82 5
Ohio 100	18,500,000	.....	.....
Ohio and Miss. pref..100	4,030,000	semi-an.	Mar.'75 3½
Old Colony.....100	7,333,800	semi-an.	Jan. '82 3
Oregon R'way&Nav..100	6,000,000	q'rterly.	May '82 2
Oswego & Syracuse..100	1,320,400	semi-an.	Aug. '81 4½
Panama 100	7,000,000	.....	Jan. '82 6
Paterson & Hudson*.100	630,000	semi-an.	Jan. '82 4
Paterson & Ramapo.100	248,000	semi-an.	Jan. '82 4
Pember.&Hightst'n*. 50	342,150	semi-an.	Jan. '82 3
Pennsylvania..... 50	77,672,750	semi-an.	May '82 4
Pennsylvania Co..... 50	20,000,000	semi-an.	June'81 2½
Peoria & Bureau Val*100	1,200,000	semi-an.	Feb. '82 4
Philadelphia & Erie*. 50	7,013,700	semi-an.	.....
" " pfd 50	2,400,000	semi-an.	Jan. '75 4
Phil,Ger.&Norrist'n* 50	2,231,900	q'rterly.	Mar '82 3
Phil. and Reading... 50	32,726,375	q'rterly.	Jan. '76 2½
" " pref. 50	1,551,800	q'rterly.	July '76 3½
Phila. and Trenton..100	1,259,100	q'rterly.	Apl. '82 2½
Phila., Wil. and Balt. 50	11,585,750	semi-an.	Jan. '82 4
Pittsb.,Ft. W. & Chi.*100	19,714,285	q'rterly.	Apl. '82 1¾
" Special Imp.100	6,770,900	q'rterly.	Apl. '82 1¾
Pittsfield&N.Adams..100	450,000	semi-an.	Jan. '82 2½
Portl., Saco & Portsm100	1,500,000	semi-an.	Jan. '82 3
Providence &Worces.100	2,000,000	semi-an.	Jan, '82 3
Rensselaer&Saratog.*100	7,000,000	semi-an.	Jan. '82 4
Rhode Island& Mass.100	100,000	.....	Jan. '81 3
Richmond& Danv...100	3,866,000	q'rterly.	May '82 2
Richmond & Petersb100	1,009,300	semi-an.	Jan. '81 3
Roch.&Genesee Val.*100	555,200	semi-an.	Jan .'82 3
Rome,Watert.& Ogd.100	5,293,900	semi-an.	July '75 1½
Rutland preferred.. 100	4,000,000	semi-an.	Feb. '82 1
St.L.,Alt. & T.Haute.100	2,300,000	.....	.....
" " pref.100	2,468,400	.....	May '82 3
St.L.&S.Fran.1st pref100	4,500,000	.....	Feb. '82 3½
St.L.,I.Mt.&South'n.100	21,459,821	semi-an.	Feb. '74 3
St. P. & Duluth pref.100	4,705,006	q'rterly.	Mar.'82 1¾
St. P., Minn. & Man..100	15,000,000	semi-an.	Feb.'82 3½
Schuylkill Valley*... 50	576,050	semi-an.	Jan. '82 2½
Seaboard & Roanoke.100	1,299,600	semi-an.	May '82 5
Shamokin V.&Pottsv 50	869,450	semi-an.	Feb. '82 3
Shore Line*.....100	1,000,000	semi-an.	Jan. '82 4
Sioux C.&Pacific pref100	169,000	semi-an.	Apl. '82 3½
South Br. (N. J.)*....100	438,300	semi-an.	Jan. '82 3
South Western (Ga.)*100	3,892,300	semi-an.	Dec. '81 3½
Stockbridge&Pitts.*.100	448,700	semi-an.	Oct. '81 1½
Summit Branch*.... 50	4,010,350	semi-an.	Feb. '76 3
Syr.,Bingham&N.Y.*100	2,500,000	semi-an.	Feb. '81 2
Terre Haute & Ind...100	1,988,150	semi-an.	Feb. '82 4
Troy and Boston....100	1,609,000	semi-an.	Feb. '80 2
Union Pacific 100	61,000,000	q'rterly.	Apl. '82 1¾
United Cos of N. J.*.100	20,490,000	q'rterly.	Apl. '82 2½
Utica, Shenango&S V100	4,000,000	semi-an.	Nov. '81 3
Utica and Black Riv.100	1,772,000	semi-an.	Mar. '82 2
Vermont and Mass. 100	3,050,000	semi-an.	Apl. '82 3
Wab. St.L.& Pac.pref.100	22,615,100	q'rterly.	Nov.'81 1½

Markedthus(*)are leased roads.	Stock out-standing.	Divide'd Periods.	Last Dividend Payable.
Ware River*.....100	750,000	semi-an.	Jan. '82 3½
Warren (N. J.).....100	1,800,000	semi-an.	Apl. '82 3½
Warwick Valley.....100	340,000	semi-an.	Jan. '82 2½
Westchest&Phil.pref100	821,300	semi-an.	July '80 2
West Jersey.....100	1,359,750	semi-an.	Apl. '83 3s
Wilmingt'n&Weld'n.100	1,456,200	semi-an.	Dec. '81 3
Wil., Col., & Aug 100	960,000	semi-an.	Dec. '81 3
Winchester&Poto'c.*100	180,000	semi-an.	Jan. '82 3
Winchester&Strasb.*100	74,700	semi-an.	Jan. 82 3
Worcester & Nashua. 75	1,789,800	semi-an.	Jan. '82 1½
HORSE-POWER R. R.			
Albany City.....100	200,000	annual	..... '80 5½
Baltimore City..... 25	1,000,000	semi-an.	Jan. '82 4
Balt.,Cat.&El. Mills..100	....	semi-an.	Jan. '82 2
BleeckerSt.&Ful.F'y.100	900,000	semi-an.	July '81 3¾
Boston&Chelsea pref. 50	110,000	semi-an.	Apl. '82 3
Broadway (Brooklyn)100	250,000	q'arterly	Oct. '81 3
B'way&7th Av,(N.Y.)100	2,100,000	q'arterly	Oct, '81 2
B'klyn&Hunter's Pt.100	400,000	semi-an.	Apl. '79 3
Brooklyn City.....100	2,000,000	q'arterly	Dec.'81 3½
Bushwick (Brooklyn)100	309,000	semi-an.	July '81 2½
Cambridge.....100	908,000	q'arterly	Apl. '82 4½
Cen.Park,N.& E.Riv.100	1 ,800,000	q'rterly.	Jan. '82 2
Christoph'r&TenthSt100	650,000	semi-an.	Aug.'81 2½
Citizens' (Phil.)..... 50	192,500	q'rterly.	Jan. '82 2½
Citizens' (Pbg.)..... 50	200,000	annual.	....'80 14½
Coney Island&Bklyn100	500,000	semi-an.	Oct. '80 5
Continental (Phil.) .. 50	580,000	semi-an.	Jan. '82 6
D.Dock,E.B'way&Bat100	1,200,000	q'arterly	Nov.'81 4
Eighth Av. (N. Y.)...100	1,000,000	q'rterly.	Oct. '81 3
42d St. & G. St. Ferry100	748,000	semi-an.	Nov.'81 6
Frankf.&Southw (Ph) 50	600,000	q'rterly.	Jan. '82 6
Germantown, (Ph.).. 50	572,860	q'rterly.	Apl. '82 2½
Girard College (Ph.) . 50	500,000	semi-an.	July '71 3
Grand St. & Newton.100	170,000	semi-an.	July '81 2½
Green&Coates St.(Ph) 50	150,000	q'rterly.	Apl. '82 3
Heston,Mantau&F'm 50	299,381	semi-an.	Jan. '75 4
Highland.....100	600,000	semi-an.	Jan. 82 4
Lomb.&SouthSts(Ph) 25	195,000	semi-an.	Oct. '79 4
Lynn and Boston....100	200,000	semi-an.	May '82 4
Malden and Melrose.100	165,500	.....	.....
Metropolitan (Bost.). 50	1,500,000	semi-an.	Jan. '82 4
Middlesex (Boston)..100	650,000	semi-an.	May '82 3½
N.Y.,Bay Ridge&Jam100	150,000	.....	Oct. '78 7
Ninth Av. (N. Y.)....100	797,320	.....	.....
Orange &Newark....100	282,555	.....	.....
People's (Phila.)..... 25	124,744	.....	Apl. '82 2
Philadelphia City... 50	475,000	semi-an.	Jan. '82 5
Phila. and Darby.... 20	200,000	semi-an.	July '81 3½
Phila.&Grey's Ferry. 50	308,000	semi-an.	Jan. '82 6
Pbg,Alleg.&Manches. 50	300,000	q'rterly.	Oct. '81 3
Ridge Avenue (Ph.).. 50	420,000	semi-an.	Oct. '81 11
Second Avenue (N.Y.)10	1,199,500	semi-an.	July '81 2½
Second&ThirdSt.(Ph) 50	771,076	q'rterly.	Jan. '82 4½
17th &19th sts (Ph.).. 50	250,000	semi-an.	July '81 3
Sixth Avenue (N. Y.)100	750,000	semi-an.	Oct. '81 5
Somerville (Boston).100	113,000	semi-an.	May '82 3
South Boston..... 50	600,000	semi-an.	Jan. '82 4
Third Avenue, N. Y..100	2,000,000	q'rterly.	Nov.'81 5
13th and 15th sts.,Ph 50	334,529	q'rterly.	Jan. '82 4
23d street, N. Y.....100	600,000	semi-an.	Aug.'81 4
Union, Boston.....100	374,300	semi-an.	Jan '82 4
Union, Phila..... 50	1,005,000	semi-an.	Jan. '82 7
West Philadelphia... 50	750,000	semi-an.	July '77 10
CANALS.			
Chesapeake and Dela 50	2,078,038	semi-an.	June'75 2
Delaware Division... 50	1,633,350	semi-an.	Feb. '82 $1
Delawa. and Hudson100	20,000,000	q'rterly.	June'82 1¾
Delaware & Raritan*.100	5,847,400	q'rterly.	Apl. '82 2½
Lehigh Coal and Nav 50	11,204,250	semi-an	June'82 2
Monongahela Nav.... 50	1,004,500	semi-an.	July '81$2
Morris, consolidated.100	1,025,000	semi-an.	Feb. '81 2
" preferred....100	1,175,000	semi-an.	Feb. '81 5
Pennsylvania..... 50	4,501,200	.....	.....
Schuyl. Nav., com.*. 50	859,100	annual..	Au. '81 50c.
" " pref... 50	3,200,950	annual..	Aug. '81 $1
MISCELLANEOUS.			
Adams Express.....100	12,000,000	q'rterly.	June'82 2
American Express... 50	18,000,000	semi-an.	July '82 3
Amoskeag Manuf.Co.100	3,000,000	semi-an.	June'81 5
Calumet&HeclaMin'g —	100,000 S.	q'rterly.	May '82 $5
Central Mining Co...100	.....	semi-an.	Feb. '82 2½
Consolidation Coal..100	10,250,000	semi-an.	Jan. '82 2
George's Creek C.&I.100	.....	semi-an.	Jan. '82 3
Maryland Coal.....100	4,400,000	semi-an.	Feb. '76 1¾
Mariposa L. &Mining100	10,000,000	.....	.....
" pref100	5,000,000	.....	.....
Missouri Val.LandCo100	200,000	semi-an.	Jan. '82 7
National Tube Works100	1,000,000	q'rterly.	Apl. '82 3
Pac. Mail Steamship.100	20,000,000	q'rterly,	Sept.'69 3
Pennsylvania Coal... 50	5,000,000	q'rterly	May '82 3
Pullman Palace Car..100	10,023,800	q'rterly.	May '82 2
Quicksilver, com....100	5,708,700	.....	May '82 0.4
" pref....100	4,291,300	.....	May '82 6
Quincy Mining Co... 25	40,000shs	semi-an.	Feb. '82 $8
Quincy R. R. Bridge.100	1,750,000	semi-an,	Jan. '82 5
SiouxC.&I.F.L.&L.Co100	500,000	semi-an.	June'82 4
Spring Mt. Coal.....100	1,500,000	semi-an.	Jan. '82 3½
Topeka Equip'nt Co.100	255,000	semi-an.	Apl. '82 5
United States Ex....100	7,000,000	q'rterly.	May '82 1
Wells-Fargo & Co. Ex100	6,250,000	semi-an.	Jan. '82 4
Western Union Tel..100	80,000,000	q'rterly.	Apl. '82 1½

The Coal Trade.

THE leading coal-carrying companies make the following reports of their tonnage for the week ending May 20th, and for the year to same date, compared with their respective amounts carried to the same time last year:—

	Week.	1882.	1881.
Reading Railroad	180,963	3,394,665	3,202,956
Schuylkill Canal	11,221	106,114	84,524
Lehigh Valley	183,119	2,624,442	2,406,797
Delaware, Lackawanna and Western	96,488	1,443,672	1,478,150
Shamokin	26,115	341,270	381,751
Central R. R. of New Jersey	94,653	1,418,931	1,471,565
United R. R. of New Jersey	40,151	602,483	580,989
Pennsylvania Coal	33,113	390,181	412,540
Delaware and Hudson Canal	81,677	1,127,125	1,265,497
Huntingdon and Broad Top Mountain	5,621	184,509	166,028
Penn. and New York	31,432	649,985	607,987
Clearfield, Pa.	70,110	1,117,658	892,033

The total tonnage of anthracite coal from all the regions for the week ending May 20, as reported by the several carrying companies, amounted to 686,393 tons, against 398,016 tons in the corresponding week last year, an increase of 288,377 tons. The total amount of anthracite mined for the year is 9,233,665 tons, against 9,818,461 tons for the same period last year, a decrease of 585,196 tons. The quantity of bituminous coal sent to market for the week amounted to 83,254 tons, against 96,915 tons in corresponding week last year, a decrease of 13,662 tons. The total amount of bituminous mined for the year is 1,725,795 tons, against 1,798,904 tons for the corresponding period last year, a decrease of 73,109 tons. The total tonnage of all kinds of coal for the week is 769,647 tons, against 494,931 tons in corresponding week last year, a decrease of 274,716 tons; and the total tonnage for the coal year is 10,959,060 tons, against 11,617,365 tons to same date last year, a decrease of 658,305 tons. The quantity of coal and coke carried over the Pennsylvania Railroad for the week ending May 20th was 222,549 tons, of which 168,300 tons were coal and 54,249 tons coke. The total tonnage for the year thus far has been 4,246,842 tons, of which 3,042,630 tons were coal, and 1,204,212 tons coke. These figures embrace all the coal and coke carried over the road east and west. The shipments of bituminous coal from the mines of the Cumberland coal region for the week ending May 20 were 5,459 tons, and for the year to that date 486,243 tons, a decrease of 198,044 tons as compared with the corresponding period of last year. All the coal was carried by the Baltimore and Ohio Railroad, the shipments by which have been for the year to date 403,010 tons, a decrease of 126,067 tons as compared with 1881. The canal shipments for the year have been 4,559 tons, a decrease of 87,178 tons as compared with 1881. The shipments by the Pennsylvania Railroad for the year have been 74,842 tons, an increase of 9,369 tons of 1881. The Reading Railroad shipment for last week, ending May 27, was about 104,000 tons, of which 22,400 tons were sent to and 38,500 tons shipped from Port Richmond, and 11,600 tons sent to and 15,500 tons shipped from Elizabethport.—*Phil. Ledger, May* 29.

WE never knew before that nature could be deceived, but an artist has been found who lately painted a piece of cork so like a stone that when thrown into the river it sank immediately.

'HERE'S a point for you, boys!" says the Boston *Bulletin* to the brokers: "Buy a hundred thermometers. They are sure to touch 85 before September."

THE difference between a pessimist and an optimist is, that the former finds fault with nature for putting thorns on roses, while the latter thanks her for putting roses on thorns.

A CERTAIN Chicago vessel captain was complaining recently that he had invested some money on 'Change, and lost it all. A sympathizing ship-chandler asked him whether he had been a "bull" or a "bear," to which he replied; "Neither; I was a jackass."

MR. VAN KYSSELBERGHE, Director of the Belgian Meteorological Bureau, has discovered a system for transmitting telegrams and telephonic messages simultaneously along the same wire. The French Minister of Posts and Telegraphs has received in Paris, from Brussels, simultaneously, a telegram of 53 and a telephonic despatch of 119 words. The practical advantages of this invention are estimated by the French and Belgian Governments as of the utmost importance.

A NEW process for economizing coal waste, the invention of W. H. Cory, an Englishman, it is said, is about to be introduced into this country. In mining anthracite coal it is said that thirty-four per cent of the entire output is small coal, culm or dust, which is thrown aside and wasted because it packs so tightly in the furnace that it cannot be made to burn. Mr. Cory's process looks to the solidification of this culm into blocks or bricks, which will burn as freely as the lump coal, yielding more heat. It can be prepared, it is claimed, at an average cost of fifty cents a ton, and the saving in the quantity of anthracite coal alone which is annually mined, it is estimated, would be over $15,000,000.

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[From our Boston Correspondent.]

Our Boston Letter.

THE UNION FREIGHT RAILWAY.

This is a road about which little is known outside of Boston, and yet one which figures quite prominently in the through business. Your correspondent visited the office of the superintendent, Mr. MacFee, and learned much of the amount of business done and the way it is carried on. The Union Freight Railway is the connecting link between the roads which enter Boston on the north and those entering on the south. It was built on an idea started by a concern called the Marginal Freight Railroad, which got a charter and laid a small piece of track, and then collapsed. The Union road is now engaged in a lawsuit with the skeleton of the old company, who claim that their old charter is void, and that the road had no right to the piece of track they took. The whole cost of this road was $263,015.52, and it runs from the Boston and Lowell Railroad, on the north, along Causeway street, by, and having branch tracks to, the Eastern, Boston and Maine and Fitchburg; then, continuing along Atlantic avenue, it reaches the New York and New England and Old Colony Railroads, where it ends. The Old Colony leases and operates it. Its total length is 2.431 miles, all of which is laid with flat rails along two streets of the city. No day train over this road is allowed to consist of more than ten cars, as a longer train would obstruct the streets too much, as it crosses the entrances to the two bridges leading to the Charlestown district. Therefore, most of the work is done in the night. There seems to be no provision made for the charges of this road on freight billed through from the West to points on the Old Colony Railroad, as almost without exception such freight is overcharged, which is found to be just the amount of these charges. The complaints of grain men at these points are loud. This transfer across Boston is four cents per hundred, and should be added. Some lines profess to do it, but I have heard of overcharges on every line. Of course the lines refuse *promptly*, (who ever heard of one that didn't?) but it makes much vexation of spirit and angry feeling among the descendants of our most pious Puritan stock, among whom the Old Colony runs.

In order not to frighten horses, the company built four dummy engines, the likeness of which was never before seen. They are really a locomotive boxed up, and resemble a house on wheels, with a short chimney in the middle, and the escape steam comes out at a dozen different points above and below, so that not a great deal comes out at any one place. A countryman seeing one in the distance might think that some one was moving a barn, and that it had caught fire in transit.

This road passes most all of the wharves in the city proper and has spur tracks to the most prominent ones, so that ships can discharge at many of our wharves direct into the cars.

During the last fiscal year, 302,926 tons of local freight were carried, *i. e.*, "freight to or from some wharf," and 16,187 tons of through freight between the North and South. All the cattle from Canada and the West, via the Grand Trunk, and which come in here, via the Lowell or Fitchburg Railroads, to go abroad via any steamer using the fine docks of the New York and New England Railroad, must go over the Union Freight to get there.

The average freight charge on local freight is $1.79 per ton per mile; on through freight, $2.08, or $4 per car.

The company earned last year $33,464.48, and its expenses were $19,459.62, leaving a net income of $14,004.86, out of which they paid a 6 per cent dividend, which caused a deficit of $3,995.14, which was drawn from a surplus of the previous year on hand, amounting to $12,090.99.

It is not probable that this road will ever again have so large a surplus, as the Leyland Line of Liverpool steamships, which does a very large business, used, last year, Constitution Wharf on this road, which was leased to the Fitchburg Railroad, and a great number of cars were sent there to load the steamers or to be loaded, for which the Union Freight Railway got $3 per car. On the completion of the Hoosac Tunnel roads, the Fitchburg gave up Constitution Wharf, and the steamers were moved over to the new docks above mentioned, leaving the Shawmut elevator, which stood on this wharf, empty, and withdrawing a large source of revenue from the road. The decay of the American shipping interest is also against it, as it covers wharves used mostly by sailing-vessels.

NOTES AND INCIDENTS.

The New York and Boston Inland Railroad (proposed) are having a hard time. They have had to give up the idea of entering the city on Charles street, as first proposed, and now have decided to abandon the route through the town of Brookline, and to come through the town of Needham, to the West Roxbury station of the Providence Railroad, and enter town via that road, using their handsome depot. The estimated cost of the 11,665 feet from Needham to the junction, all finished, not reckoning equipments, is $240,306.05. This new plan will cost the road much less for land damages than the old one. The estimates of the road in this State (39½ miles) call for $6,775,143 to build it.

The New York and New England commence running on their summer time card on June 1. There is no doubt that the new round trip excursion offered by this road will be very popular. This gives a ride to New York via the Norwich line steamers, a sail up the Hudson, and a return passage via the Newburg terminal of the road, where it connects with the Erie, 58 miles above New York.

The Massachusetts Central Railroad has let its repair work to the Boston and Lowell Railroad and closed its shops at South Sudbury. This road pays the Boston and Lowell $40 per day for the use of its tracks from Cambridge to Boston and its passenger depot.

W. H. Barnes, General Superintendent of the Boston and Albany Railroad, rode over the Central the other day, and looked closely at everything—road bed, connections, depots, etc. This has led many to surmise that the Albany has designs on this road.

The New York and New England and the New York, Lake Erie and Western, are talking of a through line of sleepers via Newburg. Heretofore only freight lines have run from Boston to the West via this route.

The New York, New Haven and Hartford Railroad is surveying its road, and intend taking out some curves and grades which are unnecessary, in order to hold its own with the Boston and Albany on the new six-hour fast train, via the popular Springfield line to New York.

The Fitchburg Railroad is improving its passenger depot here, by adding inward baggage-rooms and a parcel-room, which were much needed.

The Boston and Albany are adding a fourth track between here and Newton, to accommodate the large suburban traffic.

The Cape Ann branch of the Eastern Railroad is being entirely relaid with steel rails.

The New York and New England Railroad will put on its fast peach trains about August 1. If we can believe the many reports of the blighting of the peach crop, there won't be anything to haul in them.

When the Canada Junction Railroad, now building, is completed, Boston will have a new route to Montreal via Portland and the St. Johnsbury and Lake Champlain Railroad.

The Conotton Valley Railroad Directors, at a meeting held here May 24th, voted to complete the fifty miles just graded of the Straitsville Division, which they have bought; and say in a circular of May 24, that they will call for the subscription on the new 6 per cent bonds, 25 per cent at a time—May 25, June 1, July 1 and August 1. T. N. Claps, Jr., is transfer agent here, with office at 13 Exchange street.

The Sound lines between New York have raised the fare to $4 for limited first-class tickets, from June 1 to, September 30. The lines doing this are the Fall River, Norwich and Stonington. This makes the boat fare but $1 less than the all-rail.

The Railway Car Accountants' Association met here on May 24, at the Hotel Vendome Sixty railroads were represented. A.W. Davis, of the N. Y., P. and O. R. R., was elected president; F. B. Harris, of the Red Line, vice-president; F. M. Luce, of the C. and N. W. R. R., was chosen secretary, and H. H. Lyon, of the C. and A. R. R., his assistant. The subjects debated were: The Coupon Car Tracer—What benefits have been derived from its use? Has it caused extra labor, and what advantages has its use proved over the old style, and are we justified in continuing its use? It was decided to continue its use another year, as it was proved to be satisfactory. The next question was Junction Reports—How generally are they used; have they been proved to be of value, and if so, can their use be made general? It was decided to advise all roads to use these Junction Reports, they having worked well. Next—Is the Clearing House system better than the Car Accountants', and will it pay a road to employ both? An attempt being made to discuss this, it was found that no one was very well posted on the "modus operandi" of the Clearing House, and so a committee was appointed to look into the workings of it and report at the next annual meeting. The association then adjourned.

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The Massachusetts Central stock and bond holders will meet the last of the week, to see if they can raise a million dollars to complete the road with.

Owing to the dullness in the export trade, on account of high markets for both grain and cattle in the West, the steamship lines running out of this port are reducing their sailings. The Adamson & Ronaldson Line to London is withdrawn entirely. The Anchor Line has taken off its London boats; the Warren's have withdrawn some vessels, and the Allan's all but a fortnightly boat to Glasgow. These lines will all return as soon as times are better, but their absence causes our docks to look forsaken.

The Boston and Albany Railroad fast New York train ran, one night last week, 23 miles in 27½ minutes. Nine cars were attached to two locomotives.

The Old Colony Railroad is having built some twenty new and first-class passenger cars.

The New York and New England receive testimonials to the convenience of their fine docks from most every steamship captain who uses them. They are acknowledged by all to be unexcelled. T.

Boston, May 30, 1882.

He Got the Desired Information.

It was in the smoking-car on the New York Central. There was one chap who was blustering a great deal and telling of how many duels he had fought, and behind him sat a small man reading a magazine.

"Sir!" said the big man, as he whirled around, "what would you do if you were challenged?"

"Refuse," was the quiet reply.

"Ah, I thought as much. Refuse and be branded a coward! What if a gentleman offered you the choice of a duel or a public horsewhipping—then what?"

"I'd take the whipping."

"Ah! I thought so; thought so from the looks of you. Suppose, sir, you had foully slandered me?"

"I never slander."

"Then, sir, suppose I had coolly and deliberately insulted you. What would you do?"

"I'd rise up this way, put down my book this way, and reach over like this, and take him by the nose as I take you, and give it a three-quarter twist—just so!"

When the little man let go of the big man's nose, the man with the white hat on began to crouch down to get away from the bullets, but there was no shooting. The big man turned red, then pale, then looked the little man over, and remarked:

"Certainly—of course—that's it exactly!"

And then conversation turned on the general prosperity of the country.

Rapid Transit.

President Chaffee, of the Union Railway Company, is enthusiastic in regard to the workings of the cable road in Chicago, and thinks the question of rapid transit is solved by this new method of transportation. The estimated cost of construction of three miles of cable road, by Hallidie's process, is $241,000, including buildings and apparatus. The estimated expenses of running a three-mile horse railway is $138,880. The estimated expense of running a cable road the same distance is $88,246.71; leaving a balance of $50,633.29 in favor of the cable method. Arrangements have been made by which the difficulty regarding curves has been overcome. Any number of cars can be attached to the "grip" car, and the danger of accidents is not greater than it is on horse-car roads, provided proper caution is used.—*Cambridge Tribune.*

Car Accountants' Convention.

The convention of Car Accountants from different sections of the country closed its meeting in Boston on the 24th ult. Among the results of their deliberations was the decision to continue the use of the coupon car tracers system another year, the past year's test having proved favorable. It was also voted to advise all roads to adopt what are called Junction Reports of Cars. The Clearing House system, in comparison with the Car Accountants' office, was discussed, and a committee of five appointed to investigate the matter and report at the next annual meeting. The necessity of preventing delay in foreign cars was impressed upon members. Among other subjects discussed were those of recording movements of switched cars, increase of cars, demurrage, mileage of equipment, &c.

It seems that driving-belts of Italian hemp are 10 per cent stronger than those made of Russian hemp, and that similar belts made of cotton stand only about half the strain necessary to break hempen belts.

Returning from a visit to the Princess Louise at Kensington Palace recently, Queen Victoria drove down the middle of Rotten Row, thus exercising a prerogative belonging exclusively to the Sovereign, and one of which she has very rarely availed herself. From this ancient privilege of royalty came the name "Route du Roi;" whence, by corruption, "Rotten Row."

The Terre Haute (Ind.) *Express* says that the first locomotive which ever made the trip from that city to Indianapolis was engineered by J. A. Parker, of the Eagle Iron Works, of Terre Haute. The engine is still on the road. It has undergone many changes, is now numbered fifty-four, and is used exclusively with the pay car. William Baugh was the first engineer to run a locomotive from Indianapolis to Terre Haute.

A lease for 999 years nowadays is regarded as equivalent to a sale, but such a lease has just expired in England, and the property has reverted to the original owner who leased it, namely, the Church of England. It is thus legally decided that the Church of England has had a corporate entity since the time of Alfred the Great, and that it did not, as has been supposed by many, originate in the time of Henry the Eighth.

At the annual meeting of the directors and stockholders of the Western Miners' Bureau, held at Des Moines, Iowa, on the 11th instant, representatives of twenty-two corporations, with an aggregate capital of $42,000,000, being present, resolutions were adopted favoring a bimetallic standard for the world, an increase in the amount of silver dollars, making them intrinsically worth one hundred cents, and a Mining Bureau at Washington. John H. Gear was chosen president; James Harlan, vice-president; Wm. H. Ballou, secretary; and Hamilton White, treasurer.

The Smyrna *Times* says that the peach trees of Delaware have exhibited unusual vitality this year in more ways than one. They have resisted the determined assaults of a hostile season, have blossomed luxuriously, and now are "all of a strut with the young fruit," and then adds: "This intent of nature to do its best after a year of rest is notable in the great number of twin peaches; one farmer tells us that he found no less than three on a twig of six inches, and says others have noticed the number of double peaches in the same blossom cup. Such a strong intent in production has not been noticed since 1875."

The hard, black German slate pencil has been superseded of late years by the round white pencil of clay slate. At the quarry near Castleton, Vt., about thirty-five workmen produce about 50,000 pencils daily, and it is proposed to increase the daily output to 100,000. The blocks when quarried are sawed into pieces seven by twelve inches, split to the thickness of half an inch and smoothed by a planer. The block is passed under a semi-circular knife, and, after having been turned over, the process is repeated. The result is 50 7-inch pencils. A particle of quartz in the block would break all the pencils. They are pointed by a grindstone, turned, assorted, and sent to market in boxes of a hundred.

The greatest pyramid is that of Cheops, one of three pyramids forming the Memphis group, situated on a plateau about 137 feet above the level of highest rise in the Nile. Its dimensions have been reduced by the removal of the outer portions to furnish stone for the city of Cairo. Its masonry consisted originally of 89,028,000 cubic feet, and still amount sto 82,111,000 feet. The present vertical height is 450 feet against 479 feet originally, and the present length of the sides is 746 feet against 764 feet originally. The total weight of the stone is estimated at 6,316,000 tons. The only entrance is on the north face, 49 feet above the base, and about 24 feet east of the central line. The passage-way is only 3 feet 11 inches high and 3 feet 5½ inches wide. It leads down a slope a distance of 320 feet 10 inches to the sepulchral chamber, and beyond this 52 feet 9 inches into the rock. It is supposed that it was intended to excavate another chamber at the end of this passage. The sepulchral chamber is 46 feet long by 27 feet in width, and its height is 11½ feet. Above this chamber are several smaller chambers connected with it by passages. The only sarcophagus found in the pyramid was in one of the upper apartments known as the King's Chamber. It is of red granite, and a tone time contained the mummy of the King, which disappeared when the pyramids were first opened and plundered.

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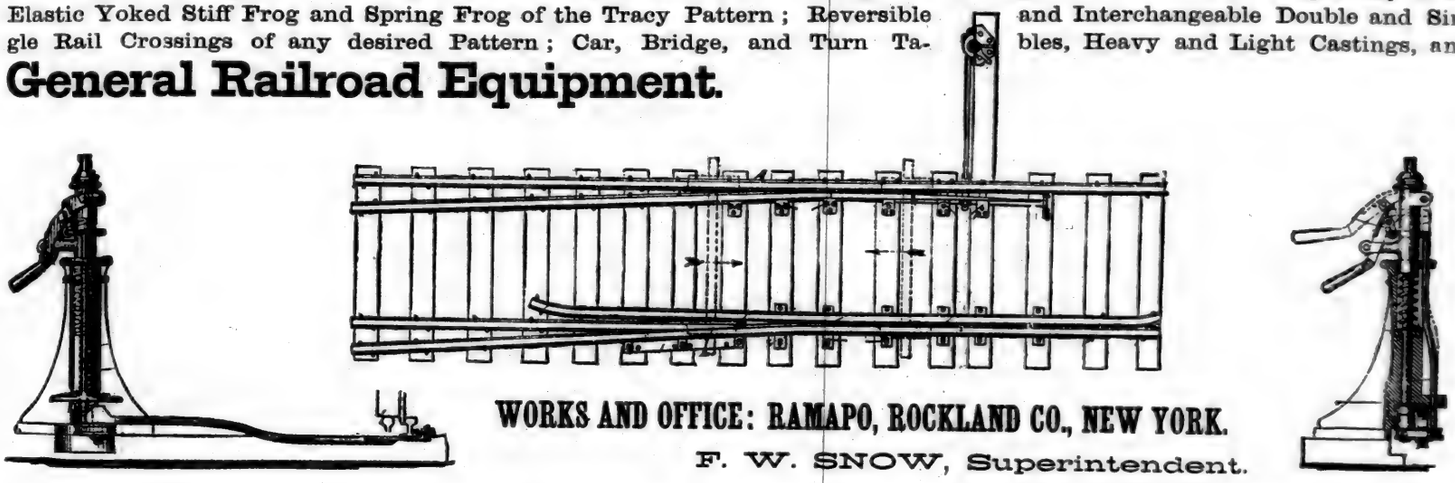
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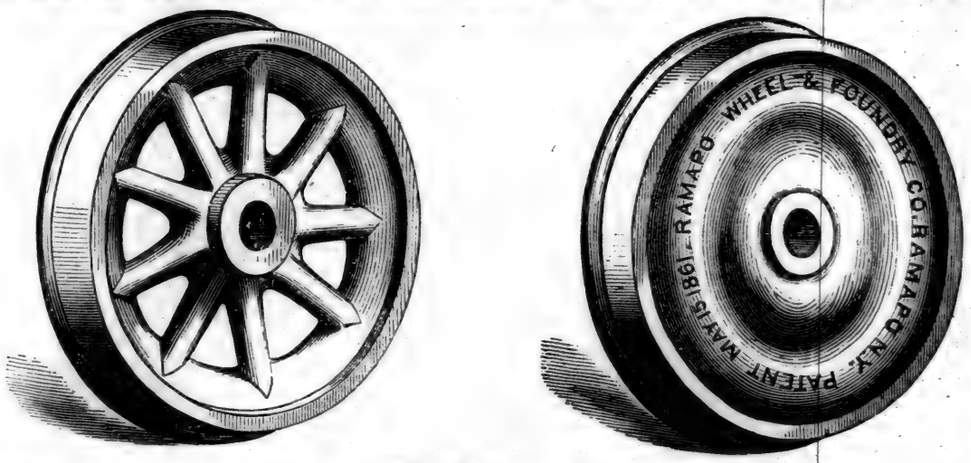
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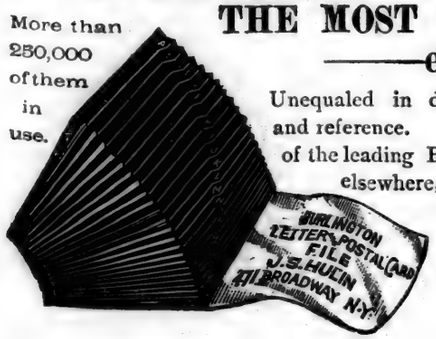
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AMERICAN Railroad Journal.

ESTABLISHED 1831.

Steam Navigation, Commerce, Finance, Banking, Machinery, Mining, Manufactures.

SECOND QUARTO SERIES.—VOL. XXXVIII., No. 22.] NEW YORK, JUNE 10, 1882. [WHOLE No. 2,407.—VOL. LV.

American vs. English Securities.

IT may be that many of the American railways are as good and sound as English of equal class, but there is one circumstance which is adverse to shareholders in Yankee lines—the fluctuations in the prices are extreme and never ending. They dance up and down as if madness guided their course. A man who buys stock of the best line, at what he considers a fair price, is sure to be placed under the bewilderment of violent fluctuations. The day after he has bought he may be unpleasantly startled by his stock being "down," and the value of his property, without any reasonable cause, less by hundreds or thousands; but a day or two further on up it flashes, and he is largely in pocket, that is provided he sells, and can reach the Stock Exchange before another violent shock occurs. This sort of thing is not to the taste of the British investor, who, on principle, declines to bet, and as a matter of inclination prefers stable stocks. The quicksilver of American stocks is so everlastingly in motion that they may presently get out of fashion on the London markets. People of a substantial order do not like their property to be "either up a tree or down a well." They want something they can rely upon for income, and not "investments" at a high premium one day and at a frightful discount the next. Such movements may be very well for speculators and gamblers, but they disgust investors. With regard to these American lines, also, there seems to be two markets continually pegging away at prices. There is a London market, and there is a New York market. Both quote prices and dodge each other in daily fluctuation. We should think that a man who had all his property in American shares could hardly fail to go mad. He might, however, save his pocket and his intellect by reducing his stake in the ordinary stocks of American companies and placing the money on the firmer foundation of approved American mortgages. We believe there are many American railroad mortgage bonds which are nearly as secure as first-class English railway debenture stock, and are practically quite as much so. But the Americans are behind the times in their management in this respect. They have not, as a rule, sufficient regard for security. They do not apparently understand raising money at 4 per cent. Many American railroad bonds, although highly covered, bear 6 per cent interest, and yet command no high price. Nor can they ever, being payable off within a comparatively short period at par. What extravagance! Why could not our cousins husband their credit, and issue perpetual debenture stock, as we do, and as the Canadian Railway Companies do? Our high class 4 per cent railway debenture stock is at a considerable premium, a premium of 16 or 17. It is true the Canadian railway debenture stocks do not rank at so high a price as this, but the Grand Trunk 5 per cent debenture stock is at about 17 premium, and the Great Western of Canada not far from it. If the Canadian lines were as prosperous as the English, their debenture stocks would rank nearly as high, and we see no solid reason why high class American railroad debenture stocks should not be as popular with the investing public. But at present the Americans have no debenture stocks. They seem to prefer paying extravagant prices for borrowed money. Perhaps they are conscious that their occasional wars of rates and their existing laws are not favorable for high credit, but are suited only for 6 per cent bon s, repayable at par by sinking funds. However, if they like to pay high rates of interest, there are many in this country who are pleased to receive them. If they will not do the right thing to command high credit they must take the consequences.—*Herapath's Railway Journal.*

Contributory Negligence.

IN a case which has been tried several times before, and was recently decided in the English Supreme Court of Judicature, the chief point was whether the plaintiff had contributed, by his negligence, to the injury he received. He was about to cross a rail track, in the station, and he and every one else expected the arrival of a train to stop. Unexpectedly an engine came through at express speed and ran over him. It was conceded that if this had been the expected train his crossing was proper, and he would have crossed safely. As he stepped down from the platform to the track a signal man shouted to him. The whole point in the case was whether at this instant he should not have stopped. Lord Justice Brett, in brief words, stated a common sense as well as legal principle, which is applicable to many cases occurring on railways. He said: "It is not negligence not to take the best possible care in a sudden peril; but to do what persons ordinarily careful and of ordinary nerves, under ordinary circumstances, would not do. It cannot be laid down as law that persons suddenly placed in extreme peril must not lose their heads."

Iron and Steel Production.

THE report of the Secretary of the American Iron and Steel Association for the year 1881 has just been completed. The following is a summary of its contents: Production of pig iron in 1881, net tons, 4,641,564, including 21,086 tons of spiegeleisen; production of all rolled iron, including nails and excluding rails, 2,155,346 tons; Bessemer steel rails, net tons, 1,330,302; open hearth steel rails, net tons, 25,217; iron and other rails, net tons, 488,581; production of iron and steel street rails included in above 21,544; crucible steel ingots, net tons, 146,946; Bessemer steel ingots, net tons, 1,539,157; blister and patent steel, net tons, 3,047. Production of all kinds of steel, net tons, 1,778,912. Production of blooms from ore and pig iron, net tons, 84,606. Imports of iron and steel, $61,555,078. Imports of iron ore, gross tons, 782,887. Exports of iron and steel, $15,781,282. Production of Lake Superior iron ore, gross tons, 2,336,335; production of iron ore in Jersey, gross tons, 737,052. Total production of iron ore in census year 1880, net tons, 7,974,705.

Production of anthracite coal in census year 1880, net tons 28,646,995. Production of bituminous coal in census year 1880, net tons, 42,420,581. Production of anthracite coal in 1881, gross tons, 28,500,016. Miles of railway completed in 1881, 9,650; miles of railway track in the United States, December 31, 1881, including double track and siding, estimated, 130,000. Iron ships built in the United States in the fiscal year ending June 30, 1881, 42.

Coal by Wire.

THE proposal by Sir Henry Bessemer to bring coal by wire, instead of by rail, is very simple. Although coal is still our great agent in the production of motive power, it must not be forgotten that Sir William Thompson has clearly shown that by the use of dynamo-electric machines, worked by the Falls of Niagara, motive power could be generated to an almost unlimited extent, and that no less than 26,250 horse power so obtained could be conveyed to a distance of 300 miles by means of a single copper wire of half an inch in diameter, with a loss in transmission of not more than 20 per

cent, and hence delivering at the other end of the wire 21,000 horse-power. Sir Henry exclaims, "What a magnificent vista of legitimate mercantile enterprise this simple fact opens up for our own country! Why should we not at once connect London with one of our nearest coal fields by means of a copper rod of one inch in diameter, and capable of transmitting 84,000 horse-power to London, and thus practically bring up the coal by wire instead of by rail?" He supplies the equivalent in coal of this amount of motive power. Assuming that each horse-power can be generated by the consumption of three pounds of coal per hour, and that the engines work six days and a half per week, we should require an annual consumption of coal equal to 1,012,600 tons to produce such a result. Now, all this would, in the case assumed, be burned at the pit's mouth, at the cost of 6s. per ton for large and 2s. per ton for small coal—that is, less than one-fourth the cost of coal in London. This would immensely reduce the cost of electric light, and of the motive power now used in London for such a vast variety of purposes, and at the same time save us from the enormous volumes of smoke and foul gases which this million tons of coal would make if burned in our midst. A one-inch diameter copper rod would cost about £533 per mile, and if laid to a colliery 120 miles away, the interest at 5 per cent on its first cost would be less than 1d. per ton on the coal practically conveyed by it direct into the house of the consumer.—*Iron.*

Injurious Effects of Gas Lighting.

An English writer, after describing the baneful effects of gas upon the healthfulness of living rooms, goes on to notice some of the mischief done to books, wares, furniture and the like. The evil effects of the heat of gas jets are augmented, he says, by the large amount of water produced by the gas flame. Sixty burners will produce on the lowest computation two gallons of water per hour; hence in a November evening many large shops filled with delicate goods will have a nine-gallon caskful of water thrown into their atmosphere in the form of steam, to condense on any cool surface, as we often see it trickling down in windows in winter. But worse remains behind. The sulphur, always present in gas in larger or smaller proportion, according to the character of the coal employed, burns into sulphurous vapor, which passes in the air to the state of oil of vitriol. The eminent chemist, Dr. Prout, exposed water in a drawing-room in which gas was burned and found that it absorbed sufficient of these vitriolic emanations to redden blue litmus and show the presence of free sulphuric acid. The fumes from gas will, indeed, in the long run, discolor every sort of fabric, rust metals, rot gutta percha and reduce leather (as in the binding of books) to "a scarcely coherent powder with a strongly acid taste." After referring to the evidence of the librarians of the Athenæum Club, London Institution, etc., as to the rotting of the bindings of books kept in rooms lighted by gas, the writer says: "Drapers know to their cost how the edges of pieces of dyed fabrics become faded and rotten when kept long on the upper shelves of gas-lighted shops; no plant will grow in a room where gas is burning, and cut flowers quickly wither; while those who work long and habitually in gas-lighted rooms become blanched and sickly. From all these manifold evils electricity will deliver us."

St. Gothard Tunnel Railway.

On Sunday, May 28, as previously announced, the great St. Gothard Tunnel Railway was solemnly opened, and the rejoicings in honor of the event were very great. The "great hole," as the London *Globe* calls it, is the longest tunnel yet made. It is 9 miles 468 yards, or about a mile and a half longer than the Mont Cenis Tunnel. It is, however, less than half the length of the projected tunnel under the sea to France. The St. Gothard Tunnel has proved to be very costly, its expended capital being, in round figures, £7,000,000, or about £700,000 per mile. The St. Gothard Tunnel is 14,944 metres in length; the Mont Cenis is 12,233 metres. Besides its long tunnel, the St. Gothard has 53 other tunnels, making up with it a covered way of 40,718 metres. The Semmering has only 15 tunnels, with an aggregate of 4,469 metres; the Brenner 27 tunnels.

Man and Insects.

The only nerves (worth mentioning) in the human body which are not under the control of the brain, are those of the heart and other internal organs; and over these parts, as everybody knows, we have not any voluntary power. But all our limbs and muscles are moved in accordance with impulses sent down from the brain, so that, for example, when I have made up my mind to send a telegram to a friend, my legs take me duly to the telegraph office, my hand writes the proper message, and my tongue undertakes the necessary arrangements with the clerk. But in the insect's body there is no such regular subordination of all the parts composing the nervous system to a central organ or head office. The largest knot of nerve matter, it is true, is generally to be found in the neighborhood of the same organs, and it receives direct nerve bundles from the eyes, antennæ, mouth, and other chief adjacent parts; but the wings and legs are moved by separate knots of nerve cells, connected by a sort of spinal cord with the head, capable of acting independently on their own account. Thus, if we cut off a wasp's head and stick it on a needle in front of some sugar and water, the mouth will greedily begin to eat the sweet syrup, apparantly unconscious of the fact that it has lost its stomach and that the food is quietly dropping out of the gullet at the other end as fast it is swallowed. So, too, if we decapitate that queer Mediterranean insect, the praying mantis, the headless body will still stand catching flies with its outstretched arms, and fumbling about for its mouth when it has caught one, evidently much surprised to find that its head is unaccountably missing. In fact, whatever may be the case with man, the insect, at least, is really a conscious automaton. It sees or smells its food, and it is at once impelled by its nervous constitution to eat it. It receives a sense-impression from the bright hue of a flower, and it is irrestistably attracted towards it, as the moth is to the candle. It has no power of deliberation, no ability even to move its limbs in unaccustomed manners. Its whole life is governed for it by the fixed nervous constitution, and by the stimulations it receives from outside. And so, though the world probably appears much the same to the beetle as to us, the nature of its life is very different. It acts like a piece of mechanism, wound up to perform a certain number of fixed movements, and incapable of ever going beyond the narrow circle for which it is designed.—*Grant Allen, Knowledge.*

Imports of Dry Goods at New York.

The Imports of Foreign Dry Goods at New York for the month of May, were :—

ENTERED FOR CONSUMPTION.

	1880.	1881.	1882.
Manufs. of wool....	$842,249	$449,122	$812,309
Manufs. of cotton...	1,474,852	1,159,676	1,651,085
Manufs. of silk.....	1,616,352	1,482,682	2,317,768
Manufs. flax.....	851,994	732,302	966,270
Miscell. dry goods...	509,788	359,494	535,740
Total ent. for consumption.....	$5,295,135	$4,118,276	$6,193,232

WITHDRAWN FROM WAREHOUSE.

	1880.	1881.	1882.
Manufs. of wool.....	$240,478	$513,365	$321,122
Manufs. of cotton...	191,165	233,563	166,598
Manufs. of silk.....	328,998	361,446	370,722
Manufs. of flax.....	217,732	340,233	200,065
Miscell. dry goods..	140,836	201,567	122,934
Total withdr'n from warehouse.....	$1,119,209	$1,650,174	$1,181,446
Add ent. for con....	5,295,135	4,188,276	6,193,232
Total thrown on the market.....	$6,414,344	$5,838,450	$7,374,678

ENTERED FOR WAREHOUSING.

	1880.	1881.	1882.
Manufs. of wool....	$760,511	$240,336	$428,920
Manufs. of cotton..	412,394	209,556	263,543
Manufs. of silk.....	389,779	258,845	499,940
Manufs. of flax....	510,438	196,526	227,170
Mis. dry goods.....	102,532	112,539	120,200
Total ent. for warehouse	$2,175,654	$1,017,802	$1,539,773
Add entered for consumption	5,295,135	4,188,276	6,193,232
Total ent. at port....	$7,470,789	$5,206,078	$7,733,005

The Imports of Foreign Dry Goods at New York for five months from January 1, were:—

ENTERED FOR CONSUMPTION.

	1880.	1881.	1882.
Manufs. of wool..	$8,540,826	$6,598,897	$9,081,249
Manufs. of cotton	11,529,861	10,294,341	12,203,355
Manufs, of silk....	13,221,652	10,927,401	15,636,022
Manufs of flax....	7,577,484	5,319,683	6,704,115
Mis. dry goods....	4,285,459	3,814,856	4,325,951
Total entered for consumption ...	$45,155,282	$36,946,178	$47,950,692

WITHDRAWN FROM WAREHOUSE.

	1880.	1881.	1882.
Manufs. of wool..	$2,401,744	$3,518,915	$2,779,379
Manufs. of cotton.	1,491,602	2,561,808	1,872,922
Manufs. of silk....	2,153,764	2,514,450	2,488,704
Manufs. of flax...	1,846,502	2,661,278	1,801,001
Mis. dry goods....	986,355	1,252,125	1,284,129
Total withdrawn from warehouse.	$8,879,966	$12,508,576	$10,286,135
Add entered for consumption ...	45,155,282	36,946,178	47,950,692
Total thrown on the market.....	$54,035,248	$49,454,754	$58,236,827

ENTERED FOR WAREHOUSING.

	1880.	1881.	1882.
Manufs. of wool...	$3,166,287	$2,743,592	$3,021,878
Manufs. of cotton.	1,629,598	2,040,584	1,931,719
Manufs. of silk....	2,200,724	2,132,646	2,367,153
Manufs. of flax....	3,000,938	1,909,817	1,717,590
Mis. dry goods....	1,039,052	1,333,052	1,146,695
Total entered for warehouse	$11,036,599	$10,159,691	$10,185,035
Add entered for consumption ...	45,155,282	36,946,178	47,950,692
Total ent. at port.	$56,191,881	$47,105,869	$58,135,727

Marble-Mining in Carrara.

[Robert W. Welch, in the Century.]

CARRARA marble is an article well known the world over. It is reputed to be unquestionably the best marble for the use of sculptors, gravestone builders, architects, and other marble-workers, and inasmuch as it has enjoyed this reputation without dispute for over nineteen centuries, it is fair to presume that it is justly entitled to its good name. The ancient Romans of the time of Augustus could find no other marble equal to that of Carrara, and they used it freely in making statues, and in building monuments, temples, and various other public edifices. The judgment of the statuaries and architects of the "year one" has been re-enforced by that of their successors in each succeeding generation, and to-day Carrara marble is in such demand in every civilized nation of the world that nearly one hundred and fifty thousand tons of it are quarried every year. Of this the United States use about twenty-five thousand tons annually, notwithstanding the fact that, duty paid, the rough blocks are worth about two dollars and a half a foot, or almost two cents a pound, as they are landed from the vessel.

Carrara is situated on the west coast of Italy, forty-five miles from Leghorn, and twice as far from Genoa, and, counting in the villages which are dependencies of Carrara, it is a city of twenty thousand inhabitants. The city stands in a niche of the Appenine Mountains, which in its rear rise in barren, rocky cliffs, varying in height from three thousand to five thousand feet, and on two sides of the town soften into earth-covered hills, from three hundred to a thousand feet high, cultivated to their very tops by the growers of the grape. These side-hills lack but an eighth of a mile of coming together on the fourth side of the town. If they met, Carrara would be like a very small bit of gentian in a very large mortar. As it is, this break of an eighth of a mile affords an outlook into the world, and looking through it, one's horizon is bounded by the Mediterranean.

Carrara is entirely given up to the trade in marble. The sojourner in the city is not slow to learn this fact, nor likely to forget it. He is awakened in the morning by the clicking of the marble-cutters, and the last sound of which he is aware at night is that of the swearing teamsters, pounding their marble-laden oxen into greater speed. The ground floor of almost every house is turned into a studio, in which tombstones, cemetery and lawn figures, architectural ornaments, and occasionlly a fine piece of statuary are produced.

Wonderful to relate, and much to the surprise of people who come to Carrara with no foreknowledge of the place, the houses are not built of marble, but of rough stones cemented together, and covered on the outside with a smooth coating of plaster. There is, however, marble enough in the inside work. The door-posts, the window seats and caps, the stairs, the mop-boards, and generally the floors are of marble, and a new-comer to Carrara can enjoy a very active month of sneezing if his chambers do not afford additional facilities, especially as it is customary to throw in a few marble-topped tables and stands, a half-dozen marble statues, and now and then an elaborate marble mantelpiece.

Terrible as it would be to spend a life-time in Carrara, it is a very interesting city to the few tourists who stop over a day or two on their way from Genoa to Pisa and Florence. The Carrara marble quarries are certainly one of the sights of the world. In Vermont, the workmen grovel in the earth for their marble; in Carrara they go up hundreds, sometimes thousands, of feet into the sky for theirs. Fancy a range of mountains, as high as the highest of the White Mountains of New Hampshire, rising almost perpendicularly—mountains of somber gray rock, bare of trees and of every other sort of vegetation. At the foot of these mountains, upon a plateau of a few hundred acres, place a dingy, dirty, crowded little Italian city; upon the sides of the mountains, at heights varying from five hundred to thirty-five hundred feet, place the marble quarries. Seen in a clear day, at a distance of half a dozen miles, the Carrara mountains seem to rise at an angle of ninety degrees, and the profile of their sharp peaks is so positive and clean, that one can think of nothing more effective in the way of description than to say that they look like the teeth of a magnified wood-saw. And as for the quarries, some of them seem to be patches of snow obstinately refusing to succumb to the sun's warm rays; others look like cascades dashing down the mountain sides; while others seem to be mammoth sheets of paper stuck upon an immense stone wall.

There are upward of four hundred marble quarries, large and small, in Carrara, which are worked by about five thousand men, and the annual production is about one hundred and fifty thousand tons. To procure this amount of marble, probably five hundred thousand tons are quarried, the difference between the figures which represent the annual production and those which represent the amount quarried, being waste. The reason for this is that nobody has yet been ingenious enough to devise a method of quarrying adapted to Carrara which will yield more than one available foot of marble to every four feet quarried. Fortunately, the stock of Carrara marble is inexhaustible, and two thousand years of steady and constantly increasing production have not sensible affected the supply. The mountains of beautiful white stone seem only to have been touched here and there by the miners.

About half of the quarries are located on the sides of an immese ravine called Ravaccione. A railroad has been built up into this ravine, and tourists who desire to inspect the quarries generally go to Ravaccione by rail, saving a walk of three miles. Arriving at the terminus of the railroad they are about five hundred feet higher than the city of Carrara, and are in sight of as many as two hundred quarries, of which some are not more than two hundred feet above the railroad terminus, while others are very high up the mountain sides. Very few people undertake to explore the loftier quarries, as the feat requires a deal of hard climibing, and in places an amount of nerve which people unaccustomed to mountaineering do not possess. There are some quarries into which the workmen are lowered by ropes, and still others in which the men do the drilling, and, in fact, all the other work while suspended by ropes in mid-air, hundreds of feet above the quarry landing.

(TO BE CONTINUED.)

THE Duke of Manchester, who is now visiting Canada in connection with the purchase of land in the northwest in behalf of the "Land Corporation of Canada" with a capital of £3,000,000 sterling, states that the quantity of land purchased by the syndicate is 5,000,000 acres. As a means of inducing settlement the company will erect houses for immigrants unable to do so themselves. The syndicate's affairs are to be controlled by two resident Canadian commissioners.

THE trustees of Cornell University have appropriated $20,000 for a new building, to be called "The Armory." It is to be of brick, 60 by 150 feet. The interior is to be one large hall and will be used for a drill-room, for receptions, commencement exercises and similar purposes. An annex will contain swimming-tanks, bath-rooms and a gymnasium. The building will be illuminated by the electric light. The work is to be begun at once.

THE managers of the Connecticut and Passumpsic Rivers Railroad are making extensive improvements in their Lake Memphremagog hotel property this season. The Mountain House at Owl's Head was rebuilt and refurnished last year, and the Memphremagog House at Newport is being somewhat reconstructed and thoroughly renovated for summer travel. Both houses will open early in June in charge of Mr. Nehemiah Ripley, well and favorably known in Boston and New York as a superior hotel manager. The steamer Lady of the Lake will make two trips daily between Newport, Georgeville, Magog and other points on the lake. Prospect Hill has been made an attractive spot by President Raymond, the grounds on this sightly eminence being much improved. A good portion of the road has been steel railed and newly ballasted, and the tourist will find the train service and equipment of this pleasant pleasure route all that could be desired.

IN Illinois and some other Western States the telephone companies are perfecting a system of operations which will be of great benefit to towns away from railroads. The plan is to have a central station in each county seat, with wires leading to all the towns in the county. From the county seats it is proposed to communicate with the capital or principal city of the State, thus giving a complete circuit. By new devices greater distance than heretofore is covered, and connections over a State can easily be made. The work has proceeded furthest in Ohio, where more than half a dozen counties and a large number of towns have been brought within hearing distance of Cincinnati. In Illinois considerable work has been done, and Joliet and various towns beyond are connected with Chicago. The tariff established is fifty cents for five-minute conversations, with commutation to regular patrons.

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TRADE AND COMMUNICATION WITH CENTRAL AND SOUTH AMERICA.

SOME five years ago, one L. U. REAVIS, a resident of St. Louis, in the State of Missouri, whose single distinction is his extravagant claims for the future of that city, publicly offered a prize for the best essays on the subject of a continuous railroad from the northern limit of United States Territory to the borders of Patagonia, which he fancifully called "The Three Americas Railway." Notwithstanding that he had pretty well worked out the vein of discovery himself, the essays were received and examined by a committee of three of St. Louis' eminent citizens—for the city boasts that number—one of whom was Prof. W. T. HARRIS, who, besides being at the head of the Municipal School System, is also at the head of the American School of Hegelian Philosophy. Captain JAMES B. EADS, of jetty fame, if we mistake not, was another of the judges. The essays were doubtless paid for, and have since been published in book form. At the time of his propagandism, Mr. REAVIS had no other idea than that this enterprise of joining the whole American continent lengthwise by a railroad should be done by the united and concerted efforts of the respective governments; and no end of argument was adduced to show that it would be as easily within the means of the coming generation as was the original Pacific Railroad to the past generation.

We mention this curiosity of literature now only to call attention to how much has been already done, and is in a fair way of being done, to realize Mr. REAVIS' dream of imagination, though not at all in the way, nor by the agencies he was working. Already the iron rail extends from Pembina to the Rio Grande in Southern Texas, and by the end of 1883 there will be a continuous rail of the same gauge from Hudson's Bay, at Fort Severn, to the City of Mexico, a distance of 2,800 miles, or more. This is not all, however; at the east, the continuous rail will have been connected with Halifax and St. Johns, Newfoundland, and at the west with Puget Sound, southeasterly through Oregon, California, Arizona, and New and Old Mexico, to the ancient Aztec capital. At the same time a road is under charter, and Gen. U. S. GRANT is president of the company, to construct the road thence southward through Oaxaca and Chiopas to the northern boundary of Gautemala, intersecting and connecting with the Tehauntepec Railroad, 140 miles long. This latter is at present the most formidable competitor to the Panama Railroad, for it is half done, and will, under some organization, be completed, while LESSEPS' canal may not for a generation to come, at least.

Simultaneously we see it announced that the governments of Guatemala and Salvador have granted concessions to American companies, of which Gen. DANIEL BUTTERFIELD is the president, for the construction of a trunk line of railroad, from the northern and Gulf boundaries to the Gulf of Fonseca in Labrador, which contains the best harbor between San Francisco and the Isthmus. These lines are to be pushed to completion with vigor, some small branch lines connecting the seaports of San Jose and Sansonate being already in operation; and when the contemplated trunk line, running parallel with the backbone chain of mountains, is completed, within say five years, one may find it practicable to make the journey from Newfoundland or Vancouver, practically all the way by rail, to La Union, within three hundred miles of Panama.

These several links of road, it is needless to say, have not been built through any concerted or dependent action, but on local considerations. Indeed, the presence of ocean routes on either side of the continent does away, to a great extent, with the necessity of a through route to or from Central America, for purposes of through travel or shipment. It will be the local traffic which is to sustain each one; and the water, not the rail, lines will take business over the long distances. Neither Mr. REAVIS, nor any of his essayists, appear to have understood this.

It is not likely that there will be any longitudinal extension of railroad lines beyond and south of Salvador for a long time. The country is not favorable, nor is the climate. Besides, in South America the shore line of the Pacific comes close up to the foot of the Andes, while on the Atlantic water-shed the territory is broken and forms lines running in an east and west direction. Being neither necessary to outside people, nor productive to their inhabitants, they will wait the filling up of the continent. It is a noticeable feature of the physical geography of the whole Pacific slope that the high mountains and plateaus are near the shore, while the Atlantic slope is margined by flat and low country, and less favorable to human health. One consequene of this is that the bulk of population, trade and wealth is found on the higher ground, and is consequently, both in Mexico and Central and South America, near the Pacific ports.

Political writers and legislators have been puzzled to know why New Orleans did not do a much larger trade with the Central American States, to which it lies so close. Besides the question of tariff and seamanship there enters into this question this proximity to Pacific ports; the bulk of the products, even now, finds its way to the Pacific, and via the Cape or the Panama Railroad, to Europe; and international money exchanges are conducted via England. It would be easier, as far as mere transportation is concerned, to do the business of Central America, or even of Chili and Peru, with the United States markets, by way of San Francisco, than as at present. The tolls from the plantations to Panama and across the Isthmus are greater than would be required to take them to San Francisco and thence by rail to New York; and it may easily happen that when the Central American harbors are improved that it will be so done. The President of Guatemala is reported en route to the United States to look into our system of transportation, with a view to encourage an increased commercial in-

tercourse between the two peoples, and ought to be warmly welcomed.

In South America we are at a greater disadvantage. The distance from Brazil is so nearly the same as to Europe as to put us out of competition for the present. Yet something might be done even in that direction. The United States consume large quantities of South American coffee, wool, hides, woods, and the like, and we have food products, machinery, oils, and some fabrics to sell in exchange. We certainly ought to be able to sell our bread stuffs. Before the war a considerable volume of trade was done with Richmond and Baltimore, the coffee ships taking in return the flour made from Virginia wheat, that being by its chemical composition better suited for preservation in hot countries. The immense flouring mills at Richmond were in large part built up on this specialty. We notice a fresh attempt is to be made to revive this commerce by the formation of a line of steamers to ply between New York and Rio, touching each way at Newport News, which latter is a new port situated near Fortress Monroe, and quite accessable to all other ports on the Chesapeake, including Washington. It is not likely that Congress will grant any money subsidy to this effort, but it is one well worthy of National encouragement; and since, if we are ever to do any business with our Southern neighbors on this continent, and not leave it altogether to Europe, a beginning must sometime be made, though small at first, it should be fostered until we are able to compete even-handed with the nations where cheap life, cheap labor and cheap capital prevail.

PERSONAL.

Robert Potts has been appointed general master car builder of the Canada Southern Railway, vice Mr. John Ortton, resigned.

E. H. Witter, formerly General Freight and Purchasing Agent of the Buffalo, Pittsburgh and Western, has been appointed Assistant Superintendent of the road.

Hon. D. J. Morrell, president of the Cambria Iron Company, at Johnstown, Penn., has returned from a five months' visit to Europe, in greatly improved health.

John Bell, of Belleville, Canada, solicitor of the Grand Trunk Railway, has left for England via New York. He goes to arrange the details of the Grand Trunk and Great Western amalgamation.

At the Produce Exchange election, on the 5th inst., L. F. Holman was elected President over J. H. Herrick, the regular nominee. At the Cotton Exchange, M. B. Fielding was elected president over the regular nominee, Joseph Yeoman.

The officers of the Iron Mill Company, Canonsburg, Penn., are: John Ewing, president; L. A. Meyran, secretary; Charles H. Taylor, treasurer; Samuel Munnell and H. S. Duncan, managers. Orders have been given for about $60,000 worth of machinery.

George Skinner, Superintendent of the Scioto Valley Railway, announces that Richard Bromley has been appointed Master Mechanic in place of C. G. Browning, deceased. Mr. Bromley was formerly Master Mechanic of the Little Miami division of the Pittsburgh, Cincinnati and St. Louis Railway.

C. P. Huntington, in behalf of the Chesapeake and Ohio Railroad Company, has closed a contract with Hazeltine & Arman, of New York, builders and managers of the Erie grain elevators in Jersey City, to build a grain elevator and warehouse at Newport News, Va., with a capacity of 1,500,000 bushels. The Chesapeake and Ohio Company is also building extensive coal docks and warehouses at Newport News.

William Wharton, Jr., late president of the West End, Angora and Park Passenger Railway Company, Philadelphia, and the largest stockholder as well in the Lombard and South streets line, has sold out his interest in those companies to Messrs. W. H. Shelmerdine and Robert N. Carson, of the firm of William H. Shelmerdine & Co., bankers and brokers. Mr. Wharton says that the affairs of the companies are in a satisfactory condition, and that he withdrew from street railway business to give his whole attention to manufacturing.

INCORPORATION.

The Midland Railroad Construction Company, of Cincinnati, Ohio, has been incorporated, with a capital of $50,000.

The Governor of New York has signed the bill incorporating the New York and Canada Bridge Company, and authorizing the company to build a bridge over the St. Lawrence River.

The American Atlantic Cable Company, of New York, filed amended articles of incorporation at Albany, N. Y., on the 2d inst. The general route of the line of telegraph is from New York City to a point convenient upon the coast of the United States, and thence to the coast of Portugal, Spain or France in Europe. The capital is $10,000,000, which can be increased at the discretion of the stockholders.

A certificate of incorporation was filed in the office of the Secretary of State, at Albany, on the 3d inst., of the Baltimore and Ohio Telegraph Company. The route of the lines is from New York to Brooklyn, thence across New York Bay to Edgewater, through Richmond county, to a point in the southwesterly boundary in or near Tottenville. The capital is $100,000. George P. Frick, William T. Barnard and D. P. Crawford, of Baltimore, and John A. Hall and Edward R. Solliday, of Trenton, N. J., are the shareholders. The concern is to continue 500 years.

Articles of incorporation have been filed in St. Paul, Minn., of the St. Paul, Minneapolis and Sea Coast Railway Company, with a capital of $3,000,000. Alexander Ramsey, president; Judge Thayer, of Clinton, Iowa, vice-president; General H. H. Sibley, of St. Paul, treasurer. Advices from St. Paul state that the line is intended to connect St. Paul and Minneapolis with the coal fields of Illinois, via Northern Iowa, to Clinton, the Mississippi River port. Governor Ramsey, who is the head and front of the project, says that a preliminary survey has been made, and the road will cross the Iowa line in Mower county at a point 105 miles from St. Paul, thence to Clinton, the distance being 185 miles, so that the total length to the Mississippi, if the present survey is followed, will be 290 miles. At Clinton connection would be secured with the three great corporations—the Chicago, Milwaukee and St. Paul, Chicago and Northwestern, and Chicago, Burlington and Quincy, all of which center there.

ORGANIZATION.

The directors of the Erie and Western Transportation Company, elected in Philadelphia on the 6th inst., are: George B. Bonnell, Francis J. Firth, H. H. Houston, Joseph D. Potts and William Shaw.

The Directors of the Wilton (N. H.) Railroad Company, elected on the 31st ult., are: Solomon Spalding, Clarke P. Boutwell, Wm. Ramsdell, John Reed, John A. Spalding. Clerk, Harvey A. Whiting.

The directors of the Old Colony Steamboat Company, elected in Boston on the 6th inst., are: Charles T. Choate, Frederick L. Ames, Cornelius N. Bliss, Thomas J. Borden, John S. Brayton, William Borden, Francis B. Hayes, Silas Pierce and Elisha W. Wallard.

At the annual general meeting of the Canada Southern Railway Company, held at St. Thomas, Ont., on the 7th inst., the following directors were elected: W. H. Vanderbilt, C. Vanderbilt, J. Tillinghast, A. G. Dullman, Augustus Schell, S. F. Barger, Sidney Dillon, Joseph E. Brown and E. A. Wickes.

At the recent annual meeting of the Wisconsin and Minnesota Railroad Company, the following officers were elected for the ensuing year: C. L. Colby, president and treasurer; E. H. Abbot, vice-president and secretary, and F. N. Finney, general manager. The old Board of Directors was re-elected for the ensuing year.

The Directors of the Nashua (N. H.) Manufacturing Company, elected on the 1st inst., are: John A. Burnham, of Boston; J. Ingersoll Bowditch, of Boston; Edward Spalding, of Nashua; James S. Amory, of Boston; Charles U. Cotting, of Boston; Frederick Amory, of Boston; Treasurer, Webster P. Hussy, of Nashua.

The Directors of the Jackson Company, of Nashua, N. H., elected on the 1st inst., are: John A. Burnham, of Boston; J. Ingersoll Bowditch, of Boston; James S. Amory, of Boston; Edward Spalding, of Nashua; Charles U. Cotting, of Boston; Treasurer, Frederick Amory; Clerk, Edward M. Temple, of Nashua.

At a meeting in Boston, on the 3d inst., of the directors of the Boston, Hoosac Tunnel and Western Railway, the following officers were elected: Ginery Twitchell, president; William V. Reynolds, general manager; executive committee, Ginery Twitchell, F. L. Ames, W. R. Garrison, Robert B. Minturn and Lewis May, of New York.

THE Directors of the Concord and Claremont Railroad Company, recently elected, are: Henry C. Sherburne, George E. Todd, Charles P. Sanborn, Mason W. Tappan, Daniel W. Johnson, Charles O. Stearns, Dexter Richards. The directors organized by electing H. C. Sherburne, president; John Y. Mugridge, clerk; George A. Kettell, treasurer, and George K. Hazelton, assistant treasurer.

AT the annual meeting of the Nashua and Lowell Railroad Company, held on the 31st ult., the following directors were elected: Francis A. Brooks, Francis V. Parker and Gedney K. Richardson, Boston; Jeremiah W. White, Cornelius V. Dearborn, Wm. W. Bailey, of Nashua; A. M. Shaw, of Lebanon. Treasurer, Charles B. Brooks, of Boston; Corporation Clerk, Walter A. Lovering, of Nashua.

THE officers of the United States and Brazil Mail Steamship Line, recently incorporated under the laws of this State, are: John Roach, president; C. P. Huntington, vice-president; C. McCullough Beecher, manager; Sidney W. Rowell, secretary and treasurer, and C. P. Huntington, John Roach, H. K. Thurber, Henry F. Hitch, Edward H. Ripley, C. McCullough Beecher and Sidney W. Rowell, directors.

AT the annual meeting of the shareholders of the Franklin Telegraph Company, held in Boston on the 7th inst., the following directors were chosen: E. D. Morgan, Augustus Schell, Norvin Green, Thomas T. Eckert, John Van Horne, Jay Gould and D. H. Bates, of New York; Fred L. Ames, of North Easton, and Joseph Greenough, of Cambridge; clerk, Thomas Roche, of Boston; treasurer, R. H. Rochester, of New York.

THE annual election of the Chicago, Rock Island and Pacific Railroad, held in Chicago on the 7th inst., resulted in the choice of the following directors for three years: David Dows, Sidney Dillon and H. R. Bishop, of New York; R. R. Cable, of Rock Island, and Hugh Riddle, of Chicago. The new directors elected Hugh Riddle, president; David Dows and R. R. Cable, vice-presidents, and Francis Tows, secretary and treasurer.

AT the annual meeting of the stockholders of the Broadway Underground Connecting Railway Company, held in this city on the 6th inst., the following directors were elected to serve for the ensuing year: George Ticknor Curtis, Robert Sewell, James F. Pierce, Douglas Campbell, F. W. Paige, George C. Lay, George P. Sheldon, John T. Howard, Herbert N. Curtis, Francis A. Stout, D. Calden Murray, James F. Ruggles and George G. Schermerhorn.

AT the annual meeting of the stockholders of the Swedesboro' Railroad Company, recently held at Swedesboro', N. J., the following were elected directors: Richard Ashhurst, John H. Bradway, Edwin Stokes, William Knight, D. B. Gill, Matthew Gill, I. H. Vanneman, Samuel Black and Henry C. Clark, M. D. At a subsequent organization of the Board Samuel Black was elected president, and D. B. Gill secretary and treasurer of the company.

THE officers of the Produce Exchange, elected on the 5th inst., are: President, L. F. Holman; vice-president, E. S. Whitman; treasurer, Samuel Jacoby. Board of Managers—A. Romer, C. D. Sabin, R. Stobo, J. A. Tobey, J. A. Amelung, C. F. Ackermann, J. Gledhill, J. R. Boyd, T. A. McIntyre, D. A. Lindley, B. Logan and C. C. Burke. Inspectors of Election—E. M. Munn, C. S. Kennedy, A. B. Hart, C. H. Cadwell, J. E. Close and W. T. Jeffrey.

THE stockholders of the Breakwater and Frankford Railroad Company met at Georgetown, Del., on the 31st ult., and elected the following Board of Directors: Chas. C. Stockley, N. L. McCready, Benjamin B. Burton, John Bodine, Thomas Baumgardner, George F. Tyler, Ebe W. Tunnell, W. S. Phillips and John T. Long. The officers are: Charles C. Stockley, president; Benjamin B. Burton, secretary; W. H. Stanford, assistant secretary; David H. Houston, treasurer; and John L. Mapes, superintendent.

AT the annual meeting of the Boston and New York Air Line Railroad Company, held in Middletown, Conn., on the 6th inst., the following directors were elected: H. B. Hammond, D. B. Hatch, S. S. Sands, James H. Smith and A. Duprat, of New York; J. L. Watson, of Bridgeport; Theodore Adams, of Philadelphia; John M. Camp, of Middletown; Silas F. Loomer, of Willimantic, and Simeon E. Baldwin and Henry G. Lewis, of New Haven. The president for the next year will be H. B. Hammond; treasurer, D. C. Hatch; secretary, T. L. Watson.

THE directors of the Toronto Paper Manufacturing Company, elected on the 31st ult., are:—J. R. Barber, Georgetown; W. J. Gage, C. Blackett Robinson, W. W. Copp, R. Brown, E. Trout, Toronto; and Geo. Macdonald, Cornwall. At a subsequent meeting of the Board, J. R. Barber was re-elected president; W. J. Gage, vice-president; and Edward Trout, secretary-treasurer. The work on the company's mill at Cornwall is progressing rapidly. The building, it is expected, will be completed early in September next.

AT the general annual meeting, on the 31st ult., of the Canada Atlantic Railway Company, the following directors were elected for the ensuing year: E. McGillivray, McLeod Stewart, G. P. Patton, George H. Perley, Ottawa; E. C. Smith, St. Albans; Duncan A. McDonald, Lochiel; Alexander A. Stewart, Kenyon; John Rankin, Montreal; Guy C. Noble, St. Albans. At a subsequent meeting the following were elected: President, E. McGillivray; vice-president, McLeod Stewart; secretary-treasurer, A. W. Fleck; solicitor, J. J. Gormally.

AT the annnal meeting of the stockholders of the Frankford and Worcester Railroad Company, held at Snow Hill, Md., on the 30th ult., the following Board of Directors were elected: N. L. McCready, John Bodine, Henderson Moore, of New York; John M. Robinson, of Baltimore City; Thomas Baumgardner, of Lancaster, Pa.; C. E. Stockley, of Delaware; George W. Bishop, George W. Covington, E. K. Wilson, George W. Purnell, Joseph R. Purnell and Thomas D. Purnell, of Snow Hill. The officers are: George W. Bishop, president; Thomas D. Purnell, secretary; John L. Mapes, of Franklin City, Va., general superintendent.

THE annual election for directors of the New York Central and Hudson River Railroad Company, held in Albany on the 7th inst., resulted in the re-election of the following board: W. H. Vanderbilt, Cornelius Vanderbilt, W. K. Vanderbilt, F. W. Vanderbilt, Augustus Schell, Samuel F. Barger, Chauncey M. Depew, James H. Rutter, J. Pierrepont Morgan, Cyrus W. Field, of New York; Chester W. Chapin, of Springfield, Mass.; John Allen, Jr., of Buffalo, and James M. Marvin, of Saratoga Springs. About sixty millions of stock were voted upon. The day for the annual election was changed to the third Wednesday in April.

THE annual meeting of the stockholders of the Chicago, St. Paul, Minneapolis and Omaha Railroad was held at Hudson, Wis., on the 3d inst. The only business of any importance transacted was the election of directors, which resulted as follows: For the term expiring in 1885—P. Sawyer, of Oshkosh; Benjamin Brewster and A. Kountze, of New York; and A. H. Wilder, of St. Paul. For the term ending in 1884—W. D. Washburn, in place of John Comstock, of Hudson, Wis., who resigned in May, 1882; and Henry T. Welles, in place of G. I. Seney, who also resigned last month. The full Board now stands—H. H. Porter, R. P. Flower, David Dows, H. R. Bishop, W. D. Washburn, P. Sawyer, Benjamin Brewster, A. Kountze, A. H. Wilder, S. M. Fiske, E. F. Drake, R. R. Cable and Henry T. Welles. The Board of Directors subsequently met and elected the following officers: President, H. H. Porter; vice-presidents, R. P. Flower and P. Sawyer; treasurer, R. P. Flower; assistant treasurer, R. E. Gerton; secretary, C. W. Porter; assistant secretary, C. W. Hilliard; executive committee, H. H. Porter, P. Sawyer, B. Brewster, D. Dows, R. P. Flower, E. F. Drake and H. R. Bishop.

CONSTRUCTION.

THE Mexican National Railway reached Villaldama, Mexico, on the 30th ult., a distance of one hundred and ten miles west of Laredo.

THE first sod for the Selkirk and Rockwood Junction Railway was turned on the 27th ult. The ceremony was witnessed by a large number of persons.

PRELIMINARY surveys are being made of a route for the Mississippi Valley Railroad, between Natchez and Baton Rouge, on the east side of the river.

THE track on the Atlanta and Rome division of the Cincinnati and Georgia Railroad is now laid forty miles from Atlanta, toward Rome, and is steadily pushing for the latter city.

THE Chesapeake and Ohio Railway Company is pushing the extension of its road from Newport News to Old Point Comfort and Fortress Monroe. The line will be completed July 1.

A NEW railroad, 38 miles long, is to be built from Santa Fe, New Mexico, to Espanola, the terminus of the Denver and Rio Grande. The contracts for the same have been let, and work is probably under way.

THE construction train of the Lehigh and Hudson River Railroad has reached a point near the Sussex Railroad, in the vicinity of Snook's Station. The roadbed, so far as completed, is in excellent condition.

THE announcement is made that the Yellowstone division of the Northern Pacific Railroad will be opened some time this month. So in a

short time passengers can go through by rail from New York to Yellowstone National Park.

THE last spike was driven on the extension of the Shenandoah Valley Railroad on the 27th ult., thus completing the line between Hagerstown, Md., and Roanoke, Va., where communication is made with the Norfolk and Western Railroad.

THE first sod of the Leamington and St. Clair Railway was turned on the 18th inst. It is understood to be the intention of the company to prosecute the work energetically, so as to have it ready to hand over to the Canada Southern by the month of August.

THE Quebec Government has decided to subsidize the Gatineau Valley Railway, and also the Ottawa Colonization Railway, by a land grant of 630,000 acres, partly agricultural and partly mineral. This insures the construction of the line within two years and a half.

THE petroleum pipe constructed from the Couban oil territory over the Caucasus Mountains to Novoroszisk Harbor, on the Black Sea coast was opened on the 27th ult. It is seventy versts long, with a daily capacity to deliver thirty thousand puds of petroleum.

THE last spike in connection with the Omaha and Denver Railroad by means of the Chicago, Burlington and Quincy extension was driven, fifteen miles east of Denver, on the 25th ult. Through freight trains had already been running, and passenger trains will be put on July 1st.

THE 15th instant is the date fixed for the formal commencement at Hull of the construction of the Ottawa and Gatineau Valley Railway and branches, by the turning of the first sod. The occasion is expected to be an interesting one. The work will afterwards be prosecuted with vigor.

THE Shippensburg (Pa.) *News* says arrangements have been effected which will secure the construction of the Harrisburg and Potomac Railroad to that town in the shortest possible time. It is not known whether the new road will cross the Cumberland Valley Railroad at grade or overhead.

THE Toronto *Globe* has a despatch from Winnipeg stating that an arrangement has been made with the Canadian Pacific people for the Northern Pacific to connect with Winnipeg by the Southwestern, the Northern agreeing not to build any more parallel lines to the St. Paul and Minneapolis road.

THE Washington and Ohio Railroad has been reorganized under the corporate title of the Washington and Western Railroad Company, with William J. Best, of Boston, Mass., as president. It is proposed to complete the road through to Berryville, Virginia, where it will connect with the Shenandoah Valley Railroad.

THE contract for the first thirty miles of the Pittsburgh and Monongahela Valley Railroad has been awarded to James H. Connor, who will within a short time have five hundred men at work. There will be one tunnel on the line and several bridges, and it will tap one of the finest coal and iron fields in West Virginia.

THE contract for building the extension of the West Virginia Central and Pittsburg Railway to Elkins, formerly Fairfax Stone, fifty miles from Piedmont, was awarded on the 3d inst. to Humbird & Sons, Cavan, Codwise & Co. and Adams & Kennedy. Humbird & Sons, of Cumberland, Md., get thirteen miles of the road and all the masonry.

THE surveying party of the Washington and Ohio Railroad, which is to be put into the field at once, will endeavor to find a cheaper way of crossing the Blue Ridge than by a mile-long tunnel at Snicker's Gap, and it is supposed by good engineers that by branching off at Hamilton and going south, those mountains can be crossed without a tunnel, and not by a very high grade either.

CHARLES ARMSTRONG, of the Great Eastern Railway, from Port Levis, which runs along the south shore of the St. Lawrence to opposite Quebec, thence direct to Cape Covington, N. Y., to connect with the American system of railways, has been making arrangements to have American capitalists complete the remaining two hundred miles of the road. Forty-five miles are now completed.

THE enlargement of the Welland Canal, commenced in 1872, is very nearly completed. The cost when finished is estimated at thirteen millions of dollars, and it will accommodate vessels of one thousand tons. This expenditure has been made by Canada upon the supposition that the canal will divert transportation from the railroads of the United States, as well as from the Erie Canal.

THE Canada Junction Railway is now completed to the Province line at East Franklin, and engineers have completed the levels from the Province line to Sheldon Junction, and the road will be constructed to Sheldon Junction as soon as possible. This will give a connection with the St. Johnsbury and Lake Champlain Railway, and form a new route from Montreal to Boston *via* Portland.

THE end of the track on the Fort Worth and Denver City Railway, at the close of work on the 26th ult., was at a distance of sixty-six miles from Fort Worth, and progressing at the rate of one and a half miles a day, through one of the finest countries in the State. The portion of the road, about forty miles, between Fort Worth and Decatur, already in operation, is doing a large and increasing traffic.

THE proposed Galveston and Eagle Pass Air Railway when constructed will extend from Galveston, Texas, through the counties of Galveston, Brazoria, Matagorda, Wharton, Lavaca, Jakcson, De Witt, Pictoria, Gollana, Bee, Karnes, McMullen, Live Oak, La Salle, Wilson, Otascoba, Frio, Zavalia, Dimmitt, and Maverick, or any other of them in Eagle Pass, in the last named county, on the east side of the Rio Grande River, a distance of 350 miles, more or less.

THE St. John and Boston Shore Line is projected to run from St. John, N. B., to Bangor, Me., and to be composed of the Grand Southern Railway, now being completed from St. John to the St. Croix River, at St. Stephen, 82 miles, and the Maine Shore Line Railway from Calais to Bangor, Me. The whole distance is 210 miles, of which 40 per cent., in round numbers, is reported to be now about finished, well built, laid with steel rails, and equipped with rolling-stock, shops, turn-tables, station houses, &c. Power is given in the charters of both roads to consolidate into one line. The road is intended to make close connections with the Maine Central at Bangor, and to run through cars without change from St. John to Boston, touching and connecting with Mt. Desert, Campobello and other summer resorts in Maine. The intention is to lay the whole line with steel rails and have it thoroughly constructed throughout, and to limit its bonded debt to $15,000 per mile, including all equipment.

WE learn that the work of construction on the Pennsylvania and New England Railroad is being pushed with the utmost vigor, and there no longer seems to be a doubt of its early completion from Harrisburg, Pa., to the Hudson River. The bridge across the Delaware, at Portland, has been put under contract and bonds given for its completion by November next. The grading from Deckertown to its connection with the New York, Lake Erie and Western at Hampton, Orange county, has also been put under contract. Grading and tracklaying is being pushed southward from Deckertown, and a few weeks more will witness the completion of the road from that point to Augusta. From Portland to Pen Argyl the work is well under way, and a large force of workmen are busy at the grading and bridge building. The road has been consolidated with the Delaware and Slatington, and the name of the corporation is now the Pennsylvania, Slatington and New England Railroad. The company, we are informed, have ample means for the completion of the enterprise, and are doing business on the principle of pay as you go.

The Channel Tunnel and Carbonic Acid Gas.

PROFESSOR TYNDALL writes to the London *Times* to describe "a small experiment" which he made with reference to the proposal that Dr. Slemens is reported to have laid before the military authorities to fill the Channel Tunnel with carbonic-acid gas in the event of its occupation by an enemy:—

"Coming down from London, on a part of the line where our speed was about thirty miles an hour, I took out my watch and determined how long I could hold my breath without inhalation. By emptying my lungs very thoroughly, and then charging them very fully, I brought the time up to nearly a minute and a half. In this interval I might have been urged through more than half a mile of carbonic-acid gas with no injury and with little inconvenience to myself. Indeed, supposing the tunnel to be entirely filled with carbonic-acid gas, I have sufficient confidence in my friend's ability to wager that in six hours he would be able to devise a means of sending troops safely through it. The problem of supplying fresh air to persons surrounded by an irrespirable atmosphere has already been solved by Mr. Fleuss and others."

THE name Cape of Good Hope was given by John II. of Portugal, who augured well of future discoveries, having found the extremity of Africa.

The Stock Exchanges and Money Market.

New York Stock Exchange.

Closing Prices for the week ending June 7.

	Th.1.	F. 2.	Sat.3.	M. 5.	Tu.6.	W.7.
Adams Express	.....	.....	.....	140	.....	130
Albany and Susq.	.....	.....	.....	.....	.....	.....
1st mortgage	.....	.....	.....	.....	.....	.....
2d mortgage	.....	.....	.....	.....	.....	.....
American Express	97¼	97	96¾	96	96	95
Burl., C. R. & Nor.	.....	.....	.....	70	70	.....
1st mortgage 5s	99¼x	.....	99¾	.....	99	98¾
Canada Southern	.....	49	48⅜	48¼	47	46¼
1st mortgage guar	94½	95	.....	94½	94⅛	94
Central of N. Jersey	71¾	68⅜	66⅞	65¾	.....	67⅞
1st mort. 1890	.....	117	.....	117	.....	.....
7s, consol. ass	.....	.....	.....	.....	.....	.....
7s, convertible ass.	110½	.....	109¾	.....	.....	.....
7s, Income	.....	.....	.....	.....	.....	.....
Adjustment	105½	.....	.....	104¾	.....	.....
Central Pacific	89½	89¼	88⅞	88	87	87⅛
6s, gold	118½	118½	.....	.....	.....	.....
1st M. (San Joaq)	.....	.....	.....	.....	.....	.....
1st M. (Cal. & Or.)	.....	.....	.....	.....	.....	.....
Land grant 6s	..	.....	107	.....	.....	.....
Chesapeake & Ohio	.....	21¼	.....	20¾	.....	20⅛
1st pref	31	.....	.....	28	28¼	28
2d pref	.....	21¼	21⅝	.....	.....	.....
1st mort., series B	..	80½	80	.....	.....	78
Chicago and Alton	131½	131	.....	130	140¼	129¾
Preferred	.....	.....	.....	.....	.....	.....
1st mortgage	.....	.....	.....	.....	.....	.....
Sinking Fund	113	.....	113½	.....	.....	.....
Chi,, Bur. & Quincy	130½	129¼	129⅜	129	129	128
7s, Consol. 1903	.....	.....	.....	130	.....	131
Chi., Mil. & St. Paul	110⅞	110⅝	110½	109⅝	109⅛	109¾
Preferred	120⅜	120⅛	.....	120	122	123
1st mortgage, 8s	.....	.....	.....	.....	.....	135
2d mort., 7 3-10s	122	.....	.....	.....	.....	.....
7s, gold	.....	.....	.....	.....	.....	.....
1st M. (La. C. div)	.....	120	.....	.....	.....	.....
1st M. I. & M. div.)	121⅜	.....	.....	.....	.....	.....
1st.M. (I. & D. ext.)	.....	.....	.....	.....	.....	.....
1st M. (H.&D. div.)	.....	.....	.....	.....	.....	.....
1st M.(C. & M.div.)	.....	.....	.....	.....	.....	.....
Consolidated S. F.	121¾	.....	.....	.....	122	.....
Chi. & Northwestern	130¾	129⅝	129⅞	129⅛	128¾	129⅝
Preferred	145¼	143½	143	143	142	142¼
1st mortgage	.....	.....	.....	.....	109	.....
Sinking Fund 6s	.....	.....	.....	.....	.....	.....
Consolidated 7s	.....	133⅛	.....	.....	.....	.....
Consol. Gold bo'ds	.....	124¼	.....	125	125	.....
Do. reg	.....	.....	.....	125	.....	.....
Chi., R. Isl. & Pac.	129½	129	129	129	128½	129
6s, 1917, c	.....	129¾	.....	.....	130	129⅜
Clev.,Col.,Cin.&Ind.	72	70⅞	70	69¾	67	65⅛
1st mortgage	.....	.....	.....	.....	.....	.....
Clev. & Pittsburg gr.	.....	.. ..	.....	.....	.....	135
7s, Consolidated	125⅛	.....	.....	.....	.....	.....
4th mortgage	.....	.....	.....	.....	.....	.....
Col.,Chi.,& Ind. Cent	8⅛	8⅛	8	8½	7¼	7
1st mortgage	.....	.....	.....	.....	.....	.....
2d mortgage	.....	.....	.....	.....	.....	.....
Del. & Hud Canal.	104⅛	103¼	104	103⅝	103¼	103⅜
Reg. 7s, 1891	.....	.....	116	.....	.....	116½
Reg. 7s, 1884	.....	.....	.....	.....	.....	.....
7s, 1894	.....	.....	.....	.....	.....	.....
Del.,Lack.& Western	119⅛	118⅝	119⅛	118⅝	118¼	119⅛
2d mortgage 7s	.....	.....	.....	.....	.....	.....
7s, Consol. 1907	.....	.....	.....	.....	.....	.....
Erie Railway	...	.....	.....	.....	.....	.....
1st mortgage	.....	.....	.....	.....	.....	.....
2d mort. 5s, ext.	.. ..	.....	.....	.....	.....	.....
3d mortgage	105½	105¾	.....	105¾	105⅛	105½
4th mort. 5s, ext.	.....	.....	.....	.....	107	.....
5th mortgage	110x	.....	.....	.....	.....	.....
7s, Consol. gold	.....	127⅜	.....	.....	126	126
Great West. 1st mort	.....	.....	.....	.....	.....	.....
2d mortgage	.....	.....	.....	.....	.....	.....
Hannibal & St. Jo	.....	.....	.....	.....	.....	.....
Preferred	.....	79¼	79	79¼	79	80
8s, Convertible	.....	.....	.....	.....	.....	106¾
Houston & Tex. Cen	.....	.....	.....	.....	.. .	.....
1st mortgage	112	.....	.....	112½	.....	.....
2d mortgage	.....	.....	.....	.....	.....	.....
Illinois Central	134¾	134	133½	135½	133	132¾
LakeShore&MichSo	102¾	101¾	101⅞	100⅞	98⅜	100⅛
Consol. 7s	.....	.....	.....	.....	.....	.....
Consol. 7s, reg	.....	.....	.....	.....	.....	.....
2d Consolidated	.....	.....	.....	.....	.....	.....
Leh. & W. B. con.ass	.....	.....	102	.....	.....	.....
Long Dock bonds	.....	.....	.....	.....	.....	.....
Louisville & Nash.	74	72⅛	68	64⅞	64⅝	66½
7s, Consolidated	.....	117½	.....	117¾	.....	.....
Manhattan	55	56¼	57⅜	58	56¾	58⅞
1st pref	.....	.....	.....	.....	92	.....
Met. Elevated	.....	86	87½	88	88	85½
1st mortgage	.....	101⅞	102	101⅞	102	102
Michigan Central	86¼	85⅝	85⅞	84⅝	82½	84¾
7s, 1902	123⅜	.....	.....	.....	.....	.....
Morris & Essex	124½	124	124	124½	.....	125⅛
1st mortgage	.....	... .	....	.....	.....	.....
2d mortgage	.....	... .	.....	.....	.....	.....
7s of 1871	121½	.....	.....	.....	121½	121½
7s, Convertible	.	..	.....	.....	.....	.....
7s, Consolidated	.....	121½	121½	.....	.....	.....
N.Y. Cen. & Hud. R.	126⅞	120⅛	126⅝	126¼	125¾	126¾
6s, S. F. 1883	..	.....	.....	.....	.....	.....
6s, S. F., 1887	... .	.....	.....	.....	.....	.....
1st mortgage	134½	.....	.....	.....	134	131
1st mortgage, reg.	.....	.....	.....	.....	.....	... .
N. Y. Elevated	.....	.....	.....	.....	.....	.....
1st mortgage	. .....	118	.....	.....	. ..	117½
N. Y. & Harlem	.....	207½	.....	.....	.....	.....
Preferred	.....	.....	.....	.....	.....	.....
1st mortgage	.....	.....	.....	.....	.....	.....
1st mortgage, reg	....	.....	.....	.....	...	.....
N. Y., Lake Erie & W	35⅛	34	34¼	33¾	33⅛	34
Preferred	72⅞	.....	.....	.....	70	69½
2d Consolidated	91⅜	90½	.....	89¼	88¼	89
New 2d 5s fund	.....	87½	90⅜	.....	.....	.....
N.Y.,N.Hav'n&Hart	.....	179	.....	.....	180	.....
North Mo. 1st mort	..	.....	.....	.....	.....	.....
Northern Pacific	41¼	41⅛	41⅛	40⅝	39⅞	40⅜
Preferred	79½	79¼	79	78¾	78⅛	77⅝
Ohio & Mississippi.	31¾	31⅞	32⅛	31⅞	30⅜	30¾
Preferred	100	.....	.....	.....	.....	.....
2d mortgage	... .	.....	120¼	120½	120¾	.....
Consolidated 7s	.....	.....	.....	.....	.....	.....
Consol. S. Fund	.....	118¼	118⅜	.....	118⅛	.....
Pacific Mail S. S. Co	41⅝	40¾	40⅝	40¾	39¼	39½
Pacific R. R. of Mo.	.....	.....	.....	.....	.....	.....
1st mortgage	.....	.....	.....	.....	.....	.....
2d mortgage	.....	.....	.....	.....	.....	.....
Panama	.....	.....	.....	.....	.....	.....
Phila. & Reading	55⅜	53⅞	53¼	52⅛	52⅝	53⅝
Pitts,Ft.W.&Chi.gtd	....	135	135	.....	.....	.....
1st mortgage	.....	.....	.....	140	.....	.....
2d mortgage	. .....	.....	.....	.....	.....	.....
3d mortgage	.....	.....	.....	.....	130	.....
Pullman Palace Car	120¾	120	119	117	118	117
Quicksil'r Min'g Co	.....	.....	.....	.....	.....	8¾
Preferred	.....	.....	.....	.....	.....	.....
St. Louis & San Fran	.....	.....	.....	.....	.....	.....
Preferred	50	.....	49½	.....	47¼	46¾
1st Preferred	86¾	.....	.....	.....	.....	85
St. L., Alt'n & T. H.	27	.....	.....	.....	.....	.....
Preferred	.....	63	.....	58½	60¼	57⅞
1st mortgage	.....	.....	.....	.....	.....	.....
2d mort. pref	109	.....	.....	.....	.....	.....
Income bonds	.....	.....	.....	.....	.....	.....
St. L., Iron Mt. & S	.....	.....	.....	.....	.....	.....
1st mortgage	.....	. ...	115½	.....	.....	.....
2d mortgage	.....	.....	.....	.....	.....	106½
Toledo and Wabash	.....	.....	.....	.....	.....	.....
1st mortgage	.. ..	.....	....	.....	109	.....
2d mortgage	.....	99¼	.....	.....	.....	.....
7s, Consolidated	.....	.....	.....	.....	.....	.....
St. Louis Division	.....	.....	.....	.....	100	100
Union Pacific	112¾	112¼	112½	109⅞	107⅛	108⅞
1st mortgage	118½	.....	.....	118¼	118	118
Land Grant 7s	.....	.....	.....	.....	.....	113½
Sinking Fund 8s	.....	.....	.....	.....	.....	.....
United States Ex	73	.....	.....	.....	.....	70½
Wabash, St. L.& Pac	28¼	27⅛	27¾	26¾	24	25⅞
Preferred	51¾	51	50¾	49½	47¼	49
New mort. 7s	.....	.....	91	.....	.....	... .
Wells-Fargo Ex	130	.....	129	.....	128	130
Western Pacific b'ds	113	.....	.....	.....	.....	.....
Western Union Tel.	83	82	82½	81⅞	81⅜	82
7s., S.F conv., 1900	.....	.....	.....	.....	.....	.....
FEDERAL STOCKS :—						
U. S. 4s, 1907, reg	. ..	.....	.....	119¾	119⅝	.....
U. S. 4s, 1907, coup	.....	.....	120⅜	120⅜	.....	120¼
U. S. 4½s, 1891, reg.	114⅞	....	.....	.....	.....	.....
U. S. 4½s, 1891, coup	.....	.....	.....	.....	.....	.....
U. S. 5s, cont'd at 3½	101¼	.....	.....	101¾	101¼	101¼
U. S. 6s cont'd at 3½	.....	... .	.....	100	.....	.....
Dt. of Col. 3-65s, reg	.....	.....	.....	.....	.....	.....
Dt. of Col.3-65s,coup	.....	.....	.....	.....	.....	.....

Boston Stock Exchange.

Closing Prices for the Week Ending June 7.

	Th.1.	F. 2.	Sat.3.	M.5.	Tu.6.	W. 7.
Atch.,Top.&San.Fe.	86⅛	85⅜	.....	83⅞	83⅜	82⅛
1st mortgage	118	.....	.....	118⅜	.....	.....
Land Grant 7s	.....	.....	.....	.....	.....	114⅜
Boston & Albany	167	165x	.....	164½	164	164
Boston and Lowell	....	.....	.....	.....	.....	103⅜
Boston & Maine	.....	.....	.....	143½	144	.....
Boston& Providence	.....	.....	.....	.....	.....	.....
Bos'n,Hart.& Erie7s	49½	.....	.....	48½	46¾	.....
Burl.& Mo.R.L.G.7s	.....	.....	.....	.....	.....	.....
Burl.& Mo.R.in Neb	.....	.....	.....	.....	.....	.....
6s, exempt	.....	.....	.....	.....	.....	.....
4s	.....	.....	.....	.....	.....	.....
Chi.,Burl. & Quincy	130¼	129¾	.....	129⅞	129⅞	127¾
Cin.,Sand&Clev($50)	26	25¾	.....	.....	24½	....
Concord ($50)	.....	.....	.....	.....	98	.....
Connecticut River	.....	.....	....	.....	.....	.....
Eastern	36	. ...	.....	.....	.....	.....
New 4½ Bonds	108¼	.....	.....	.....	107	107
Fitchburg	128	128	.....	123	.....	.....
N.Y. & New England	48	....	.....	47	46¾	.....
7s	.....	.....	114¼	.....	113¾	..... 113⅞
Northern N. H.	108	.....	.....	.....	108	.....
Norwich&Worcester	.....	.....	.....	.....	.....	.....
Ogden & Lake Cham	.....	.....	.....	.....	.....	.....
Old Colony	.....	133	.....	133½	133¾	.....
Ph.,Wil.&Balt.($50)	.....	.....	.....	.....	.....	.....
Portl'd,Saco & Ports	....	.....	.....	.....	.....	.....
Pueblo & Ark Val 7s	113⅛	114	.....	113⅛	113¾	113¾
Pullman Palace Car	122	120	.....	.....	.....	.....
Union Pacific	112½	.....	.....	110¾	109	108
6s	...	.....	.....	.....	.....	.....
Land Grant 7s	.....	.....	.....	.....	.....	.....
Sinking Fund 8s	.....	.....	.....	.....	.....	.....
Vermont & Mass	.....	.....	.....	.....	.....	.....
Worcester & Nashua	.....	.....	.....	.....	.....	.....
Cambridge (Horse)	.....	.....	.....	.....	.....	.....
Metropolitan(Horse)	.....	76	.....	.....	76	.....
Middlesex (Horse)	.....	.....	.....	.....	.....	.....
Cal.&Hecla Min'gCo	242	243	.....	243	245	....
Quincy	50	50	.....	51	.....	54

Philadelphia Stock Exchange.

Closing Prices for the Week Ending June 6.

	W.31.	Th.1.	F.2.	Sat.3.	M.5.	Tu 6.
Allegh'y Val. 7 3-10s	122	.....	.....	.....	.....	.....
7s, Income	52	.....	.....	.....	51	50
Buff., Pitts & West.	15⅛	15⅛	15¼	15¼	14¾	14¼
Camd'n & Am. 6s, '83	103	.....	.....	.....	.....	.....
6s, 1889	....	.....	.....	.....	.....	.....
Mort. 6s, 1889	.....	.....	.....	.....	113	113
Camden & Atlantic	.....	.....	.....	.....	35	.....
Preferred	....	.....	.....	.....	.....	....
1st mortgage	.....	.....	.....	.....	.....	.....
2d mortgage	.....	.....	.....	.....	.....	.....
Catawissa	22¼	.....	.....	.....	....	19⅞
Preferred	.....	.....	.....	.....	.....	51
2d pref	.....	52¼	52	.....	53	52
7s, new	.....	.....	.....	.....	52	.....
Del. & Bound Brook	.....	.....	.....	.....	.....	.....
7s	125	.....	.....	.....	.....	125
Elmira&Williamsp't	.....	.....	.....	.....	.....	.....
Preferred	.....	.....	.....	.....	.....	.....
Hunt. & B. Top Mt.	.....	.....	.....	.....	12	.....
Preferred	.....	.....	.....	.....	.....	.....
2d mortgage	.....	.....	.....	.....	.....	.....
Lehigh Navigation.	36½	36¾	36½	36	35	34⅞
6s, 1884	.....	104¾	104¾	.....	.....	104¼
Gold Loan	.....	.....	.....	.....	113¾	112
Railroad Loan	.....	... .	.....	.....	.....	.....
Conv. Gold Loan	.....	.....	.....	.....	.....	.....
Consol. Mort, 7s	.....	.....	....	.....	.....	.....
Lehigh Valley	60⅛	60	60	60	59	59
1st mort. 6s, coup	.....	.....	.....	.....	.....	.....
1st mort. 6s, reg	.....	.....	.....	.....	.....	.....
2d mort. 7s	.....	.....	.....	.....	.....	.....
Consol mort. 6s	.....	.....	.....	.....	.....	.....
Consol.mtg.6s,reg	.....	.....	.....	.....	.....	.....
Little Schuylkill	57½	57½	.....	.....	.....	57¾
Minehill&Sch.Hav'n	.....	63	63	.....	.....	.....
North Pennsylvania	.....	63¼	.....	63	62¾	.....
1st mortgage 6s	.....	.....	.....	.....	.....	.....
2d mortgage 7s	.....	.....	.....	122½	.....	.....
Genl. mtg.7s,coup	.....	.....	.....	.....	.....	123
Genl. mtg. 7s, reg	.....	.....	.....	.....	.....	... .
Northern Central	.....	.....	.....	47½	46¾	44⅜
5s	98½	98½	98½	.....	98	.....
Northern Pacific	42¼	41¾	41¼	41¼	41	39¾
Preferred	80¼	79½	79½	79¾	78¾	78
Pennsylvania R. R.	56⅛	56	55¾	55½	54⅞	54¼
1st mortgage	.....	.....	.....	.....	.....	.....
Gen'l mort	.....	.....	.....	.....	.....	.....
Gen'l mort reg.	.....	.....	.....	.....	.....	.....
Consol. mort. 6s	.....	.....	.....	.....	.....	.....
Consol. mort. reg	.....	.....	.....	.....	.....	...
Pa. State 5s, new	119	.....	.....	119	.....	.....
do 4s, new	.....	.....	.....	.....	.....	110
do 3½s, 1912	.....	.....	.....	.....	.....	.....
Phila. & Reading	28¾	27¾	26¾	26⅝	26¾	26¾
1st mortgage 6s	.....	.....	.....	.....	.....	.....
7s of 1893	120	.....	.....	.....	.....	120
7s, new convert	.....	.....	.....	.....	.....	.....
Consol. mort. 7s	.....	.....	.....	123	.....	.....
Consol. mort. reg.	.....	.....	.....	.....	.....	.....
Gen'l mort. 6s	96¾	97	96¾	96¾	97	96¾
Def. Income bonds	.....	.....	.....	.....	.....	.....
Philadelphia & Erie	.....	.....	.....	.....	12	.....
1st mortgage 5s	.....	103	.....	.....	102½	.....
2d mortgage 7s	.....	117	117	.....	117	117
Pittsb.,Cin.&St.L.7s	118¾	118¼	.....	.....	.....	.....
Pitts.,Tit.&Buff. 7s,	.....	.....	.....	.....	.....	.....
Schuylkill Navi't'n.	. ..	.. ..	.....	.....	.....	.....
Preferred	.....	.....	.....	.....	.....	.....
6s, 1895	.....	.....	.....	.....	.....	.....
6s, 1882	.....	91	.....	.....	.....	91
United Co. of N. J.	188	.....	.....	188	187¾	187¾
Hestonville, (Horse)	.....	.....	.....	.....	.....	.....
Chestnut&Wal.(do)	.....	.....	.....	.....	.....	.....

Baltimore Stock Exchange.

Closing Prices for the Week Ending June 6.

	W. 31.	Th. 1.	F. 2.	Sat. 3.	M. 5.	Tu. 6.
Baltimore & Ohio..	.....	194	.....	.....	194	194
6s, 1885.....	.....	.....	.....	.....	.....	.....
Central Ohio ($50)..	...	.....	.....	.....	.....	.....
1st mortgage.....	110¾	.....	.....	.....	.....	.....
Marietta & Cincin'ti	.....	.....	.....	.....	.....	.....
1st mortgage, 7s..	.....	.....	.....	.....	...	....
2d mortgage, 7s..	.....	.....	.....	.....	.....	.....
3d mortgage, 8s..	.....	.....	.....	.....	.....	.....
Northern Cen. ($50)	.....	48¼	48¼	48¼	46¼	44⅞
2d mort., 6s 1885..	.....	.....	.....	.....	.....	.....
3d mort., 6s, 1900.	.....	.....	.....	.....	.....	.....
6s, 1900, gold.....	.....	118¼	.....	.....	.....	.....
6s, 1904, gold.....	.....	.....	.....	.....	.....	.....
Pitts. & Connellsv. 7s	.....	.....	....	.....	.....	.....
Virginia 6s, Consol.	62	62¼	62¾	62⅜	62	61¾
Consol. coupons..	.....	.....	.....	.....	.....	.....
10 40 bonds.....	43½	.....	43⅜	43¼	43	43
Def'd Certificates.	.....	.....	.....	.....	.....	.....
Western Maryland..	.....	17	.....	.....	17	.....
1st M., end. by Balt	.....	.....	.....	.....	.....	.....
2d M. do .	.....	.....	.....	.....	.....	....
3d M., do .	.....	.....	.....	.....	.....	.....
1st M., unendors'd	114½	.....	.....	.....	.....	.....
2d M., end. WashCo	.....	.....	.....	.....	.....	.....
2d M., preferred..	.....	.....	.....	.....	.....	.....
City Passenger R R.	....	.....	.....	....	107½	....

London Stock Exchange.

	May 19.		May 12.	
	——Closing Prices——			
Baltimore & Ohio 5s, 1927.....	107	109	107	109
Central of N. J., $100 shares....	93	98	93	98
Do. consol. mort.....	112	115	112	115
Do. Income Bonds.....	93	97	93	97
Det., G'd Haven & Mil. Equip bds	115	117	116	117
Do. Con. M. 5p.c., till '83 aft'r 6p.c	112	114	112	114
Illinois Central $100 shares.....	137	139	138	140
Lehigh Valley Cons. mortgage..	115	119	115	119
Louisville & Nashville mort 6s.	99	101	98	101
Do. capital stock $100 shares.	75	77	78	80
N. Y. Cent. & Hud. R. mt. bds..	134	136	134	136
Do. $100 shares.....	129	131	129	131
Do mort. bonds (stg.).....	124	126	124	126
N.Y., Lake Erie & West., $100 shs	36½	37	36½	37
Do. 6 p. c. pref. $100 shares..	73	75	73	75
Do. 1st Con. Mort. bds (Erie) .	128	130	128	130
Do. do. Funded Coupon bds.	124	126	124	126
Do. 2d Consol Mort. bonds...	94	96	94	96
Do. do. Funded Coupon bds..	92	94	92	96
N.Y., Pa. & Ohio 1st mort. bonds.	46	47	46	47
Do. Prior Lien bds (sterling)..	101	105	101	105
Pennsylvania, $50 shares.....	59¼	60	60	60¼
General Mortgage.....	122	126	122	126
Philadelphia & Reading $50 shs	29¼	29¾	29½	30
General Consol Mortgage.....	118	120	118	120
Do. Improvement Mortgage..	102	104	102	104
Do. Gen. Mtg. '74, ex-def'd coup.	99	101	99	101
St. L. Bridge 1st mort. gold b'd.	125	127	125	127
Do. 1st pref. stock.....	98	102	98	102
Union Pacific 1st. mtg	117	119	117	119
Wabash, St. L. & P. $100 shs....	30	32	31	33
Do. $100 pref. shares.....	53	55	54	56
Do. gen. mort. bonds.....	83	85	83	85

AMERICAN RAILROAD JOURNAL

Financial and Commercial Review.

THURSDAY EVENING, June 8, 1882.

THE quotations for call loans this morning on stocks were 2½@3½ per cent, and on United States bonds 2@2½ per cent. In the afternoon, the rate for call loans at the Stock Exchange was 3 per cent, but in the last hour fell to 2@2½ per cent.

The actual rates for prime bankers' sterling were 4.86¼@½ and 4.89@¼, with cable transfers 4.89¼@½, and prime commercial bills 4.85¼@4.85½. The actual rates for continental bills are as follows: Francs, 5.17½@5.16⅞ and 5.14⅜@5.13¾; Marks, 95⅛@¼ and 95⅞@96, and Guilders 40¼ and 40⅝.

The earnings of the Cleveland, Columbus, Cincinnati and Indianapolis Railway for the month of April, 1882, were $309,847, against $370,395 for the month of April, 1881, a decrease of $60,548. From January 1, to April 30, 1882, the earnings were $1,135,521, against $1,307,998 for the corresponding period of 1881, a decrease of $172,476.

The 112th call for bonds matured on the 6th inst. It is for $15,000,000. Of the six previous calls, aggregating about $75,000,000, there were yet outstanding about 7,500,000. The calls next in order will mature July 1 and August 1. They are for $12,000,000 (about) and $15,000,000 respectively. There are still uncalled about $31,000,000 extended sixes, which will be called in before the calls for fives begin.

From the report of the Erie and Western Transportation Company, which was presented at the annual meeting in Philadelphia, on the 6th inst., it appears that the tonnage carried during the year amounted to 598,000 tons, that a dividend of six per cent was paid, and a fund for depreciation in vessel property provided, leaving a moderate surplus.

A bond of $100,000, as a guarantee for the completion of the Broadway Underground Railway, was filed in the Controller's office on the 2d inst. The bond will be forfeited if the road is not completed within five years from July 1st last.

A Mexican paper, which has just reached here, contains a letter from Senor Romero, the Mexican Minister, to the Secretary of Foreign Relations of Mexico, detailing an interview with General Grant, in which the latter denies that he has lost any money in stock speculations, and says that the rumors were started to injure the Mexican railway enterprises in which he is interested.

The report of the Boston and New York Air Line Railroad Company, presented at the annual meeting of the stockholders in Middletown Conn., on the 6th inst., shows that the net earnings for the year ending April 30th were $174,066.38, being an increase of $10,000 over the previous year.

The Atchison, Topeka and Santa Fe Railroad Company assumed control on the 1st inst., of the Kansas City, Lawrence and Southern Railroad. This company has 388.27 miles of road, as follows: Main line, Lawrence, Kan., to Coffeyville, Kan., 143.33 miles. Extensions—Ottawa Junction, Kan., to Olathe, Kan., 31.77 miles; Cherryvale, Kan., to Harper, Kan., 148.82 miles; Wellington, Kan., to Hunnewell, Kan., 18.35 miles. Leased—Ottawa and Burlington Railroad, 46 miles.

The capital stock of the Sibley Manufacturing Company, of Augusta, Ga., has been increased $1,000,000, and the directors authorized to issue $100,000 additional bonds for the purpose of erecting tenement houses for the operatives. The capacity of the mill is to be increased to 37,600 spindles.

The total revenue of the Chesapeake and Ohio Canal for the year 1881, was $308,837.93; expenditures, $241,756.94; revenue over expenses, $67,080.99. Law expenses, interest on notes of basin wharf property, and judgments in Allegany county, $32,458.83; leaving revenue over all debts other than lengthening the locks, $30,298.20. Actual receipts were $288,751.95; received from sale of repair bonds and temporary loans, $77,000; balance on hand, $42,928.20—total to be accounted for, $424,928.20. Paid on labor and material, $73,716.62; interest on repair bonds, $7,080; paid on account of operating expenses, $228,554.40; account of extending locks, $69,938.43; balance, $45,638.75—total, as above, $424,928.20.

The Trustees of the Canton Company's gold mortgage bonds have just completed a drawing for $193,000, to be paid off on presentation, with interest to date. Interest bonds drawn on the will cease on the 4th of August next.

A mortgage has been filed in Galveston, Texas, by the Galveston and Eagle Pass Air Line Railway Company, conveying to the Mercantile Trust Co., of this city, all the line of said railway, completed or proposed to be completed, with all lands, personal property, rights and franchises belonging to said company. The mortgage is for $4,200,000. The company will issue 4,200 gold bonds of $1,000 each, bearing interest at 6 per cent, to run forty years, interest to be paid semi-annually. This document is given for the purpose of correcting some errors in a former mortgage given by the company in December last. The issue of the bonds under the terms of the trust conveyance is restricted to $12,000 per mile.

The earnings of the Ohio division of the Indiana, Bloomington and Western system (formerly the Cleveland, Sandusky and Columbus Railroad) for the year ending May 1, 1882, were $963,827.69, being an increase over the earnings of the previous year of $94,630.31. The earnings were derived from the following sources: freights, $510,363.94: passengers, $292,097.74: express, $26,714.45: mail, $14,062.44: miscellaneous, $11,307.61: sleeping-cars, $3,628: Cincinnati and Springfield rental, $105,153.77.

After a careful review of the condition of the Northern Pacific Railroad Co., and what it has accomplished, the Judiciary Committee of the House of Representatives at Washington have reached the conclusion that it would not be advisable to give its land grants to another company or to sell them and apply the proceeds to the completion of the road: that the early completion of the road will be more readily accomplished by a policy of non-interference on the part of the government, and they therefore recommend that no further legislation is necessary or advisable.

The revenue of the Chesapeake and Delaware Canal Co. from tolls for the year ending May 31st was $209,839.57, being much larger than in any previous year since 1876. The balance in the treasurer's hands at the close of the year amounted to $47,692.22.

The receipts at the United States Patent office from Jan. 1 to June 1, 1882, amount to $428,805.65. This is an increase over the corresponding five months of the previous year of $64,623.55 and over the first five months of the year 1880 of $90,660.85. The number of applications for patents filed in the same period of this year was 15,244, an increase over 1881 of 2,307 and over 1880 of 3,039.

At the recent annual meeting of the Concord and Claremont Railroad Co., it was "voted that the act passed by the last Legislature authorizing the union of the Northern and Concord and Claremont Railroads be accepted, and the directors of this corporation be authorized to agree upon the terms, conditions and guarantees of such union."

At the annual meeting of the Nashua and Lowell Railroad Co., held on the 31st ult., it was stated that the dividends paid during the past year have exceeded the rental by $4,000, this excess having been derived from other sources of income. It is expected in future to realize a yearly sum of $64,000, or 8 per cent on the capital stock, by reason of increased traffic earnings over the financial year ending Oct. 1, 1880.

At the annual meeting of the Chicago, Milwaukee and St. Paul Railway Co., held at Milwaukee, Wis., on the 5th inst., a resolution was passed authorizing the issue of 20 per cent in common and preferred stock, in both cases one-half on account of surplus earnings and one-half for each at par. The object of this issue of stock, as stated in the resolution, is for the betterment of the road. The common and preferred stock now amount to $32,000,000. The resolution, therefore, authorizes the issue of $6,400,000, of which $3,200,000, or one-half, is on account of surplus earnings, and the remaining $3,200,000 is to be sold to stockholders at par. Of the $6,000,000, 400,000 is for completing the work now in progress and for repairing the road-beds in Minnesota and Wisconsin. The stockholders further decided to apply a portion of this issue for the completion of the Minneapolis car shops.

The gross earnings of the Chesapeake and Ohio Railway for the month of April were $267,453.84, being $14,000 in excess of the estimated earnings. The expenses for the month of April were $178,016.95, a decrease from last year of $4,753.18, leaving net earnings of $89,436.18, an increase over the same month of 1881 of $44,864.46. The company is actively engaged in extending its road from Newport News to Old Point Comfort and Fortress Monroe, and will have the work completed about July 1.

The report of the Pennsylvania Company, which was presented at the annual meeting held in Pittsburgh on the 6th inst., shows that the total revenue from the eleven lines leased and operated by that company west of Pittsburgh, and known as the Northwestern system, was $4,074,508.96, and the expenses, including interest on bonds, losses on the Erie and Pittsburgh, the Massillon and Cleveland and the Indianapolis and Vincennes railroads, were $1,208,325.95—leaving as net income the sum of $2,866,183.01, of which $1,775,674.63 was derived from the lease of its main feeder, the Pittsburgh, Fort Wayne and Chicago Railway. Two dividends of 2½ per cent each were paid out of the net income, amounting altogether to $1,000,000, leaving a balance and surplus for the year 1881 of $1,866,183.01. The company has no floating debt.

The following quotations of sales of railway and other securities, for the week, are in addition to those given elsewhefe in our columns:

New York.—Albany and Susquehan t, 125; Atlantic and Pacific 1st, 106⅝; Boston and New York Air Line pref., 70¼; Boston, Hartford and Erie 1st, 48; Buffalo, New York and Erie 7s, new, 122; Chicago, St. Louis and New Orleans, 75; Chicago, St. Paul, Minneapolis and Omaha, 35¾; do. pref., 99¾; do. consol., 100¼; Chesapeake and Ohio cur. int., 45; Chicago, Milwaukee and St. Paul, Chicago and Pacific div. 1st, 110¾; do. Chicago and Pacific West div. 1st, 94¼; do. Southern Minnesota div. 1st, 108⅛; Central Branch Union Pacific 1st,

105; Chicago, Burlington and Quincy 8s, 105; do. Iowa div. 4s, 103½; Chicago, St. Paul and Minneapolis 1st, 110; Denver and Rio Grande, 56; do. 1st, 113; do. 1st consol., 104¼; Dubuque and Sioux City, 84; Detroit, Monroe and Toledo 1st, 122½; East Tennessee, Virginia and Georgia, 87⅛; do. pref., 16; do. inc., 44½; Elizabeth, Lexington and Big Sandy 6s, 99; Fort Worth and Denver, 1st, 89¾; Flint and Pere Marquette 1st, 113¼; Green Bay, Winona and St. Paul, 9; do. 1st, 84; Gulf, Colorado and Santa Fe 1st, 108¼; Illinois and Southern Iowa 1st, 98⅛; Indiana, Bloomington and Western, 37; do. 2d, 73; International and Gt. Northern 1st, 106; do. coupon 6s, 88; Kansas Pacific 1st consol., 102⅛; do. 6s, Denver div. ass., 108¾; Louisville and Nashville Gen'l mort. 6s, 96; Long Island, 57; do. consol. 5s, 97½; Lake Erie and Western, 26¾; do. 1st, 99⅞; Louisville, New Albany and Chicago, 58; do. 1st, 103; Marietta and Cincinnati 2d pref., 4½; Minneapolis and St. Louis, 24; do. pref., 63; do. Southwest ext. 1st, 110; Mobile and Ohio, 15; do. 1st deben., 72; Missouri, Kansas and Texas, 28; do. gen'l mort. 6s, 77¾; do. 7s, consol. 105¾; do. 2d, 54½; Missouri Pacific, 91⅛; do. 3d, 109; Memphis and Charleston, 44¾; Milwaukee, Lake Shore and Western, 44¾; do. 1st, 101; do. inc., 77½; Manhattan Beach, 32⅛; Metropolitan Elevated 2d, 90; Michigan Southern S. F., 107½; New York, Chicago and St. Louis, 10⅞; do. pref., 28: do. 1st, 84¼; Nashville, Chattanooga and St. Louis, 53; do. 1st, 116¾; New York, Ontario and Western, 23; Norfolk and Western pref., 47½; do. Gen'l mort., 101¼; New Orleans Pacific 1st, 86⅜; Northern Pacific 1st, 102¾; New York City and Northern, Gen'l mort., 50¼; Ohio Central, 11½; do. 1st, 95; do. inc., 31; Oregon Transp., 66½; Oregon Short Line 6s, 103½; Ohio Southern inc., 25; do. 1st, 82; Oregon Railway and Nav. 1st, 109; Peoria, Decatur and Evansville, 26; do. 1st, 106; Richmond and Alleghany, 17¼; do. 1st, 87½; Richmond and Danville, 100; do. deben., 70; do. 1st, 100; Richmond, Danville and West Point, 51¼; Rochester and Pittsburgh 1st, 104½; St. Paul and Sioux City 1st; 110¾; St. Louis, Kansas City and Northern. R. E. 7s, 103¾: St. Paul, Minneapolis and Manitoba, 135½; do. 1st, 111¼; do. 2d, 110; do. 1st, Dakota ext., 106¾; St. Louis and San Francisco 2d, Class B, 85; do. C, 85; Southern Pacific of California 1st, 105¼; South Pacific 1st, 106; St. Louis, Iron Mountain and Southern 5s, 79; South Carolina inc., 47¾; do., 6s, Brown consol., 102; Texas and Pacific, 37¾; do. inc. Land Grants, 59; do. Rio Grande div. 1st, 78⅞; Texas Central 1st, 105; Toledo, Peoria and Western 1st, 108; Utah Southern Gen'l mort. 7s, 106: Wabash, St. Louis and Pacific, Gen'l mort. 6s, 74⅞; do. Iowa div. 1st, 90; do. Chicago div. 1st, 82; Winona and St. Peter 2d, 115; Alabama, Class A, 86; Louisiana 7s, consols., 67¾; North Carolina 6s, S. T., 3d class, 6¾; Tennessee 6s, 56¼; Am. Dist. Tel., 40; Sutro Tunnel, ¾; Colorado Coal and Iron, 42½; do. 6s, 91½; Consolidation Coal, 29; Cameron Coal, 33¾; Homestake Mining Co., 17¾; Little Pittsburgh, 1½; Mariposa, 1⅝; Standard, 16¼.

Boston.—Atlantic and Pacific blocks, 109; do. 6s, 98; Boston Land, 6⅞; Boston Water Power, 3¼; Connotten Valley, 6⅝; Chicago, Burlington and Quincy 4s, 86¾; do. 4s, Denver extension, 83¾; Cincinnati, Sandusky and Cleveland 7s, 101½; Flint and Pere Marquette, 21; do. pref., 96; Iowa Falls and Sioux City, 89½; Kansas City, St. Joseph and Council Bluffs 7s, 115; Kansas City, Fort Scott and Gulf, 69½; do. pref., 121¾; Louisiana and Missouri River, 13; do. pref., 30; Little Rock and Fort Smith, 45½; do. 7s, 107⅛: Mexican Central 7s, 87⅜; do Block No. 3, 106½; Massachusetts Central, 5; do. 6s, 47; Marquette, Houghton and Ontonagon, 60; Maine Central, 63; New York and New England 6s, 102¾; New Mexico and Southern Pacific 7s, 113; Northern Pacific 6s, 100; Oregon Short Line sub., 113¼; do. 6s, 102; Ogdensburg and Lake Champlain consol. 6s, 97; Rutland pref., 24½: Sonora 7s, 102¼; Toledo, Cincinnati and St. Louis, 5½; do. inc., 13½; Toledo, Delphos and Burlington, Dayton div. inc., 16; Wisconsin Central, 12½; do. 7s, 2d Series, 45; Allouez Mining Co., 2; Atlantic, 13; Brunswick Antimony, 11; Franklin, 12; Huron, 1¼; Harshaw, 1½; Osceola, 33; Phœnix, 1; Pewabic, 10¾; Sullivan, 1⅛; Silver Islet, 17.

Philadelphia.—Am. S. S. Co. 6s, 105; Allegheny Valley 7s, 118; Central Transportation, 34; Northern Pacific 1st, 102¾; Pennsylvania R. R. consol. 5s, 105⅛; Pennsylvania Canal 6s, 91; Philadelphia and Reading def. Income bond receipts, 28¼; do. scrip, 98; Pennsylvania Co. 4⅛s, 98; Philadelphia, Germantown and Norristown, 111; Pennsylvania allotments, 4¼; Susq. Canal 6s, 60½; Schuylkill Nav. 6s, B. L., 62; Texas and Pacific 6s, 106; do. consol. mort. 6s, 96¾: do. Rio Grande div. 6s, 79⅞; Union and Titusville 7s, 95; Warren and Franklin 7s, 112. The latest quotations are: City 6s, 108@118; do. free of tax, 128@135; do. 4s, new, 108@116; Pennsylvania State 5s, new loan, 118@119; do. 4s, old, 108@112; do. 4s, new, 114@115; Philadelphia and Reading R. R., 26⅜@26½; do. consol. mort. 7s, reg., 123@124; do. gen'l mort. 6s, coupon, 96½@97; do. 7s, 1893, 119½@120½; do. new conv., 72@75; United New Jersey R. R. and Canal, 187@188; Buffalo, Pittsburg and Western, 14¼@14⅜; Pittsburgh, Titusville and Buffalo 7s, 94⅛@95½; Camden and Amboy mort 6s, 1889, 112½@113½; Pennsylvania R. R., 54⅛@54¼; do. general mort. 6s, coupon, 125@126; do. reg., 125@126; do. consol. mort. 6s, reg., 120@121; Little Schuylkill R. R., 57@58; Schuylkill Navigation, pref., 12@13; do. 6s, 1882, 90@91; Elmira and Williamsport pref., 58@60; do. 5s, 95@100; Lehigh Coal and Navigation, 34¾@35; do. 6s, 1884, 104@105; do. R. R. loan, 115½@116½; do. Gold Loan, 111½@112½; do. consol. 7s, 118½@119½; Northern Pacific, 39⅝@39⅞; do. pref., 77⅞@78; North Pennsylvania, 62½@63½; do. 6s, 107@108; do. 7s, 120@121; do. 7s, General mort. reg., 122@124; Philadelphia and Erie, 14@15; do. 7s, 116½@117; do. 5s, 102@103; Minehill, 62½@63½; Catawissa, 19½@20½; do. pref., 52@54; do. new pref., 51@53; do. 7s, 1900, 120@—; Lehigh Valley, 58@59; do. 6s, coupon, 121@122; do. reg., 121@122; do. 7s, 133@133½; do. consol. mort. 120½@121½; Fifth and Sixth streets (horse), 152@155; Second and Third, 109@112; Thirteenth and Fifteenth, 70@75; Spruce and Pine, 45@47; Green and Coates, 85@90; Chestnut and Walnut, 90@93; Germantown, 70@75; Union, 110@115; West Philadelphia, 106@112; People's 11@12; Continental, 100@102.

Baltimore.—Atlanta and Charlotte, 1st, 110¼; Atlantic Coal, 1.20; Baltimore and Ohio 1st pref., 126½: do. 2d pref., 124; Baltimore City 6s, 1890, 119; do. 6s, 1900, 130¼; do. 5s, 1894, 116½; do. 5s, 1916, 126; Columbia and Greenville 1st, 104¾, Chesapeake and Ohio Canal, 33⅛; Charlotte, Columbia and Augusta 1st, 109½; Maryland Defense 6s, 105⅝; Marietta and Cincinnati 1st Trust certificates, 125¾; do. 2d do., 99¼; do. 3d, do., 53⅝; Northern Central 5s, 97½; Ohio and Mississippi, Springfield div. 1st, 117⅛; Richmond and Danville gold bonds, 100¾; Virginia Peelers, 36; do. coupons, 38; Virginia Midland 1st 113; do. 5th mort., 94¾. The latest quotations are: Atlanta and Charlotte 1st, 110@110¼; Baltimore and Ohio, 194@196; do. 6s, 1885, 106¼@—; Baltimore City 6s, 1890, 118⅝@119; do. 6s, 1886, 109½@—; do. 6s, 1884, 104½@—; do. 5s, 1894, 116½@—; do. 5s, 1916, 125@126; Columbia and Greenville 1st, 104½@105; Canton 6s, gold, 106@107½; Marietta and Cincinnati 1st, 125¾@126; do. 2d, 99⅛@99¼; do. 3d, 53¼@53¾; Northern Central, 44@44¾; do. 6s, 1900, 118⅛@120; do. 6s, 1900, gold, 118@—; do. 5s, 1926, 97@97¾; Pittsburg and Connellsville 7s, 123@125; Virginia Midland 5th mort., 94¼@94½; Virginia Consols, 61¾@61¾; do. coupons, 65@69; do. 10-40s, 42⅞@43¼; Wilmington, Columbia and Augusta, 108@108½; Western Maryland 1st, unindorsed, 113@—; do. 2d pref., 107½@—; do. 2d mort., guar. by Washington Co., 113@—.

At the annual meeting of the Saratoga and Schenectady Railroad Company, held at Waterford, N. Y., on the 5th inst., the following directors were chosen: George H. Cramer, Joseph M. Warren, E. Thompson Gale, James M. Marvin, Stephen E. Warren, Legrand C. Cramer, T. W. Lockwood, C. B. Russell and C. N. Lockwood.

The officers of the Cotton Exchange, elected on the 5th inst., are: President, M. B. Fielding; vice-president, Siegfried Gruner; treasurer, Walter T. Miller. Board of Managers—Thomas Scott, Mayer Lehman, D. H. Baldwin, Henry Hentz, James F. Wenman, George E. Moore, P. A. Fachire, K. M. Murchison, B. R. Smith, J. H. Hollis, D. G. Watts, J. Yeoman, James Swan, J. L. Macauley and William V. King.

At the annual meeting of the stockholders of the Chicago, Milwaukee and St. Paul Railway Company, held at Milwaukee, Wis., on the 5th inst., the following Board of Directors was chosen: Alexander Mitchell, Milwaukee; Julius Wadsworth, New York; Selah Chamberlain, Cleveland; Jeremiah Milbank, Abraham R. Van Nest, James T. Woodward, William Rockefeller, Peter Geddes, Hugh T. Dickey and James Stillman, New York; John Plankinton, S. S. Merrill, Milwaukee; and Jason C. Easton, Chatfield, Minn.

"Are those stars which we see at night suns?" asked a little boy of his father. "Yes, my boy." "Are the shooting stars suns, too?" "No; the shooting stars are not suns, they are darters."

The new chair smoker on the day express train on the Michigan Central Railway carries with it a novel device recently invented. It is a little machine for recording the mileage and speed of a train. On the first round trip to Chicago it marked 569 miles, the exact mileage from depot to depot and return, the wire being disconnected during switching. The principal is electricity. At each revolution of the wheel a circuit is made which moves the escape wheel in the clock-work one notch. Eight revolutions of this wheel carries the mile-hand round once, ten revolutions of the mile-hand carries the ten-mile hand round once, and so on.

Professor Hofer states that the heat in the deepest workings of the Adalbert silver mines in Bohemia—about 3,400 feet below the surface—is far from being excessive. The temperature of the rock is but about 76 degrees Fahrenheit, while that of the atmosphere is a small fraction of a degree higher. In some parts of the Comstock lode in Nevada the temperature is 130 to 157 degrees at a depth of 1,800 to 2,000 feet. It is generally known that geologists find the average increase in the earth's internal heat from the surface downward to be one degree for every sixty feet of descent. In the case of the Adalbert mines the increase—allowing the surface temperature to be fifty degrees—would be one degree for each 131 feet of descent; and the highest average in the Comstock lode cannot be less than one degree to every nineteen feet.

The greatest active volcano in respect of eruptive force is probably Hecla, on the southwest coast of Iceland, though Vesuvius, on the east side of the Bay of Naples, may be said to dispute the palm with it. Hecla rises to a height of 5,110 feet above the sea and is surrounded by many much higher mountains. It has three peaks, and along its side numerous craters, the seats of former eruptions. The crater of its principal peak is a little over one hundred feet in depth. Since A. D. 900 forty-three of its eruptions have been recorded, five of which were simultaneous, or nearly so, with those of Vesuvius, and four with those of Etna and one with those of both. Vesuvius rises 3,948 feet above the sea level. Its crater is 1,500 feet in diameter and 500 feet deep. The craters of both of these famous volcanoes are far exceeded in dimensions by that of the "mountain of fire" of Sicily, whose crater has been estimated to be four miles in circumference and 800 feet in depth.

RAILROAD AND CANAL DIVIDEND STATEMENT.

Showing the amount of Stock Outstanding, the Dividend Periods and the date of last Dividend.

Marked thus(*)are leased roads.	Stock outstanding.	Divide'd Periods.	Last Dividend Payable.
Albany and Susq*...100	3,500,000	semi-an	Jan. '82 2
Ashuelot.....100	210,000	q'arterly	Oct. '81 3½
Atch., Top. and S. Fe100	54 000,000	q'arterly	May '82 1½
Atlanta and W. Point100	1,232,200	semi-an	Jan. '82
Atlantic and St. Law*100	5,840,000	semi-an	Mar. '82 3
Augusta and Savan'h100	1,022,900	semi-an	June'81 3½
Avon, Genesee&MtM*100	225,000	semi-an	July '81 3
Baltimore and Ohio.100	14,792,566	semi-an	May '82 5
" " pref.100	5,000,000	semi-an	Jan. '82 3
Washington Br....100	1,650,000	semi-an	Apl. '82 5
Berkshire*.....100	600,000	q'arterly	Apl. '82 1¾
Boston and Albany..100	20,000,000	q'arterly	June'82 2
Bos.&N.Y.AirLine pf.100	2,795,227	q'arterly	June '82 1
Bos.,Cl.,F.&N.B.pref.100	1,750,100	.....	Apl. '82 3½
Bos.,Conc.&Mont.pf*100	800,000	semi-an	May '82 3
Boston and Lowell..500	3,940.000	semi-an	Jan. '82 2
Boston and Maine...100	6,921,274	semi-an	May '82 4
Boston & Providence100	4,000,000	semi-an	May '82 4
Attleborough Br...100	131,700	semi-an	Jan. '82 3½
Bos.,Revere B&Lynn100	419,400	semi-an	Jan. '82 3½
Buffalo,N. Y. & Erie*.100	950,000	semi-an	June'82 3
Camden & Atlantic.. 50	377,400	q'arterly	Apl '80 3s
" " pref. 50	880,650	q'arterly	Apl '80 3½s
Camden & Burl. Co..100	381,925	semi-an	July '81 3
Canada Southern....100	15,000,000	.....	Feb. '81 2½
Cape May &Millville* 50	447,000	semi-an	June'81 3
Catawissa*..... 50	1,159,500	annual	Oct.'81$1½
" pref..... 20	2,200,000	semi-an	May '82 3½
" new pref.. 50	1,000,000	semi-an	May '82 3½
Cayuga and Susq.*.. 50	589,110	semi-an	July '81 4½
Cedar Rapids&Mo.R*100	6,850,400	q'arterly	May '82 1½
" " pref.100	769,600	semi-an	Feb. '82 3½
Central of Georgia...100	7,500,000	semi-an	Dec. '81 4
Central of New Jersey100	18,563,200	q'arterly	Apl. '76 2½
Central Ohio*..... 50	2,437,950	semi-an	Jan. '82 3
" pref.. . 50	411,550	semi-an	Jan. '82 3
Central Pacific 100	59,275,500	semi-an	Feb. '82 3
Chemung*.....100	380,000	q'arterly	July '81 1½
Cheshire preferred ..100	2,155,300	semi-an	Jan. '82 1½
Chicago and Alton...100	11,181,741	semi-an	Mar. '82 4
" " pref 100	2,425,400	semi-an	Mar. '82 4
Chi., Burl. & Quincy.100	55,337,455	q'arterly	June '82 2
Chi., Iowa & Nebras*.100	3,916,200	semi-an	Jan. '82 4
Chi., Mil. & St. Paul.100	20,404,261	semi-an	Apl. '82 3½
" " pref 100	14,401,483	semi-an	Apl. '82 3½
Chi. & N. Western...100	14,988,257	semi-an	June'82 3½
" " pref.100	21,525,353	q'arterly	June'82 2
Chi., R. I. & Pacific..100	41,960,000	q'arterly	May '82 1¾
Chi. and West Mich .100	6,151,000	semi-an	Feb. '82 2½
Chi., St. P., M. & O..100	10,390,000	q'arterly	Jan. '82 1¾
C., Ind., St. L. & Chi.100	6,000,000	q'arterly	Apl. '82 1½
Cin., Sand. & Clev.pf. 50	429,037	semi-an	May '82 3
Clev. and Mahoning* 50	3,759,200	semi-an	Nov.'81 3½
Clev. and Pittsburg* 50	11,244,336	q'arterly	June'82 1¾
Columbus & Xenia*. 50	1,786,200	q'arterly	Jun e '8 2
Colum.&HockingVal.100	2,500,200	semi-an	Aug.'81 20s
Concord 50	1,500,000	semi-an	May '82 5
Concord and Ports.*.100	350,000	semi-an	Jan. '82 3½
Conn.& Passump.Riv100	2,244,400	semi-an	Feb. '82 3
Connecticut River ..100	2,100,000	semi-an	July '82 4
Cumberland Valley.. 50	1,292,950	q'arterly	Apl. '82 2½
" 1st pref 50	241,900	semi-an	Apl. '82 4
" 2d pref. 50	243,000	semi-an	Apl. '82 4
Danbury & Norwalk. 50	600,000	.....	Apl. '82 1½
Dayton and Mich.*.. 50	2,402,573	semi-an	Oct. '81 1¾
" " pref. 50	1,211,250	q'arterly	Oct. '81 2
Delaware*..... 25	1,468,940	semi-an	Jan. '82 3
Del. & Bound Brook*100	1,652,000	q'arterly	May '82 1¾
Del., Lack.& Western 50	26,200,000	q'arterly	Apl. '82 2
Denver & Rio Grande.100	29,160,000	q'arterly	Jan. '82 1½
Den.,South P. & Pac.100	3,500,000	.....	Aug.'80 4
Detroit, Lans. & Nor.100	1,825,600	semi-an	Aug.'80 2½
" " pref.100	2,503,380	semi-an	Feb. '82 3½
Dubuque&Sioux C'y*100	5,000,000	semi-an	Apl. '82 3
East Pennsylvania*.. 50	1,709,550	semi-an	Jan. '82 3
East Mahanoy*..... 50	392,950	semi-an	Jan. '82 3
Eastern (N. H.).....100	492,500	semi-an	June'82 2½
Eel River.....100	3,000,000	q'arterly	June '82 $1
Elmira.Jef.&Canand*100	500,000	annual	Sep. '80 5
Elmira&Williamsp't* 50	500,000	semi-an	May '82 1½
" " pref. 50	500,000	semi-an	Jan. '82 3½
Erie and Pitsburg*.. 50	1,998,400	q'arterly	Dec. '81 1¾
Evansville & Terre H.100	100,000	semi-an	Nov.'81 2
Fitchburg..... .100	4,500,000	semi-an	Jan. '82 3
F. & P. Marquette pf.100	6,500,000	semi-an	Jan. '82 3
Ft.W. & Jackson pref.100	2,000,000	.....	May '82 2
Georgia. ..... .100	4,200,000	q'arterly	July '82 2½
Granite 100	1,250,000	semi-an	Jan. '82 3
Han. & St. Jo. pref .100	5,083,024	semi-an	Feb. '82 3½
Harrisbg&Lancaster 50	1,182,500	semi-an	Jan. '82 3½
Housatonic pref. ...100	1,180,000	q'arterly	Apl. '82 2
Illinois Central.....100	39,000,000	semi-an	Mar. '82 3½
Ia.Falls & Sioux City*100	4,623,500	q'arterly	June'82 1½
Iowa R. Land Co....100	7,620,000	q'arterly	May '82 1
Jeffersonv. Mad.&Ind100	2,000,000	q'arterly	Feb.'82 1½
Joliet and Chicago*..100	1,500,000	q'arterly	June'82 1¾
Kan.C.,Ft.S.&Gulf...100	4,000,000	.....	Feb. '82 2
" " pref..100	2,750,000	semi-an	Feb. '82 4
Kentucky Central...100	500,000	semi-an	June'81 1
" " pref..100	5,583,500	semi-an	June'81 3
Lake Shore&Mich.So.100	49,466,500	q'arterly	May '82 2
" (guar.)100	533,500	semi-an	Feb. '82 5
Lawrence*..... 50	450,000	q'arterly	Apl. '82 2
Lehigh Valley..... 50	27,496,895	q'arterly	Apl. '82 1½
" " pref. 50	106,300	q'arterly	Apl. '82 1½

Marked thus(*)are leased roads.	Stock outstanding.	Divide'd Periods.	Last Dividend Payable.
Little Miami..... 50	4,637,300	q'arterly	June'82 2
Little Rock & Ft. S..100	4,096,135	.....	July' 81 10s
Little Schuylkill*.. . 50	2,646,100	semi-an.	Jan. '82 3½
Louisville & Nashv..100	18,130,913	semi-an.	Feb. '82 3
Lowell & Andover...100	500,000	semi-an.	Jan. '82 3½
Lykens Valley.....100	600,000	q'rterly.	Oct, '81 2½
Manchester & Law...100	1 000,000	semi-an.	May '82 5
Manhattan 100	13,000,000	.....	.....
" " 1st pref.100	6,500,000	q'rterly.	July '82 1½
" " 2d pref.100	6,500,000	q'rterly	July '82 1½
Marietta& Cincinnati 50	1,386,350	.....	.....
" " 1st pref 50	8,105,600	semi-an.	Sep. '66 3s
" " 2d pref 50	4,440,100	semi-an.	Sep. '66 3s
Marq.Hout.&Ont.pf..100	2,259,026	.....	Feb. '82 4
Massawippi*.....100	400,000	semi-an.	Feb. '82 3
Michigan Central....100	18,738,204	q'rterly.	Aug. '81 1
Middlesex Central...100	280,000	semi-an.	Feb.'82 3
Mill Creek& Minehill* 50	323,375	semi-an.	Jan. '82 5
M.Hill& Schuyl.Hav* 50	4,022,500	semi-an.	Jan. '82 3½
Missouri Pacific.....100	28,169,800	q'rterly.	Apl. '82 1½
Mobile&Montgomery100	3,022,517	semi-an	Feb. '80 2½
Mont. & Wells River100	800,000	annual	Feb. '80 2
Morris and Essex.... 50	15,000,000	semi-an	Jan. '82 3½
Mt Carbon&PtCarbon 50	282,350	semi-an	Jan.. '82 6
Nashua and Lowell..100	800,000	semi-an	May '82 4
Nashua & Rochester.100	1,305,800	semi-an	Apl. '82 1½
Nashv. & Decatur...100	1,827,000	semi-an	June'81 3
Nash.,Chat.&StLouis 25	6,670,325	semi-an.	Apl. '82 1½
Naugatuck.....100	2,000,000	semi-an.	Jan. '82 5
Nesquehoning Val'y* 50	1,300,000	semi-an.	Mar. '82 3
N.Castle&Beaver Val* 50	600,000	q'rterly.	Oct. '81 —
NewLondonNorth'n*100	1,500,000	q'rterly.	Jan. '82 1½
N. Y. Cen. & Hud. R.100	89,428,330	q'rterly.	July '82 2
N. Y. and Harlem....100	7,950,000	q'rterly	Apl. '82 2
" " pref.100	1,500,000	q'rterly	Apl. '82 2
" City Line.. —	.....	annual	Apl. '82 3
N.Y.,LakeErie&West.100	77,083,800	.....	.....
" " pref.100	8,156,725	.....	Jan. '82 6
N. Y., N. H. & Hart..100	15,500,000	semi-an.	Jan. '82 5
N. Y., Prov. & Boston100	3,000,000	q'rterly.	May '82 2
Niag.Bridg&Canand*100	1,000,000	semi-an.	July '81 3
North Carolina*.....100	3,000,000	semi-an.	Sep. '81 3
" " pref.100	1,000,000	semi-an.	Sep. '81 3
N. Eastern (S.C.) pref100	86,000	semi-an.	May '81 4
Norfolk & Western pref.	15,000,000	q'rterly.	June '82 $1
North Pennsylvania. 50	4,527,150	q'rterly.	May '82 1¾
Northern Central.... 50	6,142,000	semi-an.	Jan. '82 3
Northern N. Hampsh100	3,068,400	semi-an.	June'82 3
Northern N. Jersey*.100	1,000,000	semi-an.	July '80 2½
Norwich&Worcester*100	2,604,400	semi-an.	Jan. '82 5
Ohio 100	18,500,000	.....	.....
Ohio and Miss. pref..100	4,030,000	semi-an.	Mar. '75 3½
Old Colony.....100	7,333,800	semi-an.	July '82 3½
Oregon R'way&Nav.100	6,000,000	q'rterly.	May '82 2
Oswego & Syracuse..100	1,320,400	semi-an.	Aug. '81 4½
Panama.....100	7,000,000	.....	Jan. '82 6
Paterson & Hudson*.100	630,000	semi-an.	Jan. '82 4
Paterson & Ramapo.100	248,000	semi-an.	Jan. '82 4
Pember.&Hightst'n*. 50	342,150	semi-an.	Jan. '82 3
Pennsylvania..... 50	77,672,750	semi-an.	May '82 4
Pennsylvania Co..... 50	20,000,000	semi-an.	June'81 2½
Peoria & Bureau Val*100	1,200,000	semi-an.	Feb. '82 4
Philadelphia & Erie*. 50	7,013,700	semi-an.	.....
" " pfd 50	2,400,000	semi-an.	Jan. '75 4
Phil,Ger.&Norrist'n* 50	2,231,900	q'rterly.	Mar '82 3
Phil. and Reading... 50	32,726,375	q'rterly.	Jan. '76 2½
" " pref. 50	1,551,800	q'rterly.	July '76 3½
Phila. and Trenton...100	1,259,100	q'rterly.	Apl. '82 2½
Phila., Wil. and Balt. 50	11,585,750	semi-an.	Jan. '82 4
Pittsb. Ft. W. & Chi.*100	19,714,285	q'rterly.	Apl. '82 1¾
" Special Imp.100	6,770,900	q'rterly.	Apl. '82 1¾
Pittsfield&N.Adams..100	450,000	semi-an.	Jan. '82 2½
Portl., Saco & Portsm100	1,500,000	semi-an.	Jan. '82 3
Providence &Worces.100	2,000,000	semi-an.	Jan, '82 3
Rensselaer&Saratog.*100	7,000,000	semi-an.	Jan. '82 4
Rhode Island& Mass.100	100,000	.....	Jan. '81 3
Richmond& Danv...100	3,866,000	q'rterly.	May '82 2
Richmond & Petersb100	1,009,300	semi-an.	Jan. '81 3
Roch.&Genesee Val.*100	555,200	semi-an.	Jan. '82 3
Rome, Watert.& Ogd.100	5,293,900	semi-an.	July '75 1½
Rutland preferred.. 100	4,000,000	semi-an.	Feb. '82 1
St.L.,Alt. & T.Haute.100	2,300,000	.....	.....
" " pref.100	2,468,400	.....	May '82 3
St.L.&S.Fran.1st pref100	4,500,000	.....	Feb. '82 3½
St.L.,I.Mt.&South'n.100	21,459,821	semi-an.	Feb. '74 3
St. P. & Duluth pref.100	4,705,006	q'rterly.	June'82 1¾
St. P., Minn. & Man..100	15,000,000	semi-an.	Feb. '82 3½
Schuylkill Valley*... 50	576,050	semi-an.	Jan. '82 2½
Seaboard & Roanoke.100	1,299,600	semi-an.	May '82 5
Shamokin V.&Pottsv 50	869,450	semi-an.	Feb.'82 3
Shore Line*.....100	1,000,000	semi-an.	Jan. '82 4
Sioux C.&Pacific pref100	169,000	semi-an.	Apl. '82 3½
South Br. (N. J.)*....100	438,300	semi-an.	Jan. '82 3
South Western (Ga.)*100	3,892,300	semi-an.	Dec. '81 3½
Stockbridge&Pitts.*.100	448,700	semi-an.	Oct. '81 1½
Summit Branch*.... 50	4,010,350	semi-an.	Feb. '76 3
Syr.,Bingham&N.Y.*100	2,500,000	semi-an.	Feb. '81 2
Terre Haute & Ind...100	1,988,150	semi-an.	Feb. '82 4
Troy and Boston....100	1,609,000	semi-an.	Feb. '80 2
Union Pacific. 100	61,000,000	q'rterly.	July '82 1¾
United Cos of N. J.*.100	20,490,000	q'rterly.	Apl. '82 2½
Utica, Shenango&S V100	4,000,000	semi-an.	Nov. '81 3
Utica and Black Riv.100	1,772,000	semi-an.	Mar. '82 2
Vermont and Mass..100	3,050,000	semi-an.	Apl. '82 3
Wab. St.L.& Pac.pref.100	22,615,100	q'rterly.	Nov.'81 1½

Marked thus(*)are leased roads.	Stock outstanding.	Divide'd Periods.	Last Dividend Payable.
Ware River*.....100	750,000	semi-an.	Jan. '82 3½
Warren (N. J.).....100	1,800,000	semi-an.	Apl. '82 3½
Warwick Valley.....100	340,000	semi-an.	Jan. '82 2½
Westchest&Phil.pref100	821,300	semi-an.	July '80 2
West Jersey.....100	1,359,750	semi-an.	Apl. '83 3s
Wilmingt'n&Weld'n.100	1,456,200	semi-an.	Dec. '81 3
Wil., Col., & Aug 100	960,000	semi-an.	Dec. '81 3
Winchester&Poto'c.*100	180,000	semi-an.	Jan. '82 3
Winchester&Strasb.*100	74,700	semi-an.	Jan. 82 3
Worcester & Nashua. 75	1,789,800	semi-an.	Jan. '82 1½
HORSE-POWER R. R.			
Albany City.....100	200,000	annual	..... '80 5½
Baltimore City..... 25	1,000,000	semi-an.	Jan. '82 4
Balt.,Cat.&El.Mills..100	.....	semi-an.	Jan. '82 2
BleeckerSt.&Ful.F'y.100	900,000	semi-an.	July '81 ¾
Boston&Chelsea pref. 50	110,000	semi-an.	Apl. '82 3
Broadway (Brooklyn)100	250,000	q'arterly	Oct. '81 3
B'way&7th Av,(N.Y.)100	2,100,000	q'arterly	Oct, '81 2
B'klyn&Hunter's Pt.100	400,000	semi-an.	Apl. '79 3
Brooklyn City.....100	2,000,000	q'arterly	Dec. '81 3½
Bushwick (Brooklyn)100	309,000	semi-an.	July '81 2½
Cambridge.....100	908,000	q'arterly	Apl. '82 4¼
Cen.Park,N.& E.Riv.100	1 ,800,000	q'rterly.	Jan. '82 2
Christoph'r&TenthSt100	650,000	semi-an.	Aug. '81 2½
Citizens' (Phil.)..... 50	192,500	q'rterly.	Jan. '82 2½
Citizens' (Pbg.)..... 50	200,000	annual..	....'80 14½
Coney Island&Bklyn100	500,000	semi-an.	Oct. '80 5
Continental (Phil.) .. 50	580,000	semi-an.	July '82 6
D.Dock,E.B'way&Bat100	1,200,000	q'arterly	Nov.'81 4
Eighth Av. (N. Y.)...100	1,000,000	q'rterly.	Oct. '81 3
42d St. & G. St. Ferry100	748,000	semi-an.	Nov.'81 6
Frankf.&Southw (Ph) 50	600,000	q'rterly.	Jan. '82 6
Germantown, (Ph.).. 50	572,860	q'rterly.	Apl. '82 2½
Girard College (Ph.) . 50	500,000	semi-an.	July '71 3
Grand St. & Newton.100	170,000	semi-an.	July '81 2½
Green&Coates St.(Ph) 50	150,000	q'rterly.	Apl. '82 3
Heston,Mantau&F'm 50	299,381	semi-an.	Jan. '75 4
Highland.....100	600,000	semi-an.	Jan. 82 4
Lomb.&SouthSts(Ph) 25	195,000	semi-an.	Oct. '79 4
Lynn and Boston....100	200,000	semi-an.	May '82 4
Malden and Melrose.100	165,500	.....	.....
Metropolitan (Bost.). 50	1,500,000	semi-an.	Jan. '82 4
Middlesex (Boston)..100	650,000	semi-an.	May '82 3½
N.Y.,Bay Ridge&Jam100	150,000	.....	Oct. '78 7
Ninth Av. (N. Y.)....100	797,320	.....	.....
Orange &Newark....100	282,555	.....	.....
People's (Phila.)..... 25	124,744	.....	Apl. '82 2
Philadelphia City.... 50	475,000	semi-an.	Jan. '82 5
Phila. and Darby.... 20	200,000	semi-an.	July '81 3½
Phila.&Grey's Ferry. 50	308,000	semi-an.	Jan. '82 6
Pbg,Alleg.&Manches. 50	300,000	q'rterly.	Oct. '81 3
Ridge Avenue (Ph.).. 50	420,000	semi-an.	Oct. '81 11
Second Avenue (N.Y.)100	1,199,500	semi-an.	July '81 2½
Second&ThirdSt.(Ph) 50	771,076	q'rterly.	Jan. '82 4½
17th &19th sts (Ph.).. 50	250,000	semi-an.	July '81 3
Sixth Avenue (N. Y.)100	750,000	semi-an.	Oct. '81 5
Somerville (Boston).100	113,000	semi-an.	May '82$
South Boston..... 50	600,000	semi-an.	Jan. '82 4
Third Avenue, N. Y..100	2,000,000	q'rterly.	Nov. '81 5
13th and 15th sts.,Ph 50	334,529	q'rterly.	Jan. '82 4
23d street, N. Y.....100	600,000	semi-an.	Aug. '81 4
Union, Boston.....100	374,300	semi-an.	Jan. '82 4
Union, Phila..... 50	1,005,000	semi-an.	Jan. '82 7
West Philadelphia... 50	750,000	semi-an.	July '77 10
CANALS.			
Chesapeake and Dela 50	2,078,038	semi-an.	June'75 2
Delaware Division... 50	1,633,350	semi-an.	Feb. '82 $1
Delawa. and Hudson100	20,000,000	q'rterly.	June'82 1¾
Delaware & Raritan*.100	5,847,400	q'rterly.	Apl. '82 2½
Lehigh Coal and Nav 50	11,204,250	semi-an.	June'82 2
Monongahela Nav... 50	1,004,500	semi-an.	July '81$2
Morris, consolidated.100	1,025,000	semi-an.	Feb. '81 2
" preferred....100	1,175,000	semi-an.	Feb. '81 5
Pennsylvania..... 50	4,501,200	.....	.....
Schuyl. Nav., com.*. 50	859,100	annual.	Au. '81 50c.
" " pref... 50	3,200,950	annual..	Aug. '81 $1
MISCELLANEOUS.			
Adams Express.....100	12,000,000	q'rterly.	June'82 2
American Express... 50	18,000,000	semi-an.	July '82 3
Amoskeag Manuf.Co.100	3,000,000	semi-an.	June'81 5
Calumet&HeclaMin'g —	100,000 S.	q'rterly.	May '82 $5
Central Mining Co...100	.....	semi-an.	Feb. '82 2½
Consolidation Coal..100	10,250,000	semi-an.	Jan. '82 2
George's Creek C.&I.100	.....	semi-an.	Jan. '82 3
Maryland Coal.....100	4,400,000	semi-an.	Feb. '76 1½
Mariposa L. &Mining100	10,000,000	.....	.....
" pref100	5,000,000	.....	.....
Missouri Val.LandCo100	200,000	semi-an.	Jan. '82 7
National Tube Works100	1,000,000	q'rterly.	Apl. '82 3
Pac. Mail Steamship.100	20,000,000	q'rterly.	Sept.'69 3
Pennsylvania Coal... 50	5,000,000	q'rterly.	May '82 3
Pullman Palace Car..100	10,028,800	q'rterly.	May '82 2
Quicksilver, com....100	5,708,700	.....	May '82 0.4
" pref....100	4,291,300	.....	May '82 6
Quincy Mining Co... 25	40,000shs	semi-an.	Feb. '82 $8
Quincy R. R. Bridge.100	1,750,000	semi-an.	Jan. '82 5
SiouxC.&I.F.L.&L.Co100	500,000	semi-an.	June'82 4
Spring Mt. Coal.....100	1,500,000	semi-an.	June'82 3½
Topeka Equip'nt Co...100	255,000	semi-an.	Apl. '82 5
United States Ex....100	7,000,000	q'rterly.	May '82 1
Wells-Fargo & Co. Ex100	6,250,000	semi-an.	Jan. '82 4
Western Union Tel..100	80,000,000	q'rterly.	Apl. '82 1½

RAILROAD EARNINGS.—MONTHLY.

	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total.
Burl., Cedar Rap. & Northern:													
1880	184,316	165,170	188,325	141,652	149,504	153,378	143,432	160,160	179,804	204,991	189,330	193,419	2,053,484
1881	167,750	124,510	148,551	184,680	165,630	205,912	174,351	209,112	221,801	221,748	203,880	232,812	2,259,037
1882	252,823	225,631	224,107	178,304	.....	.....	.....	.....	.....	.....	.....	.....	.....
Central Pacific:													
1880	1,200,614	1,070,487	1,373,438	1,356,716	1,778,488	1,724,950	1,840,067	1,973,438	1,964,997	1,120,229	2,199,466	1,905,221	20,508,112
1881	1,602,907	1,454,218	1,709,637	1,872,370	2,068,000	2,063,000	1,859,000	2,059,000	2,293,000	2,514,000	2,267,000	2,110,000	23,947,951
1882	1,876,000	1,702,000	1,987.000	2,052,000	.....	.....	.....	.....	.....	.....	.....	.....	.....
Chesapeake and Ohio:													
1880	202,335	198,681	222,762	221,559	199,443	214,352	238,236	259,110	247,303	211,820	240,795	218,009	2,674,308
1881	162,540	184,389	228,479	227,343	252,235	241,135	225,096	262,858	247,144	237,303	235,585	203,562	2,702.762
1882	210,455	209,708	208,981	253,861	.....	.....	.....	.....	.....	.....	.....	.....	.....
Chicago and Alton:													
1880	534,054	497,013	626,473	542,961	616,128	617,524	708,906	761,120	767,349	785,199	696,776	574,695	7,718,198
1881	487,890	461,641	529,915	558,190	528,860	616,935	671,466	771,466	768,897	750,359	680,133	635,307	7,553,988
1882	579,447	530,480	584,483	561,787	.....	.....	.....	.....	.....	.....	.....	.....	.....
Chicago and Northwestern:													
1880	1,154,632	1,131,683	1,361,725	1,294,573	1,875,608	1,671,177	1,699,686	1,767,938	2,020,245	2,105,217	1,855,671	1,477,902	19,416,007
1881	1,240,667	963,208	1,178,795	1,474,612	1,879,006	2,306,640	1,983,031	2,315,164	2,292,676	2,341,097	2,019,037	1,855,476	21,849,209
1882	1,620,336	1,471,945	1,696,568	1,634,819	.....	.....	.....	.....	.....	.....	.....	.....	.....
Chicago, Burlington and Quincy:													
1880	1,432,740	1,411,870	1,732,518	1,489,894	1,909,627	1,682,956	1,773,643	1,834,321	1,862,285	1,934,762	1,837,860	1,552,018	20,454,494
1881	1,307,948	1,034,821	1,418,149	1,574,371	1,679,455	2,083,803	1,888,558	2,173,945	2,262,981	2,031,001	1,816,133	1,905,490	21,324,150
1882	1,658,834	1,457,300	1,566,217	2,058,133	.....	.....	.....	.....	.....	.....	.....	.....	.....
Chicago, Milwaukee and St. Paul:													
1880	764,298	738,749	900,675	871,041	1,134,745	1,037,958	1,026,708	991,297	1,257,677	1,493,620	1,472,037	1,397,308	13,086,119
1881	990,847	682,717	916,989	1,259,946	1,538,491	1,371,000	1,560,000	1,678,000	1,645,000	1,590,000	1,569,000	1,855,000	17,025,462
1882	1,435,000	1,377,000	1,561,000	1,518,000	1,629,000	.....	.....	.....	.....	.....	.....	.....	.....
Chicago, St. Paul, Minneapolis and Omaha:													
1880	193,827	173,078	259,783	259,208	232,146	218,093	236,995	251,013	300,833	342,052	342,894	312,173	3,122,097
1881	257,786	158,594	251,648	261,211	350,124	404,562	392,702	385,586	363,685	382,714	380,733	391,950	3,981,296
1882	307,498	315,100	405,779	356,558	.....	.....	.....	.....	.....	.....	.....	.....	.....
Cincinnati, Indianapolis, St. Louis and Chicago:													
1880	155,697	172,541	198,220	168,199	186,995	200,332	204,138	233,478	343,627	239,881	209,014	198,254	2,412,185
1881	182,523	171,511	191,005	183,710	188,794	188,256	178,861	229,858	219,977	212,606	194,805	192,623	2,296,916
1882	200,042	186,879	208,066	204,269	.....	.....	.....	.....	.....	.....	.....	.....	.....
Denver and Rio Grande:													
1880	124,759	126,922	160,883	164,882	193,925	295,455	373,132	400,133	406,583	473,318	408,562	349,196	3,478,007
1881	307,476	317,681	398,493	433,111	514,767	584,230	548,284	606,193	620,643	665,686	566,819	643,417	6,206,812
1882	491,914	412,987	535,055	559,917	614,298	.....	.....	.....	.....	.....	.....	.....	.....
Hannibal and St. Joseph:													
1880	176,079	166,965	216,061	206,735	191,317	179,396	224,312	238,081	233,448	242,214	207,147	279,635	2,561,391
1881	154,401	122,874	176,356	190,812	177,002	194,949	198,110	215,308	202,567	313,433	201,782	180,376	2,230,966
1882	138,284	154,717	168,798	148,913	.....	.....	.....	.....	.....	.....	.....	.....	.....
Illinois Central:													
1880	595,212	613,806	613,008	535,732	665,120	681,736	724,095	732,755	806,836	880,211	783,120	673,182	8,304,812
1881	631,281	524,499	557,789	662,493	673,259	803,887	720,004	868,407	828,847	815,238	737 218	763,475	8,586,397
1882	728,173	689,387	695,371	674,603	.....	.....	.....	.....	.....	.....	.....	.....	.....
Indiana, Bloomington and Western:													
1880	80,498	89,690	116,185	90,374	85,733	106,954	103,438	116,732	110,622	121,343	96,621	104,619	1,233,079
1881	90,283	83,261	192,085	203,677	102,630	96,586	83,764	117,956	195,307	181,674	160,826	156,697	.....
1882	195,824	175,755	206,235	205,934	.....	.....	.....	.....	.....	.....	.....	.....	.....
Louisville and Nashville:													
1880	674,455	575,035	612,593	563,883	655,014	976,229	772,537	827,088	931,910	1,000,326	953,086	949,184	9,491,346
1881	816,960	805,124	947,959	850,862	828,726	1,227,885	817,135	876,192	951,566	1,002,950	1,065,223	1,122,285	11,326,859
1882	950,065	960,036	1,073,745	950,007	.....	.....	.....	.....	.....	.....	.....	.....	.....
Mobile and Ohio:													
1880	250,116	204,094	168,301	140,091	129,249	121,855	131,621	140,593	184,246	264,714	251,368	287,373	2,373,621
1881	224,347	216,768	230,916	163,551	145,803	136,517	131,009	159,348	209,044	252,921	252,434	262,025	2,406,437
1882	161,433	158,154	152,651	145,272	946,435	.....	.....	.....	.....	.....	.....	.....	.....
Nashville, Chattanooga and St. Louis:													
1880	205,633	191,154	169,457	155,466	158,839	144,155	151,594	169,326	167,473	178,266	182,087	175,996	2,049,448
1881	178,143	190,866	207,710	183,525	104,430	154,549	150,430	168,317	179,979	172,121	152,059	173,127	2,075,256
1882	156,994	159,961	161,005	154,155	137,645	.....	.....	.....	.....	.....	.....	.....	.....
New York and New England:													
1880	164,232	149,907	183,845	179,689	183,701	219,891	205,056	249,885	235,642	215,491	210,856	198.108	2,396,302
1881	189,749	173,614	212,019	216,913	217,185	231,518	246,821	280,524	299,573	261,199	242,412	237,729	2,809,255
1882	215,624	213,791	256,674	264,673	.....	.....	.....	.....	.....	.....	.....	.....	.....
New York, Lake Erie and Western:													
1879	1,147,173	1,207,391	1,356,780	1,372,755	1,350,574	1,230,419	1,273,533	1,450,223	1,492,497	1,713,697	1,515,835	1,398,224	16,509,127
1880	1,296,381	1,252,218	1,644,958	1,643,151	1,592,544	1,661,812	1,580,976	1,606,874	1,786,417	1,899,910	1,799,338	1,726,788	19,149,361
1881	1,443,437	1,425,765	1,847,261	1,709,057	1,776,891	1,794,982	1,787,081	1,772,895	1,734,200	.....	.....	.....	.....
Northern Central:													
1880	334,494	330,860	415,325	386,130	329,788	419,193	450,298	453,923	464,093	512,918	459,054	494,310	5,050,387
1881	386,157	382,657	452,906	487,273	465,588	487,287	440,811	498,008	429,565	449,664	487,160	476,622	5,443,697
1882	407,368	413,551	430,194	435,129	.....	.....	.....	.....	.....	.....	.....	.....	.....
Northern Pacific:													
1880	81,390	77,259	119,357	185,700	217,613	253,105	241,277	223,500	330,300	358,456	300,822	220,993	2,629,710
1881	116,508	78,803	162,984	216,210	312,705	368,276	404,180	411,624	490,096	565,485	428,903	434,331	4,044,576
1882	239,800	269,000	384,000	438,000	568,332	.....	.....	.....	.....	.....	.....	.....	.....
Philadelphia and Erie:													
1880	224,307	245,372	327,678	334,947	311,470	331,024	308,699	347,532	322,737	367,082	324,966	281,919	3,727,733
1881	224,303	225,501	285,573	293,323	343,792	350,585	291,669	303,849	276,522	292,392	284,078	282,772	3,454,309
1882	252,727	246,246	265,311	277,851	.....	.....	.....	.....	.....	.....	.....	.....	.....
St. Louis and San Francisco:													
1880	198,091	195,948	193,146	176,164	167,664	173,607	213,297	259,995	280,873	328,194	290,329	226,063	2,698,371
1881	212,435	178,234	262,050	265,298	283,399	260,254	252,333	286,373	279,064	308,569	284,320	287,914	3,160,245
1882	256,784	244,654	274,959	242,806	.....	.....	.....	.....	.....	.....	.....	.....	.....
St. Louis, Alton and Terre Haute:													
1880	153,139	163,737	168,994	155,462	147,928	150,207	191,077	216,759	204,295	221,863	188,773	184,503	2,146,741
1881	175,725	166,012	201,137	197,447	163,285	165,896	158,674	189,295	187 299	179,921	162,544	153,852	2,112,801
1882	168,987	149,619	178,145	157,450	.....	.....	.....	.....	.....	.....	.....	.....	.....
St. Louis, Iron Mountain and Southern:													
1880	555,983	490,195	451,560	408,241	349,053	363,454	432,655	565,869	671,219	688,365	632,052	656,951	6,265,597
1881	570,957	560,791	704,002	548,300	479,075	474,302	533,512	644,386	690,400	719,239	687,280	709 498	7,319,744
1882	516,370	501,127	585,008	581,977	.....	.....	.....	.....	.....	.....	.....	.....	.....
St. Paul, Minneapolis and Manitoba:													
1880	180,239	137,645	261,798	333,014	281,899	243,407	272,089	232,579	274,188	345,057	300,675	297,641	3,160,231
1881	254,187	159,482	320,962	425,685	382,642	405,322	387,488	414,954	485,736	605,708	508,530	528,262	4,878,960
1882	395,461	418 358	531,004	570,890	858'902	.....	.....	.....	.....	.....	.....	.....	.....
Texas and Pacific:													
1880	245,785	219,165	215,070	174,177	141,083	153,066	195,711	226,073	266 570	303,666	312,184	301,858	2,754,408
1881	281,176	260,781	319,928	295,066	267,443	264,204	320,466	354,082	337,117	578,668	357,724	381,218	3,921,569
1882	310,785	255,644	332,911	359,543	.....	.....	.....	.....	.....	.....	.....	.....	.....
Union Pacific Railway:													
1880	1,433,636	1,393,992	1,730,509	1,937,220	2,027,269	1,928,528	1,934,215	1,913.035	2,270,179	2,707,860	2,251.148	1,869,335	23,448,445
1881	1,339,799	1,374,740	1,674,860	1,766,894	2,398,467	2,590,969	2.528,826	2,638,659	2,844,357	3,289 350	2,773,608	2,267,004	27,451,831
1882	1,961,088	1.759,863	2,226,832	2,462,004	.....	.....	.....	.....	.....	.....	.....	.....	.....
Wabash, St. Louis and Pacific:													
1880	776,790	759,451	978,629	892,024	948,773	953,468	1,966,742	1,189,478	1,178,950	1,501,203	1,131,787	1,050,816	12,428,112
1881	811,617	818,922	1,121,592	1,023,482	1,144,660	1,308,993	1,131,751	1,542,838	1,490,027	1,396,300	1,399,555	1,328,278	14,461,570
1882	1,229,965	1,134,768	1,315,776	1,378,194	1,204,963	.....	.....	.....	.....	.....	.....	.....	.....

The Coal Trade.

THE leading coal-carrying companies make the following reports of their tonnage for the week ending May 27th, and for the year to that date, compared with their respective amounts carried to the same time last year:—

	Week.	1882.	1881.
Reading Railroad	109,990	3,504,656	3,311,022
Schuylkill Canal	9,997	116,112	97,194
Lehigh Valley	71,551	2,695,994	2,491,810
Delaware, Lackawanna and Western	76,893	1,520,566	1,538,552
Shamokin	23,575	364,845	402,276
Central R. R. of New Jersey	.....	1,418,931	1,471,565
United R. R. of New Jersey	27,289	629,773	604,247
Pennsylvania Coal	21,543	412,023	432,664
Delaware and Hudson Canal	41,643	1,168,768	1,312,463
Huntingdon and Broad Top Mountain	5,700	190,209	174,831
Penn. and New York	21,217	671,203	635,644
Clearfield, Pa.	65,049	1,182,707	938,955

The total tonnage of anthracite coal from all the regions for the week ending May 27, as reported by the several carrying companies, amounted to 412,714 tons, against 400,605 tons in the corresponding week last year, an increase of 12,109 tons. The total amount of anthracite mined for the year is 9,645,979 tons, against 10,219,066 tons for the same period last year, a decrease of 573,087 tons. The quantity of bituminous coal sent to market for the week amounted to 76,299 tons, against 101,773 tons in the corresponding week last year, a decrease of 25,474 tons. The total amount of bituminous mined for the year is 1,807,732 tons, against 1,892,623 tons for the corresponding period last year, a decrease of 84,891 tons. The total tonnage of all kinds of coal for the week is 489,013 tons, against 502,378 tons in corresponding week last year, a decrease of 13,365 tons, and the total tonnage for the coal year is 11,453,711 tons, against 12,111,689 tons to same date last year, a decrease of 657,978 tons. The quantity of coal and coke carried over the Pennsylvania Railroad for the week ending May 27th was 217,621 tons, of which 163,073 tons were coal and 54,548 tons coke. The total tonnage for the year thus far has been 4,464,463 tons, of which 3,205,703 tons were coal and 1,258,760 tons coke. These figures embrace all the coal and coke carried over the road, east and west. The shipments of bituminous coal from the mines of the Cumberland coal region for the week ending May 27, were 5,690 tons, and for the year to that date 491,632 tons, a decrease of 247,015 tons as compared with the corresponding period of last year. All the coal was carried by the Baltimore and Ohio Railroad, the shipments by which have been for the year to date 408,700 tons, a decrease of 144,603 tons as compared with 1881. The canal shipments for the year have been 4,559 tons, a decrease of 101,000 tons as compared with 1881. The shipments by the Pennsylvania Railroad for the year have been 74,842 tons, an increase of 7,761 tons over 1881. The Reading Railroad shipment for last week, ending June 3, was about 102,000 tons, of which 25,700 tons were sent to and 43,500 tons shipped from Port Richmond, and 6,500 tons sent to and 10,200 shipped from Elizabethport.—*Philadelphia Ledger, June 5.*

Life and Limb Saving Car Coupler.

MESSRS. BROWNING & PUGH, of Indianapolis, Ind., have recently invented what they call "A Life and Limb Saving Car Coupler," which is thus described by the *Times* of that city:—

"The pin is attached to a spring, which is worked by means of a lever at either the side or on top of the car. There is no necessity whatever for going between the cars, and the coupler can easily be placed in such a position as to require no handling to attach cars. The invention is simple, and the model works with perfection. The coupler is so arranged that it can be attached to any kind of cars, and they can be uncoupled as quickly as they are coupled. For such an invention it contains a comparatively small amount of mechanism, and is, therefore, not likely to get out of order. It equals in point of strength and durability the ordinary coupler now in use. Railroad men who have seen it pronounce it a great invention, and one that will probably soon spring into general use. It is the intention of the patentees to have the coupler tested at an early date at the car works. That something of the kind has not been constructed long before this appears strange. There have been patents of a similar nature, but nearly all have proved of no practical value. If this coupler proves a success, which it seems to be, there will be no little glory (as well as money) for the patentees, in being able to provide means of saving hundreds of lives and limbs every year."

Manitoba as it Was and Is.

MANITOBA was but a geographical expression before the celebrated Parliamentary Session in 1879. Everything was flat and dead. At that time Winnipeg was little more than a post office station. There was no Portage la Prairie, no Brandon, no Prince Albert, and not much of Emerson. Settlers were few and far between. Railway construction was limited and slow. There was little trade between the Province and the rest of the Dominion, for supplies and manufactured goods were got in from the States. St. Paul was headquarters for Manitoba. But now how different! The two chief measures of the Conservative Government—the National Policy and the Pacific Railway—have changed all that. The city of Winnipeg now stands where the desolate village then stood. Portage has grown to a town of 4,000. Brandon is not far behind, and even as far away as Port Albert a large settlement has been founded and is in a flourishing condition. —*London (Ont.) Free Press.*

Town-Making Industries.

ONE of the noteworthy and encouraging features of American industrial life is the very common development in out-of-the-way places of thriving manufacturing towns, based for the most part on scientific invention. It often happens that the wide-awake mechanic, young business man, or farmer utilizes some local advantage for the manufacture of a simple article which he has invented and patented, starting a small shop where a man of large capital would never think of locating. One successful invention almost invariably paves the way for more of the same sort; while the creation of a new centre of productive industry, however humble, attracts thither, of necessity, the more active minded—both those who want to work and those who want to have work done, in the region about. In this way there grow up in the most unexpected places manufacturing towns which attain not unfrequently a world-wide reputation through or by means of their peculiar products.—*Scientific American.*

ACCORDING to statistics recently worked out, the number of railway travelers killed in France is one in each 1,600,000,000 km. run, which is a distance equal to 40,000 times the length of a voyage round the world. This excursion would last during 3,044 years traveling day and night at the rate of 60 kilometres per hour. So that, supposing an average lifetime of sixty years for a healthy man, before he could be killed by a railway accident according to the law of probabilities, he would have died fifty times a natural death.

GOVERNOR Cornell has decided not to sign the bill authorizing the construction of a bridge across the Hudson River between Storm King and Breakneck Mountains.

WHEN a man and wife are divorced the law requires that they shall divide the house between them. Pat gave this law a liberal interpretation when he told his better half that he would take the inside and she could have the outside.

THE Oil City *Derrick* publishes statistics showing that during the past month 438 wells were completed in the oil region, with a daily production of 9,070 barrels. Number of wells not completed but on the way, 875. In April 437 wells were finished and yielded daily 9,388 barrels. In the same month 862 wells were in different stages of the work.

A FRIEND of the traveling public writes regarding the removal of cinders from the eye, that the obstacles can in most cases be at once removed by immediately pressing the finger against the inner corner of the eye so as to stop the tear passage, keeping it there for about a minute, as the eye becomes watery, and upon the removal of the finger is at once cleared. Do not rub the eye in the least, as by doing so the organ becomes much inflamed and the removal of any substance from it often becomes a task.

PEARL fishing on the coast of Lower California is an important industry, no less than 1,000 divers being employed in bringing up the costly black pearl, which is found in a great state of perfection in the deep waters of La Paz. The pearl oysters are found from one to six miles off shore, in water from one to twenty-one fathoms deep. Merchants provide hats, diving apparatus, etc., for the prosecution of the business, on condition that they can purchase all the pearls found at prices to be agreed upon. These boats, which are usually of about five tons burden, sail up and down the coast from May to November, searching for treasures. The product of a year's work is about $500,000, estimating the pearls at their first value.

THE biggest diamond in the world, if, indeed, it be a diamond, is the Braganza, which forms part of the Portugese crown jewels. It weighs 1,880 carats. However, not a little doubt exists of its being a diamond, as the government has never allowed it to be tested. It was found in Brazil in 1741. The largest tested but uncut diamond is the Mattam, belonging to the Rajah of Mattam, in Borneo. It is of pure water, weighs 367 carats and is of a pear shape, indented at the thick end. It was found about 1760 at Landak, in Borneo. It has been the cause of a sanguinary war. Before it was cut the Kok-i-noor, which is one of the English crown jewels, was the largest tested diamond. It then weighed 793 carats. When in the possession of the Emperor Aurengebe it was reduced by unskilful cutting to 186 carats. During the Sikh mutiny it was captured by British troops and presented to Queen Victoria. It was recut and now weighs 106 1-6 carats.

Statement of the Public Debt of the United States, June 1, 1882.

DEBT BEARING INTEREST.

	Amount Outstanding.	Accrued Interest.
6 per cent loan, 1861-'81, continued at 3½ per ct.	$26,266,300 00	$383,050 21
6 per cent loan 1863-'81 continued at 3½ per ct	47,834,600 00	697,587 92
5 per cent funded loan of 1881	401,503,900 00	1,171,153 04
4½ per cent funded loan of 1891	250,000,000 00	2,812,500 00
4 per cent funded loan of 1907	738,871,450 00	4,925,809 66
4 per cent refunding certificates	476,550 00	3,177 00
3 per cent navy pension fund	14,000,000 00	175,000 00
Aggregate of debt bearing interest	$1,478,952,800 00	$10,168,177 83
Interest due and unpaid		2,244,926 38

DEBT ON WHICH INTEREST HAS CEASED SINCE MATURITY.

	Amount Outstanding.	Interest due and unpaid
4 to 6 per cent. old debt, 1837.	$57,665 00	$64,174 81
5 per cent. Mexican indemnity stock 1846,	1,104 91	85 74
6 per cent. bonds, 1847	1,250 00	22 00
6 per cent. bounty land scrip, 1847	3,275 00	213 06
5 per cent. Texas indemnity bonds, 1850	20,000 00	2,945 00
5 per cent. bonds, of 1858	8,000 00	....
5 per cent. bonds, of 1860	10,000 00	600 00
6 per cent. 5-20 bonds, 1862, called	370,090 00	8,348 14
6 per cent. 5-20 bonds, June 1864, called	58,550 00	106 44
6 per cent, 5-20 bonds, 1863, called	70,750 00	18,674 41
5 per cent. 10-40 bonds, 1864, called	394,500 00	93,690 51
6 per cent. Consol. bonds, 1865, called	384,150 00	13,751 88
6 per cent. Consol. bonds, 1867, called	988,250 00	194,805 40
6 per cent. Consol. bonds, 1868, called	274,250 00	22,491 45
6 per cent. loan, Feb. 8, 1861, matured Dec. 31, 1880	86,000 00	5,070 00
5 per cent. funded loan 1881, called	1,387,050 00	20,922 48
Oregon War Debt, March 2, 1881, matured July 1, 1881.	12,950 00	1,855 50
6 per cent loan of July 17 and Aug. 5, 1861, matured June 30, 1881	702,900 00	21,825 00
6 per cent loan of July 17 and Aug. 5, 1861, continued at 3½ per cent, matured Dec. 24, 1881, and Jan. 29, 1882, called	8,815,100 00	87,201 68
6 per cent. loan of March 3, 1863, matured June 30, 1881.	236,500 00	8,947 50
1-10 to 6 per cent. Treasury notes, prior to 1846	82,525 35	2,668 06
1-10 to 6 per cent. Treasury notes, 1846	6,000 00	206 00
6 per ct. Treasury notes, 1847.	950 00	57 00
3 to 6 per cent. Treasury notes, 1857	1,700 00	99 00
6 per ct. Treasury notes, 1861.	3,000 00	364 50
7 3-10 per cent. 3 years' Treasury notes, 1861	16,300 00	1,104 43
5 per cent. 1 year notes, 1863.	42,175 00	2,119 60
5 per cent. 2 year notes, 1863.	32,900 00	1,643 55
6 per ct. compound interest notes, 1863-64	221,460 00	45,230 87
7 3-10 per cent. 3 years' Treasury notes, 1864-65	138,950 00	4,439 03
6 per cent. certificates of indebtedness, 1862-63	4,000 00	253 48
4 to 6 per cent. temporary loan, 1864	2,960 00	244 19
3 per cent. certificates, called.	5,000 00	394 31
Aggregate of debt on which Interest has ceased since maturity	$14,440,165 26	$624,555 02

DEBT BEARING NO INTEREST.

Demand notes, 1861-62	$59,810 00	
Legal tender notes, 1862-63	346,681,016 00	
Certificates of Deposit	12,330,000 00	
Coin certificates, 1863	5,055,420 00	
Silver certificates, 1878	66,736,220 00	
Unclaimed interest		5,726 51
Fractional currency, 1862, 1863 and 1864 $15,425,437 77		
Less amount estimated as lost or destroyed, act of June, 21, 1879 8,375,934 00		
	7,049,503 77	
Aggregate of debt bearing no interest	$437,911,969 77	$5,726 51

RECAPITULATION.

	Amount Outstanding.	Interest.
Debt bearing interest in coin, viz:		
Bonds at 6 per cent., continued at 3½ per cent.	$74,100,900 00	
Bonds at 5 per cent, continued at 3½ per cent.	401,503,900 00	
Bonds at 4½ per cent	250,000,000 00	
Bonds at 4 per cent.	738,871,450 00	
Refunding certificates	476,550 00	
Navy pension fund, 3 p.c	14,000,000 00	
	$1,478,952,800 00	$11,643,709 51
Debt on which interest has ceased since maturity.	14,440,165 26	624,555 02
Debt bearing no int., viz:		
Old demand and legal-tender notes	$346,740,826 00	
Certificates of deposit	12,330,000 00	
Coin & silver certificates.	71,791,640 00	
Fractional currency	7,049,503 77	
	$437,911,969 77	
Unclaimed interest		5,726 51
	$1,931,304,935 03	$12,273,991 04
Total debt, principal and interest to date, including interest due and unpaid	$1,943,578,926 07	

AMOUNT IN TREASURY.

Interest due and unpaid	$1,475,531 68
Debt on which interest has ceased	14,440,165 26
Interest thereon	624,555 02
Gold and silver certificates	71,791,640 00
U. S. notes held for redemption of certificates of deposit	12,330,000 00
Cash balance available June 1, 1882	141,441,876 69
	$242,103,768 65
Debt, less am't in Treas'y June 1, 1882	$1,701,475,157 42
Debt, less am't in Treasury May 1, 18820	1,711,850,598 61
Decrease of debt during the month	$10,375,441 19
Decrease of debt since June 30, 1881	$139,123,654 56

BONDS ISSUED TO THE PACIFIC RAILROAD COMPANIES, INTEREST PAYABLE IN LAWFUL MONEY.

	Amount Outstanding.	Accrued Interest not paid.
Central Pacific bonds, 1862-64	$25,885,120 00	$647,128 00
Kansas Pacific bonds, 1862-64	6,303,000 90	157,575 00
Union Pacific bonds, 1862-64	27,236,512 00	680,912 80
Cent. Branch Union Pacific bonds, 1862-64	1,600,000 00	40,000 00
West'n Pacific Bonds, 1862-64	1,970,560 00	49,264 00
Sioux City & Pacific bonds, 1862-64	1,628,320 00	40,708 00
Totals	$64,623,512 00	$1,615,587 80

Interest paid by the United States, $53,405,977.38; interest repaid by transportation of mails, &c., $15,112,-847.81; interest repaid by cash payments: 5 per cent net earnings, $655,198.87; balance of interest paid by United States, $37,637,930.70.

The foregoing is a correct statement of the public debt, as appears from the books and Treasurer's returns in the Department at the close of business, May 31, 1882.

CHARLES J. FOLGER,
Secretary of the Treasury.

The Turkish Railway System.

It would seem that the question of the completion of the Turkish railway system in Europe is coming to the front. By slow but persistent steps Austria is working herself down into the heart of what remains of the Turkish and Austro-Hungarian railways. Probably Austria would have preferred making lines of her own right down to Salonica at once; but the attitude of the Slavs in and out of Russia, as well as the embarrassing insurrection in Herzegovina, may have checked her game in that direction, and what we hear now is a junction between the railways of "M. Hirsh" and those of Austria-Hungary. This may mean an extension of the Austrian transcontinental line across Servia on the one side and of the Turkish line from Adrianople on the other, or the Varna and Rustchuk Railway may have a hand in the plan, or both. That a "junction" of some kind is spoken of and will be tried, we have no doubt; and the readiness of the Comptoir d'Escompt de Paris to risk money in the Servian railways projected by M. Bontoux arose probably as much from a knowledge that this was the drift of things, as from the belief that the speculation would be directly profitable.—*Pall Mall Gazette.*

The introduction of railroads has furthered education in Russia. It is said that 22 years ago, of four road-masters on a line about 25 miles long, two did not know their letters, and had clerks to write their reports. Instruction had to be provided for the employes of the roads, and the consequence is the establishment of about 23 "railroad schools," where men are trained to be engineers, firemen, road-masters, and telegraphers. The course of study extends over three years, with a two years' "practice course" in some cases, besides a preparatory course of one year for those who cannot read.

The steamship Rio Grande, while on a voyage from Galveston to New York lately, took fire in the hold among eight hundred bales of cotton. After vainly trying to extinguish the fire, Captain Burrows hailed a passing ship and transferred to her his passengers, ninety-seven in number. He then ran the Rio Grande on a convenient shoal and sank her to the deck beams, thus effectually extinguishing the fire. When this was accomplished he pumped the water out of his ship, raising her to her former level, and in twenty-four hours had up steam and was proceeding on his voyage. The following day he overhauled the vessel on which were his passengers and had them transferred back to the Rio Grande, which landed them all safe at New York.

Railroad hospitals are probably among the coming equipments of every important system of roads. With the certainty of a large number of accidents before them, railroad officials appoint physicians and designate places for treatment of employes. At little additional cost a hospital, owned and operated by the railroad men, can be established. At Carondelet, on the St. Louis, Iron Mountain and Southern Road, such an institution has been in successful operation for some time, and a recent issue of the Albuquerque *Morning Journal*, of Albuquerque, New Mexico, describes a railroad hospital recently established in that place by the employes of the Atlantic and Pacific Railroad. The buildings and grounds were paid for by assessments of fifty cents per month, and every convenience for the curative comforts of the inmates has been provided.

Dr. Walter Pye, the celebrated London surgeon, gives an account in the *British Medical Journal* of a new splint, which he found of great value in his operations. Its most important feature is its flexibility combined with stiffness. It is made of a material known as corrugated paper, and is very cheap and light. Dr. Pye says: "From the purely surgical point of view, I have found this corrugated paper extremely useful. It can be used in all those cases in which the expensive kettle-holder splinting may be employed, and makes about the best angular splint for the elbow I have ever seen. The commercial use to which this paper is put is principally that of either packing wine bottles in cases or else of enabling single bottles to be wrapped up in a parcel not indicating its contents." The corrugated paper thus used in surgery by Dr. Pye is of American invention and Brooklyn manufacture.

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Copper Queen Mining Company.

From the report of the Copper Queen Mining Company, for the year ending March 31, 1882, which has just been issued, we learn that at the time the company was organized, the principal development in the mine was a large body of carbonate ore exposed by an open cut, or quarry, in the side of the mountain. The present first level had only been prospected by a drift ninety feet long. No crosscuts had been run or winzes sunk. Development work on this level was, however, begun at once. On the 15th of May, 1881, the superintendent determined, by careful measurements, that there were in sight above the first level 34,780 tons of ore. During the year ending April 1, 1882, only 18,108 tons of pay ore were taken from the mine, and the superintendent estimates the quantity of ore now in sight in the mine at 83,000 tons. This quantity, taken at an average of 13 per cent (the ore smelted during the past year averaged 16 29-100 per cent), will make 10,790 tons of black copper, equivalent to about 10,412 tons of refined copper. The reduction works at the mine consist of two water jacket furnaces, capable of smelting from 80 to 90 tons of ore per day. Furnace No. 1 has been in blast since April 12, 1881, and No. 2 since August 30, 1881. The combined output of both is now from 22,000 to 25,000 pounds of copper per day. Besides doubling the smelting facilities, extensive improvements have been made in the new buildings, steam hoisting works and other machinery, and the company now has the best appliances for carrying on successful copper mining and smelting operations. The value in New York of the refined copper product of the year was $1,020,859.72; operating, freight, refining and New York expenses, $532,733.33; net earnings for the year, $488,126.39; dividends paid, $300,000; surplus profits April 1, 1882, $188,126.39.

The Hemp Trade.

The recent advance in manila and sisal hemp has attracted attention to the important changes that have occurred in recent years in the hemp trade. True hemp is the fibre of the inner bark of an annual plant which is produced in Russia, Italy, the United States and other countries. The manufacture of cordage from hemp began in Kentucky about 1795, and of hemp bagging for cotton bales in 1801 or 1802. In 1820, out of 388 establishments in the United States engaged in the manufacture of cordage, 111 were located in Kentucky. In 1850 the establishments in Kentucky had increased to 159, producing $2,311,199 worth of bagging and cordage. In 1870 the manufacture had so declined that only nine establishments were returned on cordage, producing $178,182 worth of material, and eleven engaged in the manufacture of bagging, using 6,292 tons of American hemp. As a material for coarse bagging, for baling purposes, hemp cannot compete with either flax or jute. While American hemp is worth 9½ cents per pound to-day, jute butts for bagging can be bought at 2⅞@3 cents. Neither of the two last named fibres can compete with hemp in rope or twine where strength is a leading requisite. The demand for hemp rope was enormously curtailed when iron hoops began to be used on cotton bales; 30,000 tons, or 200,000,000 feet, of hoop iron are now required to bind the cotton crop of the country. Manila hemp is obtained from the fibrous leaf stalks of a tree growing in the Philippine Islands. It possesses great strength, and brings a higher price than American hemp, but the latter is preferable for standing rigging, it withstanding the weather better. Manila hemp is now 11¾ cents a pound, against 10¾ cents a month ago and 6¾ cents in the early part of 1879. The recent advance of one cent per pound is due to a decrease in production in the Philippine Islands. But the large advance since 1879 is partially due to the general appreciation of values of all kinds of merchandise and partly to the increased use of manila harvest twine in place of wire. Sisal is obtained from a species of aloe, produced largely in Mexico. Though possessing 25 per cent less strength than manila, it is also cheaper, selling at 6¾ cents, against 5¼@5⅝ cents a month ago, and at 5@5¼ cents in the first part of 1879. —*Boston Commercial Bulletin.*

Great Engineering Feat.

The railroad bridge over the James River, at Richmond, Va., to replace the structure burned in March last, was rebuilt in less than two months by Mr. R. J. Kenly, of Baltimore, Md., who was called to the work in an emergency, and has been retained in an important official capacity. The bridge is 2,860 feet long. It is made of heavy timbers, which were yet growing in the forest sixty days ago. Over 800,000 feet of sawed timber was used, not counting crossties, and 1,520 pine poles. Mr. Kenly made the drawings within a few days and set agencies at work to secure the timber, and by continuous energy and intelligent forethought accomplished the work to the entire satisfaction of the railroad company. The bridge is used by the Richmond and Petersburg and Richmond and Danville North and South lines, and it is one of the great railroad bridges of the country, over a wide and swift-running stream. Mr. Kenly is a brother of Major Kenly, one of the civil engineers of the Gunpowder Water Works of Baltimore, and both are accomplished, energetic and scientific men.

Railway Gardening.

If our railway companies would employ a forester and gardener or two, they might cultivate their thousands of acres of waste lands for crops, grass, fruit trees, and so on, with profit, so that they could afford to refuse to be any longer in the position of the poor shopkeeper or barber who fills his shop and pastes his walls over with advertisements and placards because he cannot make two ends meet without the small sums obtained by this disfigurement. At present our railway companies allow their stations and bridges to be so hideously pasted and papered over that the property has the appearance of the last stages of struggling poverty. In many parts of Belgium the land has been planted with fruit trees and other things many years, and in Wurtemberg, for about twelve years past, a forester has had charge of the lands. He pays particular attention to planting the slopes of excavations and embankments to prevent washing and slipping, grows quick fences, and where practicable fruit and timber trees. The gardens at the stations are largely devoted to fruit, and made useful and ornamental at once. A profit of about 14s. an acre has, it is said, been made for the past five years on the ground so utilized. Why should it not be done in England?—*London Engineer.*

Water Telescopes.

Considering the cheap and easy construction of these useful instruments, it is wonderful they are not used more than they are, as, by employing them, extremely interesting observations can be made on the denizens of sea or river. To make a water telescope, procure a tube made of tin, and funnel-shaped, about three and a half feet long, and nine inches in diameter at the broadest end. It should be wide enough at the top to take in the observer's eyes, and the inside should be painted black. At the bottom or wide end, a clear thick piece of glass must be inserted, with a little lead, in the form of a ring, to weight the tube. When the instrument is immersed in clear water, it is astonishing how many fathoms down the observer can see. One of these simple contrivances would greatly enhance the pleasure of water picnics, as much amusement would be afforded by watching the inhabitants below; and it would also prove very useful in surveying deep places, that have been ground-baited, for, if no fish were seen collected there, another spot would naturally be chosen. The Norwegians employ this instrument largely for ascertaining the position of herring-shoals, and in their cod-fisheries. Often by the use of the telescope tney discover fish which otherwise they would not have known of.—*Chambers' Journal.*

The Harlan and Hollingsworth Company, of Wilmington, Del., will shortly deliver eight new cars to the Oregon Railway and Navigation Company, and Oregon and California Railroad Company.

Nine trustees of the Mutual Life Insurance Company, to serve for four years, were elected on the 5th inst., viz: Frederick S. Winston, John E. Develin, Oliver H. Palmer, Richard A. McCurdy, James C. Holden, Hermann C. Von Post, George C. Richardson, Robert Olyphant, Robert Sewell.

The number of wells completed during May in the entire oil region was 438, with a daily yield of 9,070 barrels. In the previous month 438 wells were completed, with a daily yield of 9,388 barrels. The rigs up and building and wells drilling in the entire field at the close of the month were 875, and at the close of April 862.

The directors of the Rensselaer and Saratoga Railroad Company, elected on the 5th inst., are: George H. Cramer, J. M. Warren, E. Thompson Gale, W. A. Shepard, William Howard Hart, I. V. Baker, James Forsyth, Thomas Dickson, J. W. Fuller, I. C. Allen, H. C. Lockwood, John Hobart Warrenand, C. W. Tillinghast.

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Special Cars.

THE car in which Commodore Vanderbilt used to ride over his roads, and which he considered pretty fine and becoming his station as a railroad king, is now owned by the Wagner Car Company, and is constantly on the road between this city and Chicago. It bears the name Iroquois, and any one may ride in it who pays his passage. In these times it is looked upon as a rather plain car, and none too good for even common travel. People not worth a thousandth part what the Commodore was ride in better cars than he did every time they take a trip. It costs from $15,000 to $20,000 to build a palace car nowadays, according to the style in which it is finished, and it is safe to say that the Commodore's car cost scarcely more than half the first sum. Cars are now built so that the owner of one, if he were so inclined, could live on the rail from the commencement to the end of the year. Three cars have just been built by the Pullman Palace Car Company which are, indeed, palaces on wheels. One was constructed for Hugh J. Jewett, the president of the New York, Lake Erie and Western Railroad Company; another for Henry Villard, the president of the Oregon Railway and Navigation Company; and the third for T. W. Peirce, the president of the Sunset Route in Texas. These cars form houses in miniature. At the forward end of each car is a kitchen; back of this a parlor, which serves as a dining-room; adjoining, a bedroom with bathroom attached; and at the rear end a smoking-room and observatory. Berths are also supplied in different parts of the cars, and electric bells connect with the kitchen and servants' quarters. The cars are handsome in the extreme. That of Mr. Jewett, the "Ramapo," may be taken as an example. It is heavily inlaid with costly woods and magnificently upholstered. These cars cost about $20,000 each.

The car of Wm. H. Vanderbilt is one of the largest in the country. It is 74 feet in length, 9 feet 10 inches wide, and 14 feet 6 inches high. It is divided into four main apartments. At the front is the kitchen, and back of it Mr. Vanderbilt's stateroom. The sitting and dining room and the card-room follow. At the extreme rear is the observatory, with inclosed sides and open back. The car is elegantly fitted up, and is provided with electric bells and other conveniences. There are four views on the sides of the cars, representing the Grand Central Depot, the improvements at One Hundred and Tenth street and Fourth avenue, in this city, Niagara Falls, and the West Albany bridge of the Central Railroad. His car could not be duplicated for less than $18,000 or $20,000. When Mr. Vanderbilt makes a trip he has a special engine, and all other trains must keep out of the way. He travels as fast as it is possible for engines to draw him, and a time-table is made up at least twelve hours and sometimes two days before he starts, and is telegraphed along the line. Jay Gould's private car, the "Convoy," No. 143, of the Missouri Pacific Railroad, is the same one that Commodore Garrison used. It is very large, and has accommodations for twelve. It is finished in black walnut, and while not strikingly beautiful, is very comfortable. The car of George B. Roberts, president of the Pennsylvania Railroad, is supplied with stateroom, sleeping-room, kitchen, and other apartments. A. J. Cassatt, and Frank Thomson, the general manager, have cars of similar construction. John W. Garrett, the president of the Baltimore and Ohio Railroad, has a car for his exclusive use—the "Maryland"—and Robert Garrett, his son, the third vice-president, another—the "Baltimore." The president of nearly every road of consequence in the country has a car of his own of more or less elegance, but none can compare with those mentioned. The Queen of England does not ride in such magnificence as the railway magnates of America. In fact, all who are able to pay their way can ride on any road of importance in greater style than Victoria, for it is well known that foreign cars will not bear comparison with American ones.

The Pullman Palace Car Company has, besides its coaches in regular service, one car especially intended for the use of families or private parties. This car is a house on wheels, and is similar in construction to the Ramapo. It bears no inscription save the monogram "P. P. C." It has accommodations for ten persons and is complete in every respect. The main saloon is furnished like a parlor, and is supplied with an organ. The Pullman Company charges $85 for the use of this car, which includes the services of a conductor, a cook and two waiters. Besides this, the person hiring the car, or in fact any car, must buy eighteen full tickets of the railroad line over which the car passes for hauling it. The car is usually attached to a regular train, and if a special engine is secured, which is rarely the case, the expense is greatly increased. Provisions and liquors are supplied by the Pullman Company at cost, or the person to whom the car is let may stock it himself. Sleeping-cars are let at the rate of $65 a day, including a conductor and a porter; and hotel cars at $75 a day, including a conductor, cook, and two waiters.

The Pullman Company also has two hunting and fishing cars. One is named the "Davy Crockett" and the other the "Izaak Walton." The charge for these cars is $35 a day, which includes a cook and waiter for each. The cars are provided with kennels for dogs, and are in every way adapted for the use to which they are put. They are somewhat smaller than the ordinary cars, but are plenty large enough for hunting and fishing parties of eight or ten. These cars are in steady demand during the sporting season. Mr. Jerome Marble, of Worcester, Mass., built a hunting car for his own use and to let. His venture proved so successful that he has constructed two more. His charges are about the same as those of the Pullman Company. Noblemen coming to America frequently hire a special car to make a trip across the continent. The Grand Duke Alexis, the Duke of Sutherland, and the Baron de Streuve, the Russian Ambassador, are among those who have made trips in American special cars. Dom Pedro made his tour in a Pullman hotel car. The Brazilian Emperor marveled at the magnificence of the hotel cars now attached to through trains on all the great lines.

It is a common thing to see a special car on the rail. Rich Americans ride this way in making long journeys, and people do not wonder at it here half so much as they would across the water. When a party of ten or twelve is made up to go from New York to San Francisco, for instance, the expense is no greater, if as much, to hire a special car, with cooks and waiters, than it would be to ride in an ordinary palace car, and stop at first-class hotels on the way. Special cars are used more on the roads across the plains than in the East, on account of the distance between eating-stations and the lack of superior hotel accommodations. When a whole train is chartered for any particular occasion, the rates are made according to the distance and the number of cars. The estimated cost of running an engine, including engineer and firemen, is 25 cents a mile, and no road will send out an engine, no matter how short the run, for much less than $25. It is not always that a railroad magnate has a special engine. Generally the car is attached to a regular train. Little is to be gained by using a special engine. The schedule time of trains on well-constructed roads is so fast nowadays that it is impossible to better it, and a car attached to one of these trains is just as exclusive as it would be by itself. There are some trains that are reserved for common travel, and which people traveling in special cars cannot enjoy the advantages of. These are the limited trains. They are made up of a certain number of cars—the full number that an engine can haul and make schedule time—and even the officers of the roads do not presume to use their authority to attach their cars to them and run the risk of belating them. A great many people who ride in special cars enjoy the "courtesy" of railroad companies owing to business relations, or for other reasons, and are not asked to pay for having their cars hauled. Again, on some roads, besides the 18 full tickets, the occupants of the cars are compelled to pay bridge tolls. A few roads run over bridges owned by corporations, for which privilege they are obliged to pay so much for each car. There are a few lateral roads which only charge 12 tickets, but 18 is the rule.

The use of special cars has very greatly increased in the last two years. The railroad companies themselves do not have special cars to let. The palace car companies conduct this branch of the business entirely. The Wagner Company does not make a business of letting out cars, although coaches can be hired of it. —*New York Times.*

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Chicago as it Was and Is.

Forty-three years ago there were 4,170 residents in Chicago; now there are more than half a million. Forty-eight years ago the first schooner sailed into its river; this year 12,000 vessels enter it, and in the season of navigation more vessels enter this river than enter the three largest Atlantic ports during the same months. Less than fifty years ago the final treaty with the Indians was made, involving the title to this region; to-day there are more voluntary transfers of real estate annually than in New York, Philadelphia and Boston combined. Less than eighty years ago the first white man took up his residence here; to-day this immense city covers more than 50 square miles of densely populated area. The pioneers all built of logs; now there is sent from this port lumber enough to fill a continuous freight train from here to Boston, and from Boston to Washington. It is but a little time since the first settler kept a pig in his own "sty;" now the city slaughters and ships enough hogs to make a continuous line from Boston to San Francisco, back to Boston, and to Chicago again. Thirty-two years ago the first railroad was built here; now there are 10,000 miles of railroad with headquarters in this city. Twenty-three years ago the first horse-car was seen in the streets; now there are a hundred and thirty miles of continuous horse railway tracks. Less than fifty years ago the first driving carriage was seen in the streets. To-day the finest liveries of the country are here. Forty-seven years ago the first bank was established on a primitive scale; to-day one dry goods house sells over twenty million dollars worth of goods annually. Fifty years ago the first school was opened in a room twelve feet square, with store boxes for benches; to-day, in addition to the numberless public schools, there are fifty colleges, universities, theological seminaries and charitable institutions in the city. Fifty years ago next August, the first Sunday-school in the city was organized—before there was a schoolhouse, church, or minister in the settlement. There were present fifteen scholars, mostly the children of the French and half-breed residents. —*Boston Traveler.*

The Most Active Intellectual Period.

Professor David Swing, the eminent Chicago divine, in his last Sunday's discourse remarked as follows: "The most active intellectual period known to history is the present. Nothing escapes scrutiny. The laws of Russia, of Germany, of Ireland, are undergoing review; all instruments and machines and apparatus are being reconstructed; science is being rewritten; history is restudied and corrected; and under this influence, good and bad, all the modern forms of faith have passed, as though they too are to be purified in the modern flame. In a few instances it may be that Christianity has passed into the furnace of pure hostility, but as a general fact it has been cast into the same kind of a refiner's fire as that which is testing science and political ideas—a fire which seeks without malice to separate the gold from its harmful alloy. The more mind is cultivated, the more it asks for things in their purity. Civilization would purify the water it drinks, the air it breathes, the iron it uses in its places of power and trust, the gold it wears in jewels or uses in coin, the music it hears."

Had not civilization better give a little of its attention now to the sugar, and coffee, and tea, and butter, and cheese, and flour, and lard, and in fact about everything that the people of to-day make use of as food, and which somehow is unacquainted with "purity?" This "active intellectual period" seems to be making far greater progress in receding from such purity than in any advancing process. Lard is purified with tallow and cotton-seed oil, and also with lime juice and barytes, and butter goes through the same process by the admixture of lard; our coffee, tea and spices are purified by the incorporation with them of the most abominable materials; our flour is purified, even at that great central manufacturing point, Minneapolis, by the adding of a proportion of a magnesian mineral; in fact, the time has arrived when the person must narrow his diet down very nearly to that of potatoes to be sure that his stomach shall not be made an involuntary purifier, and his kidneys to do a service not contemplated in the order of things preceding this active intellectual period. But through the kindly efforts of the stomach and the acquiescence of the kidneys, the left eye is permitted to wink at the progress being made in the purifying world—and we are about as happy as any people who have lived before us.

The Master Car Builders' Association will meet in annual convention in Philadelphia June 13, and a convention of the Yard Masters' Mutual Benefit Association will be held in Baltimore the day after.

The Pardee Car and Machine Works at Watsontown are now engaged in building a derrick car for the New York, West Shore and Buffalo Railroad Company that is said to be the largest of the kind ever constructed. It is made entirely of iron and steel, and is rigged so it can be operated either by hand or steam power, and is capable of hoisting the heaviest car now in use.

The projected Siberian Railway, which has been approved by the Russian Council of Ministers, will, for the first time, carry through communication with the European railway system beyond the Ural Mountains. Starting from the large town of Orenburg on the Ural River, the line will run 200 miles westward to Samara, to join the European systems; then nearly 300 miles northeast to Ufu; a similar distance in the same direction, and passing the Ural Mountains, to Ekaterinburg; westward 200 miles to Tiumin; and finally some 340 miles to the terminus at Omsk, on the Irtish, a big river running past Tobolsk, the capital of Western Siberia, into the Northern Ocean. The town on the route which has special interest is Tiumin, as it is generally believed that there the projected Central Asian Railway will begin, to end at Tashkend.

At present four daily trains are taken each way through the St. Gothard tunnel, but even with this slight traffic ventilation is a serious problem. In some of the shorter tunnels leading up to the great one the inclines are so steep that a locomotive is required at each end of the train, and the men in charge of the one at the rear have to be supplied with reservoirs of pure air from which to breathe. It is manifest that a new system must be adopted as soon as the completion of connecting lines makes the tunnel traffic heavy. With this in view, the chief engineer, M. Bridel, has sought the services of the Messrs. Siemens, who prescribe an electric railway on a similar system to that adopted by them in Paris. There is an abundance of water-power near the entrance to the tunnel, and that will be utilized to drive turbines working the dynamos. A one-inch copper rod will be carried through the tunnel, on which a little carriage will run in electrical connection with the electro-motor on the train. Current will thus be supplied throughout the journey, the rails serving the purpose of a return wire. The expense of this experiment will be about 180,000 francs, but if it should not succeed the value of the plant will reduce the loss 80,000 francs.

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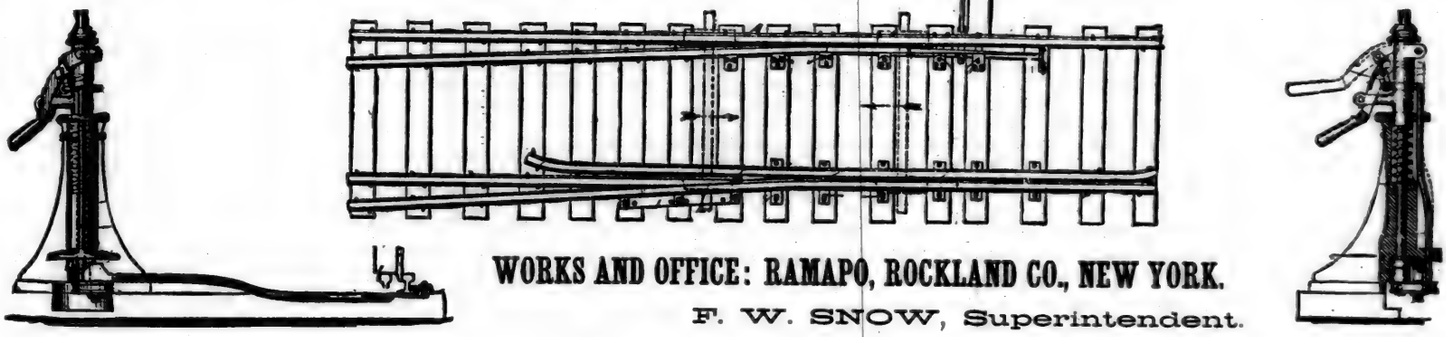
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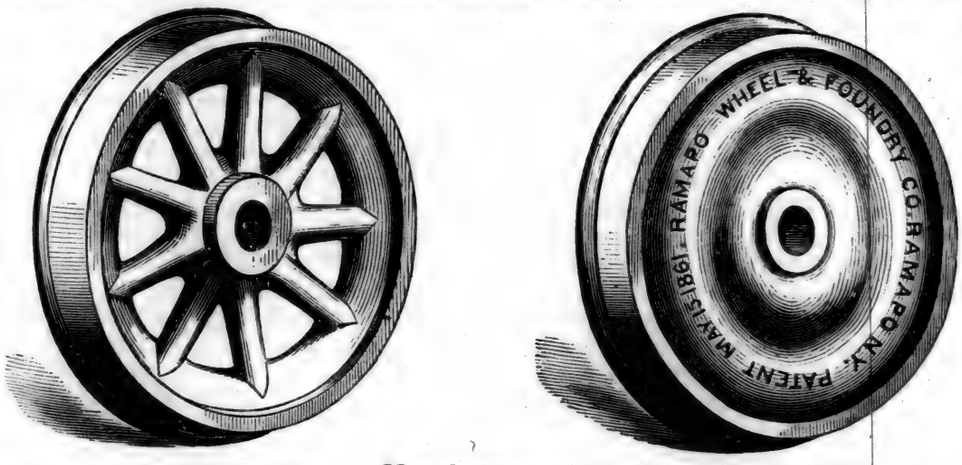
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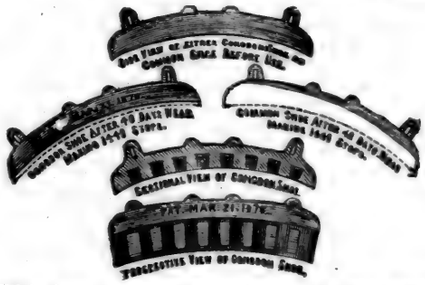
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United States and Brazil Mail Steamship Line.

THE United States and Brazil Mail Steamship Line, an American steamship company, with American-built iron ships and sailing under the United States flag, has been organized under the laws of New York by prominent merchants of this city, Philadelphia, Baltimore and Richmond, for the purpose of running a semi-monthly line of passenger steamships between the United States and South American ports.

The company is building three iron steamers at John Roach & Sons' shipyards at Chester, Penn., under the direction of a committee representing the staple products of the two countries to be carried. Air-tight iron compartments will be used for each of the great staples, so that rubber, hides, sugar and coffee, etc., will not be stored together.

A preliminary line under the management of C. McCullough Beecher has been running successfully for ten months, the line coaling and completing cargo at Baltimore, to which point the Richmond flours were shipped to meet the line. The new company has perfected arrangements with the Chesapeake and Ohio Railway Company for picking up its freight by arranging to use Newport News, the seaboard terminus in Hampton Roads of the transcontinental lines embraced in the Chesapeake and Ohio Railway system.

Through bills of lading will be given to all points, and accommodations for 50 passengers allowed on each steamer. Arrangements are being perfected for the sale of tourist and commercial tickets at cities touched by the line to European cities via New York, with the privilege of delaying for a time in this country. A unmber of leading houses in the South American trade are interested financially.

Coal Mining with Lime.

AT last there appears a possibility that the terrible loss of life which annually occurs in these isles through mining accidents will soon be sensibly reduced. At the present meeting of the Iron and Steel Institute, Mr. Mosley read a long and instructive paper on a new method of winning coal. The principal feature is that cartridges containing lime in a highly caustic condition are employed instead of explosives. After one of these has been rammed down tightly to the bottom of the shot-hole and "tamped," water is injected into the cartridge by means of a small force-pump and hose, and a rapid generation of steam then takes place, gradually rending asunder the coal in all directions, and, in short, performing all the duties of gunpowder or dynamite. It is too early as yet to say whether this process will prove applicable in all cases. When lately tried at the Shipley collieries, it more than answered expectations, having won 140 tons more coal in one hundred hours' less time than the wedging method did in the next "stall." Commercially, therefore, its success seems to be demonstrated under the conditions which exist at the Shipley pits. It is further claimed for this invention, apparently on good grounds, that it gives absolute immunity from gas explosion, as no fire or flame is generated; that it does not create any smoke or noxious odor; that unskilled labor can work it; and that the men engaged always have plenty of time to get away before the coal begins to fall. Should only a portion of these pretensions be established, coal winning by lime will assuredly replace all other methods.—*London Globe.*

Why Women are Excluded from Colleges and Universities.

THE shutting-out of women from Harvard University, Yale College and other prominent Eastern institutions for the instruction of youth is based on sound principles. Their officers say, and say truly, that if they should admit women the object for which these institutions were originally established—the education of young men—would be perverted. The standard would have to be lowered, and the whole curriculum demoralized and modified. Nothing has yet been shown to prove that any kind of preparation can fit girls and women for the course of study pursued at those institutions. Except in very rare instances the female sex has not exhibited any qualifications enabling them not merely to take high rank in American colleges, but even to maintain their places in the studies pursued there.

Few, if any of them, can row. Now and then one meets a girl who can pull an oar in a boat, and occasionally a champion female sculler is heard of; but the number is too few to allow ancient and honorable institutions, with scholarships and funds and charters hoary with age, to set aside precedent and custom. It would be folly to revolutionize the whole system and disturb the antique usages for the mere chance of getting one Amazon out of two or three thousand women fit to take a seat in the eight-oared shell with the University crew. It is a preposterous thing to ask; and women or their advocates must see at once how absurd it is. Not one woman in a thousand, probably not one in ten thousand, could graduate at the head of the class, nor, as we have suggested, sustain herself with any credit in the examination for the test of thirty-eight strokes to the minute, and the co-efficiency of force exerted by the bow oar when he is "looking one way and rowing the other."

Then how can any young woman ever compete with her male classmates in the base ball course? Some of them might perhaps ascertain the mathematical properties of the "double curve" described by the pitcher's ball. But that would be only a superficial and shallow part of the problem. The real thing is to do it. Women would be utterly worthless in sustaining the reputation which the students of Eastern colleges have won as base-ball players. The trustees and faculties of these institutions would soon have cause to blush whenever their colleges were mentioned. The disastrous "muffs," errors, misplays, passed balls, called balls, of which female students would be guilty would ruin the reputation of these institutions in a single season.

Then there is foot-ball. Young women attempting this course of study would fall behind the rest of the class in the very first game—we would say recitation. Or they would be in the way, and would either put a stop to the game altogether or prevent the accomplished students of this branch of learning from breaking each other's heads or maiming one another for life.

Michigan University has thrown open its doors to women, and see where it stands. It is the contempt and by-word of nearly every other college in the land. It has never won a boat race; it never dares enter one; it has no boats; not even a single sculler. In base ball it is equally obscure and contemptible. Women can go to Cornell and Michigan universities because those institutions do not attempt nor dare to establish courses in these higher branches of literature and scholarship. So long as they confine themselves to Greek, Latin, mathematics, English literature, physics, etc., they are just about fit for women. But the colleges which are abreast of the age, which of late have won more fame and attracted wide attention in boat-racing, foot-ball and base ball, have no use for women. Their admission would, as we have said, either pervert the purpose for which these institutions are founded or lower the standard to the vulgar and old-fashioned pursuits of the classics, mathematics and sciences. In short, women are unfit for the higher education in the Eastern colleges.—*Detroit Free Press.*

Oatmeal Ahead.

WE are told by the Chicago *Inter-Ocean* that "James Watson Webb, of New York, is 81, and smokes incessantly. Thurlow Weed is 85, and drinks large quantities of Santa Cruz rum. Peter Cooper is 91, and lives on a diet of oatmeal. They are all vigorous, healthy, and happy; and why, then, shouldn't a mixture of oatmeal, tobacco, and Santa Cruz rum be the elixir of life?"

A REPORT upon Russian railways, by the British ambassador at St. Petersburg, shows that nearly all the leading railway lines are hopelessly in debt, and that many of them already so are still piling up their obligations. One cause of this extravagance and carelessness is due to lax supervision on the part of the Government to see that no more than the annual appropriations for railway purposes are expended. According to the report, from three to seven times the sums allotted from the public treasury for railway maintenance have, in late years, been expended by various companies. A commission has been named to investigate and report on a measure for preventing a continuance of such a policy. Another account of the Russian railways tells of the astonishing ignorance of a majority of the employes, —engineers, firemen, train-masters and others holding responsible positions. To improve this thirty-three "railroad schools" have been established for the instruction of employes. The oldest was founded in 1874, and has graduated thus far but twenty-five students. The fact that even to-day over half the railway engineers in Russia are Germans, and that house servants and others who could read have had to be pressed into service as locomotive engineers, will show the present condition of the Russian railway service.

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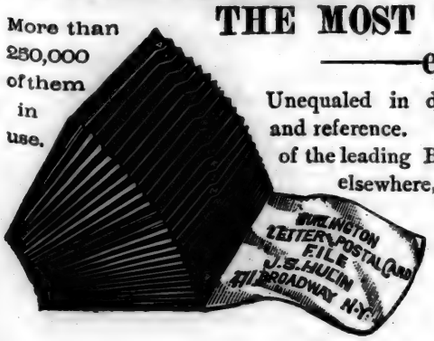
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A New Explosive.

THE English industrial journal, *Iron*, describes a new explosive recently invented in the canton of Unterwalden. It says experts of the Federal Polytechnikum have tested it, and are stated to have found it entirely free from danger. It appears from their report that this explosive can be ignited only by exposure to an electric spark on the naked flame, or by heating up to 180 degrees centigrade. But amidogene, even if ignited, will not exert its explosive effect unless firmly inclosed. The manufactory at Hergis was burnt down two years ago, and although about 2,000 pounds of finished amidogene was stored in it, no accident took place, and even the private residence, which was only twelve feet from the factory, was preserved. Owing to these properties, Swiss railways have admitted it under certain conditions for transport. The explosive effect of amidogene is stated to be midway between that of ordinary powder and that of dynamite.

The Railway Tunnel Under the Mersey.

THE construction of the railway tunnel under the Mersey, between Liverpool and Birkenhead, under the superintendence of Messrs. Brunlees & Fox, the engineers, is making rapid progress. The main tunnel is being proceeded with simultaneously with the construction of the heading and the pumping works, an additional shaft having been sunk on each side of the river in order to admit of the whole of the works being so carried forward. There are now, therefore, four shafts to work from, two on the Liverpool side and two on the Birkenhead side of the river. The shafts on the Liverpool shore are 173 feet in depth and 45 feet in circumference, whilst those on the Birkenhead side are 170 feet deep and 51 feet in circumference. These several shafts admit of the main tunnel being driven from four faces. There are pumping engines on both sides of the river, which are said to be the most powerful of the kind hitherto constructed, each engine being considered equal to raising 6½ million gallons of water per day. In connection with the pumping operations it may be stated as an interesting fact that the water which has hitherto been met with has, for the most part, come from springs and not from the river bed.

Up to the end of last week the drainage heading had been driven to the length of about 700 yards, or upwards of one-third the entire length of the tunnel. The main tunnel has likewise been carried upwards of a quarter of a mile under the river, the entire width of which, between the points at the two shores where the tunnel passes under the Mersey, being from three-quarters of a mile to a mile. The tunnel will be faced with brickwork in cement.

When the tunnel is completed and opened for railway traffic, the approaches at the Liverpool and Birkenhead shores to the railway level below will be effected by means of hoists, but the ultimate intention is to connect the tunnel with the several railways both on the Liverpool and Birkenhead side of the river. On the Liverpool side it is proposed to construct an underground railway from the tunnel terminus, with which it will form a junction, passing under Lord street and Church street, two of the principal central arteries in the city, terminating by a junction with the central station of the Midland and Great Northern Companies, whilst on the Birkenhead side the intention is to connect the tunnel with the Great Western Railway, which will then have direct railway communication with Liverpool, and also with the London and North Western Railway, including the new line promoted by that company between Birkenhead and the coast of the River Dee, in the direction of West Kirby and Chester, which has been sanctioned by the Select Committee of the House of Commons during the present week.—*Herapath's Railway Journal, May* 20.

Use of Straw in Making Paper Car Wheels.

A CURIOUS use for straw is the manufacture of car wheels. The straw is first made into common straw board; these are cut into round pieces perforated at the center, and 26, 33 and 42 inches in diameter, for use in wheels of these various sizes, then pasted together and pressed repeatedly in a powerful hydraulic press under a force of 3,000 pounds to the inch. The block is then fitted into a steel tire bound with plates and bolts, and finally makes a wheel which sells readily at $80, while an iron wheel costs but $15. But the paper takes up all the vibration from the rail, which is so injurious to the tire and axles when iron wheels are used, causing breakage and costly accidents. These paper wheels never break, while the iron wheels break very often. An iron wheel will run 100,000 miles, but a paper wheel 400,000 or 500,000 before the tire is worn out, and then the tire can be replaced at a small cost. Other important uses are being found for straw, and in course of time it may become too valuable for feeding, and will be more profitable for sale than the grain which it bears. Near the large cities and straw-board mills rye straw is worth a sum equivalent to about $30 an acre; this is equal to the price of a larger yield than an average crop of grain.—*Rural New Yorker.*

Ocean Transportation.

MR. ANDREW CARNEGIE, in his new book entitled "Our Coaching Trip," which has just been printed for private circulation, makes this reference to ocean transportation:—

"In no branch of human progress has greater advance been made within the past twenty years than in ocean navigation by steam; not so much in the matter of speed as in cost of transport. The Persia, once the crack ship of the Cunard Line, required an expenditure of thirty-five dollars as against her successor's one dollar. The Servia will carry thirty-five tons across the ocean for what one ton cost in the Persia. A revolution, indeed! and one which brings the products of American soil close to the British shores. Quite recently flour has been carried from Chicago to Liverpool for about eighty cents per barrel. The farmer of Illinois is as near the principal markets of Britain as the farmer in England who grows his crops one hundred miles from his market and transports by rail.

"Some of the good people of Britain who are interested in land believe that the competition of America has reached its height. Deluded souls, it has only begun!

"One cannot be a day at sea without meeting the American who regrets that the Stars and Stripes has been commercially driven from the ocean. This always reminds me of a fable of the lion and the turtle. The lion was proudly walking along the shore, the real king of his domain, the land. The turtle mocked him, saying, 'Oh, that's nothing, any one can walk on land. Let's see you try it in thew ater.' The lion tried. Result: the turtle fed upon him for many days. America can only render herself ridiculous by entering the water. That is England's domain.

'Her home is on the mountain wave,
Her march is o'er the deep.'

"Travelers know the character and abilities of the men in charge of a Cunard ship, but have they ever considered for what pittances such men are obtained? Captain, $3,250 per annum; first officer, $1,000; second, third and fourth officers, $600. For what sum, think you, can be had a man capable of controlling the ponderous machinery of the Servia? Chief engineer, $1,250. You have seen the firemen at work down below, perhaps. Do you know any work so hard as this? Price $30 per month. The first cost of a steel ship—and it is scarcely worth while in these days to think of any other kind—is about one-half on the Clyde what it is on the Delaware. Steel can be made, and is made, in Britain for one-half its cost here. Not in our day will it be wise for America to leave the land. It is a very fair division, as matters stand—the land for America, the sea for England."

Comet's Tails.

PROFESSOR ENNIS, of the Naval Observatory at Washington, believes that the tails of comets are electric lights. "If these tails have any substance," he argues, "the laws of motion are constantly violated by them. The great comet of 1843 was so near the sun that it passed from one side to the other in a few hours. Its immense tail, 100,000,000 miles long, was shifted completely, so that it pointed directly in an opposite direction. Could that be so if it were composed of any substance? Could a comet swing 1,000,000,000 miles of tail around so quick as that? The electricity is generated by evaporation. As the comets approach the sun, the heat becomes more intense, the evaporation and accumulation of electricity more rapid, the repulsive force greater and the tails longer. Sometimes the material becomes completely evaporated. Then the comet has no tail."

W. E., ROCKDALE, Tex.; "What authority has the Legislature of Arkansas for deciding the difference of pronunciation in the name of that State, Arkan*saw* or Arkan*sas*? If *saw* is right for *sas*, why not say Kansaw for Kansas, Texaw for Texas?" As the people of New York are called New Yorkers, and the inhabitants of Michigan are called Michiganders, possibly the Arkansas legislators were afraid they might be called Arkansasses, and so changed the pronunciation of the name of the State to Arkansaw.—*Texas Siftings.*

American Railroad Journal.

ESTABLISHED 1831.

Steam Navigation, Commerce, Finance, Banking, Machinery, Mining, Manufactures.

SECOND QUARTO SERIES.—VOL. XXXVIII., NO. 23.] NEW YORK, JUNE 17, 1882. [WHOLE NO. 2,408.—VOL. LV.

CONSTRUCTION.

THE Chicago, Milwaukee and St. Paul Railway Company has sent surveyors to locate a line through the Red River Valley into the Northern Pacific country.

THE Philadelphia and Erie Railroad Company is running sidings into the new oil fields in Warren county, Penn., and will haul nearly the whole production of that field.

THE Central Railroad Company of New Jersey has engaged 1,500 tons of steel rails from the Bethlehem Iron Company, which will be used for double track between Mauch Chunk and Treichlers.

A COMMITTEE has been appointed by the French Chamber of Deputies to examine a scheme proposed by a scientific society to cut a canal from the Atlantic to the Mediterranean, North of the Pyrenees.

THE Des Moines and Fort Dodge Railroad has reached a point twenty miles north of Tara Junction, Iowa. It is expected to reach a junction with the Chicago, Milwaukee and St. Paul Railway in August, where work for the season will stop.

THE Milwaukee, Lake Shore and Western Railroad Company have decided upon the route of the branch from Pelican to the Wisconsin River Rapids. The building of this line will commence at once and is to be completed in August, with a view to securing the fall lumber traffic.

THE track of the Canadian Pacific Railway from Almonte to Pembroke will be relaid with steel rails immediately. The first sod of the Ottawa and Gatineau Valley Railway was turned on the 12th inst. It is expected that the whole road will be completed within a little over two years.

AT a meeting of the directors of the South Shore Railway and Tunnel Company, held on the 7th inst. at the office, 17 Place d'Armes Square, Montreal, the president was authorized to take immediate steps for the construction of the railway and to report to a general meeting of shareholders to be held on the 27th inst.

A CONTRACT for grading thirty miles of the Pittsburgh and Monongahela Valley Railroad, from Pittsburgh southward towards the West Virginia line, has been let to James H. Connor, who is to begin work at once. For some twenty miles the line is parallel and close to the Pittsburgh Southern Railroad.

THE Chicago, Milwaukee and St. Paul Railway Company has placed seven large construction gangs, fitted out with steam ploughs and other grading implements, along the entire length of its Southern Minnesota route. This track is to be entirely relaid and all the bridges are to be reconstructed or replaced.

THE Texas and St. Louis Railroad will be completed from Cairo to Texarkana by the 1st of September. It will parallel the St. Louis and Iron Mountain Railroad in Missouri for forty miles, and a competing branch is to be built to Magnolia. Trains will run from Texarkana to Chicago and St. Louis without breaking bulk or changing cars.

A LINE is now being surveyed for a railroad from Springfield, Mo., to Harrison, Arkansas, a distance of 100 miles. This road is being constructed by the St. Louis and San Francisco Railway Co., and will be pressed to completion as rapidly as it can be graded. It is proposed to extend it to Yellville, Arkansas, and thence southeast to the interior of the State. The road is built as a feeder to the "Frisco" line, and to draw the trade of Arkansas to St. Louis.

THE Pleasantville and Ocean City Railroad, extending from Pleasantville to Ocean City, a distance of seven miles, was built by the Philadelphia and Atlantic City (narrow gauge) Railroad Company, but was recently purchased in the interest of the West Jersey Railroad Company. The track has been changed from its original gauge to suit that of the uniform gauge of the Pennsylvania track, and trains are now running over the road.

A COMPANY has been organized for the construction of a railroad from Christiansburg, on the Norfolk and Western Railroad, to the great iron and coal fields of Brush Mountain, Montgomery county, Va. Dr. Harvey Black is the president of the company. The engineer-in-chief of the survey reports that he can reach the combined coal and iron fields in a distance of thirteen miles without a bridge, a tunnel, or any cut exceeding twenty-one feet.

THE Northern Pacific Railroad Company has purchased from the St. Paul, Minneapolis and Manitoba the line of track between Watab and Anoka, on the east bank of the Upper Mississippi, and will bridge the river at Anoka and extend the line to Minneapolis. Watab is about eighty miles from St. Paul, and Anoka is twenty-seven miles from the same city. The Northern Pacific thus acquires what it has not heretofore enjoyed, a continuous line of its own from Minneapolis to its main stem at Brainerd. The Manitoba road will complete its other line on the west bank of the Mississippi.

THE Pennsylvania Company, deeming it advisable to provide more direct western connections with the extensive iron-producing district in the Mahoning Valley, is furnishing means to construct a line from Niles, on the Ashtabula line, to Alliance, on the Pittsburgh, Fort Wayne and Chicago Railway, which will be completed during the present year. The New Brighton and New Castle Railroad Company is also building a line from New Brighton to a connection at Wampum with the New Castle and Beaver Railway, which will afford easier grades for the movement of the heavy traffic between Pittsburgh and the Mahoning Valley and the Lakes.

THE Utah and Pleasant Valley Railway was sold on the 12th inst. by L. H. Meyer and G. A. Lowe, trustees, under the mortgage, to Wm. M. Spackman, treasurer, who, it is understood, bought the road in the interest of the Denver and Rio Grande Western Railway Company. This company finished its track to Salt Lake City on the 12th, and the party of gentlemen who attended the sale returned to that city from Provo on this line. The Denver and Rio Grande Western has now over 150 miles of constructed road south of Salt Lake City. There is iron enough on hand to lay 50 miles additional into Castle Valley. The rest of the line will be laid from Gunnison west some 300 miles.

THE Canadian Pacific Railway is now graded for 150 miles west of Brandon, and ironed for 80 miles. Word has been received from the Barclay and Brereton survey parties that the former has completed correction of the survey of last year, and the line has now been definitely located further south. The new line will save ten miles of construction, besides being straighter and easier of operation. It will be more expensive to build, but there will be a saving in the end. The route as now located follows the line between townships 17 and 18, almost straight from the center of range 11, west of the second principal meridian to the east line of range 21, crossing Pile of Bones Creek, where the north line of township 17 intersects that line. The route is now fully fixed to Moose Jaw Creek with this correction. Brereton is now about locating the line from Moose Jaw to Strong Current Creek and ferry, and Shaw from there to the Rockies.

ORGANIZATION.

A. S. Gear, of New York, and F. Vogel, of Milwaukee, have been elected directors of the Milwaukee and Northern Railroad Company for three years.

At the meeting of the United States Illuminating Company, on the 13th inst., the following gentlemen were elected directors: Richard Irvin, Jr., W. E. Dodge Stokes, George W. Hebard, Edward K. Goodnow, Eugene T. Lynch, Edward L. Montgomery, George J. Gould.

The directors of the Queen Anne and Kent Railroad Company, elected on the 7th inst., are Isaac Hinkley, Strickland Kneass, Frank Thomson, Samuel M. Felton, J. Morris Perrot, Jacob Tome and B. T. Biggs. The officers are: President, B. T. Biggs; secretary and treasurer, Robert Craven.

The directors of the Missouri Pacific Railroad Company of Nebraska, recently elected, are: Jay Gould, Russell Sage, A. A. Talmage, John T. Webster, F. R. Drake, Thomas J. Portis. Officers of the company were chosen as follows: President, A. A. Talmage; vice-president, T. J. Portis; secretary, F. R. Drake.

At the annual meeting of the Boston Exchange Company, held on the 12th inst., the following officers were chosen: Directors, Eben Bacon, Lemuel Shaw, Thomas Wigglesworth, Benjamin C. White, Peter T. Homer, Albert Glover, Nathaniel J. Bradlee; president, Eben Bacon; clerk and treasurer, Francis Cabot.

The directors of the Wisconsin and Minnesota Railroad Company, elected on the 8th inst., are: Jesse Hoyt, of New York; J. C. Spencer, Angus Smith, Guido Pfister, E. Mariner and F. Vogel, of Milwaukee. The officers are: President, Jesse Hoyt; vice-president, J. C. Spencer; secretary and treasurer, E. Mariner.

At a meeting of the stockholders of the Toledo, Canada Southern and Detroit Railroad Company, at Grosse Isle, on the 8th inst., the following directors were elected: James Tillinghast, Edward A. Wickes, Cornelius Vanderbilt, Augustus Schell, Edwin D. Worcester, Samuel F. Barger, Joseph Harker, George W. Davis and William I. Scott.

The directors of the Baltimore and Potomac Railroad Company, elected on the 7th inst., are: George B. Roberts, A. J. Cassatt, George Small, William T. Walters, B. F. Newcomer, E. J. Henkle and Samuel Cox, Jr. The officers are: President, Oden Bowie; vice-president, A. J. Cassatt; treasurer, John S. Leib; secretary and auditor, John Crowe.

At the annual meeting of the Broadway and Seventh Avenue Railroad Company, held on the 12th inst., the following board of directors was chosen: Thurlow Weed, Thomas B. Kerr, James W. Forshay, Jesse A. Marshall, Jacob Sharp, Edward F. Smith, S. Sidney Smith, John H. Murphy, Alfred Wagstaff, J. J. Bradley, M. M. White, George N. Curtis and Harrison D. Kerr.

At the recent annual meeting of the stockholders of the Vermont and Massachusetts Railroad Company, the following named were elected directors: Daniel S. Richardson, of Lowell; William H. Hill, of Brookline; James A. Dupee, of Winchester; Francis Goodhue, of Brattleboro, Vt.; George F. Fay, of Fitchburg; Thornton K. Ware, of Fitchburg; Edward I. Davis, of Worcester.

At the annual meeting of the stockholders of the Cincinnati, Hamilton and Dayton Railroad Company, held in Cincinnati on the 13th inst., the following directors were elected: H. J. Jewett, George R. Blanchard, C. C. Waite, John Carlisle, E. A. Ferguson, F. H. Short, E. N. Laralde, C. S. Brice and C. R. Cummings. Messrs. Blanchard, Waite and Carlisle were appointed an executive committee.

At the annual meeting of the Cincinnati and Ohio River Railroad Company, held in Cincinnati, on the 13th inst., the following board of directors was elected: J. G. Blaine, of Maine; Marshall Jewell, of Connecticut; H. C. Parsons, of New York; Orlando Smith, of Columbus, O.; Theodore Cook, W. A. Goodman, William Ramsey and J. F. Follett, Cincinnati; W. A. Hutchins, Portsmouth, O.; and A. J. Warner, Marietta, O.

At the recent annual meeting of the Chicago and Western Indiana Railroad Company, the old board of directors was re-elected as follows: Andrew Crawford, Charles B. Sawyer, Roswell Miller, Joseph T. Torrence and J. B. Brown. Subsequently the following officers were elected: President, J. B. Brown; first vice-president, Andrew Crawford; second vice-president, Roswell Miller; general manager, G. S. Griscom; secretary and treasurer, A. S. Dunham.

At a meeting in Camden, N. J., on the 8th inst., of the Pleasantville and Ocean City Railroad Company, the following gentlemen were elected directors: George Wood, Strickland Kneass, John M. Moore, William Robinson, Charles P. Stratton, Israel S. Adams, William J. Sewell, Samuel J. Lewis, N. Parker Shortridge, Walter Wood, Israel G. Adams. Subsequently the directors elected George Wood, president; Edward Bettle, secretary; and Dr. William Taylor, treasurer.

The annual election in Baltimore, on the 7th inst., for directors of the Baltimore and Drum Point Railroad Company, resulted as follows: Augustus Albert, Dr. James A. Steuart and William H. Blans, of Baltimore; Dr. Benjamin King, Judge Thomas S. Inglehart and John G. Butler, of Anne Arundel county; Henry Owings, of S., Calvert county; Andrew Banks, of Baltimore county; John Oxner, Joseph R. Swan, Jr., Samuel Remington and P. V. Rogers, of New York. The directors re-elected officers as follows: President, Augustus Albert; treasurer, Andrew Banks; secretary, John G. Butler.

At the recent annual meeting of the stockholders of the Western Railroad of Minnesota, the following gentlemen were elected directors for the ensuing year: C. B. Wright, Philadelphia; Frederick Billings, T. F. Oakes and Geo. W. Cass, New York; Alexander Ramsey, F. R. Delano, George L. Becker and R. M. Newport, St. Paul; S. E. Neiler, Minneapolis. The officers chosen were: President, George L. Becker; vice-president, F. R. Delano; secretary, treasurer and land commissioner, E. T. Williams.

At a meeting of the Board of Managers of the Iron and Metal Exchange, on the 10th inst., the following standing committees were appointed: Executive—Messrs. Delafield, White, Flynn. Finance—Messrs. Mayer, Gerry, Leman. Complaint—Messrs. Hill, Snow, Rogers. Floor—Messrs. Rogers, Leman, White. Information—Messrs. Mayer, Hill, Shriner. Statistics—Messrs. J. A. Flynn, Mendel. Warehouse—Messrs. Robinson, Leman, Gerry, Delafield. Trade—Messrs. Leman, Mayer, John E. White, Libbald, Marval. Mr. E. J. Shriner was appointed secretary and acting superintendent.

At the annual meeting of the stockholders of the St. Louis and Cairo Railroad Company, the old board of directors was re-elected, viz: W. F. Whitehouse, L. M. Johnson, S. Corning Judd, H. B. Whitehouse and E. H. Fishburn, of Chicago; John B. Lovingston, of East St. Louis; F. Bross, of Cairo; C. W. Schaap, of Ohio, and J. A. Horsey, of New York. At a meeting of the Board of Directors held on the same day, the following officers were elected: W. F. Whitehouse, president; L. M. Johnson, vice-president; William Ritchie, secretary; C. W. Schaap, treasurer; S. C. Judd, general solicitor; Charles Hamilton, general superintendent; and Lewis Enos, auditor.

The stockholders of the Mexican Telegraph Company and of the Central and South American Telegraph Company held meetings on the 13th inst., to elect officers for the coming year. The two corporations are virtually under the same control. The Mexican Telegraph Company elected the following directors: Robert B. Minturn, E. E. Chase, J. Pierpont Morgan, Alfred Pell, John E. Alexandre, James K. Gracie, William G. Hamilton, Henry L. Higginson and James A. Scrymser. At a meeting of the directors the following officers were elected: James A. Scrymser, president; William G. Hamilton, vice-president; James R. Beard, secretary; Samuel C. Blackwell, treasurer; and Bernard Schulze, auditor. Executive Committee—John E. Alexandre, James K. Gracie and Alfred Pell, the president and vice-president *ex-officio*. The South American Company chose the following directors: Michael P. Grace, Ernesto G. Fabbri, William G. Hamilton, Edward D. Adams, J. Pierpont Morgan, Alfred Pell, James A. Scrymser, Theodore J. de Sabla and Richard W. Thompson. The directors subsequently elected the following officers: James A. Scrymser, president; William G. Hamilton, vice-president; James R. Beard, secretary; Samuel C. Blackwell, treasurer, and Bernard Schulze, auditor. Executive Committee—Edward D. Adams, Ernesto G. Fabbri and Alfred Pell, the president and vice-president *ex-officio*.

PERSONAL.

George Moore has been appointed secretary and E. R. Powers superintendent of the Cotton Exchange.

T. A. McIntyre has been appointed secretary and S. H. Grant superintendent of the Produce Exchange.

Hubbard C. Atkins has accepted the general superintendency of the St. Paul, Minneapolis and Manitoba line.

E. H. Green has been elected a director of the Central Railroad Company of Georgia, to succeed the late Moses Taylor.

The officers of the New England and Oregon Mining Co., elected at the annual meeting held

in Concord, N. H., on the 12th inst., are: George S. Locke, president; Thomas Stuart, vice-president; and Horatio Hobbs, secretary and treasurer.

THE Master Mechanics will hold their annual convention, this year, at Niagara Falls, commencing on the 20th of June.

J. A. MCDUFFIE has been appointed superintendent of telegraph and master of transportation of the Sonora Railroad in Mexico.

HENRY C. MURPHY has been re-elected president, Wm. C. Kingsley, vice-president, O. B. Qnintard, secretary, and Otto Witte, treasurer, of the East River Bridge Co.

JOHN W. ROMAINE, for many years connected with the "General Passenger Department" of the New York, Lake Erie and Western Railroad Co., has been appointed Emigrant Agent of that company, Vice Nicholas Muller retired. This position is one of the most responsible in the gift of the company; and Mr. Romaine has fairly won it by twenty years' arduous service in nearly all grades of the department to which he has hitherto been attached, and which has eminently fitted him for the duties of the position to which he has now attained. The promotion may, indeed, be regarded as a just tribute to, and recognition of, his long and faithful services. With a change in the management of the "Emigrant Department," the office has been removed to No. 5 Battery Place.

New Flight of Invention.

GERMANY and Russia are both pushing forward experiments in flying-machines for use in war or otherwise. It appears that the direction in which these are working is the only one likely to be successful. It ignores the ridiculous inflated gas-bag, which is enormous in size, difficult and costly to fill in war, and floats—a gigantic derelict—at the mercy of every current of air, a huge mark for the first gunner who can hit and bring it to the ground. Baumgarten, in Germany, and Baranovski, in Russia, adopt the principle of the inclined plane pressed against the air, and thus capable of making some attempt at least to regulate its own course. In the kite the force that presses the inclined plane is the hand of the boy acting through the string. In the sail of the boat the resistance of the water to sidelong motion keeps the sail pressed against the wind. In flying-machines the pressure is given by an engine carried by the machine and acting by means of fans of one sort or the other. The difficulty at present is the weight of engine and fuel; but with the development of electrical practical knowledge we may fairly expect to see accumulators which will supply the maximum of power with the minimum of weight. The problem of flying in still air may be solved. Whether we shall ever be able to ride the storm is another matter.

THE regular annual meeting of the stockholders of the McLeod Air Railroad Signal Company will be held at the office of H. B. Freeman, No. 345 Main street, Hartford, Conn., on Tuesday, June 20, 1882, at 1 o'clock P.M. First, To elect a board of directors for the ensuing year; second, to alter or amend the by-laws and articles of association as may be deemed expedient by the stockholders; third, to transact any other business that may legally come before said meeting. The stock books are to be closed between the twelfth and twenty-fourth of the present month, and all books and papers of the company are required at the meeting.

Mexican "Bee Line" Railroad.

ONE of the latest projects begun by Boston investors and projectors is a new railroad in Mexico, both ends of which are in the United States. It is known as the "Bee Line," and is thus described in a San Diego (Cal.) letter to the Boston *Advertiser:*

"It begins at National City, 3 miles from San Diego, at the present terminus of the California Southern Railroad, and runs southeast through northern Mexico 470 miles, to Calabasas, in Arizona, running only 12 miles in the United States at the west end. Crossing Lower California, a territory of Mexico, and the only one that she has, to the mouth of the Colorado River, thence across northern Sonora, and leaving it near the eastern line, it enters Arizona and runs 24 miles to Calabasas, where it connects with the Sonora Railroad from Guymas, running northeast to a connection with the main line of the Atchison, Topeka and Santa Fe Railroad at or near Benson, and with an extension north sooner or later from Calabasas to the main line of the Atlantic and Pacific Railroad by the way of Prescott. The Bee Line, after leaving National City (San Diego), crosses the fine valleys of the Sweetwater and Otai, and over the Mesa lands of the National Ranch to the Mexican boundary line at Tia Juan, where it enters upon Mexican soil, passing up the rich, fertile valley of the Tia Juan, past the Hot White Sulphur Springs for a distance of 14 miles into the Caoiso Valley, which it follows for 5 miles; thence by an easy grade through Dwartys' Pass, over into the Valley De Los Palmos, a distance of 3 miles; thence up the valley 15 miles, where it enters Causios Canon, and follows it for 7 miles over an easy grade and nature's highway. Thence it runs across the Cienega (Hot Springs) 5 miles to Governor Rveyson's, across his magnificent ranch 6 miles, and up Oak Canon, heavily timbered with live oak, with a little heavier grade, 2 miles; thence down Cerrio Canon 7 miles to Guadulupe Valley, across its east end 3 miles; thence up Csanias and San Rafael canons to the rich mining region at San Rafael (Real del Castillo) 12 miles over a fine timbered country, an easy grade and natural roadway. Thence it follows up the fine Valley of San Rafael, level as a floor for 30 miles; then by an easy grade through San Catarina Pass 25 miles, and then across the Mesa plain to the Colorado River 70 miles. From National City to Santa Catarina there are fine springs of fresh water every six, eight, or ten miles, and often every two or three miles. All the valleys are susceptible of cultivation, and in the right hands will produce two crops a year. All the grains grow luxuriantly, as do grapes, peaches, figs, and most of the semi-tropical fruits—limes, lemons, oranges, &c.—while beans, peas, melons, and all the vegetables and small fruits produce abundantly. From the Real del Castillo the company will build a branch to the Eususarada, on Todos Santos Bay (Pacific Ocean), 28 miles, and thence down the copper belt 10 or 12 miles inland, a distance of perhaps 300 miles, which will unlock the richest belt of mineral, gold, silver, copper, salt, iron and coal on the Pacific coast.

"Twenty-two miles southeast of the Real del Castillo the road will enter, or run very near, the finest pine belt of timber of northern Mexico. This belt of magnificent pine, redwood and cedar is from 75 to 90 miles in length, and from 15 to 30 wide. The mineral belt is a very large one, and almost entirely unoccupied. The whole field is a new one, and worthy of the attention which the building of this new line of railroad will give it. On the Shore Line branch of the Bee Line is a mountain of iron ore, not excelled in quantity or quality by the famous iron mountains in Missouri, or of Durango in Mexico. Near by, also, are beds of good coal, from all appearances inexhaustible. None of these are located as yet. Good coal is said to have been found at Santa Catarina. Good indications of coal are found in several places along the main line, and two old Pennsylvania miners give it as their opinion that good coal exists within a mile of the Real del Castillo. Adjacent to the Bee Line, near the Colorado River, are millions of acres of wild hemp of the largest growth and finest quality. It is estimated by those who are qualified to judge that the railroad would have a million tons of hemp for transportation per year east and west from the Colorado River, not to speak of the sugar and rice which this vast valley will produce. English and German capitalists are at work even now developing this region. East of the Colorado River the Bee Line passes through a country rich in mineral resources, with fine valleys. Several Massachusetts and Connecticut towns are already interested in the mines, mills, and otherwise at the Real del Castillo."

THE *American Law Magazine* prints an opinion of the Illinois Supreme Court on the subject of licenses, which, if applied in New Hampshire, would upset a decision given by the Supreme Court of that State, printed in the same issue of the *Law Magazine.* The New Hampshire Court decided that an act requiring every railroad expressman to pay a heavy license fee was a disproportional and discriminating tax within the meaning of the Constitution providing for proportional taxation. The Illinois Supreme Court having a different case before it, decided that "a fee required to be paid for a ferry or other license is not a tax, and the constitutional limitations and restrictions upon the taxing power have no application to fees enacted for a license."

A NEW method of producing low temperature artificially is described at length by the *Oil and Drug News,* as due to the absorbtive power of glycerine for ammonia. It appears that the former will take up about 600 times its own volume of the latter. Placed in a vacuum in a refrigerator, the ammonia begins to separate from the glycerine, and intense cold is produced. A condenser is brought into use, the ammonia is reabsorbed, and then it is ready to be used with freezing effect once more. The refrigerators designed to be used contain apparatus which carries on the operations mentioned. At a test recently the temperature was reduced from 60 deg. F. to 18 deg., and ice formed within twenty minutes. This plan of accomplishing so useful a result is said to be much cheaper than any heretofore in use.

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CUTTING DOWN OPERATING EXPENSES.

A WAVE of economy in operating expenses seems to have started over the country, and coming at a time when the expenses of maintenance are unusually high will bring the laborer face to face with the limitations that surround him. Every week brings the word that wholesale reductions of force are being made in the railroad shops and of the operating forces. The Wabash, St. Louis and Pacific is reported to have discharged 2,000 men. The Missouri Pacific and its Texas feeders as many more. The Pennsylvania is curtailing its mechanical force largely; and doubtless the example will spread and become general.

Whether this is simply a desire to take in sail in anticipation of a coming storm, or a result of the diminished volume of traffic requiring less rolling-stock and motive power, is not made public. The reductions come just at a time when the builders, iron makers and boiler men are organizing a strike, and should have a salutary lesson for all the trades union men. The car shops, locomotive works and rolling-mills are also slacking up. Orders taken last year at high prices are not always delivered. The price of steel rails has fallen below fifty dollars at the mills; and it cannot be long before the European foundries, mills and mines will feel the loss of American orders.

Labor is comparatively so much better rewarded in the United States than in any other part of the world that one would expect strikes to be rare and peaceful. Unfortunately the habits and organization of trades unions have been transplanted to American soil, and the lack of central executive power prevents prompt and efficient repression of the illegitimate and unjust resort to violence on the part of the strikers. This is a problem that all industrial nations have to deal with; and the solution under our theory of "the consent of the governed" may be quite as easy as under the more absolute forms.

The influx of near a million of immigrants, most of them adult workers, into our industries in a single year cannot but have some effect on the rates of wages. The stoppage of building and railroad construction in consequence of advancing prices of labor must at the other extreme tend to check the advance and tend to restore the equilibrium of prices. America is the land of inventions, and the bulk of them are of the practical sort—labor-saving devices. This is most apparent in the tools and appliances of railroads—more patents being issued for railroad uses than all others put together. It seems as if the attempt to make automatic machinery do the work of manual labor was sometimes in danger of being pushed to an injurious extreme.

Take the growing weight of our engines and cars as an illustration. The later engines built for heavy freight purposes weigh from 45 to 60 tons. It is argued that one driver and fireman can work such an engine about as easily as one of half the weight, whereas the load may be doubled. It does not require a physical demonstration to show that there are narrow limits to the expansion of economy of this sort. To move the heavier load of cars, the parts whereon the tension falls must be made stronger; the draw-bars, coupling-pins, springs, wheels, axles and car-bodies need to be proportionately heavier. Aside from the heavier weight of the engine, and the greater elevation of the centre of gravity, there must come a greater weight of train. It has been sought to avoid this in part by increasing the capacity of cars to 40,000 or 50,000 pounds; but neither can this process go much further. These added weights and velocities greatly increase the force of the blow upon the rails, and the strain and vibration of bridges. The track itself may indeed be made more solid, but it is very expensive; while every addition to bridges not only increases expense in geometrical ratio, but it is only practicable within narrow limits. There has been a suspicion in the minds of thoughtful engineers for some time that our rails were too light, and our motive power and cars were too heavy—too much dead weight for the paying weight; that the tracks are being pounded, bent and ground into uselessness too rapidly; and that a return to the original idea of a massive solid roadway, traversed by lighter and more numerous trains would be in the interest of true economy. The item of manual labor is the chief first saving of our present policy—but is it an actual gain in the end?

Railroads of New Jersey.

THE Camden and Atlantic Railroad extends from Camden to Atlantic City, and is 59 miles in length. The capital stock paid in is $1,319,650.65; the floating debt is $64,359.42; and the cost of road and equipments $2,323,738.02. The receipts for the year 1881 were: From passengers, $269,510.99; from freight, $121,012.56; and from other sources, $121,456.50—a total of $511,980,05. The expenditures were $373,864.03, and the net income $138,116,02.

The West Jersey Railroad extends from Camden to Cape May, 82 miles, with the Bridgeton branch from Glassboro, 20 miles. The capital stock paid in is $1,359,750; bonded debt, $2,755,500; floating debt, none; cost of road and equipments, $3,078,178.84. The receipts for the year 1881 were: From passengers, $540,791.74; from freights, $260,649.37; expenditures, $438,974.15.

The West Jersey and Atlantic Railroad extends from Newfield to Atlantic City, a distance of 34 miles. Capital stock paid in, $522,500; bonded debt, $500,000; floating debt, $59,000; cost of road and equipments, $1,000,000. It is operated by the West Jersey Railroad Company, to whom it is leased. The income from passengers last year was $123,123.54; from freight, $12,438.44; from other sources, $320.62; total, $135,882.60; expenditures, $82,527.45.

The Williamstown Railroad extends from Atco, on the Camden and Atlantic Railroad, to Williamstown, in Gloucester county, a distance of 9¾ miles. Capital stock paid in, $30,000; bonded debt, $250,000; no floating debt; cost of equipments and road, $146,442. Income from passengers last year, $3,825.92; from freight, $7,962.51; from other sources, $346.28; expenditures, $11,639.15.

The Camden and Burlington County Railroad

extends from Camden to Mount Holly, Burlington and Pemberton, a distance of about 30 miles. Capital stock paid in, $381,925; bonded debt, $350,000. Dividends paid during the year, six per cent. The income during the past year was: From passengers, $132,608.36; from freight, $41,171.53; expenses, $106,066.64. This road is leased to the Pennsylvania Railroad Company, who equip and operate it.

The Camden, Gloucester and Mt. Ephraim Railroad extends from Camden to Mt. Ephraim, a distance of 6 miles, and is a narrow gauge road. Capital stock paid in, $64,500; bonded debt, $62,100; floating debt, $2,615.75—total, $129,215.75. Cost of road and equipments, $76,015.88. No dividends paid during the past year. Receipts from passengers, $14,532.44; from freight, $327; expenditures, $17,293.59.

The Cape May and Sewell's Point Railroad extends from Cape May to Sewell's Point, a distance of 3 miles. Capital stock paid in, $30,000; cost of road and equipments, $40,000. During the past year the income from passengers was $3,925.25; expenses, $2,221.62.

The Salem Railroad leaves the West Jersey Railroad at Elmer, and runs to Salem, a distance of 17 miles, and is operated by the West Jersey Company. Capital stock paid in, $180,550; bonded debt, $100,000; cost of road, $278,320.43.

The Swedesboro Railroad extends from Swedesboro to Woodbury, nearly 11 miles. Capital stock paid in, $93,350; bonded debt, $200,000; cost of road and equipments, $262,274.79. Income from passengers, $11,718.18; from freight, $8,614.88.

The Philadelphia, Marlton and Medford Railroad runs from Haddonfield to Medford, a distance of 11 miles. Capital stock paid in, $80,887.50; no bonded debt; floating debt, $77,245.01; cost of road and equipments, $158,978.02. Income from passengers, $3,665.81; from freight, $1,415.64; from other sources, $623.58. Expenses during the year, $4,003.04.

The Philadelphia and Atlantic City Narrow Gauge Railroad made no report during the past year to the State Controller.

The Erlanger System.

The importance of the Erlanger system of railroads to the South and Southwest, and more especially to the States of Georgia, Alabama, Mississippi, Louisiana and Texas, is probably not yet comprehended by the people or even the press of these States. The data that may be used as a basis for the valuation of the system to the country through which its lines are to be constructed are about as follows: 1. The syndicate has ample means to build the links and extensions necessary to complete the system. 2. The location of the lines from Cincinnati via Chattanooga, Birmingham, Selma, Vicksburg and Shreveport to the Rio Grande, with a great strong arm coming up from the deep-water port of Brunswick, on the coast of Georgia, uniting with the main trunk at Selma or Meridian, and another reaching down from Meridian to New Orleans. 3. The nationality of the capitalists composing the syndicate, being German, with the great city of Cincinnati, with over $25,000,000 already invested, to back it. No one doubts that the Erlangers, Seligmans, and their German associates have sufficient means to carry out their colossal work to successful completion, and to meet the fiercest competition that Vanderbilt, Gould, Garrett and the Louisville and Nashville may be able to organize to oppose them. Nor is it to be apprehended that they are building a speculative system simply to alarm these other mammoth combinations with a view to selling out at an enormous profit. They have planted already about $40,000,000 of their capital, and are daily expending large sums in improving completed roads and building the extensions. The lines projected pass through the most fertile regions of the south, and reach some of the best ports on the gulf and Atlantic. These, without reckoning the extension across the Republic of Mexico, from the Rio Grande to the lower Gulf of California, will aggregate at least, 1,000 miles. When completed, the magnificent system, in its transcontinental character, will be without competition as to distance, as it will present the shortest line from Cincinnati and from the South Atlantic coast across the continent to the Pacific Ocean. Besides this, the main trunks and branches will traverse the very heart of the cotton belt, penetrate the sugar region, and open a new line across Texas northeast and southwest, with a possible connection from Galveston via Pearsall to the Rio Grande. Such is the comprehensive plan of the Erlangers. They are Germans. Heretofore the tide of German immigration has flowed westward, chiefly for the reason that German capital was interested in giving it that direction, and because of the railroad facilities and superior advantages offered the immigrant. The country through which this system is projected and is being rapidly constructed affords an abundance of land which can be had very cheaply, rivaling the most fertile prairies of the West. The climate is mild and inviting, while schools, churches and all the advantages of commerce and civilization are superior to those of the now available regions of the West, where the country is wild and unsettled. The rivers and estuaries in this belt teem with the finest varieties of fish and oysters, and afford water power for machinery. None of these can be had in such rich abundance in the now unoccupied territory of the West. The Erlangers and their associates being Germans, and possessing the confidence of the Teutonic population on both sides of the Atlantic, as well as the confidence of the financial world, will have opportunities and equal incentives of interest to familiarize the people of Germany with the advantages and facilities offered by their lines, which invite them to come and settle up the vast areas of fertile lands that now await population and offer homes at reasonable outlay. This is the country for the industrious and thrifty agriculturists of Germany, and the Erlangers have doubtless banked heavily on the expectation of peopling with Germans large districts along their roads in the South and Southwest, in their estimate of returns for the expenditure of sixty to a hundred millions in construction and equipment. With lines of steamships plying between the ports of Brunswick and Galveston and Bremen, they can readily divert a great volume of German immigration from Castle Garden and the West to these southern ports and the South. It is in this view of the system of the Erlangers that this section of the country sees great results and a degree of material progress and prosperity unparalleled in the growth and development of any country that has a history.—*Galveston News.*

Tide-water Receipts.

The quantity of flour, wheat, corn and barley left at tide-water from the commencement of navigation to the 31st ult., inclusive, during the years 1881 and 1882 was as follows:

	Flour. Bbls.	Wheat. Bush.	Corn. Bush.	Barley. Bush.
1881	1,300	1,218,600	3,333,900	48,300
1882	400	1,428,200	2,984,600	204,100
	Dec. 900	Inc. 209,600	Dec. 318,800	Inc. 155,900

By reducing the wheat to flour the quantity of the latter left at tide-water this year, compared with the corresponding period in 1881, shows an increase equal to 51,500 barrels flour.

The following comparative table shows the quantity of some of the principal articles of produce left at tide-water from the commencement of navigation to and including the 31st of May in the years indicated:

	1880.	1881.	1882.
Canal opened	April 20.	May 17.	April 11.
Flour, bbls.	1,300	1,300	400
Wheat, bush.	4,267,500	1,218,600	1,428,200
Corn, bush.	3,431,000	3,333,800	2,984,600
Barley, bush.	27,400	48,200	204,100
Rye, bush.	285,200	121,100	377,500
Oats, bush.	307,700	133,000	1,672,300
Malt, bush.	136,000	171,400	139,200

Baltimore and Potomac Railroad.

From the report of the Baltimore and Potomac Railroad Company, which was presented at the annual meeting of the stockholders, held in Baltimore on the 7th inst., we learn that the gross earnings from all sources for the year ending December 31, 1881, were $966,431.85, of which the Washington line and tunnel were $920,774.05, and the Pope's Creek line were $45,657.80, showing an increase of $176,284.48, of which the Washington line and tunnel were $172,313.66, and the Pope's Creek line were $3,970.82. The total expenses were $840,923.26, of which the Washington line and tunnel were $775,770.11, and the Pope's Creek line were $65,153,15, showing an increase of $208,260.07, of which the Washington line and tunnel were $204,632.54, and the Pope's Creek line were $3,627.53. The net earnings were, on the Washington line, $145,003.94; deduct loss on Pope's Creek line, $19,495.35—total net earnings, $125,508.59. The earnings increased about 22⅛ per cent.

The increased number of passengers carried was as follows: Through the tunnel, 109,453; Washington line, 120,805; Pope's Creek line, 3,037. Tonnage increase, 101,020, or 37¾ per cent.

The large increase of expenses is mainly attributed to the extension of a second track, to the erection of a car shed and improvements at the passenger station in Washington, and to the necessary expenditures at Calverton stock-yards.

The extension of the second track is favorably

progressing. The double track is now in use from Baltimore southward to Patapsco River, and from Washington northward to Wilson's—a total distance of 18 miles, or three-sevenths of the whole distance between Baltimore and Washington. In December last contracts were authorized for the graduation and masonry of the remaining 24½ miles between the Patapsco River and Wilson's, and the work has progressed as rapidly as the unfavorable weather permitted.

In addition to the new iron train shed, 112 feet wide, 496 feet long, at Washington, a beautiful mural tablet, commemorative of the assassination of the late President, has been placed in the ladies' reception room in this station, and a brass five-pointed star countersunk in the floor to mark the spot where Garfield fell. The cost of restoring the Long Bridge over the Potomac at Washington, carried away by the ice last winter, was $23,420; the iron bridge over the Patapsco cost $53,124.

Railroad Libraries.

One trunk line company is said to have recently placed small but well assorted libraries on some of its trains. As good books in such places serve the double purpose of keeping out the train boy and supplying better reading matter than the said boy usually selects to inflict upon his victims, the traveling public should be grateful. But why should not the company go further and not only put libraries on all the trains, but supply gum drops and prize packages also? It is quite true that these alleged luxuries are worthless, and very few people buy them anyhow, but this makes stronger the argument in favor of suppressing the tormentors who inflict them upon the attention of people who do not want them. If the keeper of a hotel should add to his income by authorizing a horde of peddlers to invade the rooms of his guests, he would speedily become a bankrupt. Why, then, should a railroad company establish a similar annoyance merely because it has a number of travelers temporarily in its power? Let every train carry its own books, gum drops and prize packages, to be taken only at will; then travel, losing half its terrors, will become twice as popular as now.—*N. Y. Herald.*

The Pintsch Light.

A special train, composed of two coaches and a postal car, left the depot of the New York, Lake Erie and Western Railroad Company, at Jersey City, on the 13th inst. at 6:15 P. M., bearing about 100 railroad and post office officials, invited by the Pintsch Lighting Company, to witness a trial of their lights. The inventor of the system is Julius Pintsch, of Berlin, Germany, who has placed it upon 9,000 cars and 250 locomotives in various parts of Europe. Its aim is to supply railways with gas-light supplied from reservoirs placed under each car and stored with hydro-carbon vapor under strong compression. This arrangement, as at present perfected, consists of a tubular receiver placed under each car, with a capacity of 344 feet of gas, under compression of 8½ atmospheres, or 127 pounds to the square inch. From this tubes ¼ of an inch in diameter run to the various burners. A regulator, consisting of an ingeniously weighted valve, prevents the gas from flowing too rapidly, and secures an even escapement, despite the varying pressure. The burners are of the fish-tail pattern, composed of steatite, and of about 1 foot capacity per hour. Of these, in the mail car, there were 13, each of 17 candle power (Bunsen's photometer), and in the other cars 4 groups of 5 burners each, of about the same power. The gas is manufactured by the decomposition of shale-oil refuse and fats generally, and consists mainly of oliplant gas and other heavy hydro-carbons. This is stored under a pressure of 10 atmospheres in reservoirs near the track, whence, through stout rubber tubes, the car receivers may be charged in from one to three minutes. The cost of this system may be seen from the following figures from the report of an English railway: Cost of plant, £12,000; cost of gas and repairs, per annum, £3,955; interest, £602. Cost of old gas system plant, £15,000; cost of gas and repairs, old system, £5,985; saving on Pintsch's sytem, £2,000.

The run was made from Jersey City to Turner's, 47 miles, in 1 hour and 16 minutes. The lamps were lighted 15 minutes betore starting, with a pressure in the reservoirs, as indicated by the gauge, of 8½ atmospheres. Among others on board were J. D. Ripley, W. K. Jewett, A. C. Humphreys, and Lucien L. Boyle, of the Pintsch Lighting Company; E. O. Hill, E. F. Bowen, and B. W. Spencer, of the Erie Rail road; R. C. Jackson, Superintendent of Railway Mail Service, and A. J. Miller, Chief Head Clerk of the Railway Mail Service; A. Lounsberry, Cashier New York post office; Gen. Barnie, President New Jersey Telephone Company; Manager Haines, of the Metropolitan Elevated Railroad; Maximilian Calm, Secretary New Orleans and Northwestern Railroad, and H. G. Shirley, of Providence. All expressed themselves highly delighted at the brightness and steadiness of the light. Mr. Miller said it was the only light he had ever seen that would meet the exigencies of the railway mail service. Mr. Jackson spoke guardedly, saying that the light during six week's test had undoubtedly distanced all others, and if it would stand the test of time it would be a great success. On the way homeward, it being dark, the light was seen to best advantage. A newspaper could be read with ease in any part of the day coaches, while the mail car was flooded with light. Examination of the gauge on reaching Jersey City showed that in four hours' run the pressure in the reservoir had been reduced only two-thirds of an atmosphere, leaving seven and two-thirds yet unused. The mail car in question has to run to St. Louis and back with one supply of gas. The invention is one calculated to work a revolution in railway lighting, as it is cheap, furnishes a brilliant and constant light, is not liable to damage, and, in case of accident to the train, is harmless.

A new excursion steamer called the "Sam Sloan," in honor of the president of the Delaware and Lackawanna Railroad Company, was launched on Monday at Noank, Conn., and will be used this summer by Starin's Transportation Company on the Glen Island Route. The dimensions of the steamer are: Length of keel, 215 feet; length over all, 230 feet; beam, 50 feet; hold, 9 feet; cylinder, 50 inches; stroke, 12 feet. She is 650 tons burden and has accommodations for 1,400 passengers.

Commerce of New York.

The foreign imports at New York in the month of May were :—

	1880.	1881.	1882.
Ent. for cons.....	$17,706,044	$16,008,187	$21,156,155
Do. for warehousing	14,278,907	8,471,078	11,465,308
Free goods.....	11,115,579	9,048,838	11,375,068
Specie and bullion..	547,797	1,409,573	245,739
Total ent. at port....	$43,738,327	$34,938,276	$44,242,270
Withdrawn from warehouse.....	5,325,501	9,070,526	7,322,236

The foreign imports at New York for five months from January 1, were :—

	1880.	1881.	1882.
Ent. for cons.....	$105,985,402	$88,595,499	$111,896,913
Do. warehouse....	53,639,273	37,505,950	43,619,297
Free goods.....	54,878,852	51,079,878	55,286,562
Specie and bullion.	3,600,338	29,419,949	1,720,852
Total ent. at port..	$218,103,857	$206,601,276	$212,523,724
Withdrawn from warehouse	32,879,645	39,868,737	36,879,322

The foreign imports at New York for ten months ending May 31, were :—

	1880.	1881.	1882.
Six months ending January 1.....	$266,228,601	$280,770,515	$252,275,460
January.....	40,897,154	36,085,359	40,135,673
February.....	40,165,384	34,157,263	40,414,146
March.....	45,598,729	48,580,761	45,383,384
April.....	47,704,263	52,839,617	42,348,251
May.....	43,738,327	34,938,276	34,242,270
Total nine mos....	$484 332,458	$487,371,791	$464,799,184
Deduct specie.....	82,343,501	100,014,485	28,009,250
Total mdse.....	$401,988,957	$387,357,306	$436,789,934

Received for Customs at the Port of New York :—

	1880.	1881.	1882.
6 mos. ending Jan. 1.....	$59,271,080 94	$69,593,542 80	$75,083,478 15
In Jan.....	11,960,677 78	10,572,559 15	13,387,515 96
In Feb.....	12,254,602 24	11,217,766 87	13,585,053 25
In March....	14,469,557 65	13,122,964 03	13,999,138 76
In April.....	11,901,071 43	11,678,760 93	11,906,105 45
May.....	9,752,873 54	11,055,935 39	11,981,893 88
Total 11 mos	$119,609,763 58	$127,241,529 17	$139,943,184 65

The exports from New York to foreign ports for the month of May, were :—

	1880.	1881.	1882.
Dom. produce.....	$34,681,661	$29,164,091	$24,285,229
For. free goods.....	106,308	638,364	255,563
Do. dutiable.....	522,034	784,110	797,679
Specie and bullion...	473,769	573,358	14,055,027
Total exports.....	$35,783,772	$31,159,923	$39,393,498
Do. exclusive of specie.....	35,310,003	30,586,565	25,338,471

The exports from New York to foreign ports for five months from January 1, were :—

	1880.	1881.	1882.
Dom. produce.....	$149,954,069	$148,404,192	$124,975,225
For. free goods.....	1,060,133	4,569,613	2,270,174
Do, dutiable.....	1,899,522	2,688,082	3,059,722
Specie and bullion.	3,706,056	5,303,421	30,096,110
Total exports.....	$156,619,780	$160,945,308	$160,401,231
Do. exclusive of specie.....	152,913,724	155,641,887	130,305,121

The exports (exclusive of specie) from New York to foreign ports for eleven months of the fiscal year were :—

	1880.	1881.	1882.
Six months ending January 1.....	$197,760,586	$220,839,350	$187,136,859
January.....	25,416,566	30,264,919	27,848,734
February.....	23,891,148	28,136,303	25,735,057
March.....	33,626,459	36,290,685	25,588,893
April.....	34,669,548	30,363,415	25,793,966
May.....	35,310,003	30,586,565	25,338,471
Total produce....	$350,674,310	$376,481,237	$317,441,980
Add specie.....	7,039,122	9,952,822	36,367,159
Total exports.....	$357,713,432	$386,434,059	$353,809,139

The Erie and Western Transportation Company operates seven large iron propellers, ten large wooden propellers and three sailing-vessels, and has three elevators in Erie and one in course of construction in Buffalo, with a capacity of 800,000 bushels. The tonnage carried last year was 598,000 tons, including 10,232,000 bushels of grain and 753,000 barrels of flour.

[From our Boston Correspondent.]

OUR BOSTON LETTER.

Being a Review of Events of the Week.

THE NEWTON CIRCUIT RAILROAD.

SUCH movements have been made during the last ten days as will secure the construction of this much-talked-of road. The New York and New England owns a piece of road called the Woonsocket Branch, to which access has to be gotten via the Boston and Albany, and from their depot here. This branch runs to Woonsocket, R. I., passing through Newton Center, Newton Highlands and Newton Upper Falls. The City of Newton is divided into a number of villages, one might say, under a general city government. A portion of these Newtons have been without direct railroad communication with Boston, and it has long been the wish of the inhabitants of these places to remedy this; and it now looks as if they would be successful. Negotiations between the Boston and Albany and the New York and New England railroads have been pending for some time for the sale of a portion of this Woonsocket division to the Boston and Albany, to form the nucleus of the Newton Circuit Railroad, and at present the sale is so far along, that the amount to be paid has been left to Commissioner Fink, as the parties interested could not agree on a price. As soon as this is settled, the Boston and Albany can go ahead and build this road without waiting for the consent of the Railroad Commissioners. The portion to be sold is 5½ miles long, and extends from Brookline to a point between the Highlands and the Upper Falls. The New York and New England want $100,000 per mile, and the Boston and Albany is only willing to pay $300,000 for the whole thing.

The representative of the JOURNAL called on the Railroad Commissioners to see what were the plans for this road, and obtained the following, as filed by the incorporators: The road will commence at Brookline, connecting with the Boston and Albany Railroad, extend through Brookline to Newton, thence to Newton Highlands; from that point to Newton Lower Falls, and from there to Riverside Station on the Boston and Albany. The total length will be eight miles, and it will be double-tracked, and will bring all parts of Newton, which are among the finest of Boston's suburbs, into close communication with the city, opening a large amount of finely located real estate to the market. The road will be operated by the Boston and Albany. The following gentlemen will act as directors: E. B. Haskell, R. M. Pulsifer, L. Saltonstall, Charles P. Clark, H. Cousens, J. F. C. Hyde, William C. Strong, J. N. Bacon, William Marcy, William E. Webster, George Hyde and Charles C. Barton, all of Newton. The capital stock is $500,000.

A comparison of the cost per mile of the various roads entering Boston will be of interest. The Boston and Albany cost $100,000; Boston and Providence, $77,000; Boston and Lowell, $100,000 (this large figure for so short a road was caused by their passenger depot, which cost, with the land, $600,000); Fitchburg, $65,000; Boston and Maine, $90,000. There is no doubt but what most of these roads, if constructed at the present day, could be built and equipped for a much less figure per mile.

The committee appointed to raise funds for the completion of the Massachusetts Central Railroad to Ware, from which it is hoped that business enough can be obtained to make the road pay at least its operating expenses, are hard at work. The cost of this will be $150,000, and it is proposed to ask the bondholders to contribute $50 for each $1,000 of bonds held by them. It is said that Mr. Munson, the contractor, will contribute $20,000 towards this. He holds a large mortgage on the road and is anxious to have it on a paying basis.

The fastest time yet between Boston and New York was made during the last week by a train on the Shore Line, via the Boston and Providence Railroad. The run was made in 5 hours and 54 minutes; the distance is 234 miles. This is quick time, and the Boston and Albany will have to look to the laurels of its six-hour fast train, or it will get left in the shade. There are those who believe that the run between these two cities will be made in three hours, and that in less than ten years, too. The call seems to be all around for quicker time, and it is noticeable that whenever a fast train has been put on, it has always run full and been the most popular train of the road on which it is placed.

The number of cars which came into New England through the Hoosac Tunnel, in May, was 4,500, which was some 228 less than for the same month of last year. When the dullness of the export business and the high prices prevailing on grain and cattle in the West are taken into consideration, this is much less of a decrease than might reasonably be expected.

The New York and New England Railroad reports that it brought around its Harlem transfer, during May, 3,076 loaded freight cars and 85 emptys, coming into New England, and that it sent West, via this route, 2,552 loaded and 342 empty cars. At its new connection with the Erie, and the Pennsylvania coal fields, at Newburg, they received 2,144 loaded cars and 23 empty ones to come East, delivered; and to be sent West, 557 loaded and 1,647 emptys. The east-bound traffic from the West having been so light during May, a large per cent of these 1,647 emptys must have been coal cars returning home. These figures show that we are getting our share of business.

C. J. King, general traveling agent of the Boston and Maine Railroad, has been offered the same position on the Boston, Concord and Montreal, and will resign to accept it.

President Strong, of the Atchison, Topeka and Santa Fe Railroad, has secured George O. Manchester to assist him, in place of F. L. Parker, who went to Mexico. Mr. Manchester has heretofore been assistant to the general manager of the road in Kansas, and has moved to Boston and entered upon his duties.

The Boston and Albany report the largest passenger business for years for this season. They secured 800 emigrants from a steamship which arrived on the 10th.

Out of 10,875 cars delivered by the Boston and Albany Railroad to the New York Central during May, 9,072 of them came from Boston; and out of 9,942 received from them, 7,216 came to points on the road east of Worcester.

The Boston and Albany Railroad officials are cultivating an eye for the beautiful, by issuing an order forbidding patent medicine advertisers and the makers of cigarettes, etc., from plastering every fence, wall and building in sight of the track, over with advertisements. This looks like a sensible idea, but the question now suggests itself, Will they send a man along the road to paint out those already there? If not, this generation will lose the benefit of the order. "A word to the wise," etc.

The New York and New England Railroad are doing a large business in strawberries this year. A train arriving here last Sunday had some ten car-loads attached.

The Fitchburg Railroad is experimenting with a dump-car, that can easily be shaken by two men. It is a patent of F. P. Johnson, of Waltham. Assistant Superintendent Turner speaks of it as a valuable invention. The inventor intends introducing it elsewhere.

The Eastern Railroad of New Hampshire will pay a dividend of 2¼ per cent on the 15th.

The Connotton Valley Railroad managers announce that they have purchased 3,800 tons of steel rails.

The Old Colony Railroad has declared a dividend of $3.50 per share.

The New York and New England Railroad reports an increase of $63,558.16 in its earnings for May of this year, above those of the same month of last year.

The story that the Eastern Railroad is to be leased by the Boston and Maine, is, for the fifth or sixth successive year, abroad in our midst, and with few believers, as usual. It would require a 6 per cent guarantee to the bondholders of the Eastern for that to be done, which is an undertaking that few would want to shoulder. The rumor that the Maine Central is to have the Eastern is also pronounced by the officials to be false.

The Boston and Maine Railroad has about completed its double track through to Scarboro, Me. It will not be long before their entire line from Boston to Portland will be laid with a good double track of steel rails.

The Eastern Railroad is only waiting for a few hot days to put its mountain and seashore cars into use. This road has just completed some twenty new and handsome passenger cars, at a cost of from $4,000 to $5,000 each. Their passenger traffic is among the best of the list, they standing third in the number of passengers carried by the Boston roads during the last year.

The new president of the Boston, Hoosac Tunnel and Western Railroad, Hon. Ginery Twitchell, is actively engaged in looking over the road and its connections. President Stearns, of the Fitchburg, has been looking over the new Saratoga branch of the Boston, Hoosac Tunnel and Western with him. CURTIS.

BOSTON, June 13, 1882.

AT a meeting in Baltimore on the 8th inst., of the Committee of Management of the Baltimore and Ohio Railroad Employes' Relief Association, the most comprehensive and liberal arrangements were made for receiving on deposit the savings of the company's employes, and allowing them four per cent interest, and for loaning them money for the purpose of purchasing or improving homesteads at a uniform rate of six per cent.

The Stock Exchanges and Money Market.

New York Stock Exchange.

Closing Prices for the week ending June 14.

	Th.8.	F.9.	Sat.10.	M.12.	Tu.13.	W.14.
Adams Express	138	.....	.....	.....	.....	137½
Albany and Susq.	.....	.....	.....	.....	.....	.....
1st mortgage	.....	.....	.....	.....	.....	.....
2d mortgage	.....	.....	.....	.....	.....	.....
American Express	95¾	.....	.....	92	92⅜	.....
Burl., C. R. & Nor.	70	.....	67	.....	.....	.....
1st mortgage 5s	99¼	99	98⅞	99	.....	.....
Canada Southern	47	45¾	47	47⅜	48¾	50
1st mortgage guar	94½	.....	95	95⅜	95⅜	.....
Central of N. Jersey	67⅞	67⅝	67	69	69¾	70¾
1st mort. 1890	.....	.....	.....	.....	.....	.....
7s, consol. ass	110	.....	.....	.....	110½	.....
7s, convertible ass.	108	.....	.....	.....	107½	.....
7s, Income	.....	.....	.....	.....	.....	.....
Adjustment	104¾	.....	104¾	.....	105	.....
Central Pacific	87¾	87⅜	87½	88⅝	88⅝	90¼
6s, gold	117½	.....	.....	117¼	117⅛	.....
1st M. (San Joaq)	.....	.....	.....	110	.....	.....
1st M. (Cal. & Or.)	.....	.....	.....	.....	.....	.....
Land grant 6s	.....	.....	.....	.....	.....	.....
Chesapeake & Ohio	.....	20¾	20¼	20⅛	20⅛	21⅜
1st pref	.....	.....	.....	28	30	.....
2d pref	.....	23	.....	.....	23	23¾
1st mort., series B	.....	.....	.....	77¾	.....	78½
Chicago and Alton	131	131½	.....	130½	.....	132½
Preferred	.....	.....	.....	.....	.....	.....
1st mortgage	.....	.....	.....	.....	.....	.....
Sinking Fund	.....	.....	.....	111½	.....	.....
Chi., Bur. & Quincy	128¼	127½	127¾	129¼	130¼	130¼
7s, Consol. 1903	131	.....	132	.....	.....	.....
Chi., Mil. & St. Paul	109⅝	108⅞	108¾	109½	109⅞	110⅞
Preferred	124⅞	124	123	124⅜	123½	126
1st mortgage, 8s	.....	.....	.....	.....	.....	.....
2d mort., 7 3-10s	.....	.....	.....	.....	.....	.....
7s, gold	.....	.....	.....	.....	.....	.....
1st M. (La. C. div)	.....	.....	.....	.....	.....	.....
1st M. I. & M. div.)	.....	.....	.....	.....	.....	.....
1st.M. (I. & D. ext.)	.....	.....	.....	.....	.....	.....
1st M. (H.&D. div.)	.....	.....	.....	.....	117½	117¾
1st M.(C. & M.div.)	.....	.....	.....	.....	.....	.....
Consolidated S. F.	121¾	.....	121¼	120½	121½	121½
Chi. & Northwestern	130	129¾	129½	129⅞	130⅜	128¾x
Preferred	143⅛	143¼	.....	143⅜	.....	142¾x
1st mortgage	.....	.....	.....	.....	.....	.....
Sinking Fund 6s	.....	.....	111¼	.....	.....	.....
Consolidated 7s	.....	.....	133¼	.....	.....	.....
Consol. Gold bo'ds	.....	.....	.....	.....	.....	.....
Do. reg	125	.....	.....	.....	123½	.....
Chi., R. Isl. & Pac.	129¼	129¼	128⅜	129½	130⅛	130⅜
6s, 1917, c	129½	129½	.....	.....	.....	.....
Clev.,Col.,Cin.&Ind.	66⅛	65½	....	68	70¾	73¼
1st mortgage	.....	.....	.....	.....	.....	.....
Clev. & Pittsburg gr.	137	.. ..	.....	137	.....	.....
7s, Consolidated	125½	.....	... .	.....	.....	.....
4th mortgage	.....	.....	.....	.....	.....	.....
Col.,Chi.,& Ind. Cent	7⅛	7⅛	7	7¼	8	8
1st mortgage	120	.....	.....	.....	.....	.....
2d mortgage	.....	.....	.....	.....	.....	.....
Del. & Hud Canal.	103⅞	103¼	.....	103⅞	104	105¼
Reg. 7s, 1891	.....	.....	.....	.....	117	116
Reg. 7s, 1884	107	.....	107	.....	107	...
7s, 1894	.....	.....	.....	.....	.....	.....
Del.,Lack.& Western	119¾	119¼	119	120	121	123⅝
2d mortgage 7s	.....	.....	.....	.....	.....	.....
Consol. 1907	.....	.....	.....	.....	.....	.....
Erie Railway	...	.....	.....	.....	.....	.....
1st mortgage	.....	.....	.....	.....	.....	.....
2d mort. 5s, ext.	.. .	.....	.....	.....	.....	.....
3d mortgage	.....	105¾	.....	.....	. .	105¼
4th mort. 5s, ext.	.....	.....	.....	.....	.....	.....
5th mortgage	.....	.....	.....	.....	.....	.....
7s, Consol. gold	126½	.....	126½	120¼	.....	126½
Great West. 1st mort	.....	.....	.....	...	.....	.....
2d mortgage	.....	.....	98	.....	.....	98
Hannibal & St. Jo.	.....	.....	.....	.....	.....	.....
Preferred	79	79	78	77¼	77½	80⅛
8s, Convertible	.....	.....	.....	.....	.....	.....
Houston & Tex. Cen	.....	.....	.....	69½	69¾	69¼
1st mortgage	112	....	.....	.....	.....	.....
2d mortgage	.....	.....	.....	.....	.....	.....
Illinois Central	133	131⅞	132	133¼	133	134½
LakeShore&MichSo	101⅛	101½	101⅞	104⅝	104⅞	107⅞
Consol. 7s	.....	.....	.....	.....	.....	.....
Consol. 7s, reg	.....	126	.....	.....	.....	.....
2d Consolidated	.....	.....	.....	.....	.....	.....
Leh. & W. B. con.ass	100	.....	.....	100	.....	101
Long Dock bonds	.....	.....	.....	.....	116	.....
Louisville & Nash.	65¾	62¾	62½	64¾	65¼	68
7s, Consolidated	.....	.....	.....	.....	118	.....
Manhattan	58¾	57	57	.....	57	57
1st pref	.....	91	.....	.....	.....	.....
Met. Elevated	.....	.....	.....	. ...	.....	.....
1st mortgage	102½	102½	102	.....	102½	103
Michigan Central	85⅝	84¾	85⅛	86⅞	87⅜	88½
7s, 1902	.....	123½	.....	.....	.....	124½
Morris & Essex	.....	125½	125	122½	.....	121½
1st mortgage	.....	... .	....	.....	.....	.....
2d mortgage	.....	... .	.....	.....	.....	.....
7s of 1871	.....	.....	.....	.....	.....	.....
7s, Convertible	...	.. .	.....	.....	.....	.....
7s, Consolidated	121⅛	.....	. ...	121½	.....	.....
N.Y. Cen. & Hud. R.	127¾	127⅞	127¾	129¼	129½	131
6s, S. F. 1883	101⅜	.....	.....	.....	101½	....
6s, S. F., 1887	... .	.....	.....	.....	.....	.....
1st mortgage	..	133½	.....	.....	.....	135½
1st mortgage, reg.	.....	.....	.....	.....	.....	... .
N. Y. Elevated	.....	.....	.....	.....	.....	.....
1st mortgage	. ...	.....	.....	117⅝	.....	... 117½
N. Y. & Harlem	.....	.....	.....	.....	.....	.....
Preferred	.....	.....	.....	.....	.....	.....
1st mortgage	.....	.....	.....	.....	.....	.....
1st mortgage, reg	.....	.....	.....	.....	...	132
N. Y., Lake Erie & W	34¼	33¾	33¾	35⅞	35⅛	36
Preferred	69½	.....	.....	70	72	.....
2d Consolidated	89	88¾	88⅞	90½	92⅛	94⅛
New 2d 5s fund	.....	.....	.....	.....	89⅛	90¼
N.Y.,N.Hav'n&Hart	.....	.....	.....	.....	.....	.....
North Mo. 1st mort	..	.....	.....	.....	.....	.....
Northern Pacific	40¾	39¾	39⅛	40	39⅞	40⅛
Preferred	77⅜	77	76	76⅞	76⅞	78⅛
Ohio & Mississippi	.....	31	30⅛	32⅛	.....	.....
Preferred	.....	.....	.....	.....	.....	.....
2d mortgage	... .	.....	120½	.....	.....	.....
Consolidated 7s	.....	.....	.....	.....	.....	.....
Consol. S. Fund	.....	.....	118½	.....	.....	.....
Pacific Mail S. S. Co	40	40	39⅛	40	39¾	42⅛
Pacific R. R. of Mo.	.....	.....	.....	.....	.....	.....
1st mortgage	.....	.....	.....	.....	.....	.....
2d mortgage	.....	.....	.....	.....	.....	.....
Panama	.....	.....	.....	.....	.....	.....
Phila. & Reading	54⅛	53⅛	53⅛	54⅝	55	58¾
Pitts,Ft.W.&Chi.gtd	. ...	.....	.....	.....	.....	.....
1st mortgage	.....	.....	140½	.....	.....	140½
2d mortgage	.....	.....	.....	.....	.....	.....
3d mortgage	.....	.....	131	.....	.....	.....
Pullman Palace Car	118⅞	118⅞	119	117	119	121¼
Quicksil'r Min'g Co	8½	8½	8½	.....	.....	8¾
Preferred	.....	.....	.....	.....	.....	.....
St. Louis & San Fran	.....	35	34	.....	34	36
Preferred	46	46½	.....	46	46½	47½
1st Preferred	.....	.....	. ...	65	.....	85
St. L., Alt'n & T. H.	23	23¼	.....	.....	.....	25¾
Preferred	....	.....	.....	.....	.....	.....
1st mortgage	.....	.....	.....	.....	.....	.....
2d mort. pref	.....	.....	.....	.....	.....	.....
Income bonds	.....	.....	.....	.....	.....	.....
St. L., Iron Mt. & S	.....	.....	.....	.....	.....	.....
1st mortgage	.....	. ...	.....	.....	117	.....
2d mortgage	106½	.....	.....	.....	.....	.....
Toledo and Wabash.	....	.....	.....	.....	.....	.....
1st mortgage	.. ..	.....	.....	.....	.....	.....
2d mortgage	.....	.....	.....	.....	98⅝	99½
7s, Consolidated	.....	.....	.....	.....	.....	.....
St. Louis Division	.....	.....	.....	.....	.....	.....
Union Pacific	109⅛	103½	107X	108⅛	108⅝	110⅛
1st mortgage	.....	118½	118¼	118⅜	118¼	118½
Land Grant 7s	.....	.....	.....	.....	.....	.....
Sinking Fund 8s	.....	121½	.....	.....	.....	.....
United States Ex	70	.....	.....	.....	71	.....
Wabash, St. L.& Pac	25¾	25⅛	24½	25½	25¾	27⅛
Preferred	48⅜	46⅞	47⅛	48⅜	49⅜	50⅝
New mort. 7s	.....	.....	.....	.....	.....	.....
Wells-Fargo Ex	130	.....	.....	.....	128	.....
Western Pacific b'ds	.....	.....	.....	.....	.....	115
Western Union Tel.	82¼	82	82	82⅜	83⅜	84⅜
7s., S.F conv., 1900	.....	.....	.....	.....	.....	.....
FEDERAL STOCKS :—						
U. S. 4s, 1907, reg	119½	119½	.....	.....	119⅜	.....
U. S. 4s, 1907, coup.	.....	121½	120⅝	.....	.....	.....
U. S. 4½s, 1891, reg.	.....	.....	.....	.....	.....	.....
U. S. 4½s, 1891, coup	114⅛	114⅛	. ...	114⅛	114½	.....
U. S. 5s, cont'd at 3½	...	.....	.....	.....	101⅜	.....
U. S. 6s cont'd at 3½	.....	... .	.....	.....	.....	.....
Dt. of Col. 3-65s, reg	.....	.....	.....	.....	.....	.....
Dt. of Col.3-65s,coup	.....	.....	.....	.....	.....	.....

Boston Stock Exchange.

Closing Prices for the Week Ending June 14.

	Th.8.	F.9.	Sat.10.	M.12.	Tu.13.	W.14
Atch.,Top.&San.Fe.	84⅛	83½	83⅝	84	83⅞	85¼
1st mortgage	.....	.....	.....	.....	118⅞	118¼
Land Grant 7s	.....	.....	.....	.....	.....	.....
Boston & Albany	.....	.....	164½	165	.....	165
Boston and Lowell	....	103¼	.....	.....	.....	.....
Boston & Maine	144	144¾	.....	145	.....	145
Boston& Providence	.....	.....	.....	.....	.....	156½
Bos'n,Hart.& Erie7s	47	.....	.....	47	47½	48
Burl.& Mo.R.L.G.7s	.....	.....	.....	.....	.....	.....
Burl.& Mo.R.in Neb	.....	.....	.....	.....	.....	.....
6s, exempt	....	.....	.....	.....	.....	112
8s	.....	.....	.....	.....	.....	.....
Chi.,Burl. & Quincy	128	127¾	128	128½	129	130
Cin.,Sand&Clev($50)	24⅝	25	.....	25⅛	25⅝	26
Concord ($50)	.....	98	.....	.....	.....	.....
Connecticut River	.....	.....	.....	.....	.....	.....
Eastern	36	. ...	36	36	36¼	37¾
New 4½ Bonds	108	.....	.....	.....	.....	.....
Fitchburg	128¼	.....	.....	128¼	.....	.....
N.Y. & New England	45	....	45	45	45¼	45⅛
7s	114	.....	.....	.....	114⅛	.....
Northern N. H.	.....	108	.....	108	.....	.....
Norwich&Worcester	.....	.....	.....	.....	.....	.....
Ogden & Lake Cham	.....	.....	.....	.....	.....	.....
Old Colony	133½	.....	.....	.....	133½	.....
Ph.,Wil.&Balt.($50)	.....	.....	.....	.....	.....	.....
Portl'd,Saco & Ports	....	.....	.....	.....	.....	.....
Pueblo & Ark Val 7s	.....	.....	.....	113¾	....	...
Pullman Palace Car	.....	119	.....	120	.....	.....
Union Pacific	109¾	108¼	109¼	108x	108⅜	110
6s	...	.....	.....	116	116	.....
Land Grant 7s	....	.....	.....	.....	.....	.....
Sinking Fund 8s	.....	119	.....	119	119¼	.....
Vermont & Mass	.....	134	.....	.....	.....	.....
Worcester & Nashua	.....	.....	.....	.....	.....	.....
Cambridge (Horse)	.....	.....	.....	.....	.....	.....
Metropolitan(Horse)	.....	.....	.....	.....	.....	.....
Middlesex (Horse)	.....	.....	.....	.....	.....	.....
Cal.&Hecla Min'gCo	245	245	246	248	.....	248
Quincy	.....	53	53	54	.....	....

Philadelphia Stock Exchange.

Closing Prices for the Week Ending June 13.

	W.7.	Th.8.	F.9.	Sat.10.	M.12.	Tu 13.
Allegh'y Val. 7 3-10s	.....	.....	.....	.....	.....	.....
7s, Income	50	50	.....	.....	50	.....
Buff., Pitts & West.	14⅜	14⅝	15	14⅞	15⅛	14¼
Camd'n & Am. 6s, '83	.....	.....	.....	.....	103	.....
6s, 1889	.....	.....	.....	.....	.....	.....
Mort. 6s, 1889	113	.....	.....	.....	.....	.....
Camden & Atlantic	.....	.....	.....	.....	.....	.....
Preferred	.....	.....	.....	.....	40½	.....
1st mortgage	.....	.....	.....	.....	.....	.....
2d mortgage	.....	.....	.....	.....	.....	.....
Catawissa	.....	.....	.....	.....	....	20
Preferred	53	.....	.....	.....	.....	.....
2d pref	.....	.....	.....	.....	.....	.....
7s, new	.....	.....	.....	.....	.....	.....
Del. & Bound Brook	.....	.....	.....	.....	.....	.....
7s	.....	125	.....	.....	.....	.....
Elmira&Williamsp't	.....	.....	.....	.....	.....	.....
Preferred	.....	.....	.....	.. .	.....	.....
Hunt. & B. Top Mt.	.....	.....	12	.....	.....	.....
Preferred	....	.....	.....	.....	.....	.....
2d mortgage	.....	.....	.....	.....	.....	.....
Lehigh Navigation	35¼	35⅝	35⅝	35⅞	36¼	36⅛
6s, 1884	.....	.....	103¾	103¾	.....	.....
Gold Loan	.....	112	.....	.....	112⅛	112½
Railroad Loan	.....	.. ..	.....	.....	116	.....
Conv. Gold Loan	.....	.....	.....	.....	. ...	.....
Consol. Mort, 7s	.?..	.....	....	116	.....	.....
Lehigh Valley	59	59	58½	.....	59	58¾
1st mort. 6s, coup	120	.....	.....	.....	.....	.....
1st mort. 6s, reg	120	120	.....	.....	.....	.....
2d mort. 7s	.....	.....	.....	.....	.....	.....
Consol mort. 6s	.....	.....	.....	120¾	121	.....
Consol.mtg.6s,reg	....	.....	.....	....	.....	.....
Little Schuylkill	...	.....	.....	.....	.....	.....
Minehill&Sch.Hav'n	63	63	63	.....	62½	62⅛
North Pennsylvania	.....	.....	62¾	.....	62¾	63
1st mortgage 6s	.....	.....	.....	.....	. ..	.....
2d mortgage 7s	.....	.....	.....	.....	.....	.....
Genl. mtg.7s,coup	.....	.....	.....	.....	.....	.....
Genl. mtg. 7s, reg	.....	.....	.....	.....	.....	... .
Northern Central	44	45¼	44¼	.....	.....	.....
5s	.....	.....	.....	.....	.....	.....
Northern Pacific	40¾	40⅝	40¼	39⅛	40	40¼
Preferred	77⅝	77¾	77	76	76⅞	76⅝
Pennsylvania R. R.	54¾	55⅛	55	54⅞	55¾	56⅜
1st mortgage	.....	.....	.....	.....	.....	.....
Gen'l mort	124½	.....	.....	.....	.....	.....
Gen'l mort reg	123½	.....	.....	.....	.....	.....
Consol. mort. 6s	.....	.....	.....	.....	.....	.....
Consol. mort. reg	.....	.....	.....	.....	.....	...
Pa. State 5s, new	118	.....	.....	.....	118½	118½
do 4s, new	.....	.....	.....	.....	.....	.....
do 3½s, 1912	.....	.....	.....	.	.....	.....
Phila. & Reading	26⅝	27	26⅛	26¾	27¼	27⅜
1st mortgage 6s	.....	.....	.....	.....	.....	.....
7s of 1893	.....	.....	.....	.....	.....	.....
7s, new convert	.....	.....	....	....	.....	.....
Consol. mort. 7s	.....	.....	.....	.....	124⅛	123
Consol. mort. reg	124	.....	.....	.....	.....	.....
Gen'l mort. 6s	.....	97	96¾	97	97¼	97⅛
Def.Income bonds	....	.....	.....	.....	.....	.....
Philadelphia & Erie	.....	.....	.....	.....	.....	.....
1st mortgage 5s	102½	.....	.....	.....	102½	102¾
2d mortgage 7s	117	.....	.....	.....	117	.....
Pittsb.,Cin.&St.L.7s	.....	.....	.....	.....	119	.....
Pitts.,Tit.&Buff. 7s,	.....	.....	.....	.....	.....	.....
Schuylkill Navi't'n.	. ..	.. ..	.. ..	.....	.....	.....
Preferred	.....	.....	12	.....	.....	12½
6s, 1895	.....	.....	.....	.....	.....	.....
6s, 1882	.....	.....	.....	.....	.....	.....
United Co. of N. J.	187½	.....	187½	.....	187⅜	.....
Hestonville, (Horse)	.....	.....	.....	.....	.....	.....
Chestnut&Wal.(do)	.....	.....	.....	.....	.....	.....

Baltimore Stock Exchange.

Closing Prices for the Week Ending June 13.

	W.7.	Th.8.	F.9.	Sat.10.	M.12.	Tu.13.
Baltimore & Ohio..	.....	.....	.....	.....	.....	193
6s, 1885.....	.....	.....	.....	.....	106¾	.....
Central Ohio ($50)..	.....	.....	.....	.....	.....	.....
1st mortgage.....	.....	.....	.....	.....	.....	.....
Marietta & Cincin'ti	.....	.....	.....	.....	.....	.....
1st mortgage, 7s..	.....	.....	.....	.....	124½	.....
2d mortgage, 7s..	.....	.....	.....	.....	.....	.....
3d mortgage, 8s..	.....	53½	.....	.....	.....	.....
Northern Cen. ($50)	44	45¼	44¾	.....	44¾	.....
2d mort., 6s 1885..	.....	.....	.....	.....	.....	.....
3d mort., 6s, 1900.	.....	.....	.....	.....	.....	.....
6s, 1900, gold.....	.....	.....	.....	.....	.....	.....
6s, 1904, gold.....	.....	.....	.....	.....	.....	.....
Pitts.& Connellsv.7s	.....	.....	.....	.....	.....	.....
Virginia 6s, Consol.	61	61½	61	61⅛	60⅝	60½
Consol. coupons..	63½	.....	.....	.....	.....	.....
10 40 bonds.....	42¾	.....	42½	42¼	40	.....
Def'd Certificates.	.....	.....	.....	.....	.....	.....
Western Maryland..	.....	.....	.....	.....	.....	.....
1st M.,end.by Balt	.....	.....	.....	.....	.....	.....
2d M. do	.....	.....	.....	.....	.....	.....
3d M., do	.....	.....	.....	.....	.....	.....
1st M.,unendors'd	114	.....	.....	.....	.....	.....
2d M.,end.WashCo	.....	.....	.....	.....	.....	.....
2d M., preferred..	.....	.....	.....	.....	.....	.....
City Passenger R R.	.....	.....	.....	.....	43	.....

London Stock Exchange.

	Closing Prices			
	June 2.		May 26.	
Baltimore & Ohio 5s, 1927.....105	107		107	109
Central of N. J., $100 shares.... 93	98		93	98
Do. consol. mort.....112	115		112	115
Do. Income Bonds..... 93	97		93	97
Det.,G'd Haven & Mil. Equip bds115	117		115	117
Do.Con.M.5p.c.,till'83aft'r6p.c112	114		112	114
Illinois Central $100 shares.....137	139		137	139
Lehigh Valley Cons. mortgage..115	119		115	119
Louisville & Nashville mort 6s. 99	101		99	101
Do. capital stock $100 shares. 76	78		75	77
N. Y. Cent. & Hud. R. mt. bds..135	138		134	136
Do. $100 shares.....130	132		129	131
Do mort. bonds (stg.).....124	126		124	126
N.Y.,Lake Erie & West.,$100 shs 35½	36		35¾	36¼
Do. 6 p. c. pref. $100 shares .. 72	75		72	74
Do. 1st Con. Mort. bds (Erie) .128	130		128	130
Do. do. Funded Coupon bds.124	126		124	126
Do. 2d Consol Mort. bonds... 93	95		93	95
Do. do. Funded Coupon bds.. 91	93		92	94
N.Y.,Pa.& Ohio 1st mort. bonds. 45½	46½		45½	46½
Do. Prior Lien bds (sterling)..103	108		103	108
Pennsylvania, $50 shares..... 57⅛	57		58	58⅛
General Mortgage.....122	126		122	126
Philadelphia & Reading $50 shs 28¼	28¾		28½	29
General Consol Mortgage.....115	117		118	120
Do. Improvement Mortgage..102	104		102	104
Do.Gen.Mtg.'74,ex-def'd coup. 89	101		99	101
St. L. Bridge 1st mort. gold b'd.125	127		125	127
Do. 1st pref. stock..... 98	102		98	102
Union Pacific 1st. mtg 118	120		117	119
Wabash, St. L. & P. $100 shs..... 29	30		29	31
Do. $100 pref. shares..... 52	54		53	55
Do. gen. mort. bonds..... 81	83		83	85

AMERICAN RAILROAD JOURNAL

Financial and Commercial Review.

THURSDAY EVENING, June 15, 1882.

DURING the morning hours the quotations for call loans were 2@3 per cent, for time loans 4@5 per cent, and for prime mercantile paper 4½@5½ per cent. In the afternoon the rate was 2½ per cent, and at the close 2 per cent.

The actual rates for prime bankers' sterling were 4.89@¼ and 4.86¼@⅛, with cables 4.89⅛@¾, and prime commercial bills 4.85@¼. The actual rates for continental bills are as follows: Francs, 5.18⅛@5.17½ and 5.15@5.14⅜; Marks, 95@⅛ and 95¾@⅞, and Guilders 40¼ and 40⅛.

It is the fashion in this country to form telegraph companies, most of which eventually become absorbed by the Western Union, or its promoters; therefore no surprise is caused by a telegram received from Chicago on the 11th inst. announcing that a new telegraph company, with a capital of $21,000,000, has been organized, that work has actually begun on its lines in the east, and that they are to be pushed rapidly west, connecting all the principal cities. Elisha Gray, the electrician, gives the following facts in regard to it. The principal stockholders are George B. Roberts and S. B. White, of New York; John B. Alley and ex-Collector Beard, of Boston; and Governor Foster, of Ohio, who, with his friends, hold a large block of the stock. The lines are to be operated with Gray's patents. It is to be known as the Postal Telegraph Company. Material reductions in telegraph tolls are promised. Seven hundred thousand dollars have been paid in.

The announcement is also made that a company has been formed in England for the purpose of laying two new cables between that country and this with as little delay as possible, and that the movement has the co-operation of several well-known banking houses in this city and Boston. It is further announced that there has been subscribed in London $4,000,000 to the capital stock of the new company. A provisional board has been formed and two of the directors of the Bank of England, as well as some of the first merchants of London, are members of it. An arrangement has been made with Mr. Garrett, of Baltimore, to operate the new cables in connection with the Baltimore and Ohio Telegraph Company. It is said that the cables are to be operated upon the co-operative principle, and that all stockholders will be entitled to a rebate on their business in proportion to their holding in the stock of the company. The tariff to the public will be twenty-five cents a word. By means of the Baltimore and Ohio Telegraph Company's wires the new cables will have an entry in Boston, New York, Philadelphia, Chicago and other centers of commerce. It is estimated that the two cables will cost $9,000,000.

Annual meetings were held in this city on the 13th inst. of the stockholders of the Mexican Telegraph Company, and of the Central and South American Telegraph Company, at which boards of directors and officers were elected for each—the officers being the same for both. The latter company, which is closely related to the former, announce that they expect to have their cable completely laid during this month and in operation soon. The cable between Payta and Saint Elena was finished in May. The land line across the isthmus of Tehuantepec was completed on the 11th inst., and the extension to Galveston, Texas, a distance of 280 miles, was successfully laid on the 12th.

Meetings are to be held in London, England, on the 29th inst. of the shareholders of the Great Western and Grand Trunk Railway companies of Canada for the purpose of considering an agreement between the directors for the consolidation of the two companies. The proposal to beconsidered looks toward a consolidation from the 1st of July next. The proposition embraces the consolidation of the undertakings of the two existing companies, the retainer of the stock of each company under the distinct existing titles, the division of the net proceeds of the consolidated undertaking after payment of interest on borrowed capital, rents of leased lines, and all other outgoings between the two classes of stocks as follows: 30 per cent to the Great Western stock, and 70 per cent to the Grand Trunk stock. But if the 30 per cent appropriated to the Great Western stock is in any year insufficient to pay 5 per cent per annum on the preference portion and 3 per cent per annum on the ordinary portion of that stock, then the deficiency is to be made good out of the 70 per cent appropriated to the Grand Trunk stock, and all sums paid to make good such deficiency to be recouped out of any surplus remaining in any subsequent year of the 30 per cent after discharging interest at the before-mentioned rates of the Great Western stock. One-third, as nearly as may be, of the directors of the consolidated undertaking to be qualified by holding Great Western stock and the other two-thirds by holding Grand Trunk stock.

The gross receipts of the Great Western Railway Company of Canada for the month of April, 1882 (excluding leased lines) were £74,446, and the working expenses (including transfers to reserve funds) £56,836, making the net receipts £17,610; for the month of April, 1881, the gross receipts were £88,952, the working expenses £59,897, and the net receipts £29,055—showing a decrease in gross receipts of £14,506, in working expenses of £3,061, and in net receipts of £11,445. For the three months ending April 30, 1882, the gross receipts were £212,241, the working expenses £174,946, and the net receipts £37,295; for the corresponding period of 1881 the gross receipts were £247,357, the working expenses £170,733, and the net receipts £76,664—showing a decrease in gross receipts of £35,156, with an increase in working expenses of £4,213, making a decrease in the net receipts of £39,369.

The gross receipts of the Grand Trunk Railway Company of Canada for the month of April, 1882, were £183,222, the working expenses £130,464 and the net profit £52,758; for the month of April, 1881, the gross receipts were £190,288, the working expenses £125,941, and the net profit £64,347—showing a decrease in the gross receipts of £7,066, with an increase in working expenses of £4,523, making a decrease in the net profit of £11,589. For the four months ending April 30, 1882, the gross receipts were £685,552, the working expenses £526,384, and the net profit £159,168; for the corresponding period of 1881 the gross receipts were £704,560, the working expenses £502,950, and the net profit £201,610—showing a decrease in gross receipts of £19,008, with an increase in working expenses of £23,434, making a decrease in the net profit of £43,442. The difference, as officially explained by the Secretary, between the decrease in gross receipts of £7,066, as shown in the monthly return, as compared with the smaller decrease to be computed from the weekly returns for the month of April, arises from there having been five Sundays and twenty-five working days in April, 1882. The difference of one working day is equal to about £6,000, and this, if deducted from the decrease of £7,066 in gross receipts shown in the monthly return, would reduce the decrease for the month to about £1,000, which closely agrees with the decrease computed from the weekly returns. This ought to be rectified in natural course in the returns for the month of May.

The Census Bureau at Washington has issued a bulletin showing that the live stock of the United States on farms on June 1, 1880, was as follows: Horses, 10,357,981; mules and asses, 1,812,932; working oxen, 993,970; milch cows, 12,443,593; other cattle, 22,488,500; sheep, 35,191,656; and swine, 47,683,951. The rate of increase from 1870 to 1880 was in horses 45 per cent, mules and asses 61 per cent, working oxen a decrease of 25 per cent, milch cows increase of 39 per cent, other cattle 66 per cent, sheep 24 per cent and swine 90 per cent.

An amicable agreement has been effected between the Adams Express Company and Wells, Fargo & Co. Express Company, whereby for the future the latter company will transact the express business over the Atchison, Topeka and Santa Fe Railroad and branches, and the Atlantic and Pacific Railroad. These routes include over 2,000 miles of railroad. On the 1st of July, Wells, Fargo & Co. will assume control of the express business of the Chicago, Burlington and Quincy and Burlington and Missouri lines west of the Missouri. These lines lead from Plattsmouth and Omaha to Denver; from Nebraska City to Calver, and from there to Atchison, to Lincoln and Columbus, and embrace 1,250 miles of railroad. Thus Wells, Fargo & Co., in the section in which a year ago they had not a mile of railroad, now have 3,250 for exclusive operation.

The First National Bank of Philadelphia, whose charter expired on the 13th inst., has re-organized under a new charter, and commenced business afresh, but with the same capital, surplus, circulation, etc. as before. This was the first National bank chartered in the United States.

The Chief of the Bureau of Statistics reports the total values of the exports of petroleum and petroleum products from the United States during April, 1882, were $4,186,955, and during April, 1881, $2,752,729. For the ten months ended April 30, 1882, $42,394,212, and for the same period the preceding year $31,401,186.

The tolls collected on the Erie Canal for the month of May aggregated $44,000. In May, 1881, they were $33,000. The boats cleared in May of this year were 856. In May of last year they were only 561. The tolls collected to June 1, this year, were $65,424, as against $32,996 to June 1, 1881. Twelve hundred and fifty-one boats have cleared this year, or six hundred and ninety more than were cleared in the same period last year.

The Standard Oil Company was chartered in Ohio as an oil refining company, with a capital of $1,000,000. In 1872 the capital was increased to $2,500,000, and in 1875 to $3,500,000. No change has been made in the nominal capital since the latter date, but the undivided profits have increased the actual capital to an acknowledged sum of $25,000,000 in 1880, but which is now estimated at $35,000,000. In addition to this undivided profit, over $10,000,000 have been declared in dividends in eight years.

The report of the Sinking Fund Commissioners of the State Ohio for the six months ending May 15, 1882, shows total receipts, $653,079.65; disbursements, $379,475.26—balance, $273,604.39. The condition of the funded debt remains the same as at the last report, the total being $5,201,665.

The imports at Montreal, Canada, for the month of May amounted to $4,954,500, an increase of over 60 per cent, or $2,268,369 over the corresponding month last year.

The commissioners for refunding the debt of Tennessee have opened an office at No. 7 Nassau street, New York, where the old bonds will be received for examination, and if found correct the new Compromise bonds at 60 cents for the face value and past-due coupons will be given in exchange.

A decision has been filed in the Supreme Court of Minnesota denying the application for an injunction to restrain the Treasurer from paying railroad bonds, under the act of the last session of the Legislature. The application was based on the ground that an amendment of the constitution authorizing the issue of bonds was illegal.

The following quotations of sales of railway and other securities, for the week, are in addition to those given elsewhere in our columns:

New York.—Atlantic and Pacific 1st, 101¼; Boston and New York Air Line pref., 74¾; Buffalo, New York and Erie 7s, new, 122; Chicago and Milwaukee 1st, 123; Chicago, St. Paul and Minneapolis 1st, 112½; Cedar Falls and Minnesota, 18; Chicago, St. Paul, Minneapolis and Omaha, 38½; do. pref., 101½; do. consol., 102½; Chesapeake and Ohio 1st, Series A, 100; do. cur. int., 46; do. 6s, 1911, 100; Chicago, Burlington and Quincy Iowa div. 4s, 87½; Cairo and Fulton 1st, 105; Cairo, Ark. and Texas 1st, 105; Chicago, Milwaukee and St. Paul, Southern Min. div. 1st, 108½; do. Chicago and Pacific West div. 1st, 94½; do. Chicago and Pacific div. 1st, 120; do. Mineral Point div. 1st, 94; do. Southeast div. 1st, 110; Cleveland, Columbus, Chicago and Indianapolis consol., 121; Chicago and Northwestern S. F. 5s, 100¼; Chicago and Eastern Illinois 1st, 99½; Columbus, Chicago and Indiana Central 1st Trust Co. certif. ass. sup., 115; Denver and Rio Grande, 5s; do. 1st, 113; do. consol., 105; Dubuque and Sioux City, 8s; Delaware and Hudson 1st, Penn. div., 126; Denver, South Park and Pacific 1st, 100⅝; East Tennessee, Virginia and Georgia, 9¼; do. pref., 17; do. inc., 45¼; do. divisional 5s, 75; Fort Worth and Denver, 1st, 94½; Gulf, Colorado and Santa Fe 1st, 108⅜; Green Bay, Winona and St. Paul, 1st, 83; Hannibal and St. Joseph 6s, consol., 102¾; Indiana, Bloomington and Western, 39½; International and Gt. Northern 6s, 88½; do. 1st, 106; Indianapolis, Decatur and Springfield 2d inc., 76; Kansas Pacific 1st consol., 102¼; do. 6s, 1895, 112¾; Keokuk and Des Moines 1st, 105½; Louisville and Nashville Gen'l mort. 6s, 95½; do. St. Louis div. 1st, 108; Louisville, New Albany and Chicago, 5s; Lake Erie and Western, 27¼; do. 1st, 99¾; Long Island, 56½; do. consol. 5s, 97½; do. 1st, 117; Louisiana and Missouri River 1st, 115; Lehigh and Wilkesbarre Inc., 80; Lafayette, Bloomington and Muncie 1st, 100; Manhattan Beach, 31¼; Mobile and Ohio, 17½; do. 1st deben., 69½; do. 2d deben., 41; Missouri, Kansas and Texas, 30½; do. consol. 7s, 106; do. 2d, 57; do. gen'l mort. 6s, 77½; Missouri Pacific, 91½; do. 3d, 109; Milwaukee, Lake Shore and Western, 47½; do. 1st, 101; Memphis and Charleston, 45; Minneapolis and St. Louis pref., 60; Michigan Central 5s, 99⅞; Metropolitan Elevated 2d, 90; New York, Chicago and St. Louis, 11¼; do. pref., 29⅞; do. 1st, 85; Nashville, Chattanooga and St. Louis, 55½; do. 1st, 116¼; New York, Ontario and Western, 24½; Norfolk and Western pref., 49⅞; do. Gen'l mort., 101⅛; Northern Pacific 1st consol., 103⅛; New Orleans Pacific 1st, 87⅛; Ohio Central, 13½; do. 1st, 95; Oregon Transp., 71½; Oregon Railway and Nav., 135; Ohio Southern 1st, 78; Oregon Short Line 6s, 104⅓; Peoria, Decatur and Evansville, 27¾; do. 1st, 105; Rochester and Pittsburgh, 24; Rensselaer and Saratoga, 140; Richmond and Alleghany, 18½; do. 1st, 85; Richmond and Danville, 98; do. deben., 68½; do. 1st, 100; Richmond, Danville and West Point, 53⅝; St. Louis, Jacksonville and Chicago 1st, 115; South Pacific of Missouri 1st, 106; Scioto Valley 1st consol., 93; St. Paul, Minneapolis and Manitoba, 134¾; do. 1st, 111¾; do. 2d, 111¼; do. Dakota ext., 1st, 108; St. Louis, Kansas City and Northern, Omaha div. 1st, 104¾; St. Paul and Sioux City 1st, 112; St. Louis, Iron Mountain and Southern 5s, 78; St. Louis and San Francisco 2d, Class B, 85; Southern Pacific of California 1st, 105½; South Carolina 1st, 97¼; do. 2d, 81; do. inc., 46; Texas and Pacific, 40⅝; do. inc. Land Grants, 62; do. Rio Grande div. 1st, 81⅓; Union Pacific, Collateral Trust 6s, 105; Winona and St. Peter 1st, 109¾; Wabash, St. Louis and Pacific, Gen'l mort. 6s, 77; do. Iowa div. 1st, 90; Arkansas 7s, Chatham R. R., 8½; Alabama, Class A, 80½; Missouri 6s, 1887, 105½; do. H. & St. J. issue, 1886, 105⅛; Tennessee 6s, 55; Colorado Coal and Iron, 46½; do. 6s, 90; Cameron Coal, 33; Pennsylvania Coal, 245; Sutro Tunnel, ¾; Deadwood, 5; Excelsior, 1½; Homestake, 18; Little Pittsburgh, 1⅓; Mariposa, 2; Ontario, 35¼; Standard, 17½.

Boston.—Atchison, Topeka and Santa Fe plain 5s, 85¼; Atlantic and Pacific blocks, 109½; do. inc., 27; Boston, Clinton, Fitchburg and New Bedford, 60; Boston Water Power, 4¼; Boston Land, 7; Burlington and Missouri River in Nebraska non-exempt, 104; Connotten Valley, 7⅝; Chicago, Burlington and Quincy 7s, 127½; do. 4s, 86½; do. 4s, Denver extension, 83½; Cedar Rapids and Missouri River 7s, 111; Chicago, Milwaukee and St. Paul. Dubuque div. 6s, 103⅛; Connecticut and Passumpsic Rivers R. R. 7s, 114; Chicago and West Michigan, 6s; Flint and Pere Marquette, 22; do. pref., 96¼; Iowa Falls and Sioux City, 8s; Kansas City, Lawrence and Southern 5s, 102¾; Kansas City, Fort Scott and Gulf 7s, 111¼; Louisiana and Missouri River pref., 30; Little Rock and Fort Smith, 45; do. 7s, 107; Marquette, Houghton and Ontonagon, 6o; do. 6s, 104¼; Maine Central, 6s; Mexican Central 7s, 85¾; do. Block No. 2, 110⅛; do. No. 3, 105; Massachusetts Central, 5⅛; do. 6s, 45; Northern Pacific 6s, 106¼; New Mexico and Southern Pacific 7s, 113½; New York and New England 6s, 103½; Oregon Short Line sub., 101¼; Oregon Imp. Co., 6s; Rutland pref., 23¾; do. 6s, 99; Sonora 7s, 102⅞; Summit Branch, 8; Toledo, Cincinnati and St. Louis, 5⅝; do. inc., 14; Toledo, Delphos and Burlington, Southeast div. 6s, 62; Wisconsin Central, 15; do. pref.,25; Franklin, 13⅛; Huron, 1¾; Napa Quicksilver, 5; National, 1⅝; Osceola, 32; Pewabic, 10¼; Sullivan, 1¼; Silver Islet, 15.

Philadelphia.—American Steamship Co., 25¼; Central Transportation, 34; Huntingdon and Broad Top Mt. consol. 5s, 85; Nesquehoning Valley, 52½; New Orleans Pacific 6s, 86¼; Philadelphia, Germantown and Norristown, 111; Perkiomen 6s, 104; Philadelphia and Reading scrip, 96; do. Income 7s, 100; do. consol. gold 6s, 112½; Philadelphia and Trenton, 186; Philadelphia City 4s, 1904, 112½; Pennsylvania R. R. allotments, 6¼; Philadelphia, Wilmington and Baltimore 4s, 94½; Pennsylvania and New York Canal 7s, 1906, 124; Pittsburgh City 5s, 108; Schuylkill Nav. 6s, 1907, 91; do. 1897, 106½; Texas and Pacific consol. mort. 6s, 96; do. Rio Grande div. 6s, 79; West Jersey and Atlantic 6s, 108½; West Jersey consol. 6s, 109½. The latest quotations are: City 6s, 108@118; do. free of tax, 125@133; do. 4s, new, 108@115; Pennsylvania State 5s, new loan, 118¼@118¾; do. 4s, old, 108@112; do. 4s, new, 114@115; Philadelphia and Reading R. R., 27½@27⅝; do. consol. mort. 7s, reg., 124@124½; do. gen'l mort. 6s, coupon, 97@97½; do. 7s, 1893, 119@121; do. new conv., 72@75; United New Jersey R. R. and Canal, 187@188; Buffalo, Pittsburg and Western, 15¼@15⅝; Pittsburgh, Titusville and Buffalo 7s, 95@97; Camden and Amboy mort 6s, 1889, 112½@113¼; Pennsylvania R. R., 56½@56⅝; do. general mort. 6s, coupon, 124@125; do. reg., 124@126; do. consol. mort. 6s, reg., 120@121; Little Schuylkill R. R., 57@58; Schuylkill Navigation, pref., 12@12¼; do. 6s, 1882, 90@91; Elmira and Williamsport pref., 58@60; do. 5s, 95@100; Lehigh Coal and Navigation, 36⅝@36¾; do. 6s, 1884, 103½@104; do. R. R. loan, 115½@116½; do. Gold Loan, 112¼@112½; do. consol. 7s, 115½@116½; Northern Pacific, 40@40¼; do. pref., 76⅝@76¾; North Pennsylvania, 62½@63; do. 6s, 107@108; do. 7s, 120@121; do. 7s, General mort. reg., 122@123; Philadelphia and Erie, 11@15; do. 7s, 116½@117½; do. 5s, 102¼@103; Minehill, 62¼@62½; Catawissa 19½@20; do. pref., 52@54; do. new pref., 51@53; do. 7s, 1900, 120@—; Lehigh Valley, 58½@58¾; do. 6s, coupon, 120@121; do. reg., 120@121; do. 7s, 133@133½; do. consol. mort. 120½@121; Fifth and Sixth streets (horse), 150@155; Second and Third, 109@111; Thirteenth and Fifteenth, 70@75; Spruce and Pine, 40@45; Green and Coates, 80@90; Chestnut and Walnut, 90@93; Germantown, 70@72; Union, 110@115; West Philadelphia, 107@112; People's 14@14¼; Continental, 100@102.

Baltimore.—Atlanta and Charlotte, 66½; do. 1st, 110¼; Atlantic Coal, 1.20; Baltimore City 6s, 1890, 118½; do. 5s, 1916, 124¾; do. 5s, 1894, 116½; Canton Co. 6s, gold, 105; Columbia and Greenville 1st, 104½, Maryland State 6s, 1890, 116; do. Defense 6s, 105¼; Marietta and Cincinnati 1st Trust certificates, 125½; do. 2d do. 97; do. 3d, do., 52¼; Northern Central 5s, 97½; Ohio and Mississippi, 2d mort., 120; Parkersburg Branch, 10¼; Richmond and Danville gold bonds, 100; Virginia and Tennessee 2d, 102¾; Virginia Midland 4th mort., 50; do. 5th mort., 94¾; Virginia Peeler coupons, 8. The latest quotations are: Atlanta and Charlotte 1st, 109⅞@110½; Baltimore City 6s, 1890, 117@118; do. 6s, 1900, 128½@—; do. 5s, 1916, —@125; Baltimore and Ohio, 193@194¼; do. 6s, 1885, 106¼@106¾; Columbia and Greenville 1st, 104½@104⅝; Canton 6s, gold, 104½@105; Marietta and Cincinnati 1st, 125½@125¾; do. 2d, 98¾@98⅝; do. 3d, 53½@53¾; Northern Central, 44@¾45; do. 5s, 1926, 95@98; Ohio and Mississippi, Springfield div. 1st, 115@116¾; Pittsburg and Connellsville 7s, 122⅞@124; Richmond and Danville 1st gold, 100@100¼; Virginia Midland 5th, 94½@95; Virginia Consols, 60½@60¾; do. 10-40s, 42@42½; Wilmington, Columbia and Augusta, 107¾@108.

Automatic Car Couplers and Freight Train Brakes.

THE Master Car Builders' Association of the United States commenced its sixteenth annual session in Philadelphia on the 13th inst.

The president, Leander Garey, of the New York Central and Hudson River Railroad Company, on taking the chair, addressed the convention, and referred to the organization of the Association at Altoona, Penn., sixteen years ago, by a few master car builders, drawn together by mutual interests. He said the Association had received no financial aid from the railroad companies, in whose interests its meetings are held. He referred to the present defective and expensive devices for coupling freight cars, and said he hoped that something practical would be presented and recommended during the convention in the shape of an automatic car coupler, dispensing with the use of loose links and pins, and yet admitting of their use when needed.

C. E. Garey, of New York, Chairman of the Committee on train brakes for freight cars, presented the following report:

"From replies received to circulars sent out when the committee was first appointed, in 1876, it was evident that there was no automatic brakes in existence adapted to freight service, and, while the practicability of such a brake was questioned by some, its desirability was conceded by all. Consequently your committee, in their first annual report, set forth certain stipulations which, in their judgment, should be embodied in any device to adapt it to the peculiar conditions of freight traffic, and, although little was accomplished for some time, still very satisfactory progress has been made in the last three years. Very few new devices have been produced during the last year, and some of these previously reported may be said to be in a progressive state.

"The Reed train brake has been considerably simplified in construction during the past year and is doing good work on the Harlem division, where it has been in operation for nearly two years. The American Brake Company report having their train brakes in successful operation on 500 cars on the St. Louis and San Francisco Railway and that for cheapness, efficiency and durability it is all they claim for it. Reports from the above railroad company give some 500 cars equipped with this brake running over a period of some fifteen months, and in that time several bad wrecks have been avoided by its use. The weight of the brake applied to one truck is 140 pounds per car and the first cost $11.75, while the annual cost of repairs is very small."

THE Khedive tried to get "over the Bey," but found he couldn't.—*Lowell Courier.*

RAILROAD AND CANAL DIVIDEND STATEMENT.

Showing the amount of Stock Outstanding, the Dividend Periods and the date of last Dividend.

Marked thus(*)are leased roads.	Stock out-standing.	Divide'd Periods.	Last Dividend Payable.
Albany and Susq*...100	2,500,000	semi-an	July '82 2
Ashuelot.....100	210,000	q'arterly	Oct. '81 3½
Atch., Top. and S. Fe100	54,000,000	q'arterly	May '82 1½
Atlanta and W. Point100	1,232 200	semi-an	Jan. '82 4
Atlantic and St. Law*100	5,840,000	semi-an	Mar. '82 3
Augusta and Savan'h100	1,022,900	semi-an	June'81 3½
Avon,Geneseo&MtM*100	225,000	semi-an	July '81 3
Baltimore and Ohio. 100	14,792,566	semi-an	May '82 5
" " pref.100	5,000,000	semi-an	July '82 3
Washington Br....100	1,650,000	semi-an	Apl. '82 5
Berkshire*.....100	600,000	q'arterly	Apl. '82 1¾
Boston and Albany..100	20,000,000	q'arterly	June'82 2
Bos.&N.Y.AirLine pf.100	2,795,227	q'arterly	June'82 1
Bos.,Cl.,F.&N.B.pref.100	1,750,100	.....	Apl. '82 1½
Bos.,Conc.&Mont.pf*100	800,000	semi-an	May '82 2
Boston and Lowell..500	3,940,000	semi-an	Jan. '82 4
Boston and Maine...100	6,921,274	semi-an	May '82 4
Boston & Providence100	4,000,000	semi-an	May '82 3½
Attleborough Br...100	131,700	semi-an	Jan. '82 3½
Bos.,Revere B &Lynn100	419,400	semi-an	Jan. '82 3
Buffalo,N. Y. & Erie*.100	950,000	semi-an	June'82 3
Camden & Atlantic.. 50	377,400	q'arterly	Apl '80 38
" " pref. 50	880,650	q'arterly	Apl '80 3½38
Camden & Burl. Co..100	381,925	semi-an	July '82 3
Canada Southern....100	15,000,000	.....	Feb. '81 2½
Cape May &Millville* 50	447,000	semi-an	June'81 3
Catawissa*..... 50	1,159,500	annual	Oct.'81$1½
" pref..... 20	2,200,000	semi-an	May '82 3½
" new pref.. 50	1,000,000	semi-an	May '82 3½
Cayuga and Susq.*.. 50	589,110	semi-an	July '81 4½
Cedar Rapids&Mo.R*100	6,850,400	q'arterly	May '82 1½
" " pref.100	769,600	semi-an	Feb. '82 3½
Central of Georgia...100	7,500,000	semi-an	June '82 4
Central of New Jersey100	18,563,200	q'arterly	Apl. '76 2½
Central Ohio*..... 50	2,437,950	semi-an	Jan. '82 3
" pref.. . 50	411,550	semi-an	Jan. '82 3
Central Pacific 100	59,275,500	semi-an	Feb. '82 3
Chemung*.....100	380,000	q'arterly	July '81 1½
Cheshire preferred ..100	2,155,300	semi-an	Jan. '82 1½
Chicago and Alton...100	11,181,741	semi-an	Mar. '82 4
" " pref 100	2,245,400	semi-an	Mar. '82 4
Chi., Burl. & Quincy.100	55,337,455	q'arterly	June'82 2
Chi., Iowa & Nebras*.100	3,916,200	semi-an	Jan. '82 4
Chi., Mil. & St. Paul.100	20,404,261	semi-an	Apl. '82 3½
" " pref 100	14,401,483	semi-an	Apl. '82 3½
Chi. & N. Western...100	14,988,257	semi-an	June'82 3½
" " pref.100	21,525,353	q'arterly	June'82 2
Chi., R. I. & Pacific..100	41,960,000	q'arterly	May '82 1¾
Chi. and West Mich .100	6,151,000	semi-an	Feb. '82 2½
Chi.,St.P.,M.&O.pref.100	10,390,000	q'arterly	July '82 1¾
C., Ind., St. L. & Chi..100	6,000,000	q'arterly	Apl. '82 1½
Cin., Sand. & Clev.pf. 50	429,037	semi-an	May '82 3
Clev. and Mahoning* 50	3,759,200	semi-an	Nov.'81 3½
Clev. and Pittsburg* 50	11,244,336	q'arterly	June'82 1¾
Columbus & Xenia*. 50	1,786,200	q'arterly	June'82 2
Colum.&HockingVal.100	2,500,200	semi-an	Aug.'81 208
Concord 50	1,500,000	semi-an	May '82 5
Concord and Ports.*.100	350,000	semi-an	Jan. '82 3½
Conn.& Passump.Riv100	2,244,400	semi-an	Feb. '82 3
Connecticut River ..100	2,100,000	semi-an	July '82 4
Cumberland Valley.. 50	1,292,950	q'arterly	Apl. '82 2½
" 1st pref 50	241,900	semi-an	Apl. '82 4
" 2d pref. 50	243,000	semi-an	Apl. '82 4
Danbury & Norwalk. 50	600,000	.....	Apl. '82 1½
Dayton and Mich.*.. 50	2,402,573	semi-an	Oct. '81 1¾
" " pref. 50	1,211,250	q'arterly	Oct. '81 2
Delaware*..... 25	1,468,940	semi-an	Jan. '82 3
Del. & Bound Brook*100	1,652,000	q'arterly	May '82 1¾
Del., Lack.& Western 50	26,200,000	q'arterly	Apl. '82 2
Denver & Rio Grande.100	29,160,000	q'arterly	Jan. '82 1½
Den.,South P. & Pac.100	3,500,000	.....	Aug.'80 4
Detroit, Lans. & Nor.100	1,825,600	semi-an	Aug.'80 2½
" " pref.100	2,503,380	semi-an	Feb. '82 3½
Dubuque&Sioux C'y*100	5,000,000	semi-an	Apl. '82 3
East Pennsylvania*., 50	1,709 550	semi-an	Jan. '82 3
East Mahanoy*..... 50	392,950	semi-an	Jan. '82 3
Eastern (N. H.).....100	492,500	semi-an	June'82 2½
Eel River.....100	3,000,000	q'arterly	June '82 $1
Elmira.Jef.&Canand*100	500,000	annual	Sep. '80 5
Elmira&Williamsp't* 50	500,000	semi-an	May '82 1½
" " pref. 50	500,000	semi-an	Jan. '82 3½
Erie and Pitsburg*.. 50	1,998,400	q'arterly	Dec. '81 1¾
Evansville & Terre H.100	100,000	semi-an	Nov.'81 2
Fitchburg..... ...100	4,500,000	semi-an	Jan. '82 3
F. & P. Marquette pf.100	6,500,000	semi-an	Jan. '82 3
Ft.W. & Jackson pref.100	2,000,000	.....	May '82 2
Georgia. 100	4,200,000	q'arterly	July '82 2½
Granite 100	1,250,000	semi-an	Jan. '82 3
Han. & St. Jo. pref .100	5,083,024	semi-an	Feb. '82 3½
Harrisbg&Lancaster 50	1,182,500	semi-an	Jan. '82 3½
Housatonic pref. ...100	1,180,000	q'arterly	Apl. '82 2
Illinois Central.....100	39,000,000	semi-an	Mar. '82 3½
Ia.Falls & Sioux City*100	4,623,500	q'arterly	June'82 1¾
Iowa R. Land Co....100	7,620,000	q'arterly	May '82 1
Jeffersonv. Mad.&Ind100	2,000,000	q'arterly	May '82 1¾
Joliet and Chicago*..100	1,500,000	q'arterly	June'82 1¾
Kan.C.,Ft.S.&Gulf...100	4,000,000	.....	Feb. '82 2
" " pref...100	2,750,000	semi-an	Feb. '82 4
Kentucky Central...100	500,000	semi-an	June'81 1
" " pref..100	5,583,500	semi-an	June'83 1
Lake Shore&Mich.So.100	49,466,500	q'arterly	May '82 2
" " (guar.)100	533,500	semi-an	Feb. '82 5
Lawrence*..... 50	450,000	q'arterly	Apl. '82 2
Lehigh Valley..... 50	27,496,895	q'arterly	July'82 1½
" " pref. 50	106,300	q'arterly	July '82 1½

Marked thus(*)are leased roads.	Stock out-standing.	Divide'd Periods.	Last Dividend Payable.
Little Miami..... 50	4,637)300	q'arterly	June'82 2
Little Rock & Ft. S..100	4,096,135	.....	July' 81 108
Little Schuylkill*.. . 50	2,646,100	semi-an.	Jan. '82 3½
Louisville & Nashv..100	19,130,913	semi-an.	Feb. '82 3
Lowell & Andover...100	500,000	semi-an.	Jan. '82 3½
Lykens Valley.....100	600,000	q'rterly.	Oct,' 81 2½
Manchester & Law..100	1,000,000	semi-an.	May '82 5
Manhattan 100	13,000,000	.....	.....
" " 1st pref.100	6,500,000	q'rterly.	July '82 1½
" " 2d pref.100	6,500,000	q'rterly.	July '82 1½
Marietta& Cincinnati 50	1,386,350	.....	.....
" " 1st pref 50	8,105,600	semi-an.	Sep. '66 38
" " 2d pref 50	4,440,000	semi-an.	Sep. '66 38
Marq.Hout.&Ont.pf..100	2,259 026	.....	Feb. '82 4
Massawippi*..... ...100	400,000	semi-an.	Feb. '82 3
Michigan Central....100	18,738,204	q'rterly.	Aug. '81 1
Middlesex Central...100	280,000	semi-an.	Feb. '82 3
Mill Creek&Minehill* 50	323,000	semi-an.	Jan. '82 5
M.Hill& Schuyl.Hav* 50	4,022,500	semi-an.	Jan. '82 3½
Missouri Pacific.....100	28,169,800	q'rterly.	July '82 1½
Mobile&Montgomery100	3,022,517	semi-an.	Feb. '80 2¼
Mont. & Wells River100	800,000	annual	Feb. '80 2
Morris and Essex.... 50	15,000,000	semi-an.	July '82 3½
Mt Carbon&PtCarbon 50	282,350	semi-an.	Jan.. '82 6
Nashua and Lowell..100	800,000	semi-an.	May '82 4
Nashua & Rochester.100	1,305,800	semi-an.	Apl. '82 1½
Nashv. & Decatur...100	1,827,000	semi-an.	June'81 3
Nash.,Chat.&StLouis 25	6,670,325	semi-an.	Apl. '82 1½
Naugatuck.....100	2,000,000	semi-an.	Jan. '82 5
Nesquehoning Val'y* 50	1,300,000	semi-an.	Mar. '82 3
N.Castle&Beaver Val* 50	600,000	q'rterly.	Oct. '81 —
NewLondonNorth'n*100	1,500,000	q'rterly.	Jan. '82 1½
N. Y. Cen. & Hud. R.100	89,428,330	q'rterly.	July '82 2
N. Y. and Harlem....100	7,950,000	q'rterly.	July '82 4
" " pref.100	1,500,000	q'rterly.	July '82 4
" City Line.. —	.....	annual	Apl. '82 3
N.Y.,LakeErie&West.100	77,083,900	.....	.....
" " pref.100	8,156,825	.....	Jan. '82 6
N. Y., N. H. & Hart..100	15,500,000	semi-an.	Jan. '82 5
N. Y., Prov. & Boston100	3,000,000	q'rterly.	May '82 2
Niag.Bridg&Canand*100	1,000,000	semi-an.	July '81 3
North Carolina*.....100	3,000,000	semi-an.	Sep. '81 3
" " pref.100	1,000,000	semi-an.	Sep. '81 3
N. Eastern (S.C.) pref100	86,000	semi-an.	May '81 4
Norfolk & Western pref. 100	15,000,000	q'rterly.	June '82 $1
North Pennsylvania. 50	4,527,150	q'rterly.	May '82 1¾
Northern Central.... 50	6,142,000	semi-an.	Jan. '82 3
Northern N. Hampsh100	3,068,400	semi-an.	June'82 3
Northern N. Jersey*.100	1,000,000	semi-an.	July '80 2½
Norwich&Worcester*100	2,604,400	semi-an.	Jan. '82 5
Ohio 100	18,500,000	.....	.....
Ohio and Miss. pref..100	4,030,000	semi-an.	Mar.'75 3½
Old Colony.....100	7,333,800	semi-an.	July '82 3½
Oregon R'way&Nav..100	6,000,000	q'rterly.	May '82 2
Oswego & Syracuse...100	1,320,400	semi-an.	Aug. '81 4½
Panama.....100	7,000,000	.....	July '82 6½
Paterson & Hudson*.100	630,000	semi-an.	Jan. '82 4
Paterson & Ramapo.100	248,000	semi-an.	Jan. '82 4
Pember.&Hightst'n*. 50	342,150	semi-an.	Jan. '82 3
Pennsylvania..... 50	77,672,750	semi-an.	May '82 4
Pennsylvania Co..... 50	20,000,000	semi-an.	June'81 2½
Peoria & Bureau Val*100	1,200,000	semi-an.	Feb. '82 4
Philadelphia & Erie*. 50	7,013,700	semi-an.	.....
" " pfd 50	2,400,000	semi-an.	Jan. '75 4
Phil,Ger.&Norrist'n* 50	2,231,900	q'rterly.	June'82 3
Phil. and Reading... 50	32,726,375	q'rterly.	Jan. '76 2½
" " pref. 50	1,551,800	q'rterly.	July '76 3½
Phila. and Trenton..100	1,259,100	q'rterly.	Apl. '82 2½
Phila., Wil. and Balt. 50	11,585,750	semi-an.	July '82 4
Pittsb, Ft. W. & Chi.*100	19,714,285	q'rterly.	Apl. '82 1¾
" Special Imp..100	6,770,900	q'rterly.	Apl. '82 1¾
Pittsfield&N.Adams..100	450,000	semi-an.	Jan. '82 2½
Portl., Saco & Portsm100	1,500,000	semi-an.	Jan. '82 3
Providence & Worces.100	2,000,000	semi-an.	Jan, '82 3
Rensselaer&Saratog.*100	7,000,000	semi-an.	Jan. '82 4
Rhode Island& Mass..100	100,000	.....	Jan. '81 3
Richmond& Danv...100	3,866,000	q'rterly.	May '82 2
Richmond & Petersb100	1,009,300	semi-an.	Jan. '81 3
Roch.&Genesee Val.*100	555,200	semi-an.	Jan. '82 3
Rome, Watert.& Ogd..100	5,293,900	semi-an.	July '75 1½
Rutland preferred.. 100	4,000,000	semi-an.	Feb. '82 1
St.L.,Alt. & T.Haute. 100	2,300,000	.....	.....
" " pref.100	2,468,406	.....	May '82 3
St.L.&S.Fran.1st pref100	4,500,000	.....	Feb.'82 3½
St.L.,I.Mt.&South'n.100	21,459,921	semi-an.	Feb. '74 3
St. P. & Duluth pref.100	4,705,000	q'rterly.	June'82 1¾
St. P., Minn. & Man..100	15,000,000	semi-an.	Aug. '82 3½
Schuylkill Valley*... 50	576,050	semi-an.	Jan. '82 2½
Seaboard & Roanoke.100	1,229,600	semi-an.	May '82 5
Shamokin V.&Pottsv 50	669,450	semi-an.	Feb.'82 3
Shore Line*.....100	1,000,000	semi-an.	Jan. '82 4
Sioux C.&Pacific pref100	169,000	semi-an.	Apl. '82 3½
South Br. (N. J.)*....100	438,300	semi-an.	Jan. '82 3
South Western (Ga.)*100	3,892,300	semi-an.	Dec. '81 3½
Stockbridge&Pitts.*. 100	448,700	semi-an.	Oct. '81 1½
Summit Branch*.... 50	4,010,150	semi-an.	Feb. '76 3
Syr.,Bingham&N.Y.*100	2,500,000	semi-an.	Feb. '81 2
Terre Haute & Ind...100	1,988,150	semi-an.	Feb. '82 4
Troy and Boston....100	1,609,000	semi-an.	Feb. '80 2
Union Pacific. 100	61,000,000	q'rterly.	July '82 1¾
United Cos of N. J.*.100	20,490,000	q'rterly.	Apl. '82 2½
Utica, Shenango&S V100	4,000,000	semi-an.	Nov.'81 3
Utica and Black Riv.100	1,772,000	semi-an.	Mar. '82 2
Vermont and Mass..100	3,050,000	semi-an.	Apl. '82 3
Wab. St.L.& Pac.pref.100	22,615,100	q'rterly.	Nov.'81 1½

Markedthus(*)are leased roads.	Stock out-standing.	Divide'd Periods.	Last Dividen d Payable.
Ware River*.....100	750,000	semi-an.	Jan. '82 3½
Warren (N. J.).....100	1,800,000	semi-an.	Apl. '82 3½
Warwick Valley.....100	340,000	semi-an.	Jan. '82 2½
Westchest&Phil.pref100	821,300	semi-an.	July '80 2
West Jersey.....100	1,359,750	semi-an.	Apl. '83 38
Wilmingt'n&Weld'n.100	1,456,200	semi-an.	Dec. '81 3
Wil., Col., & Aug 100	960,000	semi-an.	Dec. '81 3
Winchester&Poto'c.*100	180,000	semi-an.	Jan. '82 3
Winchester&Strasb.*100	74,700	semi-an.	Jan. '82 3
Worcester & Nashua. 75	1,789,800	semi-an.	Jan. '82 1½
HORSE-POWER R. R.			
Albany City.....100	200,000	annual	.....'80 5½
Baltimore City..... 25	1,000,000	semi-an.	Jan. '82 4
Balt.,Cat.&El. Mills..100	....	semi-an.	Jan. '82 2
BleeckerSt.&Ful.F'y.100	900,000	semi-an.	July '81 ¾
Boston&Chelsea pref. 50	110,000	semi-an.	Apl. '82 3
Broadway (Brooklyn)100	250,000	q'arterly	Oct. '81 3
B'way&7th Av,(N.Y.)100	2,100,000	q'arterly	Oct, '81 2
B'klyn&Hunter's Pt.100	400,000	semi-an.	Apl. '79 3
Brooklyn City.....100	2,900,000	q'arterly	Dec.'81 3½
Bushwick (Brooklyn)100	309,000	semi-an.	July '81 2½
Cambridge.....100	908,000	q'arterly	Apl. '82 4½
Cen.Park,N.& E.Riv.100	1,800,000	q'rterly.	Jan. '82 2
Christoph'r&TenthSt100	650,000	semi-an.	Aug.'81 2½
Citizens' (Phil.)..... 50	192,500	q'rterly.	Jan. '82 2½
Citizens' (Pbg.)..... 50	200,000	annual..	....'80 14½
Coney Island&Bklyn100	500,000	semi-an.	Oct. '80 5
Continental (Phil.) .. 50	580,000	semi-an.	July '82 6
D.Dock,E.B'way&Bat100	1,200,000	q'arterly	Nov. '81 4
Eighth Av. (N. Y.)...100	1,000,000	q'rterly.	Oct. '81 3
42d St. & G. St. Ferry100	747,000	semi-an.	Nov.'81 6
Frankf.&Southw (Ph) 50	600,000	q'rterly.	Jan. '82 6
Germantown, (Ph.).. 50	572,800	q'rterly.	Apl. '82 2½
Girard College (Ph.) . 50	500,000	semi-an.	July '71 3
Grand St. & Newton..100	170,091	semi-an.	July '81 2½
Green&Coates St.(Ph) 50	150,000	q'rterly.	Apl. '82 3
Heston,Mantau&F'm 50	299,381	semi-an.	Jan. '75 4
Highland.....100	600,000	semi-an.	Jan. '82 4
Lomb.&SouthSts(Ph) 25	195,000	semi-an.	Oct. '75 4
Lynn and Boston....100	200,000	semi-an.	May '82 4
Malden and Melrose.100	165,000	.....	.....
Metropolitan (Bost.). 50	1,500,000	semi-an.	Jan. '82 4
Middlesex (Boston)..100	650,000	semi-an.	May '82 3½
N.Y.,Bay Ridge&Jam100	150,000	.....	Oct. '78 7
Ninth Av. (N. Y.)....100	797,320	.....	.....
Orange &Newark....100	282,555	.....	.....
People's (Phila.)..... 25	124,744	.....	Apl. '82 2
Philadelphia City... 50	475,000	semi-an.	Jan. '82 5
Phila. and Darby.... 20	200,000	semi-an.	July '81 3½
Phila.&Grey's Ferry. 50	308,000	semi-an.	Jan. '82 6
Pbg,Alleg.&Manches. 50	300,000	q'rterly.	Oct. '81 3
Ridge Avenue (Ph.).. 50	420,000	semi-an.	Oct. '81 11
Second Avenue (N.Y.)100	1,199,500	semi-an.	July '81 2½
Second&ThirdSt.(Ph) 50	771,076	q'rterly.	Jan. '82 4½
17th &19th sts (Ph.).. 50	250,000	semi-an.	July '81 3
Sixth Avenue (N. Y.)100	750,000	semi-an.	Oct. '81 5
Somerville (Boston).100	113,000	semi-an.	May '82 3
South Boston..... 50	600,000	semi-an.	Jan. '82 4
Third Avenue, N. Y..100	2,000,000	q'rterly.	Nov. '81 5
13th and 15th sts.,Ph 50	334,529	q'rterly.	Jan. '82 4
23d street, N. Y.....100	600,000	semi-an.	Aug. '81 4
Union, Boston.....100	374,300	semi-an.	Jan. '82 4
Union, Phila..... 50	1,005,000	semi-an.	Jan. '82 7
West Philadelphia... 50	750,000	semi-an.	July '77 10
CANALS.			
Chesapeake and Dela 50	2,078,038	semi-an.	June'75 2
Delaware Division... 50	1,633,350	semi-an.	Feb. '82 $1
Delawa. and Hudson100	20,000,000	q'rterly.	June'82 1¾
Delaware & Raritan*.100	5,847,400	q'rterly.	Apl. '82 2½
Lehigh Coal and Nav 50	11,204,250	semi-an.	June'82 2
Monongahela Nav... 50	1,004,500	semi-an.	July '81 $2
Morris, consolidated.100	1,025,000	semi-an.	Feb. '81 2
" preferred....100	1,175,000	semi-an.	Feb. '81 5
Pennsylvania..... 50	4,501,200	.....	.....
Schuyl. Nav., com.*. 50	859,100	annual..	Au. '81 50c.
" " pref... 50	3,200,000	annual..	Aug. '81 $1
MISCELLANEOUS.			
Adams Express.....100	12,000,000	q'rterly.	June'82 2
American Express... 50	18,000,000	semi-an.	July '82 3
Amoskeag Manuf.Co.100	3,000,000	semi-an.	June'81 5
Calumet&HeclaMin'g —	100,000 S.	q'rterly.	May '82 $5
Central Mining Co...100	.....	semi-an.	Feb. '82 2½
Consolidation Coal..100	10,250,000	semi-an.	Jan. '82 2
George's Creek C.&I.100	.....	semi-an.	Jan. '82 3
Maryland Coal.....100	4,400,000	semi-an.	Feb. '76 1½
Mariposa L. &Mining100	10,000,000	.....	.....
" pref100	5,000,000	.....	.....
Missouri Val.LandCo100	200,000	semi-an.	Jan. '82 7
National Tube Works100	1,000,000	q'rterly.	Apl. '82 3
Pac. Mail Steamship.100	20,000,000	q'rterly.	Sept. '69 3
Pennsylvania Coal... 50	5,000,000	q'rterly.	May '82 3
Pullman Palace Car...100	10,032,800	q'rterly.	May '82 2
Quicksilver, com....100	5,708.700	.....	May '82 0.4
" pref.....100	4,291,300	.....	May '82 6
Quincy Mining Co... 25	40,000 shs	semi-an.	Feb. '82 $8
Quincy R. R. Bridge..100	1,750,000	semi-an.	Jan. '82 5
SiouxC.&I.F.L.&L.Co100	500,000	semi-an.	June'82 4
Spring Mt. Coal.....100	1,500,000	semi-an.	June'82 3½
Topeka Equip'nt Co.100	255,500	semi-an.	Apl. '82 5
United States Ex....100	7,000,000	q'rterly.	May '82 1
Wells-Fargo & Co. Ex100	6,250,000	semi-an.	Jan. '82 4
Western Union Tel..100	80,000,000	q'rterly.	July '82 1½

RAILROAD EARNINGS—MONTHLY.

	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total.
Burl., Cedar Rap. & Northern:													
1880	184,316	165,170	188,325	141,652	149,504	153,378	143,432	160,160	179,804	204,991	189,330	193,419	2,053,484
1881	167,750	124,510	148,551	184,680	165,630	205,912	174,351	209,112	221,801	221,748	203,880	232,812	2,259,037
1882	252,823	225,631	224,107	178,304	199,278	.....	.....	.....	.....	.....	.....	.....	.....
Central Pacific:													
1880	1,200,614	1,070,487	1,373,438	1,356,716	1,778,488	1,724,950	1,840,067	1,973,438	1,964,997	1,120,229	2,199,466	1,905,221	20,508,112
1881	1,602,907	1,454,218	1,709,637	1,872,370	2,091,410	2,063,000	1,859,000	2,059,000	2,293,000	2,514,000	2,267,000	2,110,000	23,947,951
1882	1,876,000	1,702,000	1,987.000	2,052,000	2,353,000	.....	.....	.....	.....	.....	.....	.....	.....
Chesapeake and Ohio:													
1880	202,335	198,681	222,762	221,559	199,443	214,352	238,236	259,110	247,303	211,820	240,795	218,009	2,674,308
1881	162,540	184,389	228,479	227,343	252,235	241,135	225,096	262,858	247,144	237,303	235.585	203,562	2,702,762
1882	210,455	209,708	208,981	253,861	.....	.....	.....	.....	.....	.....	.....	.....	.....
Chicago and Alton:													
1880	534,054	497,013	626,473	542,961	616,128	617,524	708,906	761,120	767,349	785,199	696,776	574,695	7,718,198
1881	487,890	461,641	529,915	558,190	548,556	616,935	671,466	771,466	768,897	750,359	680,133	635,307	7,553,988
1882	579,447	530,480	584,483	561,787	553,412	.....	.....	.....	.....	.....	.....	.....	.....
Chicago and Northwestern:													
1880	1,154,632	1,131,683	1,361,725	1,294,573	1,875,608	1,671,177	1,699,686	1,767,938	2,020,245	2,105,217	1,855,671	1,477,902	19,416,007
1881	1,240,667	963,208	1,178,795	1,474,612	1,879,006	2,306,640	1,983,031	2,315,164	2,292,676	2,341,097	2,019,037	1,855,476	21,849,209
1882	1,620,336	1,471,945	1,696,568	1,634,819	2,058,133	.....	.....	.....	.....	.....	.....	.....	.....
Chicago, Burlington and Quincy:													
1880	1,432,740	1,411,870	1,732,518	1,489,894	1,909,627	1,682,956	1,773,643	1,834,321	1,862,285	1,934,762	1,837,860	1,552,018	20,454,494
1881	1,307,948	1,034,821	1,418,149	1,574,371	1,679,455	2,083,803	1,888,558	2,173,945	2,262,981	2,031,001	1,816,133	1,905,490	21,324,150
1882	1,658,834	1,457,300	1,566,217	2,058,133	.....	.....	.....	.....	.....	.....	.....	.....	.....
C hicago, Milwaukee and St. Paul:													
1880	764,298	738,749	900,675	871,041	1,134,745	1,037,958	1,026,708	991,297	1,257,677	1,493,620	1,472,037	1,397,308	13,086,119
1881	990,847	682,717	916.989	1,259,946	1,538,491	1,371,000	1,560,000	1,678,000	1,645,000	1,590,000	1,569,000	1,855,000	17,025,462
1882	1,435,000	1,377,000	1,561,000	1,518,000	1,629,000	.....	.....	.....	.....	.....	.....	.....	.....
Chicago, St. Paul, Minneapolis and Omaha:													
1880	193,827	173,078	259,783	259,208	232,146	218,093	236,995	251,013	300,833	342,052	342,894	312,173	3,122,097
1881	257,786	158,594	251,648	261,211	350,124	404,562	392,702	385,586	363,685	382,714	380,733	391,950	3,981,296
1882	307,498	315,100	405,779	356,558	406,420	.....	.....	.....	.....	.....	.....	.....	.....
Cincinnati, Indianapolis, St. Louis and Chicago:													
1880	155,697	172,541	198,220	168,199	186,995	200,332	204,138	233,478	343,627	239,881	209,014	198,254	2,412,185
1881	182,523	171,511	191,005	183,710	188,794	188,256	178,861	229,858	219,977	212,606	194,805	192,623	2,296,916
1882	200,042	186,879	208,066	204,269	.....	.....	.....	.....	.....	.....	.....	.....	.....
Denver and Rio Grande:													
1880	124,759	126,922	160,883	164,882	193,925	295,455	373,132	400,133	406,583	473,318	408,562	349,196	3,478,007
1881	307,476	317,681	398,493	433,111	514,767	584,230	548,284	606,193	620,643	665,686	566,819	643,417	6,206,812
1882	491,914	412,987	535,055	559,917	614,298	.....	.....	.....	.....	.....	.....	.....	.....
Hannibal and St. Joseph:													
1880	176,079	166,965	216,061	206,735	191,317	179,396	224,312	238,081	233,448	242,214	207,147	279,635	2,561,391
1881	154,401	122,874	176,356	190,812	172,950	194,949	198,110	215,308	202,567	313,433	201,782	180,376	2,230,966
1882	138,284	154,717	168,798	148,913	154,917	.....	.....	.....	.....	.....	.....	.....	.....
Illinois Central:													
1880	595,212	613,806	613,008	535,732	665,120	681,736	724,095	732,755	806,836	880,211	783,120	673,182	8,304,812
1881	631,281	524,499	557,789	662,493	673,259	803,887	720,004	868,407	828,847	815,238	737 218	763,475	8,586,397
1882	728,173	689,387	695,371	674,603	674,749	.....	.....	.....	.....	.....	.....	.....	.....
Indiana, Bloomington and Western:													
1880	80,498	89,690	116,185	90,374	85,733	106,954	103,438	116,732	110,622	121,343	96,621	104,619	1,233,079
1881	90,283	83,261	192,085	203,677	200,064	96,586	83,764	117,956	195,307	181,674	160,826	156,697	.....
1882	195,824	175,755	206,235	205,934	182,554	.....	.....	.....	.....	.....	.....	.....	.....
Louisville and Nashville:													
1880	674,455	575,035	612,593	563,883	655,014	976,229	772,537	827,088	931,910	1,000,326	953,086	949,184	9,491,346
1881	816,960	805,124	947,959	850,862	828,726	1,227,885	817,135	876,192	951,566	1,002,950	1,065,223	1,122,285	11,326,859
1882	950,065	960,036	1,073,745	950,007	946,435	.....	.....	.....	.....	.....	.....	.....	.....
Mobile and Ohio:													
1880	250,116	204,094	168,301	140,091	129,249	121,855	131,621	140,593	184,246	264,714	251,368	287,373	2,373,621
1881	224,347	216,768	230,916	163,551	145,803	136,517	131,009	159,348	209,044	252,921	252,434	262,025	2,406,437
1882	161,433	158,154	152,651	145,272	137,645	.....	.....	.....	.....	.....	.....	.....	.....
Nashville, Chattanooga and St. Louis:													
1880	205,633	191,154	169,457	155,466	158,839	144,155	151,594	169,326	167,473	178,266	182,087	175,996	2,049,448
1881	178,143	190,866	207,710	183,525	104,430	154,549	150,430	168,317	179,979	172,121	152,059	173,127	2,075,256
1882	156,994	159,961	161,005	154,155	137,645	.....	.....	.....	.....	.....	.....	.....	.....
New York and New England:													
1880	164,232	149,907	183,845	179,689	183,701	219,891	205,056	249,885	235,642	215,491	210,856	198,108	2,396,302
1881	189,749	173,614	212,019	216,913	217,185	231,518	246,821	280,524	299,573	261,199	242,412	237,729	2,809,255
1882	213,840	217,261	256,222	263,544	283,244	.....	.....	.....	.....	.....	.....	.....	.....
New York, Lake Erie and Western:													
1879	1,147,173	1,207,391	1,356,780	1,372,755	1,350,574	1,230,419	1,273,533	1,450,223	1,492,497	1,713,697	1,515,835	1,398,224	16,509,127
1880	1,296,381	1,252,218	1,644,958	1,643,151	1,592,544	1,661,812	1,580,976	1,606,874	1,786,417	1,899,910	1,799,338	1,726,788	19,149,361
1881	1,443,437	1,425,765	1,847,261	1,709,057	1,776,891	1,794,982	1,787,081	1,772,895	1,734,200	.....	.....	.....	.....
Northern Central:													
1880	334,494	330,860	415,325	386,130	320,788	419,193	450,298	453,923	464,093	512,918	459,054	494,310	5,050,387
1881	386,157	382,657	452,906	487,273	465,588	487,287	440,811	498,008	429,565	449,664	487,160	476,622	5,443,697
1882	407,368	413,551	430,194	435,129	.....	.....	.....	.....	.....	.....	.....	.....	.....
Northern Pacific:													
1880	81,390	77,259	119,357	185,700	217,613	253,105	241,277	223,500	330,300	358,456	300,822	220,993	2,629,710
1881	116,508	78,803	162,984	216,210	312,705	368,276	404,180	411,624	490,096	565,485	428,903	434,331	4,044,576
1882	239,800	269,000	384,000	438,000	568,332	.....	.....	.....	.....	.....	.....	.....	.....
Philadelphia and Erie:													
1880	224,307	245,372	327,678	334,947	311,470	331,024	308,699	347,532	322,737	367,082	324,966	281,919	3,727,733
1881	224,303	225,501	285,573	293,323	343,792	350,585	291,669	303,849	276,522	292,392	284,078	282,772	3,454,309
1882	252,727	246,246	265,311	277,851	.....	.....	.....	.....	.....	.....	.....	.....	.....
St. Louis and San Francisco:													
1880	198,091	195,948	193,146	176,164	167,664	173,607	213,297	259,995	280,873	328,194	290,329	226,063	2,698,371
1881	212,435	178,234	262,050	265,298	283,399	260,254	252,333	286,373	279,064	308,569	284,320	287,914	3,160,245
1882	256,784	244,654	274,959	242,806	253,419	.....	.....	.....	.....	.....	.....	.....	.....
St. Louis, Alton and Terre Haute:													
1880	153,139	163,737	168,994	155,462	147,928	150,207	191,077	216,759	204,295	221,863	188,773	184,503	2,146,741
1881	175,725	166,012	201,137	197,447	172,177	165,896	158,674	189,295	187 299	179,921	162,544	153,852	2,112,801
1882	168,987	149,619	178,145	157,450	162,842	.....	.....	.....	.....	.....	.....	.....	.....
St. Louis, Iron Mountain and Southern:													
1880	555,983	490,195	451,560	408,241	349,053	363,454	432,655	565,869	671,219	688,365	632,052	656,951	6,265,597
1881	570,957	560,791	704,002	548,300	479,075	474,302	533,512	644,386	690,400	719,239	687,280	709 498	7,319,744
1882	516,370	501,127	585,008	581,977	519,120	.....	.....	.....	.....	.....	.....	.....	.....
St. Paul, Minneapolis and Manitoba:													
1880	180,239	137,645	261,798	333,014	281,899	243,407	272,089	232,579	274,188	345,057	300,675	297,641	3,160,231
1881	254,187	159,482	320,962	425,685	382,642	405,322	387,488	414,954	485,736	605,708	508,530	528,262	4,878,960
1882	395,461	418 358	531,004	570,890	858'902	.....	.....	.....	.....	.....	.....	.....	.....
Texas and Pacific:													
1880	245,785	219,165	215,070	174,177	141,083	153,066	195,711	226,073	266,570	303,666	312,184	301,858	2,754,408
1881	281,176	260,781	319,928	295,066	281,782	264,204	320,466	354,082	337,117	578,668	357,724	381,218	3,921,569
1882	310,785	255,644	332,911	359,543	409,228	.....	.....	.....	.....	.....	.....	.....	.....
Union Pacific Railway:													
1880	1,433,636	1,393,992	1,730,509	1,937,220	2,027,269	1,928,528	1,934,215	1,913.035	2,270,179	2,707,860	2,251.148	1,869,335	23,448,445
1881	1,339,799	1,374,740	1,674,860	1,766,894	2,319,238	2,590,969	2.528,826	2,638,659	2,844,357	3,289 350	2,773,608	2,267,004	27,451,831
1882	1,961,088	1.759,863	2,226,832	2,462,004	2,491,590	.....	.....	.....	.....	.....	.....	.....	.....
Wabash, St. Louis and Pacific:													
1880	776,790	759,451	978,629	892,024	948,773	953,468	1,966,742	1,189,478	1,178,950	1,501,203	1,131,787	1,050,816	12,428,112
1881	811,617	818,922	1,121,592	1,023,482	1,144,660	1,308,993	1,131,752	1,542,838	1,490,027	1,396,300	1,399,555	1,328,278	14,461,579
1892	1,229,965	1,134,768	1,315,776	1,378,194	1,204,864	.....	.....	.....	.....	.....	.....	.....	.....

Automatic Freight Car Brakes.

THE *Railway Register* a few months ago, in commenting upon the pressing need of a practicable invention for giving a freight engineer the control of his train, speaks as follows:

"Improved platforms and couplers, air and vacuum brakes, electric signals, paper wheels, safety switches, etc. permit increased speed with greater safety to passenger trains, while heavier steel rails, better ballasted road beds, lessened gradients, and more powerful locomotives reduce the cost per ton per mile of moving freight trains. This latter cost will be still further very materially lessened as soon as a thoroughly practicable, independent, self-acting, automatic freight-train brake shall have come into general use.

"Not only will the cost of moving freight be lessened, but the immense losses by wrecks be greatly reduced by such an appliance. But it must be one that shall meet the requirements of railway freight management, namely, simplicity, durability and cheapness, not only of first cost, but of cost of maintenance and repairs.

"What railway men want to-day is an automatic devise in the form of a brake for freight trains, which shall produce the greatest results with the fewest number of pieces, which, by reason of its simplicity, shall require the minimum amount of care and attention, which shall be in all respects automatic and requiring no other connection between the cars than the ordinary link and pin to make it effective and at all times operative. * * * * * This is the problem to be solved. How near are we to its solution? Every morning paper which we take up, with its record of loss of property and life, tells how badly such an improvement is wanted. Every railway manager is anxious to make his present freight equipment earn a greater income by shortening up the schedule of his freight trains, provided he could do it with any show for safety."

This problem seems to have been solved by a surgeon connected with the Chicago, Rock Island and Pacific Railway. Having his attention constantly directed to the danger to life and limb from the present system of applying brakes on freight trains, and also to the unreliability of the appliances in use to check a heavy freight train, moving at even a moderate speed, when suddenly confronted with danger, he devised and patented a very simple apparatus, which appears to meet satisfactorily all the requirements mentioned in the above extract, and which can be easily attached to any car, and adapted to the ordinary brake-beams.

With this appliance, any car can be switched in or out, and the cars mixed up in every possible way either end forwards, without any attention whatever to the brake machinery, or the necessity of fastening or unfastening other than the ordinary coupling link and pin, and when the train is "made up" and ready to start, everything is in order to enable the engineer to apply the brakes promptly to every car in the longest train, whether going ahead or backing. Not only so, but the conductor can do the same from the caboose, or from any car in the train; an arrangement which might be of great benefit in the event of some contingency arising, unobserved by the engineer, or when the latter has for cogent reasons deserted his engine.

The brake is entirely mechanical, employing neither a vacuum, compressed air, nor electricity. The apparatus on each car is complete in itself and can be operated by hand, if necessary, more easily than the ordinary brake, and yet when the cars having this attachment are made up into a train in the usual way with only the ordinary link and pin to couple them together, each one forms part of a connected system which can be put in operation from any portion of it. Brakemen can be entirely dispensed with. The mechanism is quite simple and compact, occupies but little space, and can be constructed as strongly and substantially as may be required to meet the roughest usage of railway freight service.

The principles involved in its operation are not by any means new nor untried, the same method, substantially, having been very successfully employed on the Northern Railway of France, with this essential and important difference that in that case electricity was used to bring the mechanism into operation and to transmit the power from car to car. In this brake, the mechanical means devised to bring about the same effect are new, original and simple.

The objections to the use of electricity are many and weighty—chief among which are the trouble and expense incident to the maintenance and care of a battery in some part of the train, and the absolute necessity of keeping up perfect electrical communications between every car, a single defect at any point rendering the whole system utterly useless. It is chiefly for these reasons, as being incompatible with the exigencies of freight service, that a plan, otherwise of great value, has never been adopted. This brake entirely overcomes these objections and others of less moment, but retains whatever is of value in the French device, and introduces some original features, which render it more reliable and uniform in its operation.

In other respects, however, it depends upon essentially the same mechanical principles as have been before mentioned.

The effectiveness of these principles may be judged from the following extract from the *Scientific American* (July 10, 1880): "During the experiments made with this brake on the Northern Railway of France, a train of thirteen cars, with a speed of forty-five and a half miles per hour was stopped in twenty-one seconds and within a distance of seven hundred and five feet."

We wish to call attention to this brake, feeling assured that when its merits are known and appreciated, it will be speedily adopted by many of the leading railroad companies.

The inventor is desirous of negotiating with some manufacturing company for its manufacture and introduction, or of forming a new company especially for that purpose. We believe that it will prove to be a good investment and take pleasure in referring those interested to the patentee himself, Dr. W. C. Schultze, Surgeon Chicago, Rock Island and Pacific Railway, Marengo, Iowa County, Iowa.

THE advantage of low grades for heavy traffic is shown in the fact that an engine that will move a given load on a level track will move but one-half the load on a grade of 21 feet to the mile; one-third the load on a grade of 42 feet to the mile; one-fourth the load on a grade of 63 feet to the mile; one-fifth on a grade of 84 feet to the mile; one-sixth on a grade of 105 feet to the mile.

THE deepest mine in the world, according to Professor H. Hœfer, of the Academie Imperiale des Mines, is the Pribrand silver mine, in Bohemia. The lowest depth is 3,300 feet below the surface. At this depth the temperature of the rocks is only 75.90 degrees F., and the temperature of the air, according to the same authority, 76.3 degrees F., so that up to the present only natural ventilation has been required.

NEWPORT NEWS, Virginia, promises to become the leading coaling port on the Chesapeake for steamers sailing from the South. The Chesapeake and Ohio Railroad Company has commenced the shipment of coal from Newport News, and the steamers sailing from Galveston, New Orleans, Port Royal and other principal points are only compelled to take on sufficient coal to last them to Hampton Roads, where they find much lower prices than at the extreme Southern ports, and every facility for loading.

THE new ferry boat "Chicago," built by the Harlan and Hollingsworth Company, of Wilmington, Del., for the Pennsylvania Railroad Company, to ply between New York and Jersey City, was launched on the 13th inst., at 10:25 o'clock. Captain Woolsey, superintendent of the Ferry Company, Captain Robert Bloomsburg, assistant superintendent, and Joseph Wilson, superintendent of the Construction of Floating Equipments, were present and expressed themselves well satisfied with the boat. Captain Woolsey christened the "Chicago."

A MOVEMENT is on foot for constructing a railway across Australia, but the difficulty is the arid nature of the center of that large island. There are good reasons for believing that, at all events, sufficient water is to be had by sinking wells; for, although there is none visible, it is a fact that gum-trees flourish, and there is abundance of scrub which must obtain water somehow. It is known that the underlying rock is an almost level bed of sandstone, which is believed to be saturated with water; for rivers are known which lose themselves in the waterless plain, and never reach the sea.

IT has been noticed that the gases from the furnaces in iron districts are very injurious to the trees in the neighborhood. Investigation points to the presence of sulphurous acid in the gases as the chief enemy to vegetation. The leaves absorb this gas and either die or cause the death of the branch from which they hang, and sometimes that of the whole tree. Strong-looking trees naturally resist the insiduous attacks of the gas longer than sickly trees, and deciduous ones, especially the oak, much better than pines and other coniferous trees. The inference is that especial attention should be given to the cultivation of the oak in mining districts.

The Coal Trade.

THE leading coal-carrying companies make the following reports of their tonnage for the week ending June 3d, and for the year to that date, compared with their respective amounts carried to the same time last year:—

	Week.	1882.	1881.
Reading Railroad	104,144	3,608,600	3,528,034
Schuylkill Canal	6,095	122,208	115,820
Lehigh Valley	82,391	2,778,354	2,633,231
Delaware, Lackawanna and Western	66,264	1,586,830	1,629,954
Shamokin	19,544	384,389	421,495
Central R. R. of New Jersey	125,787	1,555,302	1,569,197
United R. R. of New Jersey	23,250	653,023	634,993
Pennsylvania Coal	21,663	433,687	469,076
Delaware and Hudson Canal	53,500	1,222,628	1,390,417
Huntingdon and Broad Top Mountain	5,662	195,871	189,005
Penn. and New York	17,950	689,153	668,128
Clearfield, Pa	57,157	1,239,364	985,967

The total tonnage of anthracite coal from all the regions for the week ending June 3, as reported by the several carrying companies, amounted to 411,198 tons, against 638,306 tons in the corresponding week last year, a decrease of 227,108 tons. The total amount of anthracite mined for the year is 10,164,811 tons, against 10,472,943 tons for the same period last year, a decrease of 308,132 tons. The quantity of bituminous coal sent to market for the week amounted to 120,444 tons, against 94,375 tons in the corresponding week last year, an increase of 26,079 tons. The total amount of bituminous mined for the year is 1,877,150 tons, against 1,994,372 tons for the corresponding period last year, a decrease of 117,222 tons. The total tonnage of all kinds of coal for the week is 531,642 tons, against 732,681 tons in corresponding week last year, a decrease of 201,039 tons, and the total tonnage for the coal year is 12,041,961 tons, against 12,467,315 tons to same date last year, a decrease of 425,354 tons. The quantity of coal and coke carried over the Pennsylvania Railroad for the week ending June 3d was 197,265 tons, of which 146,950 tons were coal and 50,315 tons coke. The total tonnage for the year thus far has been 4,661,728 tons, of which 3,352,653 tons were coal and 1,309,075 tons coke. These figures embrace all the coal and coke carried over the road, east and west. The shipments of bituminous coal from the mines of the Cumberland coal region for the week ending June 3, were 5,918 tons, and for the year to that date 497,856 tons, a decrease of 276,882 tons as compared with the corresponding period of last year. The shipments were: To the Baltimore and Ohio Railroad—For the week, 5,818 tons; year, 414,517 tons, a decrease as compared with 1881, 162,292 tons. Pennsylvania Railroad—week, none; year, 74,842 tons; decrease as compared with 1881, 3,809 tons. Chesapeake and Ohio Canal—week, 100 tons; year, 4,658 tons; a decrease as compared with 1881, 114,520 tons. The Reading Railroad shipment for last week, ending June 10, was about 158,500 tons, of which 32,000 tons were sent to and 45,500 tons shipped from Port Richmond, and 14,600 tons sent to and 12,900 shipped from Elizabethport.—*Philadelphia Ledger, June 12.*

BOOK NOTICES.

"Sly Ballades in Harvard China" is the taking title of the next humorous *Vers de Societe*, soon to be published by A. Williams & Co., Boston, who are bringing out a line of books this season. The "Sly Ballades" is to be illustrated by Lambert Hollis, and in style the book will be quite unique, with flexible covers decorated in delicate colors like the famous Paris art amateur series so highly prized by connoisseurs. The writer is anonymous—as usual nowadays—but he is known as one of the foremost of the band of clever young writers whose productions, as shown in "The Little Tin Gods on Wheels," and "Rollo's Tour to Cambridge," have given them no small amount of fame and pocket money.

MISS SALLIE P. MCLEAN, of Simsbury, author of "Cape Cod Folks," has been considerably annoyed by the insinuations of some of the critics that she is the author of "A Reverend Idol." an anonymous novel recently out. Miss McLean is not the author of the work and knows nothing about its authorship.

Novel Stoking Apparatus.

MESSRS. WILLIAM MILLER & Co., of Glasgow, Scotland, are now manufacturing a new stoking apparatus, the principle of which is somewhat novel, and has the advantage of preventing smoke, effecting at the same time a great saving in fuel. The machine, as constructed for boilers, is driven by steam power, and by a simple arrangement is self-acting, and requires little attention. It consists of a box placed on rails or pivots, and provided with a movable bottom. After the box is charged it is moved underneath the bars of the furnace, at the same time pushing along a movable part of the furnace bars. When directly underneath the aperture thus created, the action of the machine raises the green fuel into the fire, so that both the smoke and gas from the fresh material pass through the mass of red coal, and are consumed. So far from this dampening the fire, it rather increases the heat-producing power of the coal, and allows it to become coked. The withdrawal of the box brings back the movable portion of the furnace bars, and the fire thus made up is always red on the top, and maintains a uniform heat. The opening of the furnace door is, moreover, rendered unnecessary, preventing the admission of cold air into the fire, and the work of the fireman is made more comfortable. The apparatus has also been applied to kitchen ranges, in which case the appliance is worked by hand. The fire is perfectly under control, and a bright, clear flame is at all times maintained. The saving of fuel is calculated to be about 20 per cent, in addition to the other advantages gained by the use of the apparatus.

Fishing by Electricity.

A FRENCH yachting paper gives some description of the new apparatus which is being used with the permission of the government of that country for fishing by electricity at night. It consists of a globe of glass, within which the electric light is shown. Two conductors incased in gutta percha are arranged so as to meet one another on the inside, very much on the same principle which is now familiar to all visitors to the Crystal Palace. They communicate with a fishing-boat anchored at a convenient distance, and can, of course, be set into activity by the occupants of the boat. As to the globe, it is attached to a weight below and a float above, so that it can be raised or lowered to the desired depth. As soon as the carbons are ignited and the glass in proper position, all the sea in its vicinity is illuminated brilliantly, and the fish, over whom light is well known to exercise an irresistible influence at night, come eagerly, and sometimes in large schools, within the rays. They may be seen from above disporting themselves in the unaccustomed brightness, and little dreaming of the sinister purpose with which the little *fete* is organized for them. It is then that other fishing-boats, armed with nets, come up and set to work at the unconscious victims, which they surround as well as they can without interfering with the apparatus connected with the lighted globe. It may be supposed that this device is calculated to operate with much deadly effect whenever it is used; and there seems to be much doubt whether it will be allowed as a recognized kind of fishing within territorial waters. Indeed, the license granted by the government is said to be merely provisional, and for the purpose of testing the new machine.—*London Globe.*

Chicago, Burlington and Quincy Railroad.

THE following circular has been issued by the Chairman of the Board of Directors of the Chicago, Burlington and Quincy Railroad Company to the stockholders, giving full particulars regarding the new issue of stock and what caused it to be made:—

"In carrying out the general policy of protecting the territory contiguous to our line, and providing a system of branches for the same out of roads which might otherwise have become competitors, your directors have now obtained full control and the substantial ownership of the following properties: The Chicago and Iowa railroad, extending from Aurora to Rockford and Forreston, about 104 miles; the St. Louis, Keokuk and Northwestern Railroad and its adjunct, extending from Mt. Pleasant, Ia., to St. Peters, Mo., a distance of about 184 miles.

"In pursuance of the same general policy, the following roads are now under construction: The Humeston and Shenandoah Railroad (this is owned in common with the Wabash, St. Louis and Pacific Railway Company), one-half of about 100 miles in length; the Joliet, Rockford and Northern Railroad, a link connecting three of our Illinois lines, of about 24 miles in length; the Ottumwa and Kirkville Railroad, a short coal road in Iowa of about 10 miles.

"The acquirement and construction of these properties have involved a cash outlay of over $6,500,000. In view of this expenditure your directors have deemed it proper and expedient for the company to exercise the power to increase its capital stock conferred by its charter, the authority to do which was prospectively confided to its directors at a meeting of the company held on the 24th of March, 1880. Your directors have therefore voted to cause such increase to be made to the amount of 10 per cent of the number of shares on record June 30, 1882, and to offer the same in the first instance to the shareholders of the company.

"The opportunity is therefore offered to the stockholders of record June 30, 1882, to subscribe to an issue of stock at par equal in amount to one-tenth of their respective holdings; that is to say, the privilege of subscribing to one share of stock at par will attach to ten shares of Chicago, Burlington and Quincy Railroad Company's stock. The books of the company will close June 30, 1882, and remain closed until July. The right to subscribe will expire July 31, 1882.

"The subscriptions to this issue of new stock will be due on the 9th of September, 1882, and the stock deliverable on that date or any day up to November 18, 1882."

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Editor American Railroad Journal.

In your issue of June 3d, in an article on the "Heating and Lighting of Railroad Cars" the types make me say that the "steam as it issues forcibly from the cylinders, is made to answer the purpose of a 'steam-chest' to the furnace fires." "Steam blast" were the words intended. Very truly,

W. C. S.

Marengo, Iowa, June 9th, 1882.

BUSINESS NOTICES.

Machinery wipers, woven like honeycomb are now used for cleaning machinery. When soiled they are quickly cleaned with a soap powder specially made for this fabric. The reasonable price, $30 per M., brings them within the reach of all who take pride in having neat shops. They are slowly but surely taking the place of *waste*. Brown Manufacturing Co., 8 Thomas St., N. Y., are the only makers.

Scales and Testing-Machines.

These important articles are coming into more general use every year, and nearly every kind of material that, as it passes from the manufacturer and seller to the buyer, is subjected to the closest test, either chemically or physically; and then, if up to the required standard, the quantity ordered is determined by weight. Both of the above mechanical appliances are extensively manufactured at the Philadelphia Scale and Testing Machine Works, Messrs. Riehle Brothers, proprietors. This firm was the first in this country to establish a regular business of testing-machines, and make all kinds, from a tiny one that will test the smallest specimen to a monstrous, and yet sensitive and accurate, piece of mechanism that can apply a tensile, transverse, or crushing strain of 1,000,000 pounds and over. The scales and testing-machines are found in almost all the leading iron and steel works in the United States, such as the Cambria Iron Company, Bethlehem Iron Works, Pennsylvania Steel Works, Allentown Rolling Mill Company, Logan Iron and Steel Company, Graff, Bennett & Co., Park Brothers & Co., Trenton Iron and Steel Company, and very many others. Among the railroads that use Riehle Brothers' scales and testing-machines are the Pennsylvania, Baltimore and Ohio, Philadelphia and Reading, Northern Pacific, Chicago, St. Louis and New Orleans, and others. The first scales made in the United States were made by the predecessors of this firm for the Lehigh Navigation Company, for use in their freight depots on Willow street, Philadelphia. Other firms have laid claim to the honor of originating the first platform scale, but their claims have been proven to be false, as there are those yet living who took part in this matter. From a small beginning, the Philadelphia Scale and Testing-Machine Works have become one of the leading establishments of the kind in Philadelphia and in the United States.

The Ohio Central Railroad Company has secured the right of way from Corning, Ohio, to Charleston, West Virginia, and considerable grading has already been done. At Charleston, the extension will connect with the Chesapeake and Ohio Railway.

W. F. Turreff, Master Mechanic of the Cleveland, Columbus, Cincinnati and Indianapolis Railway, after making experimental tests, has adopted malleable iron draw-bars for all new cars, having found that they can be made with half the weight of cast iron, and that they will probably do better service. Already about fifty cars have been equipped with them.

There is still much uneasiness felt by the various steamship companies because of the small amount of freight offered for foreign export. So restricted is the demand for cargo room that the rates for freight continue so low that there is little profit in handling it. The Mediterranean and New York steamship and the Anchor lines are doing better in this respect than most of the others at present, as the 13,000 hogsheads of Kentucky tobacco recently purchased for the Italian Government factories are being rapidly shipped to various ports in Italy. The Mediterranean and New York line has taken about 4,000 hogsheads, and room has been chartered for an additional large quantity. The Anchor and other lines to the Mediterranean have taken about 3,000 hogsheads.

The Pullman Palace Car Company have recently received orders from the New York, West Shore and Buffalo Railroad Company for sixty first-class and twenty second-class passenger coaches, twenty-one mail and baggage cars, and one hundred box cars; from the Chicago and Atlantic Railroad Company, for thirty first-class and ten second class-class coaches, and twenty baggage, mail and smoking cars; and from the St. Louis and San Francisco Railroad Company, for twelve first-class passenger cars. These will be ready for delivery in about two weeks. Twenty first-class passenger cars are being built for the New York, Lake Erie and Western Railroad Company, five of which have been delivered during the past week. The company is also building one hundred and thirty Pullman palace cars for their own use. These cars are being built at the Chicago works. The following cars have recently been completed there and delivered to the different roads: Ten first-class, ten second-class and six baggage cars for the Toledo, Cincinnati and St. Louis Railway; two day coaches and six passenger cars for the Chicago and Eastern Illinois Railroad; and seven first-class passenger coaches for the Chicago, St. Paul and Minneapolis Railroad. Eight Pullman palace cars are finished and ready for shipment to Europe.

The Coming Transit of Venus from a Scientific Standpoint.

The great importance of the coming transit of the 6th December, in the estimate of the men of science, may be seen in the preparations now being made for its observation. Forty expeditions to witness it are already projected, and the number will be largely increased by those of the United States, Italy and Austria, which have not yet been announced. The French Government will send eight expeditions to the following points: Four in north latitude and four in south latitude. In the north the stations chosen are the coast of Florida, under the charge of Col. Perrier; Cuba, under M. d'Abbadie; the coast of Mexico, under M. Bouquet de la Grye; Martinique, an island of the French Antilles, under M. Tisserand. In the south the stations chosen are Santiago, in Chili, under M. Leclerc; Santa Cruz, a river of Patagonia, under M. Fleuriais; Rio Negro, the northern boundary of Patagonia, under M. Perrotin; and Port Desire or Chubutt, also in Patagonia, under M. Hatt. The members of all the expeditions are now preparing for their work at the observatory in Paris, where by means of a model Venus and a model sun they are practicing on imaginary transits in hopes of being able to observe with scientific accuracy the passage of the real Venus over the real sun in December. They will start for their destinations in the month of July and spend the intervening time after their arrival in diligent preparation for the event.

The object of this great expenditure of time, labor, money and brains is the hope that the observers may determine with an accuracy never before attained the earth's distance from the sun. For this is the unit of celestial measurement, and as long as the doubt concerning its accuracy exists, so long there is doubt in the estimate of celestial distances. But a cloudy day will render months of unremitting labor of no avail. It is estimated that the weather at half the stations will be unfavorable, but a great deal may be learned from the observations made at the other half, where the favorable conditions prevail, according to the law of averages. The four southern stations of the French expedition are in the south temperate zone, and the 6th of December will be near their summer solstice, like the 6th of June at the north. The localities favored with a clear sky on this meridian at the time of the transit will be specially fortunate, for the short winter days are not hopeful in their conditions. A transit of Venus is not a glorious phenomenon like a total solar eclipse. It is simply the passage of a round black ball over the sun's bright face. But it is visible all over our western world, and no human eye that now looks upward to the stars will ever again behold its recurrence. It is the last chance for trying this method of estimating the sun's distance until the advent of the year 2004.—*Providence Journal, May* 31.

The Oil City *Derrick* says the three new wells in the Warren field are producing more oil than the 400 or 500 wells in the other districts of the same county.

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Electricity and Magnetism.

F. N. Gisborne, Superintendent of Dominion Telegraphs, in a recent conversation with a representative of this paper, expressed himself as being highly gratified with the success of the coast line and gulf telegraph system, which was established under his direct supervision. The method of signalling by semaphores between mainland telegraph stations and lighthouses on exposed situations among the breakers, which forms an important part of that system, is Mr. Gisborne's invention, and he has lately perfected an application of the semaphore method to signalling between ships and the shore, which cannot fail to be of great advantage to commerce and the fisheries.

The coast line telegraph is likely soon to be extended along the coast of Labrador and the north side of the St. Lawrence, an inhospitable region, whose sparse population is wholly composed of fisherman, and, mayhap, a few trappers and lumbermen as you come west. Besides the great advantage this extension will prove to the prosecution of the fisheries in the waters of those coasts, it will also enable ocean steamships coming through the Straits of Belle Isle to hold communication with all parts of this continent when five days out from British ports, thus to a large extent limiting at least the tedium of the ocean passage to that period.

Mr. Gisborne, who contests upon strong grounds with Cyrus W. Field, of New York, the honor of being the originator of ocean telegraphy, is the central spirit, as he is the projector of a circumterraneous telegraphic system passing through the Dominion of Canada, and connecting our western shore with the eastern coasts of Japan, while from the latter a branch line will include Australia in the electrical compact. Of this vast project more is likely to be heard within a very few days.

Not finding the gentleman above referred to at the hotel on calling, but seeing one having a striking resemblance to him in some features, the reporter accosted him and found himself in the presence of John S. Gisborne, C. E., of Manchester, England, who proved to be no less affable and cordial a gentleman than his brother, the Superintendent of Dominion Telegraphs.

This gentleman, after some conversation about his brother's official operations, revealed himself as the inventor of a most timely improvement upon the mariner's compass, which is likely to create a revolution in ocean voyaging second only to that resulting from the adoption of iron vessels. This invention, called "John S. Gisborne's Compass for Iron Ships," and secured by royal letters patent, occupied the best attention of the inventor for fifteen years, and the royal patent was only signed, sealed and delivered last fall.

One of the greatest difficulties met with in the navigation of iron ships is the ever present liability of the magnetic needle of the compass to become demoralized from the attraction of the iron. The method in vogue to counteract this influence has been what is technically known as "swinging" the ship, a very tedious operation that consists of placing the ship due north and south and then fastening permanent magnets of great power so as to neutralize the metallic attraction. The ship must be "swung" in smooth water and fine weather; but thick weather having a different effect from bright upon the magnets, the process does not give absolute accuracy to the compass, and ships have to be supplied with "a card of error" whereby to rectify the fluctuations of the needle.

It is well known that to errors of reckoning from variations in the compass, which cannot be corrected when the sun is invisible for days together, is due the loss annually of large numbers of ships. The permanent magnets used by compass adjusters, even, frequently are the cause of the errors leading to disaster, exercising, as stated, a different influence upon the needle as the air is dry or damp.

Mr. Gisborne claims for his invention that it is not influenced by local attraction, and that it never requires any adjustment further than for the carpenter to fasten it down to the deck of the ship. This claim is supported by certificates from the captains of several British iron ships who have tested the new compass, by different shipowners, and by Dr. T. Byron Whitehead, a gentleman who says he has passed more time on board iron ships than most of his profession, who took a special trip in the steamship Lady Olive to observe the conduct of the compass, and "on that occasion narrowly watched its working night and day on all the various courses which the ship was steered;" and the combined verdict of all these competent jurors is "unqualified success." Mr. Gisborne's compass is now being tested upon the steamship Parisian, and the result in this case will likely soon be known to our readers. The commercial manufacture of the company has not yet been begun. The inventor came across in the Parisian, and the results of his observations of the working of the compass were thoroughly satisfactory to him. John S. Gisborne is not a man of one invention, for there is scarcely a first-class British steamship on the seas which is not furnished with some appliances produced by his ingenuity, and he is known in nearly every shipyard in Great Britain and the continent.—*Montreal Witness.*

Proposing a Bridge Twenty-three Miles Long.

In a few days England will receive the visit of a highly intelligent foreigner who will have in his pocket a wonderful picture of a bridge across the channel between Folkstone and Cape Grisnez. Its twenty-three miles of length will exhibit many varieties of style. Some parts will be tubular, some iron framework open to the sky, and some again viaducts of masonry. Beneath these you will see (in the picture) ships in full sail—"Great Admirals" bearing the Queen's flag gliding proudly under the central arches, and tiny fishing-boats making their way with equal ease through the lower doorway in the shallows. The arches will rest sometimes on the sea bottom, sometimes on an artificial foundation of loose stone, or on a couple of submarine islands which Nature has most obligingly placed in this very spot as a hint of her views on the question of communication between England and France. M. Verard de Sainte-Anne is the apostle of this new idea of intercommunication, and his scheme is the alternative to the tunnel. The tunnel is altogether out of the question. It would be very costly in any case; and no one knows what soft places in the chalk the boring might not reveal. Then who could breathe down there? Unbroken railway communication with England, he says, alone stands between France and commercial ruin. Bismarck, far more dangerous in peace than even in war, has been quietly plotting a sort of commercial Sedan to block France off forever from all share of the English trade. England with her immense commerce binds the eastern and Western hemispheres as a main link. France continues the chain, but Bismarck is determined to cut her out of it for the benefit of Berlin. The French Chambers have made a patriotic but useless attempt to meet this competition by voting immense sums for the improvement of Boulogne, Calais and Dunkirk. They might just as well have thrown the money into the sea. The Dutch and Belgian ports—above all, Flushing—will always afford better land communication with Odessa. Berlin in fact lies directly on the line of the best existing route. Now the commercial command of the east of Europe means the ultimate command of Asia, and this, with a due regard to America on the other side, means the commercial command of the world. France, though, must build much more than the bridge, according to M. Verard de Sainte-Anne. She must not only run a direct railway line from England to avoid the shipment which is the sole disadvantage of the German route, but as soon as the line touched Paris she must carry it almost due east, avoiding Lyons and almost every city south of the capital, and run a neck-and-neck race with Germany "in the straight" for Constantinople via Trieste. This line, it will be seen, would leave even Brindisi far to the west. It would be as short as the German one, shorter than it for many places, and where it was not it would still secure the preference of English exporters, by preventing the loss involved in transfer.—*Paris Cor. London News.*

Niagara.

The greatest cataract in the world is that of Niagara. The Horseshoe fall on the Canadian side has a perpendicular descent of 158 feet. The height of the American fall is 167 feet. The Horseshoe fall, which carries a larger volume of water than the American fall, is about 600 yards wide, and extends from the Canadian shore to Goat Island. Geologists are agreed that the cataract was once six miles nearer to Lake Ontario than at present. Although Niagara is certainly the greatest cataract, it is by no means the highest. The Yosemite fall in California surpasses all other cataracts on the globe in height. It is formed by Yosemite Creek, which is an affluent of the Merced River. The average width of the stream in summer is about twenty feet and its depth about two feet. From the edge of the cliff, from which the water plunges, to the bottom of the valley, the vertical distance is about 2,550 feet; but the fall is not in one perpendicular sheet.

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Marble-Mining in Carrara.

[Robert W. Welch, in the Century.]

(CONCLUDED FROM LAST WEEK.)

No MACHINERY of any kind is used in the Carrara quarries. The men of to-day quarry after the fashion of their grandfathers. A common hand-drill, a few jugs of nitric acid, and a plentiful supply of gunpowder complete the outfit of the marble-miners. Slowly and painfully the drill is forced into the mountain-side to the necessary depth; into the hole made by the drill the nitric acid is poured through a tin tube; and when the acid has penetrated every crevice leading from the base to the drill-hole, and has eaten space for the gunpowder, the charge is placed, the slow-match is lighted, the quarrymen betake themselves to places of safety, and in due course of time there is an explosion. After the explosion the quarrymen come back to ascertain the result. It frequently happens that they find nothing as a reward for their labor except a quantity of small rocks. Having blasted the marble out from the mountain, the producer's next step is to put the available blocks into tolerably regular shapes. This is done with the chisel and hammer, by men who receive from twenty-five to thirty-five cents a day. Very large blocks are divided by sawing. The marble-saw is a piece of heavy sheet-iron, four or five inches wide, fixed in a cumbrous buck-saw frame, and it is worked by two men. The saw is made to cut by putting sand beneath the blade, the sand being carried down into the saw-path by a small stream of water trickling from a tub. Working from sunrise to sunset, marble-sawyers can earn as much as thirty-five or forty cents.

When the marble has been squared up it is still a hundred feet, sometimes half a mile, up in the air. It is the custom to lower it with enormous cables. The block to be lowered is put upon a sledge composed of two timbers bolted fast together, and sledge and marble are slowly and laboriously lowered down the mountain-side, pieces of wood rubbed with soap being placed under the sledge in places where the descent is not steep. Sometimes the ropes break, the block escapes from the workmen, and a terrible accident ensues. Carrara is full of cripples, the victims of such accidents.

Occasionally the quarrymen are saved the trouble of lowering the marble. It not infrequently happens that the blast is so strong that the detached pieces do not stop at the quarry landing, but go tumbling to the foot of the mountain. A few days ago, in one of the ravines, I saw a block of marble weighing at least two thousand tons, which, when it was blasted, had slid over a thousand feet from the quarry. In blasting this block the miners were very careful in the use of powder, in the hope that the block would not be driven from the mountain with sufficient force to set it rolling. Fortunately, their calculations were well made. When the blast was fired the block fell forward upon its face, and slid a comparatively short distance down the mountain-side. A very little more powder would have sent it rolling to the bottom of the ravine, and the consequences might have been very serious.

In one of the ravines, it happens perhaps a dozen times a day that workmen and visitors are obliged to take to their heels to escape destruction by some bowlder that has started down-hill. If one could take a safe position and witness the descent of a two-thousand-ton block of marble, the spectacle would be a grand one. But to be chased out of the ravine by this same bowlder would be an altogether different experience. Nothing can be more terrifying than to be in the track of one of these rocks, with hardly a second to spare in which to choose the path of flight. You hear the tooting of a horn, which is a signal that in a few minutes a blast will be set off. Casting your eye about the ravine, you discover that the blast is to be made in a quarry perhaps two thousand feet above you. Anticipating no danger, you keep on calmly crunching your lunch. (Everybody who visits the quarries is supposed to have a lunch with him.) Presently the explosion takes place, and you look up in the direction of the sound. At first you see nothing. A second later, an enormous rock comes bounding out from one of the recesses of the ravine. You fancy that the rock will come to a stop at a certain point which you have marked with your eye, when you are startled by the cries of a hundred quarrymen, and almost at the same time by a sound which, if you have had experience in the quarries, tells you that the bowlder is already dangerously near you. You give one glance at the approaching danger and run for your life, praying as you run. Your flight is to the side of the ravine, and just as you reach a place of safety the bowlder goes thundering past, enveloped in a cloud of dust, and hurling about on all sides fragments of itself and of the rocks which it crushes in its path.

In old times, all of the marble quarried at Carrara was transported from the quarries by oxen. That intended for consumption at Carrara was taken over the rough mountain road a distance of from three to five miles, while that intended for shipment was hauled five miles farther to the sea-shore. The railroad has superseded the wagon service to a large extent, but there are still hundreds of oxen engaged in carting marble from remote quarries to the railroad, and from all of the quarries to the saw-mills and studios which are not reached by the railroad. Tourists invariably leave Carrara with the belief that the Carrara teamsters are the most cruel men in the world, and to this belief the writer gives his full adherence. The work which the oxen do would be hard enough under the most favorable circumstances, for the roads are indescribably rough. But the circumstances are not favorable for the poor brutes. They are under-fed and over-loaded, and upon the road are subjected to the most outrageous cruelty. There may be a dozen pairs of oxen attached to the cart. Twelve brutal men, each armed with a heavy goad, are in attendance. The drivers of the eleven leading pairs ordinarily ride, each man seated on the yoke of his own pair, facing the cart, and steadying himself by a hand on the horn of one of the oxen. From the time the team starts from the quarries until it leaves its load there is no cessation of cruelty. It is not to be wondered at that the life of an ox terminates ordinarily within three years of the day on which he makes his first journey to the quarries.

Carrara laborers, and especially those who are engaged in quarrying and transporting marble, certainly have a very hard time of it. Like the oxen, they work much and eat little. For a day's work, beginning at sunrise and lasting to sunset, the compensation is not more than forty-five cents. It seems almost impossible that a single man can live on such wages, to say nothing of men who count their children by fives, tens and twenties. Some of the quarrymen live five or six miles from the scene of their labor, and they have, therefore, in addition to a day of severe toil, to take a daily walk of ten or twelve miles. Many of them are obliged to leave their beds at three o'clock in the morning in order to reach the quarries in season to do a full day's work. They take with them in their coat or trowsers pocket the food for the day, which consists of a small loaf of bread. When they return home at night they eat the principal meal of the day, a dish of boiled mush, or a sort of soup made of bread, water and oil. In the summer they are able to garnish their tables with a dish of vegetables, into which the aromatic garlic is sure to be strongly infused. Meat and fish are luxuries which are indulged in on rare occasions. Most of the marble intended for export is taken to the sea-shore, five miles away, and is unloaded from the cars or ox-wagons upon the sandy beach. Thousands of blocks of marble are to be seen at this depot, each block bearing the initials of its owner and the number by which it is recorded in the owner's books. Here the final preparation for shipment is made. The work of squaring or shaping the block, which was begun at the quarries, is completed here, and the edges of the blocks receive what might be called a "rough smoothing." This done, Carrara having no good harbor, the marble is put into small vessels and sent to Leghorn or Genoa for shipment to foreign ports.

SCENE.—A small lawn on Seneca street, Cleveland. Time—noon. Personages—A parrot sunning itself on a porch beside its open cage-door; and a strange dog wandering upon the lawn. The parrot speaks first: "Sick! Sick! Sick him!" The dog, with ears and tail erect, looks about for something upon which to charge; he espies the parrot, and an exciting scene ensues. From out the confused mass of dog-hair and parrot-feathers comes the shrill cry, "Git out! git out!" Dog breaks for street. Parrot, after looking at herself from head to foot, gravely exclaims: "Polly, you talk too much!"

THE marked feature of ancient bridge building was the thickness of the piers. The famous old bridge at Verona had a pier 39 feet thick, though only 11 feet high. In old London Bridge the piers were so enormously thick that the available waterway at low water was rather less than one-fourth of the width of the river spanned by the bridge. The London *Builder* thinks that the modern tendency is to make the piers too light. Of late years no country in Europe has seen more remarkable bridge work than Italy. Signor Mosca's bridge over the Dora, at Turin, is a masterpiece of construction.

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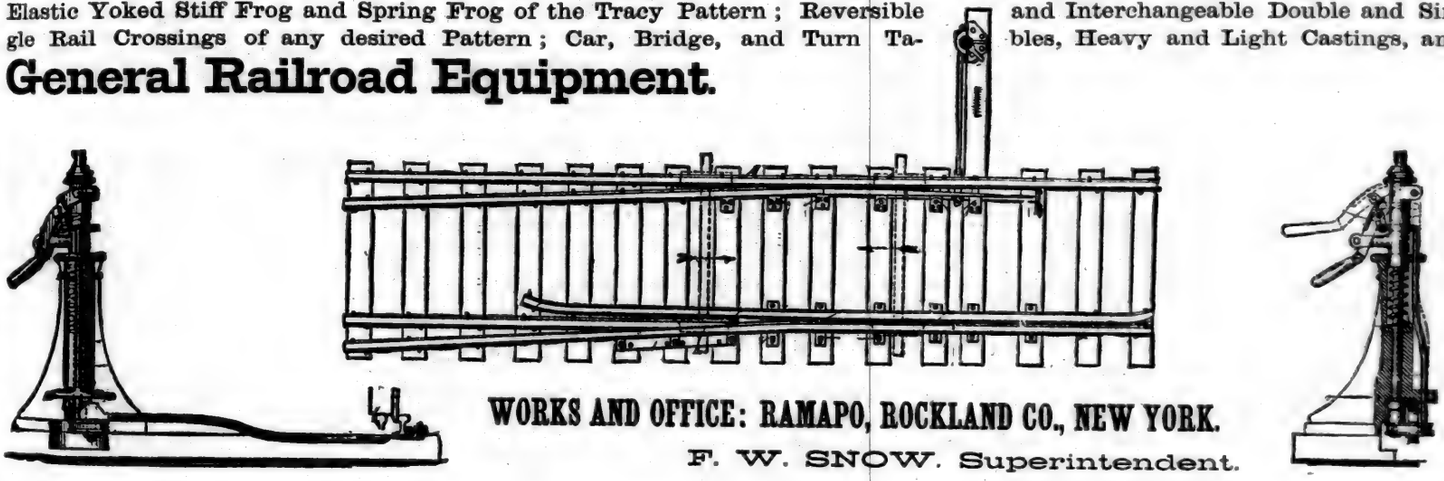
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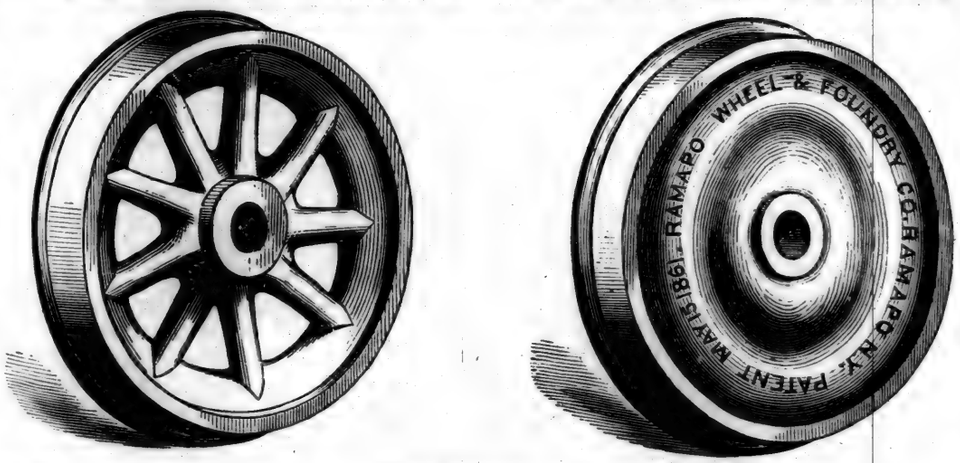
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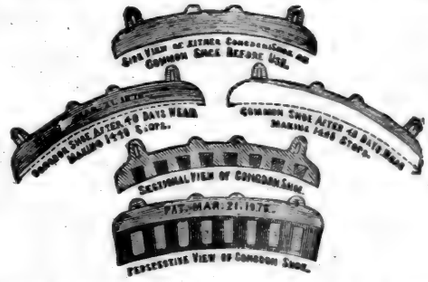
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The Clark Combination Car.

Inasmuch as the "Clark Combination Car," invented by the actor, George Clarke, seems destined at no far distant day to supersede both the Pullman and Wagner sleepers for comfort and convenience in making long railroad journeys, a description of it may not prove uninteresting. In appearance it is, of course, similar to the present sleepers, but it is in its interior that the difference becomes so apparent. During the day the "Clark Combination Car" is an open "parlor," furnished with large easy-chairs, which may be turned to suit the convenience of the occupants. Being situated two feet from the windows, passengers are thoroughly protected from draughts.

At night partitions are drawn from either end of the car through its centre to within two feet and six inches of each other. This opening forms a passageway from one side of the car to the other. These partitions divide the car, and are securely locked at one end. The chairs are then opened out. The headboards of cabinet-work, which close the upper berths, are lowered and form a division between the sections. The upper berths, which are carried in the roof of the car, are then let down, being held in position by means of four jointed bars—one at each corner—which become rigid when the berths are fully lowered. The sections when made up are hung with light curtains, making each a private berth.

It is intended that one side of the partition shall be devoted to ladies and the other side to gentlemen although arrangements are made by which the space devoted to ladies may be reduced and occupied by gentlemen without intruding on the privacy of each other. Between each window and in each section is a wash bowl supplied with running water from a tank in the upper part of the car. There is also a receptacle for towels, and brush and comb, which, with the wash bowl, is concealed in the car casing during the day. By these means absolute privacy is given to each section, and passengers may dress, undress and arrange their toilets free from intrusion. The curtain cornices on the inside are provided with hooks on which may be hung the clothing of the passengers, where they will be preserved from creases.

After passengers have retired, the porter passes through the car, restoring the window curtains to their proper position, thus allowing a free passage through each side of the car. In the morning, before passengers rise, the window curtains are turned to the berths, the wash bowls and toilet lowered, so that on arising passengers find themselves in a private stateroom.

Each section is provided with electric bells to summon the porter when wanted.

At one end of the car are the usual closets and additional washstands and a bathroom. At the opposite end is a smoking-room supplied with sofas and easy-chairs.

Also, the science of ventilation has been thoroughly studied and is as perfect as can be obtained, provision being made for the introduction of fresh air into the car and to the bedding and for forcing the foul air out of the car. The bedding is kept fresh and cool during the day, and offers a wholesome place for the passenger to rest.

Apart from the comforts secured to the passengers by these new devices, the removal of all weight from the sides to the center of the car commends itself to the owners of rolling-stock, as the wear and tear on the springs and running gear is equalized and materially reduced by bringing all the weight directly on the bearings, securing a steady and even motion to the car.

By doing away with the heavy framed seats and bulky upper berths, and by the use of metal frame-work in the skeleton of the car, much of the cumbrous material used in the present car is done away with, and the weight greatly reduced, thus lessening the cost of construction. It will be seen at a glance that this car does away with all the objectionable features of the Pullman; and if the inventor can succeed in getting it introduced as it should be, it will serve the doubly good purpose of furnishing additional comforts to travel and cutting off the source of revenue from which the avaricious Pullman Company have fed and grown fat.—*Pittsburgh Chronicle.*

Electricity in Mines.

It is now some years since the advantages likely to be given by the use of the electric light in mines were pointed out in these columns, and it is encouraging to see that the adoption of the light has, during the past few months, advanced from theory to practice. A rocksalt mine at Northwich has been lighted by lamps on the Brush system, and the result is a very considerable success. But we should imagine that for the ordinary operations of mining the incandescent lamp would be superior to the arc lamp. We do not know whether the extinction of the incandescent filament of a lamp on the breakage of a glass is so instantaneous that it would not fire inflammable gas, but if it be, such lamps would be absolutely safe. There could certainly be no opening them for forbidden purposes. The distribution of the wires should not be an insurmountable difficulty. The telephone is another electrical instrument calculated to be of considerable value in mines, quite as much morally as materially. Of course, perfect communication with all parts of an extensive mine could not but generally assist in the working of it; but hardly less valuable would be the moral effect of removing the sense of isolation which must now exist. One needs no very great powers of imagination to see what would be the boon to men shut off from their companions and from daylight by the sudden flooding of a working, or perhaps by an explosion, or the fall of a roof, if the wires had been spared to be able to describe their position and get cheery messages of hope through from the outside. It is not everybody who can work a telegraph, especially in the dark; but almost any man—any miner, at all events—has enough intelligence to work a telephone. We cannot doubt that, within a very few years, electricity will have helped greatly to alleviate the hard lot of all underground workers. And certainly no class of men deserve more consideration than they.—*London Evening Standard.*

Dangers of Going Upstairs Rapidly.

Every morning thousands of busy men issue hurriedly from up-town houses and betake themselves to the nearest elevated railway stations. It usually happens when a man is in an especial hurry that a train comes along just as he reaches the foot of the stairs. Therefore he runs hastily up the long flight and plunges into the train panting and with his heart beating like a triphammer. This experience is daily repeated on so large a scale in this city, as to excite the question whether this incessant running upstairs to catch trains might not be a more potent and more general factor in inducing heart-disease than has ever been supposed. On this point the views of some prominent physicians have been obtained. Dr. Alonzo Clark said:—

"There is undoubtedly a connection. The bane of our American life is its ceaseless hurry, which induces nervous diseases, and cannot exert a favorable influence upon the action of the heart. And this especial matter of hurrying up the stairs to catch trains is one that daily affects thousands of men, some of whom have hearts that are not sound. Therefore, they are injured by this sudden and violent strain and expose themselves to grave dangers. But I do not think that climbing these stairs hurriedly twice a day would cause heart trouble in a perfectly healthy person."

In reply to an inquiry on this subject, Dr. J. C. Peters said: "The greatest care is necessary in this matter for people with any heart trouble, either latent or developed. There certainly are among our business and professional men many afflicted with some form of heart trouble which has often been induced by severe attacks of rheumatism or kidney disease. I know of men suffering in this way who drive to the elevated stations and have a servant aid them in slowly ascending the stairs. Then on their return in the afternoon, they are met by the man, who helps them down the stairs, where the carriage is in waiting. Others we forbid to go up or down stairs, and for this reason some have had elevators put in their houses, and others turn a back parlor into a bedroom, so as to live on one floor. I have not known a case of heart disease which was attributable alone to ascending stairs. Of course, the first effect of running or rapidly ascending is shortness of breath. That means that the legs and arms are moving quickly, while the motion of the heart, not having caught up, is slower. So a load of blood from the limbs is suddenly thrown upon the heart before it begins to move rapidly enough to dispose of it. This undue burden suddenly put on the heart, and the temporary congestion in the lungs, cause imperfect action on their part, and we experience what is known as shortness of breath. This is what every one has felt after running upstairs to catch a train. But if the heart is perfectly sound this exertion will not cause disease. But persons with weak hearts should go very carefully. And I should advise everybody to ascend the stairs leisurely, and miss a train rather than rush up and make themselves at least uncomfortable."—*N. Y. Tribune.*

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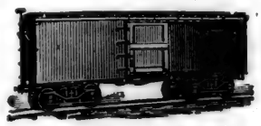
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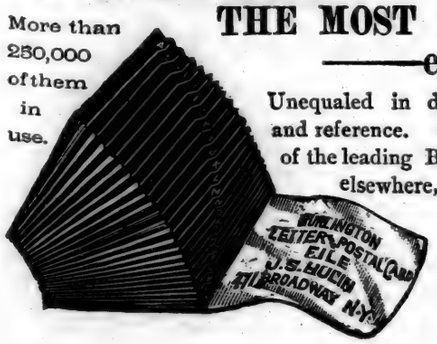
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Cultivating the Cork Oak.

In the "cork tree," that species of oak whose elastic bark is of so much practical value in the manufacture of the familiar stoppers to the millions of bottles and jars in which it is becoming more and more the custom to preserve all kinds of eatables and drinkables, many of our colonies might find a profitable object of agriculture. The cork harvest in Spain, which, with France, Portugal and Italy, is the principal source whence we derive our supplies, is becoming every year more scanty, owing to the greed of growers, who have injured the stock of trees by stripping them of their bark too frequently. The tree which produces the most valuable cork does not come to maturity for a quarter of a century, and can only be barked to advantage every eight or ten years; but the temptation to make rapid profits has been too great to withstand, and the result has been the injury or ruin of many plantations. Some of the quick-growing varieties produce an inferior, porous kind of corks, but the best are the slowest of growth. England alone imports some 10,000 tons of cork per annum, and the quantity is yearly increasing, notwithstanding the introduction of many substitutes for corks, such as plugs of wood, whose fibres have been specially softened for the purpose, india rubber and other contrivances. The French Government, seeing the desirability of securing as large a share of this trade as possible, have for several years past given special encouragement to the formation of plantations of the cork oak in Algeria, and the same thing will, no doubt, be done in Tunis; but the tree will grow equally well in India, Central America, the West Indies, many parts of Africa and Australia, and in the South Sea Islands, and planters in our possessions there might lay the foundation of a profitable industry by introducing some of these trees and starting their systematic cultivation. The tree, besides being a most valuable one and easily cultivated, is of magnificent growth, and would form an ornament in any landscape.—*Colonies and India.*

Steel Production in Staffordshire.

This week the first experiments for converting South Staffordshire common pig iron into steel have been successfully accomplished. After the metal had gone through the Bessemer process it was rolled into bars of steel. One of these has been put under heavy sledge hammers and doubled up without breaking. Others have been broken and re-welded and bent over the weld without showing a sign of fracture. The test is regarded as highly satisfactory, and favorable opinions were expressed on samples of the steel exhibited at the Wolverhampton iron market yesterday. Further experiments are to be made at the Patent Shaft and Axletree Company's works, Wednesbury, where the success has been achieved. A Wolverhampton correspondent writes: "The promoters of the scheme for the conversion of South Staffordshire common pig iron into steel are very sanguine, in view of the results already obtained. Competent authorities assert that the steel is equal to the best Yorkshire iron for ductibility, tenacity, fusibility, and welding. It will be very suitable for boiler plates, tees and angles, and the cost will be only about half that of iron. With the quality and cheapness of the raw materials at hand, South Staffordshire is looked upon as likely to again take the lead in the iron and steel trades of the kingdom. Experiments will also be made with best Staffordshire pigs."—*London Railway Times.*

An Industrious Glacier.

The glacier chiefly responsible for the numerous icebergs which have invaded the highway of ocean travel this season, is on the coast of Greenland, in latitude 60 deg. 12 min., and is known as the great glacier of Jacobshavn. It was explored in 1879 and 1880, by Lieutenant Hammer, by direction of the Danish Government, which numbers Greenland among its possessions. The exploration was accomplished with the greatest difficulty. The main stream of the great glacier was inaccessible on account of the rugged and dangerous character of the country. The glacier discharges its mountainous masses of ice through a fiord into Disco Bay. The region back of the terminal of the glacier is one mass of ice, which lies in a heavy cap over the entire region. The face of the glacier where it rests in the sea is three miles broad and two hundred feet above the water. This glacier is the largest and most prolific on the Greenland coast. The great success of this glacier in launching icebergs is owing to the very rapid rate of motion in the central portion. The rate of motion was determined by triangulation, and amounted to sixty feet in twenty-four hours. This rapid movement would permit the breaking away of an enormous berg every two weeks at least. This rapid motion is undoubtedly caused by the enormous pressure of the superincumbent ice in the interior. The Swiss glaciers travel only a few inches in twenty-four hours, and are very tame affairs beside the great glacier of Jacobshavn.

The Subdivision of the Electric Light.

W. H. Preece, the well-known English electrician, in a letter to the London *Times*, says: "There is a great confusion between the problem of the subdivision of the electric 'light' and that of the distribution of the electric 'current.' They are two totally different questions, which are generally mistaken for each other. If a given current, say that equivalent to one horse power, will give a light say of 2,000 candles, you cannot by any known means divide that light into 20 lamps of 100-candle power each. The best that has hitherto been done from one horse power is to obtain eight lamps of 16-candle power each. You can, however, distribute the current in any way you please. If one horse power will give you one lamp of 2,000-candle power, or eight lamps of 16-candle power, it is evident that two horse power will give you two lamps of 2,000-candle power and 16 small lamps; three horse power, three lamps of 2,000-candle power or 24 small ones, and so on, directly by multiplication and distribution. Mr. Brush has shown how to multiply his lamps, and Mr. Edison has shown how to distribute his currents and multiply his lights; but no one has as yet attempted to solve the question of the subdivision of the electric light. The largest machine yet made, that of Edison's, will maintain 1,200 incandescent lamps giving 16-candle power each, or a total light of 192,000 candles, with an expenditure of 150 horse power. Such a power applied directly to the production of light ought to give a light of many million candles."

The construction of the Mississippi Valley Railroad is to be commenced at once. It is expected to reach Baton Rouge by the new year.

A geologist, who has just completed an investigation of the mineral deposits along the line of the Selma, Rome and Dalton Railroad, between Rome, Georgia, and Calera, Alabama, reports that there is more brown hematite iron ore contiguous to this road than can be found in any other iron field in the United States.

In 1873 patents were issued by the Department of the Interior at Washington to the Northern Pacific Railroad Company, for over 700,000 acres of land in Minnesota, the cost of surveying which was over $26,000. At the time these patents were issued the fact was overlooked that a prior act had provided the cost of surveying, selecting and conveying lands must be paid by the railroad company before the patent was issued. The cost in this case not having been demanded of the company by the Government before patenting, the company afterwards refused to pay them. The Secretary has just decided that said expenses must be paid by the railroad company, and has directed the Commissioner of the General Land Office to certify no further lands to the Northern Pacific Railroad Company until such fees are paid, not only on any lands the patent for which may be hereafter asked, but also on those heretofore patented to that company.

Peach Prospects.—The Wilmington (Del.) *Star* says that despite the peach scare of April, peach prospects are splendid. The customary June fall has not yet set in, and the branches of many trees are already bending beneath the weight of fruit. The question with some growers is not one of enough, but of too much fruit. On the trees of many orchards there are six times as many young peaches as can be matured of fair size. They even hang in knots, and the trees of the Hale variety were never known to be so full. Trees that a month since seemed to have scarcely any fruit upon them now appear to have sufficient for a crop, and the prospect in Sussex county is much better than it was reported three weeks since. Some orchards, indeed, will have little fruit. The frost destroyed, in certain sections, the blossoms most advanced, and in other orchards the trees have too little vitality to produce much fruit. The laden trees will soon shed the surplus of fruit they cannot mature, and this dropping will likely call forth, as it usually does, gloomy forebodings from growers. At present there is small doubt that the Peninsula will this year have one of its largest crops of peaches, and one as great as any with the exception of the summer of 1875. A few growers are already purchasing baskets extensively at seven cents each. A few parties in the vicinity of Milford offer to sell the entire product of their orchards at forty cents per basket, but there are no buyers yet.

AMERICAN Railroad Journal.

ESTABLISHED 1831.

Steam Navigation, Commerce, Finance, Banking, Machinery, Mining, Manufactures.

SECOND QUARTO SERIES.—VOL. XXXVIII., No. 24.] NEW YORK, JUNE 24, 1882. [WHOLE NO. 2,409.—VOL. LV.

CONSTRUCTION.

CARS of the Canadian Pacific Railway are now running 130 miles north of Pembroke, Ontario.

A NEW iron bridge, to cost $20,000 is to be built over Newtown Creek, L. I., in place of the old "Penny Bridge."

TRACK laying on the Northern California Railroad commenced at Willows, in Calusa county, on the 19th inst.

THE survey of the Scioto Valley Railroad extension from Columbus, Ohio, to Fort Wayne, Ind., is about completed.

THE completion of the Missouri Pacific extension to Omaha was celebrated on the 15th inst. by an excursion, a banquet, etc.

THE Bell Telephone Company are constructing a line between Ottawa and Montreal. The western end of the line is already finished to Buckingham.

IT is announced that the Canadian Pacific Railway, between Prince Arthur's Landing and Winnipeg, Man., will be open for passenger and freight traffic on July 1.

THE extension of the East Tennessee, Virginia and Georgia Railroad, from Macon to Atlanta, is to be completed on the 15th of July and to Rome on the 1st of September.

THE first sod of the Gatineau Valley Railway was turned on the 15th inst. by Mr. Chapleau. A large number witnessed the ceremony. The Premier was presented with the customary silver spade.

THE Mackinaw extension of the Grand Rapids and Indiana Railway will be opened for business July 3d. The new extension is 36 miles long and runs from Petoskey to the Straits of Mackinac.

THE formal opening of the short-line route between Baltimore, New York and other eastern cities, via the Shenandoah Valley and Western Maryland railroads through Hagerstown, took place on the 19th inst., and was an unexampled success.

THE Shenandoah Valley Railroad, extending from Roanoke, Va., to Hagerstown, Md., has been completed and opened for travel throughout its whole length—240 miles. This road forms a direct line between northern cities and the South and West.

THE Sea Isle City branch of the West Jersey Railroad, extending from the main line a short distance north of Seaville station to Sea Isle City, a recently established bathing resort, a distance of between four and five miles, was opened for the transportation of freight and passengers on the 21st inst.

THE last spike has been driven which completes the connection between the work on the Canadian Pacific Railway construction eastward from Winnipeg, and westward from Thunder Bay. After ballasting, traffic will be open between Winnipeg and Lake Superior. This contract is said to be the most difficult ever attempted in a railway line.

THE Cape May Point (N. J.) Council have passed over the Mayor's veto the ordinance empowering the Cape May Point Railway Company to build a railroad along the ocean side of Beach avenue and across Ocean, Cape and Central avenues. It is stated that the company has secured the right of way to Cape May City line, and will there connect with the Schellinger's Landing road.

A DISPATCH dated Meriden, Conn., June 20, says that $186,000 has been pledged towards the $300,000 needed to build an already surveyed railroad, eleven miles long, between that city and Cromwell, on the Connecticut River. The Connecticut Valley Railroad Company has promised to lease to the new road rolling-stock and give it entrance to Springfield, while communication could be had with New York by water.

THE Northern Railroad and Piermont branch of the New York, Lake Erie and Western Railroad are to be changed from six feet to the standard gauge on the 24th inst. The eastern division and all its branches will then be of standard gauge, except the New Jersey and New York Railroad, which does not belong to this company, but simply uses its tracks for some 7½ miles out of Jersey City. That road will also have its gauge changed shortly.

WE learn from Constantinople that a German company, presided over by Herr Bleichroder, of Berlin, has applied for a concession of a line between Constantinople and Bagdad. The Sultan has appointed a commission, presided over by the Minister of Commerce, to report upon the proposed line, the length of which is estimated at 1,500 miles. It is proposed that the construction of so considerable mileage should not be taken in hand all at once, but that the line should be constructed in sections, as may be convenient or desirable.

A DISPATCH from Harrisburg, Penn., says that it is the intention of the South Pennsylvania Railroad Company to construct a line from Marysville on the Susquehanna, a few miles above that city, through Perry county into Fulton county, and by way of Bedford and across the Allegheny Mountains near Berlin, into and through Somerset county; thence their line crosses Laurel Hill range and descends Indian creek to the Youghiogheny River, thence to Connelsville and Uniontown, across the Monongahela River, and by way of Waynesburg, Green county, to Wheeling, W. Va.

A COPY of the *Official Gazette*, of the Republic of Costa Rica, dated April 18, 1882, contains the articles of an agreement purporting to be executed between Manuel Arguello, Secretary of State of the Republic, and Minor Coope Keith, in Article 1st of which the Government concedes to Mr. Keith the working of the railway between Rio Lucio and the Port of Limon for the term of five years, which are to be reckoned from 1st January 1883 forward, on the understanding that this concession shall cease as soon as the Government contract for the continuation of the railway from Rio Lucio to San Jose. During the remaining eight months of this year the contractor shall complete the line between Limon and the Rio Lucio, and shall maintain and work it on the same conditions stipulated for the years before stated.

ORGANIZATION.

AT the annual meeting of the Nevada and Oregon Railroad Company, held at Reno, Nevada, on the 7th inst., the following board of directors was elected: D. W. Balch, C. A. Bragg, A. H. Manning, W. F. Berry, R. L. Fulton, of Reno; F. F. Fowler, of New York, and George A. King, of San Francisco.

THE directors of the Cincinnati and Ohio River Railroad Company recently elected are: James G. Blaine, of Maine; Marshall Jewell, of Connecticut; H. C. Parsons, of New York; Orlando Smith, of Columbus, O.; Theo. Cook, W. M. Goodman, William Ramsay and J. F. Follett, Cincinnati; W. A. Hutchins, Portsmouth, O.; A. J. Warner, Marietta, O.

THE directors of the Burlington and Ohio River Railroad Company, chosen at a meeting of the stockholders held at Carlinville, Ill., on the 14th inst., are: W. C. Shirley, Staunton, Ill.; G. P. Merrill, St. Louis; A. Baxter, Lima, O.; W. H. Manning, New York; C. W. Brad-

ley, New York; J. L. Plain, Carlinville, Ill.; L. B. Smith, Scottville, Ill.; George H. Valliant, H. S. Clay, Jacksonville, Ill.

THE purchasers of the Pennsylvania Petroleum Railway, of which Thomas P. Fowler, of New York, was trustee, met in Titusville, Penn., on the 20th inst., and organized a new company to be known as the Petroleum Railway Company of Pennsylvania. The following are the officers: President, Adelbert H. Steele, of Titusville; secretary, D. W. Lockart, of Titusville; directors, James T. Blair, of Greenville; Francis Dunning, of New York; Henry C. Bloss, Samuel Miner and Francis H. Gibbs, of Titusville, and J. H. Gray, of Cambridge.

AT the annual meeting of the stockholders of the Rome, Watertown and Ogdensburg Railroad Company, held on the 7th inst., the following directors were chosen: Samuel Sloan, William S. Dodge, Percy R. Pyne, Gardner R. Colby, Roswell G. Rolston, John S. Barnes, Charles Parsons and Clarence S. Day, of New York; Talcott H. Camp, Watertown; John S. Farlow, Boston; William M. White, Canaserayo; Theodore Irwin, Oswego, and Solon D. Hungerford, Adams. On the 14th, the Board elected the following officers: President, Samuel Sloan; treasurer, J. A. Lawer; executive committee, Samuel Sloan, Charles Parsons, Clarence S. Day, John S. Farlow and Talcott H. Camp.

PERSONAL.

J. L. KIMBALL, of Hagerstown, Md., is president of the Shenanhoah Valley Railroad Company.

WM. RITCHIE, of Frederick, Md., has been elected secretary of the St. Louis and Cairo Railroad Company.

SAMUEL H. TAGART has been appointed a director on the part of the City of Baltimore, in the Western Maryland Railroad Company, vice Samuel H. Adams, deceased.

C. H. DAVIE, lately general accountant of the Pullman Palace Car Company, has been promoted to the new and most responsible office of auditor in that very extensive and enterprising concern.

C. L. RISING of the Wabash, St. Louis and Pacific Railway has been elected president, and C. L. Pessegrie of the Chicago, Burlington and Quincy Railroad, secretary, of the Railroad Employes' Mutual Benevolent Association of the United States.

P. E. FAIRBANKS has been appointed general superintendent of the Newfoundland Railway Company, with headquarters at St. John's. He will have charge of the completed road and of what may be completed hereafter, its rolling-stock, and all other property and equipment.

THE following gentlemen constitute the "Tariff Commissioners," nominated by the President, and confirmed by the Senate on the 20th inst.: John L. Hayes, of Massachusetts, chairman; Henry W. Oliver, of Pennsylvania; Jacob A. Ambler, of Ohio; Robert P. Porter, of the District of Columbia; John W. H. Underwood, of Georgia; Duncan F. Kenner, of Louisiana; Alexander R. Boteler, of West Virginia; Wm. H. McMahon, of New York.

Statement of the Public Debt of the United States, June 1, 1882.

DEBT BEARING INTEREST.

	Amount Outstanding.	Accrued Interest.
6 per cent loan, 1861-'81, continued at 3½ per ct.	$26,266,300 00	$383,050 21
6 per cent loan 1863-'81 continued at 3½ per ct	47,834,600 00	697,587 92
5 per cent funded loan of 1881	401,503,900 00	1,171,153 04
4½ per cent funded loan of 1891	250,000,000 00	2,812,500 00
4 per cent funded loan of 1907	738,871,450 00	4,925,809 66
4 per cent refunding certificates	476,550 00	3,177 00
3 per cent navy pension fund	14,000,000 00	175,000 00
Aggregate of debt bearing interest	$1,478,952,800 00	$10,168,177 83
Interest due and unpaid		2,244,926 38

DEBT ON WHICH INTEREST HAS CEASED SINCE MATURITY.

	Amount Outstanding.	Interest due and unpaid
4 to 6 per cent. old debt, 1837.	$57,665 00	$64,174 81
5 per cent. Mexican indemnity stock 1846	1,104 91	85 74
6 per cent. bonds, 1847	1,250 00	22 00
6 per cent. bounty land scrip, 1847	3,275 00	213 06
5 per cent. Texas indemnity bonds, 1850	20,000 00	2,945 00
5 per cent. bonds, of 1858	8,000 00	....
5 per cent. bonds, of 1860	10,000 00	600 00
6 per cent. 5-20 bonds, 1862, called	370,090 00	8,348 14
6 per cent. 5-20 bonds, June 1864, called	58,550 00	106 44
6 per cent, 5-20 bonds, 1863, called	70,750 00	18,674 41
5 per cent. 10-40 bonds, 1864, called	394,500 00	93,690 51
6 per cent. Consol. bonds, 1865, called	384,150 00	13,751 88
6 per cent. Consol. bonds, 1867, called	988,250 00	194,805 40
6 per cent. Consol. bonds, 1868, called	274,250 00	22,491 45
6 per cent. loan, Feb. 8, 1861, matured Dec. 31, 1880	86,000 00	5,070 00
5 per cent. funded loan 1881, called	1,387,050 00	20,922 48
Oregon War Debt, March 2, 1881, matured July 1, 1881.	12,950 00	1,855 50
6 per cent loan of July 17 and Aug. 5, 1861, matured June 30, 1881	702,900 00	21,825 00
6 per cent loan of July 17 and Aug. 5, 1861, continued at 3½ per cent, matured Dec. 24, 1881, and Jan. 29, 1882, called	8,815,100 00	87,201 68
6 per cent. loan of March 3, 1863, matured June 30, 1881.	236,500 00	8,947 50
1-10 to 6 per cent. Treasury notes, prior to 1846	82,525 35	2,668 06
1-10 to 6 per cent. Treasury notes, 1846	6,000 00	206 00
6 per ct. Treasury notes, 1847.	950 00	57 00
3 to 6 per cent. Treasury notes, 1857	1,700 00	99 00
6 per ct. Treasury notes, 1861.	3,000 00	364 50
7 3-10 per cent. 3 years' Treasury notes, 1861	16,300 00	1,104 43
5 per cent. 1 year notes, 1863	42,175 00	2,119 60
5 per cent. 2 year notes, 1863.	32,900 00	1,643 55
6 per ct. compound interest notes, 1863-64	221,460 00	45,230 87
7 3-10 per cent. 3 years' Treasury notes, 1864-65	138,950 00	4,439 03
6 per cent. certificates of indebtedness, 1862-63	4,000 00	253 48
4 to 6 per cent. temporary loan, 1864	2,960 00	244 19
3 per cent. certificates, called.	5,000 00	394 31
Aggregate of debt on which interest has ceased since maturity	$14,440,165 26	$624,555 02

DEBT BEARING NO INTEREST.

Demand notes, 1861-62	$59,810 00	
Legal tender notes, 1862-63	346,681,016 00	
Certificates of Deposit	12,330,000 00	
Coin certificates, 1863	5,055,420 00	
Silver certificates, 1878	66,736,220 00	
Unclaimed interest		5,726 51
Fractional currency, 1862, 1863 and 1864 $15,425,437 77		
Less amount estimated as lost or destroyed, act of June, 21, 1879	8,375,934 00	
	7,049,503 77	
Aggregate of debt bearing no interest	$437,911,969 77	$5,726 51

RECAPITULATION.

	Amount Outstanding.	Interest.
Debt bearing interest in coin, viz:		
Bonds at 6 per cent., continued at 3½ per cent.	$74,100,900 00	
Bonds at 5 per cent, continued at 3¼ per cent.	401,503,900 00	
Bonds at 4½ per cent.	250,000,000 00	
Bonds at 4 per cent.	738,871,450 00	
Refunding certificates	476,550 00	
Navy pension fund, 3 p.c	14,000,000 00	
	$1,478,952,800 00	$11,643,709 51
Debt on which interest has ceased since maturity.	14,440,165 26	624,555 02
Debt bearing no int., viz:		
Old demand and legal-tender notes	$346,740,826 00	
Certificates of deposit	12,330,000 00	
Coin & silver certificates.	71,791,640 00	
Fractional currency	7,049,503 77	
	$437,911,969 77	
Unclaimed interest		5,726 51
	$1,931,304,935 03	$12,273,991 04
Total debt, principal and interest to date, including interest due and unpaid	$1,943,578,926 07	

AMOUNT IN TREASURY.

Interest due and unpaid	$1,475,531 68
Debt on which interest has ceased	14,440,165 26
Interest thereon	624,555 02
Gold and silver certificates	71,791,640 00
U. S. notes held for redemption of certificates of deposit	12,330,000 00
Cash balance available June 1, 1882	141,441,876 69
	$242,103,768 65
Debt, less am't in Treas'y June 1, 1882	$1,701,475,157 42
Debt, less am't in Treasury May 1, 18820	1,711,850,598 61
Decrease of debt during the month	$10,375,441 19
Decrease of debt since June 30, 1881	$139,123,654 56

BONDS ISSUED TO THE PACIFIC RAILROAD COMPANIES, INTEREST PAYABLE IN LAWFUL MONEY.

	Amount Outstanding.	Accrued Interest not paid.
Central Pacific bonds, 1862-64	$25,885,120 00	$647,128 00
Kansas Pacific bonds, 1862-64	6,303,000 90	157,575 00
Union Pacific bonds, 1862-64	27,236,512 00	680,912 80
Cent. Branch Union Pacific bonds, 1862-64	1,600,000 00	40,000 00
West'n Pacific Bonds, 1862-64	1,970,560 00	49,264 00
Sioux City & Pacific bonds, 1862-64	1,628,320 00	40,708 00
Totals	$64,623,512 00	$1,615,587 80

Interest paid by the United States, $53,405,977.38; interest repaid by transportation of mails, &c., $15,112,847.81; interest repaid by cash payments: 5 per cent net earnings, $655,198.87; balance of interest paid by United States, $37,637,930.70.

The foregoing is a correct statement of the public debt, as appears from the books and Treasurer's returns in the Department at the close of business, May 31, 1882.

CHARLES J. FOLGER,
Secretary of the Treasury.

THE WILMINGTON CAR WORKS.—Bowers, Dure & Co. have just completed 20 passenger cars for the Long Island Railroad, and are now at work on 72 cars for the Manhattan Elevated Railroad. The cars are finished in Queen Anne style with cane backs and seats. They are fitted with the Eames brake, Allen paper wheels with steel tire and axle, and French's springs. They are especially handsome in interior decoration and finish, the woods being mahogany and oak. The cars for the Long Island Railroad have a very large toilet room, with wash-bowl and plate glass mirror, and are intended to be first-class in every way. This firm is also just completing 100 20-ton coal cars for the Norfolk and Western Railroad. They have over 500 men employed and make their own bolts, nuts, washers, etc., and emboss their own glass, and claim that in this way they effect quite a saving. They have large orders ahead and consider business very good.

THE Rohler Improved Cattle Car Co., of New York, has been incorporated with a capital of $500,000.

The Suez Canal.

FROM an advance copy of the report of the managers of the Suez Canal we learn the dividend for 1881 will be 43f. 80c. per share. The total receipts of the year were 54,676,189f., so that after deducting the working expenses, interest and redemption of obligations, and interest at 5 per cent on shares, there remains, while still providing 5 per cent for the statutory reserve, a net profit of 24,678,046f. 38c. The maritime traffic consisted of 2,727 vessels, the gross tonnage of which gauged 5,794,401 tons. Compared with 1880, this shows an augmentation at the rate of 34 per cent. Seven new lines, the report adds, have been established during the year, and the regular services have added to their material 46 new steamers. The excellent condition of the canal has been not only maintained, but even still further improved by the works carried out by the company in the interest of commerce. The average price of land sold at Port Said has risen to 40f. 20c. the square metre. As at present circumstanced, the canal is adequate to double the traffic at present using it. In prospect, however, of a future still greater increase of navigation through the canal, the directors request from the shareholders the necessary powers to enable them to realize at more frequent intervals successive issues of obligations, to extend over a period of 27 years.

Brazilian Submarine Telegraph.

SIR JAMES ANDERSON (not Lord Monck) presided over the late meeting, and it was he who said he would not sell a share on account of Jay Gould's threatened competition. The American gentleman has projected so many things that have not proved successful, that people are no longer alarmed at his projections. Some have certainly taken root and bid fair to bear fruit, yet others have gone off into space, and are not. In the latter class it would be well for all parties if his threatened competing scheme against the Brazilian Submarine Telegraph were included. Should it die a premature death a heavy loss to those who backed it would doubtless be saved. It appears from Sir James Anderson's statement that Mr. Jay Gould's opposition cable is to go from Brazil to North America, and that all the traffic of the Brazilian Submarine he could compete for is about 15 per cent of that company's existing gross traffic. Sir James added, however, that they had so much in their favor as to the European traffic that he did not fear the competition at all, if it arose, which is not yet quite clear.

The Brazilian Submarine is a very strong company, having all its moderate amount of capital (£1,300,000) in ordinary shares, being encumbered with neither debentures nor preference shares, possessing now a powerful real reserve fund of some £400,000, earning about 11 per cent profit in a year, of which 7 is paid in dividend, and 4 put by to reserve, and with a traffic that strongly increases with age. To all these advantages we may add the possession of a cable which for soundness is, as Sir James Anderson said, "the envy of every other telegraph company in the world."

Under all these circumstances of the case it would be most unfair to subject this company to competition, and we are very glad to learn that the said competition is little more than a bogie.—*Herapath's Railway Journal.*

Philadelphia and Reading Companies.

The following is the comparative statement of the Philadelphia and Reading Railroad Company and the Philadelphia and Reading Coal and Iron Company for the month of May 1882 and 1881 :—

	1882.	
GROSS RECEIPTS.	*Profit for mo.*	*Year to date.*
Railroad traffic	$719,201 27	$3,766,487 69
Canal traffic	35,207 81	*l*13,384 14
Steam colliers	10,140 73	168,391 60
Richmond coal barges	*l*3,617 15	*l*9,342 72
Total Railroad Co	$760,932 66	$3,912,152 43
Reading Coal & Iron Co	19,641 59	255,287 31
Total of all	$780,574 25	$4,167,438 74
TONNAGE & PASSENGERS.	*Month.*	*Year to date.*
Tons of coal on railroad	644,165 03	3,602,529 16
Tons of merchandise	652,442 11	3,716,054 00
Passengers carried	973,081	5,368,402
Coal transp by stm colliers	51,409.00	281,155.02
TONS OF COAL MINED.		
By Coal and Iron Company	285,950.11	1,681,359.05
By tenants	132,147.11	656,099.04
Total mined from lands owned and controlled by Co. and from leasehold estates	418,098.02	2,338,458,09

	1881.	
GROSS RECEIPTS.	*Profit for mo.*	*Year to date.*
Railroad traffic	$695,897 39	$3,427,655 51
Canal traffic	78,007 48	28,544 93
Steam colliers	4,327 69	96,647 37
Richmond coal barges	1,290 89	1,196 64
Total Railroad Co	$779,523 45	$3,554,044 45
Reading Coal & Iron Co	46,331 11	295,186 72
Total of all	$825,854 56	$3,849,231 17
TONNAGE & PASSENGERS.	*Month.*	*Year to date.*
Tons of coal on railroad	630,267.00	3,389,848.06
Tons of merchandise	626,073.06	2,981,663.00
Passengers carried	863,399	4,613,836
Coal transp by stm colliers	45,928.13	246,905.06
TONS OF COAL MINED.		
By Coal and Iron Company	298,377.19	1,502,218.01
By tenants	121,550.19	660,507.01
Total mined from lands owned and controlled by Co. and from leasehold estates	419,928.18	2,162,725.02

Total of both companies for the month of May, 1882 : Gross receipts, $2,878,009.03 ; gross expenses, $2,097,434.78—profit, $780,-574.25.

The Origin of Trades Unions.

THE original cause of the formation of Trades Unions in the United States is said to be from the action of the mill-owners in the New England States. In the cotton mills numerous females were employed. The mill-owners conspired each to keep his own employes at prices fixed by the employer. No workman, male or female, leaving one factory could get employment in another, without a certificate from the foreman or owner where last employed that he or she had left with the consent of the factory where last engaged, no matter how low the wages, even at starvation prices. Even if wages were due her or him they could not be collected without a great sacrifice. The mill-owners took advantage of stay laws and of appeals to court until the use of lawyers' fees overrun the amount of the judgment, and hence, no one discharged or absent without leave, as an employe, could get their money.

An anecdote of Gen. B. F. Butler, when a young lawyer, which brought him prominently into notice, although oft times published, is still germane to the matter, and will bear repetition. A young lady had a claim against one of the cotton mills for work, and payment was refused. She had seen one or two lawyers, who advised her of the course the mill-owners would take to deprive her by procrastination and the delays the law allowed them to take. Mr. Butler told her he would collect it.

"But when?"

"Well, by noon to-morrow, I think," was the reply.

That afternoon the suit was commenced, and that night the water-wheel of the factory was attached to secure the debt, and the sheriff had fastened it with a lock and chain. The water-wheel was the motive power of the factory ; no work could be done ; the whole machinery was idle, so were over one hundred hands, until the wheel was released. Butler could not be found until near noon, when on the receipt of the money in payment of all the costs, it was released—every five minutes of idle time costing the mill-owner more than double the amount of the woman's claim. After Butler's water-wheel attachment, employes could collect their just dues without being forced to go to law.

Anthracite Coal Tonnage.

THE following is an official statement of the anthracite coal tonnage for the month of May, 1882, compared with the same month in 1881 :—

	May. 1882.	May. 1881.
Reading Railroad	541,462	534,063
Lehigh Valley Railroad	480,990	415,681
Central Railroad of New Jersey	332,627	299,478
Delaware, Lackawanna and Western	368,248	301,660
Delaware and Hudson Canal	215,142	214,865
Pennsylvania Railroad	208,808	194,921
Pennsylvania Coal Co	103,686	90,061
New York, Lake Erie and Western Railroad	15,140	36,008
Total	2,266,097	2,086,742

The following is the statement for the year 1882, compared with the year 1881 :—

	1882.	1881.
Reading Railroad	2,320,207	2,339,074
Lehigh Valley Railroad	2,058,826	2,013,999
Central Railroad of New Jersey	1,483,526	1,471,369
Delaware, Lackawanna and Western	1,591,200	1,580,496
Delaware and Hudson Canal	1,094,770	1,176,339
Pennsylvania Railroad	836,583	823,674
Pennsylvania Coal	472,048	464,446
New York, Lake Erie and Western Railroad	85,647	179,859
Total	9,942,812	10,049,258

The stock of coal on hand at tide-water shipping points, May 31, 1882, was 611,441 tons; on April 30, 1882, 752,865 tons—decrease 141,524 tons.

THE old Good Friday custom of flogging an effigy of Judas Iscariot was, after a lapse of two years, duly celebrated in the London docks on April 7, by the crews of three Portuguese and Maltese vessels. The effigy of the traitor, hewn out of a block of timber, was carried by chosen members of the crews round the quarter-deck and hanged from the yard-arm, and each man chanted his vituperation as he lashed the figure with knotted ropes. The scourging over, Judas was cut down, thrown upon the deck, spat upon, cursed, and kicked to the galley fire, where he was burned into a charred mass, and then hurled into the water, after which the sailors went in procession to church.

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CHAS. T. VALENTINE, *Secretary.*

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LABOR VS. CAPITAL.

As we wrote the above caption to this editorial, the thought came to the surface that we were preparing to deal with a time-worn, almost threadbare subject. But we are instantly reminded by the great labor strikes now in progress in different sections of our own country, the difficulties in Ireland, Russia and other parts of the world, that no subject can be time-worn or threadbare which has not admitted of a peaceable solution. To-day we behold in this country men, who a few years ago were comparatively unknown, now controlling such vast interests that a false move on their part can plunge the commercial world into great distress. In this city of New York we have a few men any one of whom can so manipulate the money market as to cause a panic. In the West we have men combining together operating in breadstuffs and other merchandise, with that degree of success that at present writing very few persons can really afford to eat meat, potatoes, eggs and some other articles heretofore deemed indispensable to human living. Now there can be no valid objection to rich men combining for the purpose of carrying out to a more successful completion great enterprises, any more than for laboring men to form themselves into Labor Unions, Protective Societies, etc. for the regulation of wages, hours of service and quality of work to be performed. Laboring men have no more right to combine than capitalists, neither have capitalists any more right than laboring men. So far as we can see, one party has the same right as the other.

Now there are results following these combinations which are radically wrong. When capitalists combine to raise the price of the necessaries of life, the laborer whose wages have been graded so that he could just live when these necessaries were at the minimum, finds that his purchasing power is contracted to that extent that he cannot live on what his labor produces. All laboring men find that while the price of food advances, wages do not advance in the same ratio, if at all. It therefore follows, as an inevitable result, that with provisions advancing in price and wages at a standstill, the laborer, who just earned a living when food was cheap, now that food is dear finds himself anxious about his daily bread. At this juncture the employer should step in and relieve his employe. The laborer whose services were worth his living at one time is worth his living at another time, when he gives the same services in quality and amount. The capitalist, already rich, has no right to grind the poor in order to increase his riches. It is as cowardly to do this as it would be for a champion prize-fighter to whip a dying woman. The rich can play battledore and shuttlecock with the rich, and the best man win, but he must keep his hand off the poor. When the rich combine to oppress the laborer, laborers must form a combination to protect themselves. There is not so much difference between capital and labor, provided you get enough laborers together. A capitalist may have a million dollars, a laborer nothing but his skill. If by his skill or labor he earns $600 per year, his earnings represent 6 per cent on $10,000, and to this extent he in his person is a $10,000 bond paying him an income of 6 per cent. One hundred such laborers then represent the capital of one millionaire. This problem can be worked to as high figures as the curious choose, but the foundation is enough for our purpose—that one hundred men earning each $600 per annum, stand on an equal money value with the million dollars held by a single capitalist. A combination of working-men can then meet a combination of capitalists when they are organized in the ratio of one hundred laborers on one side to every million dollars on the other side, and treat on a money equality. The question of brains will then be the only unknown quantity, though it is fair to suppose that one man who can accumulate a million dollars has more of a certain order of brain than the hundred men who just earn a living. Yet this inference will not always prove correct, as in some cases time, circumstance and place have combined so that a man could not help getting rich, while another man of better brain and greater worth, for whom circumstances, time and place have not combined, may remain the victim of poverty all his days. But this question of brain need not disturb so long as on either side there are men with brain enough to determine on quality, quantity and demand. Granted, then, that in these labor organizations there is brain enough to weigh the quality, quantity of and demand for labor, we do not see why they are not as able to dictate terms to capitalists as capitalists are to dictate terms to them. It is to be feared though from observation that labor has thought only of the present—unmindful of the future, forgetful of the past. There are certain times when the capital of the capitalist will earn him only three per cent, while the capital of the laboring man is continuing to earn him six per cent. At such times the laborer does not strike. There are other times when the capitalist may succeed in getting nine per cent. This is the time when the laborer calculates to strike, forgetting the past when the capitalist earned only three, while he was earning six, unmindful of the future when he will earn six, while the capitalist will be obliged to return to three. This is all a mistake. Labor must place itself on the same platform on which capital stands—the platform of quality, quantity and demand. When money is in great abundance its earning power is reduced, and sometimes to a point where it is just as profitable to lock it up where it earns nothing. Its value depends wholly on its quality, quantity and demand. Now the work of Protective societies should have in view wholly and entirely the raising of the standard of its members to that quality represented by gold, and the regulating of the earning power according to the quantity and demand. When labor becomes such a drug that it can earn little or nothing, the laborer has the same right to stop work that the capitalist has to lock his money up to stop its earning. But the laborer has no right to interfere with his fellow laborer who is content to take half a loaf instead of none, any more than the capitalist who has locked up his money has the right to interfere with his brother capitalist who is content to take one.

Here is where Labor Unions have made themseves disreputable, that in claiming rights for themselves they have not allowed the rights belonging to others. A man has a right to work or not to work. If he chooses to work, no one has the right to prevent him. If he chooses not to work, no one has the right to make him. The spectacle of violence now being presented to the country by Labor unions is a violation of natural rights, and will work no permanent good, but great harm to all. The only peaceable solution to this problem is the adoption of quality, quantity and demand, and the equality of rights.

CLOUDS OVERHANGING TWO CONTINENTS.

THERE is an old saying in Wall street that "the man who will sell stocks short will, if he thinks it will help him to deliver them, strike his own mother." This is only an exaggeration of the tendency on the part of the gambler to sacrifice anything and anybody to gain the point of profit he is after. It would be strictly true to say that the speculator on the short side does not hesitate to play with fire in a magazine of combustibles. Such thin partitions do their bonds divide that it is impossible to separate the line of legitimate dealing from that of illegitimate gambling; there is, however, one characteristic which plainly bespeaks the irregular speculator, and that is the selling of any species of property for future delivery with the hope or expectation of lowering the market price before the time for delivery comes. This is essentially knavish; and has no better foundation as a business practice than that of the coast wrecker or common card sharper.

Mr. RUFUS HATCH, who was long and principally known as a stockbroker in Wall street, has recently turned, or returned his attention to dealing in breadstuffs and provisions—that having been his vocation in Chicago before he came to this city. Mr. HATCH has won some notoriety, and some money, in New York as a conspicuous Bear operator; and as one who used the newspapers openly and avowedly to accomplish his ends. This is the most honorable, but at the same time least dangerous, of the short-seller's methods; there are other means more insidious and effective practiced by others. Mr. HATCH has lately had published in the *Independent* (and perhaps in other papers) an article intensely personal in its character, and mischievous in its tendency. With the personal features wherein he attacks Messrs. VANDERBILT, GOULD, SAGE and FIELD we are not now concerned; but Mr. HATCH, in effect, invokes the aid of the communistic spirit to cast a gloom over the prospect of the political, financial and trading world. This is reckless playing with fire.

Mr. HATCH may be sincere in his belief that bad times are before us, and that the drift of things is toward general ruin. He has the right to express this opinion publicly, and to act upon it by making contracts to sell what he has, or even what he expects to buy, in open market. It is much more likely that his views are biassed by his hopes of gain; and what he now wants is to have other people think as he writes—else why does he go to the trouble and expense of printing his views? If he is sincere it is in his case, no less than in the case of many others, an affair of the liver: his general health improving, his sombre imaginings will disappear. We do, however, question both the prudence and the moral right—however it may be with the legal right—of stirring up riot and disorder, even by suggestion or prediction. Mr. HATCH's fanciful suggestion that the raising of rates of transportation by the pooled trunk lines, under Mr. FINK's management, is a cause or provocation of the labor strikes, an of discontent among the working classes, is one of this mischievous and diabolical character. It reminds one of the advice of the western man haranguing the mob: "Don't lynch him," which up to that moment they had not thought of.

Among much that we approve, more or less, such as his criticisms of the new mansions built by the railroad princes, we desire to protest against this unwarranted charge against railroad management. Transportation is now conducted at a mere fraction of its cost at any previous history of the world; and what is more to the point, the railroad has not abridged the other modes of conveyance, while the average compensation of this industry is not high—not as high as other branches. Besides it is impossible to attack the title of the persons named to their possessions without unsettling that of every other person in the land, and among the foremost those of Mr. HATCH himself. It is not long since he was freely predicting that "May" corn would be worth one dollar per bushel in Chicago, and to him and such middlemen as he is are the laboring men indebted in part for the high prices of food of which they complain.

These reflections call to mind the words of an observing American traveler, quoted in a Buffalo newspaper recently: that after taking a survey of Europe—the huge and idle standing armies, the costly courts and shows of monarchy, the non-productive nobility, the seething of communistic passions among the many poor, and the imminent dread of outbreaking war—he thinks that all the much agitated questions among ourselves seem merely insignificant, and not to be seriously entertained. The United States has nothing more to dread than a possible short crop; and every day diminishes that fear. The number of men at work, and the amount of labor-saving machinery in use, is in greater proportion than in any other nation; and were it not for the unparalleled extravagance of the women, and in a less degree that of the children, and the comparative idleness of both classes as contrasted with the women of France, for instance, we should make all Europe our debtors, and presently lay the maritime world under tribute to us. The very worst that threatens us, is that we may not have as much to export as of late years, and consequently less with which to buy finery, luxuries, and superfluities—among which may be reckoned foreign rails for an unduly stimulated railroad building mania.

Observe in Europe how the war cloud, now the eastern question, recurs to trouble its peace, as it will again and again, until the unspeakable Turk, so much worse than his religious creed, is driven east of the Dardanelles; until Egypt and the south coast of the Mediterranean are again Saracenic; until Germany, Denmark and England are Republics; until the Latin races rid themselves of the incubus of vermin priests. War and turbulence in Europe, even, so fortunately are we placed, do not mean mishap to our people. Foreign capital may be drawn hence for a few months or so, but only to return in multiplied fold. Both labor, capital and skill will be seeking America as it natural habitat. Let no one be deceived by the cry of the anti-monopolist alarmists among us, whether their object be to gain public office, or to cheat us in trade. In no other place is labor so well rewarded, nor the wholesome enjoyment of these rewards so permanently assured.

A SAILING vessel is reported to have arrived at London recently after a voyage of ninety-eight days from New Zealand, carrying a cargo of 5,000 frozen sheep, and landing them in as good condition as if only freshly slaughtered. This was made feasible by the use of an apparatus supplied by the Bell-Coleman Mechanical Refrigeration Company, which kept the holds containing the carcasses constantly down to a temperature of twenty degrees below the freezing point. Considering that this was accomplished in a sailing vessel, and that the greater part of the long voyage was through the torrid zone, the result was the more remarkable.

THE President has appointed the following Government directors of the Union Pacific Railway Company: Robert H. Baker, of Wisconsin; George G. Haven, of New York; Geo. E. Spencer, of Alabama; Watson Parrish, of Nebraska, and Isaac H. Bromley, of Connecticut.

The Erie and its Connecting Lines.

THE *Commercial and Financial Chronicle*, in its issue of the 17th inst., after alluding to the success which has attended Mr. Jewett's efforts to acquire the control of the Cincinnati, Hamilton and Dayton Railroad (20,000 out of the 35,000 shares of the capital stock having been transferred to him on the 13th inst.,) goes on to say:

"The belief is gaining ground that there is truth in the reports of a close alliance between the Erie and the New York, Chicago and St. Louis. Such an alliance would manifestly be mutually advantageous. The latter road extends from Chicago to Buffalo, and the former from Buffalo to New York—together forming a trunk line between the west and this city. Being an opposition line to the Vanderbilt system, it is not likely that it would care to deliver its business at Buffalo to the New York Central and Hudson River; and, aside from the Central, the Erie is the only other line in operation all the way from Buffalo to New York. There are several new trunk lines in progress between these two points, but they are all of them so far removed from completion that it is out of the question to treat them as yet as connecting lines. The New York, Lackawanna and Western appears to make but slow progress, and it is now stated that it is expected to have trains running over the whole line in a year—that is, next summer. Originally it was intended to have the line in operation the present summer. On the New York, West Shore and Buffalo work seem to be progressing more actively, but we believe the earliest date at present set for its completion is January 1, 1884—fully a year and a half hence. The Boston, Hoosac Tunnel and Western is the last of the proposed new trunk roads, but from the present outlook of its affairs the prospect of its ever becoming a reality seems remote indeed. It will be seen that, for some time to come, the New York, Chicago and St. Louis will be forced to work in harmony with the Erie—that, in fact, the Erie is its only available outlet to New York. It would not be surprising, therefore, if the New York, Chicago and St. Louis people, and not the Erie people as commonly supposed, should be the more anxious to bring about an alliance between the two lines.

"On the other hand, the Erie will gain not a little from such an arrangement. Its fast freight line, which used to run over the Lake Shore and Michigan Southern was some time ago ordered off that road, and the company now sends this class of freight over the Pittsburgh, Fort Wayne and Chicago, controlled by the Pennsylvania Company, with which the Erie was able to make satisfactory terms. Then the Erie also maintains the old friendly relations with the New York, Pennsylvania and Ohio (formerly Atlantic and Great Western), the election of that company last March having resulted in a victory for the friends of Mr. Jewett; and it is further reported now that the Erie is desirous of making the bond between the two roads altogether secure by leasing the line. Whether there is any basis for the report we are unable to say, though it is certain that the Chicago and Atlantic Railroad, from Marion to Chicago, which is to give the Erie an independent line to Chicago via the New York, Pennsylvania and Ohio, is being rapidly pressed forward and is expected to be ready for operation before the end of the current year. Thus the Erie is not dependent upon the New York, Chicago and St. Louis; but there would be this positive advantage in a close connection with that road, that thus the Erie would reach one or two lake ports not now open to it. Supposing, then, all these reported arrangements completed, the position of the Erie to command an increasing share of western and southern traffic would be greatly strengthened."

National Railway Commission.

A NATIONAL Railway Commission, the functions of which shall consist in accumulating information, will be a device for creating unnecessary and useless offices. Any one who wants to accumulate information about railways can do so by reading the newspapers and studying the official reports of railway officers and State Railway Commissioners. If further information is needed, the Treasury statistical bureaus and various State railway officials can obtain it. If we are to have a National Railway Commission at all, it should be a commission that will be empowered to do something more than to compile ponderous reports that will never be read, and which never have any other utility than to furnish work for the Government printing office. Congress prints and distributes (to the junk shops) too many such reports already. Let us have a commission that can arbitrate railway disputes and rivalries, and whose decision shall be final. As for prescribing freight rates, that never can be successfully done by a commission. The rates of transportation must be regulated, like other prices—by competition and the laws of trade. Congress and the State Legislatures may, and by law ought to, prevent the consolidation of parallel lines, and the formation, by that means, of great transportation monopolies, but freight and passenger schedules can no more be prescribed by statute than can the market prices of corn and potatoes. —*Ohio State Journal.*

Baltimore and Ohio and European Cable Company.

AT the monthly meeting of the directors of the Baltimore and Ohio Railroad Co., held in Baltimore on the 14th inst., President Garrett stated that a new cable line would be constructed so arranged as to connect with the Baltimore and Ohio system, and that it would probably be ended on the shores of the Chesapeake and be permanently connected as a competing line to the combined organization, and at reduced rates with the Baltimore and Ohio land system, and probably with the title of the Baltimore and Ohio and European Cable Company. The statement that the Congress of the United States had for the purpose of encouraging competition given authority to railway companies to construct lines of telegraph and furnish telegraph services for the people, not only upon their own railways, but through other States, so that no technical or hostile objectors could interfere with its effective working, was received with great interest. The perfect success of the telegraph lines of the Baltimore and Ohio Company attracted much favorable comment. It was stated in Chicago that through their direct lines, extending from the rooms of the Produce Exchange to those of the Corn and Flour Exchange of Baltimore, transactions had been made and orders executed and reported within three minutes, and in Cincinnati and St. Louis similar rapid work had been accomplished. Such satisfactory results have caused a great enlargement of the business of the Baltimore and Ohio Telegraph system, and such has been the increase of commercial messages in addition to its railway service that the company, upon many of its lines, has placed and is operating sixteen wires, and its policy will be to continue to enlarge its capacity to meet all requirements.

What is a Receiver?

IT may be broadly asserted that the function of a Receiver, as appointed by a court, is to conserve the property intrusted to him, and when that property depends for its value upon active operations, to operate it, pending the judicial determination of the issue as to its final disposition. When, for instance, a business of any kind, such as a dry goods store, is put in the hands of a Receiver, it is supposed to be his duty to carry it on, to maintain it, and to make due accounting to the court. But in the Placerville Railroad case the appointment of a Receiver has been equivalent to the destruction of the property. The Sacramento Valley Railroad Company offered to pay into court three times the amount in dispute, provided they were allowed to operate the road, but the court required that they should pay $375,000 into court, a demand for, which no justification whatever could be or was made, and which covered bonds since declared invalid by the Supreme Court. The company refusing very properly to pay over a sum of this magnitude, when the only amount which could by any possibility have been recovered by the plaintiff was less than $20,000, the court appointed a Receiver. There was no warrant for this course. It was distinctly against both public and private interests. It was alike injurious to the plaintiff and the defendant. Its only result was to suspend the operation of the railroad for more than two years, and to necessitate an expenditure of $5,000 for cutting down the grass which grew all over the track, and which menaced the whole property with destruction. The appointment of a Receiver in such a case was without excuse. There could be no pretense that the railroad would be made away with. It could not be injured by operating it. It could only be injured by suspending its operation. But as the case appears to the public, Judge Hunt undertook to deprive three counties of transportation, and to ruin a valuable property, for no better reason than because a corporation refused to submit to a demand which was unreasonable and inequitable. Apparently as a punishment for this refusal, twenty-eight miles of railroad were thrown out of operation, and regardless of the heavy loss and suffering inflicted upon innocent third parties, have been stubbornly kept out of operation be-

tween two and three years. If this is not an abuse of judicial power it would be difficult to discover what is. The usual practice in the appointment of Receivers has been reversed, and for no other conceivable purpose than to do mischief and inflict injury. The law journals would do well to make a note of this, as one of the most remarkable instances of perversion of judicial practice on record.—*Sacramento Record-Union.*

What "Gumption" Is.

An address was delivered before the Golden Leaf Society of Phillips Exeter Academy, at Exeter, N. H., on the 19th inst., by Mr. Edward Atkinson, on the question: "What Advantages does an American Boy Possess," in which he argued that the young men who are soon to become the workers and controllers in the business of life should be careful not to become one-sided and not to lose the "gumption" which every boy ought to possess, and which does not form a part of the curriculum of the school or college, but is developed or lost in that part of the process of education which is outside the books and independent of the teacher. "Gumption" is that power of applying the work of the hand and the brain together under the quick application of the will, which makes a boy or man ready for any emergency, and enables him to decide at a glance, or with a single thought, the right way of doing something.

In the old time, although the organization of the schools was not as perfect as it is to-day, and although the teachers were perhaps not as competent as those of modern time, while the variety of instruction was far less, there was a no less number of able and capable men among the graduates of schools and colleges in proportion to the whole number of pupils than there is to-day. The necessity which was imposed upon rich and poor alike to do some part of the work of life with their own hands, while they were attempting to develop their mental powers, worked in the direction of that readiness and versatility which we call "gumption."

It is obvious to men who have been engaged from very early years in the active work of life, and have been charged with the duty of selecting men to fill important places, that the number of school or college graduates who have been adequately prepared to apply their instruction to immediate use constitutes a painfully small proportion of the whole number. It may be admitted that the only true result of school and college training is to enable a young man to know when and how to begin the real education which must form a part of his life, and which will not end except with life, but it ought not to happen that the method of preparation is so ill devised that it disqualifies the graduate in a measure for the work which he must do. Mr. Atkinson advocates for boys and young men in school and college an organized system of sports as a means of developing manual dexterity, urging the development of hand and brain together. His address throughout is an argument in favor of students endeavoring to acquire not only that knowledge which will enable them to design, but the "gumption" which facilitates the ready application of knowledge to the execution of design in whatever work may demand their attention and effort.

In the battle of life, no man can win by firing blank cartridges.

Inquisitive people are the funnels of conversation; they do not take in anything for their own use, but merely pass it to another.

The Wilmington (Del.) *Every Evening* says that the Lobdell Car Wheel Company is now moving part of its works to the new foundry. It intends moving all of the machinery from the old foundry at the foot of Robinson street, above Second, to the new foundry. The old foundry will eventually be entirely deserted. What it will be used for is not known, though it will not be torn down. Were it to be torn down, it would make way for Robinson street to be extended further.

The cabalistic "O. K." was first officially used by Old Keokuk, the Pacific Chief of the Sacs and Foxes. When he sold Iowa to Uncle Sam, he signed the deed with his initials, O. K. His co-chief, the fiery Black Hawk, refused to sell or sign away the rights of his people to this beautiful land, and hence the "Black Hawk war." Old Keokuk years ago passed on to the happy hunting grounds of the Great Beyond, but his sign continues to supply a long felt want in the English language.

Under the new law, Chinese going home to visit with the intention of returning to this country will require a passport, but the indentification of a Chinese is a difficult matter, he differs so slightly in appearance from thousands of his race. To prevent the possibility of fraud it has been suggested that the authorities should take advantage of the fact that no two human heads are shaped exactly alike. It is proposed by means of such a machine as hatters use for measurement to represent upon every passport by small holes punched through it the outline of a horizontal section of the owner's head.

Reports of the growing cotton crop represent that there are over 15,000,000 acres under cultivation. Cotton is indigenous to this country. Virginia commenced to cultivate it in 1621, or possibly before that time, but the growth of the business appears to have been very slow. More than 100 years afterwards—in 1739—a sample of cotton was taken to London, and this is considered the first export. As late as 1784, eight out of fourteen bales of American cotton were seized at Liverpool, on the ground that so much cotton could not have been produced in the United States; but in less than ten years, as much as 189,000 pounds were imported into Liverpool. In 1826, the thousands had become millions, and in 1840 the millions of pounds became millions of bales—reaching over 2,000,000 for many years, the whole product of the United States being over 4,000,000. In recent years the crop has been about the same as "before the war."

The Great Land Company of the Northwest.—The Canadian Pacific Railway received in aid of its enterprise of extending a steel track from the Atlantic to the Pacific a land grant from the Dominion Government of 25,000,000 acres. Of this, between 2,000,000 and 3,000,000 acres have been sold. The remainder is for sale, and a company has been formed for the purchase of from 11,000,000 to 12,000,000 acres of it, paying in bonds of the Canadian Pacific Railway, for which the land company agrees to pay ten per cent above par. With the money so obtained—amounting to about $15,000,000—the railroad company will be enabled to proceed at once to build its road and equip it. The land company makes its purchase along the line of the railroad, consolidating in one the interests of a multitude of small land companies. The capitalists concerned in the consolidation are mainly Englishmen and Canadians, with a few New Yorkers acting with the Duke of Manchester, who is the leading spirit and has been elected president of the land company. Mr. Robert Tennant, member of Parliament, of Leeds, England, is vice-president. Other prominent persons interested are Lord Elphinstone, of Scotland, and Mr. W. F. Kennedy, of New York. The corporation takes one half of the town sites as far as the line of British Columbia. Among the objects of the company is the fostering of immigration to their property from all parts of Europe.

The rapid distribution of property under the American system is strikingly illustrated by the experience of California. Thirty years ago a few individuals owned vast tracts of land, grants of more than 100,000 acres each having been repeatedly made. John A. Sutter, who died a pensioner on the Government, once owned about 50,000 acres, including the site of the city of Sacramento. With a few exceptions the proprietors of these great estates became poor. In 1850 there were only 872 farms in California; by the last census there were 35,934. "Perhaps San Francisco," says *The Bulletin*, of that city, "is a better illustration of the social force to which reference is made than the State at large. This county contains 27,000 acres. Of these 3,277.64 are Government reservations. This leaves a total area of 23,722 acres. Of these 11,078.56 acres, or nearly one-half, were granted by the Mexican Government to thirteen individuals. The remaining 12,693.44 belonged to the pueblo in trust for its inhabitants. Nearly the whole of this area was grabbed by a score or so of squatters masquerading as the inhabitants of San Francisco. The whole peninsula may be said to have been owned once by less than forty persons. But there are now not less than 40,600 property owners who pay taxes. While this tremendous social force is in operation we need have no fears for the future of our Government. The efficient agents of the system are the distribution which takes place at death, and taxes. No doubt in some of the earlier cases improvidence and an inability to comprehend the new social phenomena by which they were surrounded accelerated distribution. But it would have come sooner or later, even if the highest qualities had been arrayed against it."

The Stock Exchanges and Money Market.

New York Stock Exchange.

Closing Prices for the week ending June 21.

	Th.15.	F.16.	Sat.17.	M.19.	Tu.20.	W.21.
Adams Express						
Albany and Susq						
1st mortgage						
2d mortgage						
American Express	92½	92½			92¾	
Burl., C. R. & Nor						
1st mortgage 5s	99¼	99¾	101¼			
Canada Southern	50¾	50¾	52¾	53½	52	51½
1st mortgage guar	95⅞	95	95½	95½	95½	95½
Central of N. Jersey	71¼	73⅜	75½	77¾	75¾	74¼
1st mort. 1890	118½					118½
7s, consol. ass						
7s, convertible ass.	111		109			110¼
7s, Income						
Adjustment		106½				
Central Pacific	90⅝	90⅞	91⅜	92¼	91½	91
6s, gold				117¼	117¼	117½
1st M. (San Joaq)	110¼	110	111½			
1st M. (Cal. & Or.)						
Land grant 6s						
Chesapeake & Ohio	21¾	22⅞	22½	23	23	21¾
1st pref	30¾	30¾	31½	31¾	31¾	
2d pref		24		25	24½	23
1st mort., series B	80		80½	81		79½
Chicago and Alton		131¾	132¾	132½		132½
Preferred						
1st mortgage						
Sinking Fund		113		113½		112½
Chi,, Bur. & Quincy	130⅝	130¼	132½	132	131¼	131⅛
7s, Consol. 1903						
Chi., Mil. & St. Paul	110⅝	111¼	111½	112¼	111	110¾
Preferred	125	125¾	125⅞	125⅞	125½	125
1st mortgage, 8s					135	
2d mort., 7 3-10s						
7s, gold		122	123			
1st M. (La. C. div)				122½		
1st M. I. & M. div.)						
1st M. (I. & D. ext.)						
1st M. (H.&D. div.)	117¾	118½		118¾	118¾	
1st M.(C. & M.div.)						
Consolidated S. F.			122	122¼		
Chi. & Northwestern	129	129⅞	130⅝	131	131	129¾
Preferred	142	143⅜	143¾	144⅛		143
1st mortgage						109½
Sinking Fund 6s					110	
Consolidated 7s		131⅜				
Consol. Gold bo'ds	124		125	125		
Do. reg						
Chi., R. Isl. & Pac.	130⅝	130¼	130½	131⅛	131	131
6s, 1917, c	128¼					
Clev.,Col.,Cin.&Ind.	73¼	74	75		74⅜	73
1st mortgage					125	
Clev. & Pittsburg gr.	137		134¼		137	
7s, Consolidated						
4th mortgage				113½		
Col.,Chi.,& Ind. Cent	8¼	8½	9	9	9¼	9
1st mortgage						
2d mortgage						
Del. & Hud Canal.	104¾	105½	105¾	107	108	109¼
Reg. 7s, 1891						117
Reg. 7s, 1884						
7s, 1894						
Del.,Lack.& Western	124	125	125⅛	126⅛	125¾	125¾
2d mortgage 7s						
Consol. 1907						
Erie Railway						
1st mortgage						
2d mort. 5s, ext.	110¼					
3d mortgage	105¼				105	104½
4th mort. 5s, ext.						
5th mortgage						
7s, Consol. gold	127	127	127			
Great West. 1st mort						
2d mortgage			98⅛			
Hannibal & St. Jo	40					
Preferred	82½	82	83	83	82¾	84¼
8s, Convertible	106		107		107	
Houston & Tex. Cen			70			70
1st mortgage					113	113
2d mortgage			115⅞			
Illinois Central	134	134¼	134¾	135	134¼	134½
LakeShore&MichSo	107¼	109⅜	111¾	112⅜	110⅜	108⅞
Consol. 7s						
Consol. 7s, reg						
2d Consolidated	123½				124	
Leh. & W. B. con.ass		101	101	100	100	100
Long Dock bonds						
Louisville & Nash.	67⅜	68	67¾	67	64½	61⅝
7s, Consolidated		118				
Manhattan	55¾	55	55¼	55		
1st pref						
Met. Elevated	88½					
1st mortgage	103½	104		104	104	104
Michigan Central	88¼	91	91⅞	92½	90¾	90½
7s, 1902					124½	124½
Morris & Essex	121½			122	122½	
1st mortgage						133
2d mortgage						
7s of 1871	121¾	121¾		121¾		121
7s, Convertible						
7s, Consolidated			121	121		
N.Y. Cen. & Hud. R.	129X	131¼	133	132½	130¾	130⅛
6s, S. F. 1883		102				
6s, S. F., 1887						
1st mortgage						135
1st mortgage, reg.						
N. Y. Elevated						
1st mortgage					118	
N. Y. & Harlem						
Preferred						
1st mortgage						
1st mortgage, reg						131½
N. Y., Lake Erie & W	36	36⅝	36⅞	36⅞	35⅞	35½
Preferred	72	73	73¼	74¾	75	
2d Consolidated	94	94½	95	95¼	95	94
New 2d 5s fund			91	91½		90
N.Y.,N.Hav'n&Hart				175		
North Mo. 1st mort	120					
Northern Pacific	40¼	41⅜	41⅞	42¾	41½	40⅜
Preferred	78¼	79	79⅝	80¾	79½	78⅜
Ohio & Mississippi	33⅛	33		32¾	31¾	
Preferred						
2d mortgage						
Consolidated 7s			119			
Consol. S. Fund			119			
Pacific Mail S. S. Co	42¾	41⅝	41⅞	42	41¾	41¼
Pacific R. R. of Mo.						
1st mortgage	108		108			
2d mortgage				114		
Panama						
Phila. & Reading	58⅜	59¼	60⅞	60¾	58¾	59¼
Pitts,Ft.W.&Chi.gtd		133				
1st mortgage						
2d mortgage						
3d mortgage						
Pullman Palace Car	122¼	121¼	123⅞	125	124	124⅞
Quicksil'r Min'g Co						8½
Preferred	47					
St. Louis & San Fran		36½	38		37	
Preferred		48½	50⅞		50⅝	
1st Preferred		88½	90½		90½	
St. L., Alt'n & T. H.	26		27			
Preferred	62¾					
1st mortgage						
2d mort. pref						
Income bonds						
St. L., Iron Mt. & S						
1st mortgage		115½				115½
2d mortgage		104	104		104	
Toledo and Wabash						
1st mortgage						
2d mortgage						
7s, Consolidated						
St. Louis Division	100				102	101
Union Pacific	110½	111	112	112⅛	111¾	110⅜
1st mortgage		118¾	118½		119	
Land Grant 7s						113¾
Sinking Fund 8s	120½	120⅛				
United States Ex						
Wabash, St. L.& Pac	26⅞	28½	28½	29¾	28¾	28
Preferred	50⅜	51⅜	52¾		51⅞	50¾
New mort. 7s						
Wells-Fargo Ex		129½		129½	130	
Western Pacific b'ds						
Western Union Tel.	84¾	85¼	85¼	86⅛	83⅞x	82½
7s., S.F conv., 1900						
FEDERAL STOCKS:—						
U. S. 4s, 1907, reg	119½				119½	
U. S. 4s, 1907, coup			120⅝		120½	120⅜
U. S. 4½s, 1891, reg		114⅛				
U. S. 4½s, 1891, coup		114⅛				
U. S. 5s, cont'd at 3½					101⅛	101⅜
U. S. 6s cont'd at 3½			100			
Dt. of Col. 3-65s, reg						
Dt. of Col. 3-65s, coup						111

Boston Stock Exchange.

Closing Prices for the Week Ending June 21.

	Th.15.	F.16.	Sat.17.	M.19.	Tu.20.	W.21.
Atch.,Top.&San.Fe.	84⅛	85¼		87½	86⅞	86¾
1st mortgage					118¼	
Land Grant 7s						
Boston & Albany		164½		165½		
Boston and Lowell.				102	102¾	
Boston & Maine		146		146½	147	147
Boston & Providence		157			158	
Bos'n,Hart.& Erie7s		48¼		52¼	52	51
Burl.& Mo.R.L.G.7s						
Burl.& Mo.R.in Neb						
6s, exempt						
4s						
Chi.,Burl. & Quincy	130⅜	130⅜		131¾	131½	131¼
Cin.,Sand&Clev($50)	26			27	26½	
Concord ($50)	98					
Connecticut River						
Eastern	43¼	42		44	43½	43
New 4½ Bonds		108⅝		108¾		
Fitchburg		129			126	
N.Y. & New England	47	47½		51	50	50
7s		115½			116½	116
Northern N. H	108			108	108¼	
Norwich&Worcester						
Ogden & Lake Cham						
Old Colony					135	131½x
Ph.,Wil.&Balt.($50)						
Portl'd,Saco & Ports						
Pueblo & Ark Val 7s		113¾				
Pullman Palace Car				125	125	125
Union Pacific	110½	110¾		112⅝	112	111½
6s		116				116
Land Grant 7s		112				
Sinking Fund 8s		119¼		119⅜		119
Vermont & Mass						
Worcester & Nashua						
Cambridge (Horse)						
Metropolitan(Horse)						
Middlesex (Horse)						
Cal.&Hecla Min'gCo	247	248		247½	247	
Quincy	54	54¾		54¾	54½	54¾

Philadelphia Stock Exchange.

Closing Prices for the Week Ending June 20.

	W.14.	Th.15.	F.16.	Sat.17.	M.19.	Tu 20.
Allegh'y Val. 7 3-10s						
7s, Income		50		50		50
Buff., Pitts & West.	16	15¾	16	16½	16¼	10½
Camd'n & Am. 6s, '83						
6s, 1889						
Mort. 6s, 1889						
Camden & Atlantic						
Preferred						
1st mortgage						
2d mortgage						
Catawissa						
Preferred	53¼	53½	53¾			54
2d pref	52			52½	52½	
7s, new						
Del. & Bound Brook	125	125				
7s						
Elmira&Williamsp't						
Preferred						
Hunt. & B. Top Mt.			12½	13½	14	14
Preferred				26		
2d mortgage						
Lehigh Navigation	38	37¾	37⅞	38⅛	38⅝	38¼
6s, 1884						
Gold Loan	112		109¼x			109½x
Railroad Loan	115⅛					
Conv. Gold Loan	109					
Consol. Mort, 7s				116		
Lehigh Valley	58⅞	59½	59¾	59¾	59X	58¾
1st mort. 6s, coup						
1st mort. 6s, reg						
2d mort. 7s		133¼				
Consol mort. 6s		121		121		
Consol.mtg.6s,reg	120¾					
Little Schuylkill						
Minehill&Sch.Hav'n		62½		62½		
North Pennsylvania			63			
1st mortgage 6s			107½			
2d mortgage 7s						
Genl. mtg.7s,coup						
Genl. mtg. 7s, reg						
Northern Central	47	47	47	48	48	47½
5s				98	98	
Northern Pacific	40½	40½	41¼	42	42⅜	41⅛
Preferred	78	78¼	78¾	79⅝	80¼	79¼
Pennsylvania R. R.	57¾	57¾	58⅛	58⅜	58⅞	58
1st mortgage						
Gen'l mort				124	124	124
Gen'l mort reg						
Consol. mort. 6s						
Consol. mort. reg						
Pa. State 5s, new	118⅜	118½				118½
do 4s, new	116	116	116			
do 3½s, 1912						
Phila. & Reading	29¼	29¼	29⅝	30⅝	30¾	29⅝
1st mortgage 6s						
7s of 1893						
7s, new convert		75			77¼	80
Consol. mort. 7s		123				123
Consol. mort. reg			124			
Gen'l mort. 6s	98	99	99	99¾	100	100¼
Def. Income bonds	25		26			24
Philadelphia & Erie		13	15	16		
1st mortgage 5s		103				
2d mortgage 7s			117		117	
Pittsb.,Cin.&St.L.7s		119	119	119		119
Pitts.,Tit.&Buff. 7s				96		
Schuylkill Navi't'n						
Preferred	11⅞		12¾	13¾	13	
6s, 1895						
6s, 1882						
United Co. of N. J			187	187		
Hestonville, (Horse)						
Chestnut&Wal.(do)						

Baltimore Stock Exchange.

Closing Prices for the Week Ending June 20.

	W. 14.	Th. 15.	F. 16.	Sat. 17.	M. 19.	Tu. 20.
Baltimore & Ohio..	193	.....	.....	194	.....	.....
6s, 1885.....	.....	.....	.....	.....	.....	.....
Central Ohio ($50)..	.....	.....	46¼	.....	.....	.....
1st mortgage.....	.....	.....	110½	.....	.....	.....
Marietta & Cincin'ti	.....	.....	.....	.....	.....	.....
1st mortgage, 7s..	.....	.....	.....	.....	.....	.....
2d mortgage, 7s..	.....	.....	.....	.....	.....	.....
3d mortgage, 8s..	52⅜	52⅜	.....	.....	.....	.....
Northern Cen. ($50)	46¼	47	.....	.....	47⅛	.....
2d mort., 6s 1885..	.....	.....	.....	.....	.....	.....
3d mort., 6s, 1900.	.....	.....	.....	.....	.....	.....
6s, 1900, gold.....	119	.....	.....	.....	.....	.....
6s, 1904, gold.....	.....	.....	.....	.....	.....	.....
Pitts. & Connellsv. 7s	.....	.....	....	124	.....	.....
Virginia 6s, Consol.	60½	59¼	59⅛	60	60	59¼
Consol. coupons..	.....	61	.....	.....	.....	.....
10 40 bonds.....	42⅜	.....	.....	.....	42⅛	42⅛
Def'd Certificates.	.....	.....	.....	.....	.....	.....
Western Maryland..	.....	.....	.....	.....	17⅛	18
1st M., end. by Balt	.....	.....	.....	.....	.....	.....
2d M. do	.....	.....	.....	.....	.....	.....
3d M., do	.....	.....	.....	.....	.....	.....
1st M., unendors'd	114	.....	.....	.....	114	.....
2d M., end. WashCo	.....	.....	.....	.....	.....	.....
2d M., preferred..	.....	.....	.....	.....	.....	.....
City Passenger R R.	....	.....	42½	.....	.....	.....

London Stock Exchange.

	Closing Prices — June 2.	June 9.
Baltimore & Ohio 5s, 1927.....105	107	105 107
Central of N. J., $100 shares.... 93	98	93 98
Do. consol. mort.....112	115	112 115
Do. Income Bonds..... 93	97	93 97
Det., G'd Haven & Mil. Equip bds 115	117	115 117
Do. Con. M. sp. c., till '83 aft'r 6p. c 112	114	112 114
Illinois Central $100 shares.....137	139	135 137
Lehigh Valley Cons. mortgage..115	119	115 119
Louisville & Nashville mort 6s. 99	101	99 101
Do. capital stock $100 shares. 76	78	67 69
N. Y. Cent. & Hud. R. mt. bds..135	138	135 138
Do. $100 shares.....130	132	129 131
Do mort. bonds (stg.).....124	126	124 126
N.Y., Lake Erie & West., $100 shs 35½	36	34⅛ 35
Do. 6 p. c. pref. $100 shares .. 72	75	71 73
Do. 1st Con. Mort. bds (Erie) .128	130	128 130
Do. do. Funded Coupon bds.124	126	124 126
Do. 2d Consol Mort. bonds... 93	95	90 92
Do. do. Funded Coupon bds.. 91	93	87 89
N.Y., Pa. & Ohio 1st mort. bonds. 45¼	46½	42⅛ 43½
Do. Prior Lien bds (sterling)..103	108	103 108
Pennsylvania, $50 shares..... 57⅛	57	56¼ 56¾
General Mortgage.....122	126	122 126
Philadelphia & Reading $50 shs 28¼	28¾	27⅛ 28
General Consol Mortgage.....115	117	115 117
Do. Improvement Mortgage..102	104	102 104
Do. Gen. Mtg. '74, ex-def'd coup. 89	101	89 101
St. L. Bridge 1st mort. gold b'd. 125	127	125 127
Do. 1st pref. stock..... 98	102	98 102
Union Pacific 1st. mtg 118	120	118 120
Wabash, St. L. & P. $100 shs..... 29	30	25⅛ 26½
Do. $100 pref. shares..... 52	54	49 50
Do. gen. mort. bonds..... 81	83	76 78

AMERICAN RAILROAD JOURNAL.

Financial and Commercial Review.

THURSDAY EVENING, June 22, 1882.

The ruling rate for call loans this morning on stocks was 3 per cent, and on governments 2 per cent. In the afternoon the quotation was 3 per cent, and at the close 2½@3 per cent.

The posted rates for prime bankers' sterling were 4.87 and 4.89½, but the rates for actual business were 4.86@4.88¼ for long, 4.88⅛@4.88¾ for demand, 4.89@4.89¼ for cable transfers, and 4.84¼@4.84½ for prime commercial bills. The actual rates for continental bills are as follows: Francs, 5.18¾@5.18⅛ and 5.15⅝@5.15; Marks, 95@95¼ and 95¾@95⅞, and Guilders, 40 3-16 and 40 9-16.

The gross receipts of the Philadelphia and Reading Railroad Company for the month of May were $1,703,469.16, and the expenses (including rentals and interest) were $942,536.50, leaving a profit of $760,932,66—which is a decrease of $18,590.79, as compared with the corresponding month of last year. The gross receipts of the Coal and Iron Company for the month were $1,174,539.87, and the expenses (excluding interest) $1,154,898.28, leaving a profit of $19,641.59, The profit of both companies for the month of May was $780,574.25, being a decrease as compared with the corresponding period last year of $45,280.31. The profit of both companies for this year to date is $4,167,439.74, an increase of $318,208.57 as compared with the same period of last year.

A law has just been officially promulgated in Germany opening a credit of £4,910,900 for construction purposes. Of this sum £2,351,900 will be devoted to the establishment of 16 new lines. Eight existing lines will be supplied with second lines of rails at an estimated expense of £847,500, and £1,147,500 will also be applied to the construction of new buildings upon existing lines. It is further proposed to increase the supply of rolling-stock, and to expend for this £550,000. The balance of £15,000 will be devoted to the final completion of the Bebra and Friedland.

The House of Representatives at Washington on the 19th inst. passed a bill authorizing the Secretary of the Treasury to receive, until the 1st of July, 1884, trade dollars upon presentation, and to give in exchange for them standard silver dollars. The bill repeals all laws authorizing the coinage of the trade dollar.

The officers of the Pennsylvania Railroad Company estimate that the subscriptions for the stock lately allotted by the board of directors will amount to nearly $6,000,000. The amount of the extra stock issue authorized is about $6,240,000.

The Boston *Commercial Bulletin* says that the total value of all the worsted and woolen hosiery and knit goods imported into the United States since the Revised Statutes went into effect is $5,360,000, and that the entire duties on them would be only about $3,000,000. As it did not occur to many of the importers to pay the duties under protest until a year ago, it is doubted whether the whole amount which the Government will be called upon to refund in this case will exceed $500,000.

There was filed in the office of the Dutchess County Clerk at Poughkeepsie, N. Y., on the 17th inst. a mortgage for $5,000,000 given by the Mutual Union Telegraph Company, covering their entire lines, extending through the Eastern States, New York, Ohio, Indiana, Illinois, Michigan, New Jersey, Pennsylvania, Delaware, Minnesota and other States. It will be remembered that at a meeting of the Mutual Union Telegraph Company in May, 1881, the directors were empowered to borrow $5,000,000 for the purpose of extending the lines of the company. The instrument gave to the Central Trust Company a first mortgage on all property of every description belonging to the Mutual Union Company, as security for the payment of 5,000 6 per cent bonds, aggregating $5,000 000, or $1,000 each, which will fall due in 1911.

The exports of domestic provisions, tallow and dairy products during May, 1882, was $6,165,015; May, 1881, $9,092,642; five months ended May 31, 1882, $42,966,216; same period in 1881, $61,563,614; exports of provisions and tallow for the seven months ended May 31, 1882, were $59,319,414; seven months ended May 31, 1881, $81,370,622.

The Secretary of the United States Treasury has transmitted to Congress the report of the directors of the Mint upon the production of gold and silver in the United States in the year 1881. The report is very comprehensive, and gives the fullest possible statistics of production by States, by counties, and in many cases by mining districts. The total product of gold for the year was $34,700,000, and of silver $43,000,000. Colorado takes the first place among the producing States, with a yield of more than $20,000,000, California follows with a yield of nearly $19,000,000, and Nevada, which at one time ranked first, is now third, with a product of less than $9,000,000. A number of important papers relating to mines and mining are appended to the report, among them a careful review of the present condition of the principal gold and silver mines in the United States.

The Receivers of the Philadelphia and Reading Railroad Company give notice that the coupons of the general mortgage 6s due January 1, 1882, and the coupons of the income mortgage 7s due June 1 and December 1, 1880, June 1 and December 1, 1881, and June 1, 1882, will be paid on June 23d. The sum required to do this will amount to between $800,000 and $1,000,000.

The following quotations of sales of railway and other securities, for the week, are in addition to those given elsewhere in our columns:

New York.—Atchison, Colorado and Pacific 1st, 92½; Am. Dock and Imp. 5s, 93; Atlantic and Pacific 1st, 101¼; Boston and New York Air Line pref., 75¼; Cairo and Fulton 1st, 109¼; Central Iowa 1st, 113½; Chicago and Milwaukee 1st, 124; Chicago, St. Paul, Minneapolis and Omaha, 39⅝; do. pref., 102½; do. consol., 103¼; Cedar Falls and Minnesota, 19½; Chesapeake and Ohio cur. int., 48; Chicago, Milwaukee and St. Paul, Southern Min. div. 1st, 109½; Chicago, Burlington and Quincy, Iowa div. 5s, 107; Chicago and Northwestern S. F. 5s, 100¾; Cedar Rapids, Iowa Falls and Northern 1st, 100; Columbus, Chicago and Indiana Central 1st Trust Co. certif. ass. sup., 115; Denver and Rio Grande, 54⅜; do. 1st, 113; do. consol., 105; Evansville and Terre Haute 1st, 96½; do. consol., 96¾; East Tennessee, Virginia and Georgia, 9⅞; do. pref., 16¾; do. 5s, 75; do. inc., 46; Elizabeth, Lexington and Big Sandy 6s, 95; Fort Worth and Denver, 1st, 95¾; Green Bay, Winona and St. Paul, 9; do. 1st, 85; Gulf, Colorado and Santa Fe 1st, 108¼; Houston and Texas Central, Gen'l mort., 97; do. western div. 1st, 109; Hannibal and St. Joseph 6s, consol., 105; Indiana, Bloomington and Western, 39¼; International and Gt. Northern coupon 6s, 87½; do. 1st, 106; Indianapolis, Decatur and Springfield 1st, 103; Kansas Pacific 1st consol., 102¾; do. 6s, 1895, 112⅝; do. 6s, Denver div. ass., 109½; Keokuk and Des Moines, 15; Lake Erie and Western 1st, 99⅞; do. inc., 40¼; Lafayette, Bloomington and Muncie 1st, 99¾; Louisiana and Missouri River, 16; Long Island, 57¾; do. 1st, 117; do. consol. 5s, 97½; Louisville and Nashville Gen'l mort. 6s, 96; Michigan Central 5s, 100; Mobile and Ohio, 17⅝; do. 1st deben., 104½; do. 2d deben., 45; Marietta and Cincinnati 2d pref., 5; Missouri, Kansas and Texas, 30⅛; do. gen'l mort. 6s, 79½; do. consol. 7s, 106½; do. 2d, 60¾; Missouri Pacific, 93; do. 1st consol., 100¾; do. 3d, 109½; Memphis and Charleston, 49½; Milwaukee, Lake Shore and Western, 46½; do. 1st, 101; Manhattan Beach, 31; Metropolitan Elevated 2d, 91; Minneapolis and St. Louis Iowa ext. 1st, 112; New York, Chicago and St. Louis, 11½; do. pref., 29¼; do. 1st, 84½; Nashville, Chattanooga and St. Louis, 52½; do. 1st, 116; New York, Ontario and Western, 24; Norfolk and Western pref., 50; Northern Pacific 1st consol., 103¾; New Orleans Pacific 1st, 86½; New York, Penn. and Ohio inc., 41¾; New York City and Northern Gen'l mort., 51; Ohio Central, 13½; do. inc., 30; do. 1st, 95; Oregon Transp., 70; Oregon Short Line 6s, 103½; Oregon Railway and Nav., 135; do. 1st, 110; Ohio Southern 1st, 80; Peoria, Decatur and Evansville, 27½; do. Evansville div. 1st, 100¾; Richmond, Danville and West Point, 53; Rensselaer and Saratoga, 137; Richmond and Danville, 106; do. deben., 70; Rochester and Pittsburgh, 26¼; Richmond and Alleghany, 19; Rome, Watertown and Ogdensburg consol. 1st mort. Trust Co. certif., 87; St. Paul, Minneapolis and Manitoba, 134; do. 1st, 112; do. 2d, 111¼; do. Dakota ext., 1st, 108¾; St. Louis and San Francisco 2d, Class B, 86¾; do. C, 88; St. Louis, Kansas City and Northern, Omaha div. 1st, 106¼; do. R. E. 7s, 105¼; St. Louis, Iron Mountain and Southern 5s, 79; do. 2d pref. inc., 84; Southern Pacific of California 1st, 106; St. Paul and Sioux City 1st, 111; Texas and Pacific, 42⅞; do. inc. Land Grants, 65⅛; do. 1st, 110; do. Rio Grande div. 1st, 82⅞; Toledo, Delphos and Burlington Inc., 20; Toledo, Peoria and Western 1st, 109½; Utah Southern Ext. 1st, 100; do. Gen'l mort. 7s, 100; Wabash, St. Louis and Pacific, Gen'l mort. 6s, 79; do, Chicago div. 1st, 82: do. Iowa div. 1st, 90; Arkansas 7s, Central R. R., 10; do. L. R. & F. S., 30; Alabama, Class A, 80⅜; Missouri 6s, 1886, 109¾; do. 1887, 110¾; do. 1888, 111¼; do. 1889-'90, 113½; North Carolina Fund Act, 1868, 10; South Carolina 6s, nonfund., 6; Tennessee 6s, 55¼; Colorado Coal and Iron, 45; do. 6s, 91¼; Cameron Coal, 33¾; Maryland Coal, 15; Deadwood Mining Co., 5½; Little Pittsburgh, 1½; Standard, 18.

Boston.—Atlantic and Pacific blocks, 111; do. 6s, 98¼; do. inc., 27; Atchison, Topeka and Santa Fe 5s, 87½; do. mort. 5s, 98; Boston Water Power Co., 4½; Boston Land, 7½; Boston, Clinton, Fitchburg and New Bedford, 62; Burlington and Missouri River 4s, 81½; Chicago, Burlington and Quincy 7s, 128¼; do. 4s, old, 86; do. 4s, Denver extension, 83¾; California Southern 6s, 80; Connotten Valley, 7; Connecticut and Passumpsic Rivers R. R., 92; Chicago, Milwaukee and St. Paul, Dubuque div. 6s, 103¾; Chicago and West Michigan, 67; Flint and Pere Marquette, 24; do. pref., 96½; Iowa Falls and Sioux City, 90; Kansas City, Fort Scott and Gulf pref., 121¾; Kansas City, St. Joseph and Council Bluffs 7s, 113¾; Little Rock and Fort Smith, 48½; do. 7s, 107¾; Louisiana and Missouri River, 15¾; Maine Central, 70; Mexican Central 7s, 85; do. Block No. 2, 110; do. No. 3, 105; Marquette, Houghton and Ontonagon, 65½; do. pref., 120; do. 6s, 101½; Massachusetts Central, 5¼; New York and New England 6s, 104¾; Northern Pacific 6s, 100½; Oregon Short Line 6s, 101½; Portsmouth, Gt. Falls and Conway, 25; Rutland pref., 24; Sonora 7s, 104; Summit

Branch, 12; Toledo, Cincinnati and St. Louis, 7; do. 6s, 63; do. inc., 17; Toledo, Delphos and Burlington, inc., 22⅞; do. Dayton div. inc., 16⅝; do. Southeast div. inc., 17½; Wichita and Southwestern 7s, 108; Wisconsin Central, 15; do. 7s, 1st Series, 85¼; Allouez Mining Co., 2¾; Brunswick Antimony, 11; Franklin, 12½; Huron, 1½; Harshaw, 1½; Pewabic, 10; Phœnix, ½; Sullivan, 1⅝; Silver Islet, 18.

Philadelphia.—Central Transportation, 34; Camden and Atlantic pref. scrip, 80; Elmira and Williamsport 5s, 100; Huntingdon and Broad Top Mt. consol. 5s, 86; Nesquehoning Valley, 52½; Northern Pacific 7.30s, 105; Norfolk and Western pref., 50½; Pennsylvania Co. 4½s, 98; Pennsylvania and New York Canal 7s, 1906, 124; Perkiomen 5s, 104; Philadelphia and Trenton, 85; Philadelphia, Wilmington and Baltimore 4s, 95; Philadelphia, Germantown and Norristown, 111; Philadelphia and Reading R. R. scrip, 100½; Sunbury and Erie 7s, 117; St. Paul and Duluth, 2s; Steubenville and Indiana 6s, M. & N., 103½; do. A. & O., 104; Texas and Pacific consol. mort. 6s, 95¾; do. Rio Grande div. 6s, 84¼; Union and Titusville 7s, 94¾; Warren and Franklin 7s, 113½; West Jersey and Atlantic 6s, 108½. The latest quotations are: City 6s, 108@118; do. free of tax, 125@133; do. 4s, new, 108@115; Pennsylvania State 5s, new loan, 118@119; do. 4s, old, 108@112; do. 4s, new, 115¼@116¾; Philadelphia and Reading R. R., 29½@29⅝; do. consol. mort. 7s, reg., 124@125; do. gen'l mort. 6s, coupon, 100¾@101¼; do. 7s, 1893, 119@120; do. new conv., 79@80; United New Jersey R. R. and Canal, 184½@184¾; Buffalo, Pittsburg and Western, 16@16⅛; Pittsburgh, Titusville and Buffalo 7s, 95½@96½; Camden and Amboy mort 6s, 1889, 112½@113; Pennsylvania R. R., 57½@57⅝; do. general mort. 6s, coupon, 123¾@124; do. reg., 123¾@124; do. consol. mort. 6s, reg., 120@121; Little Schuylkill R. R., 57¾@58; Schuylkill Navigation, pref., 12⅞@13¼; do. 6s, 1882, 91@92; Elmira and Williamsport pref., 58@60; do. 5s, 100@—; Lehigh Coal and Navigation, 37¾@38; do. 6s, 1884, 103¾@104¼; do. R. R. loan, 115@116⅛; do. Gold Loan, 109@109¼; do. consol. 7s, 115⅛@116¼; Northern Pacific, 40½@40¾; do. pref., 78⅜@78½; North Pennsylvania, 63@63¼; do. 6s, 107@108; do. 7s, 119@120; do. 7s, General mort. reg., 122@123; Philadelphia and Erie, 16@16½; do. 7s, 117@118; do. 5s, 103@103¾; Minehill, 62½@63; Catawissa 23@24; do. pref., 54@54¼; do. new pref., 52@52½; do. 7s, 1900, 120@—; Lehigh Valley, 58¾@59; do. 6s, coupon, 120@123; do. reg., 120½@121; do. 7s, 133½@134; do. consol. mort. 120½@121; Fifth and Sixth streets (horse), 159@160; Second and Third, 110@112; Thirteenth and Fifteenth, 70@75; Spruce and Pine, 40@45; Green and Coates, 80@90; Chestnut and Walnut, 90@93; Germantown, 70@75; Union, 110@115; West Philadelphia, 108@112; People's 13¾@14; Continental, 100@102.

Baltimore.—Atlantic Coal, 1.20; Atlanta and Charlotte, 68½; do. 1st, 106½; Baltimore City 6s, 1893, 125; do. 6s, 1890, 117½; do. 5s, 1916, 125; Columbia and Greenville 1st, 104, Canton Co. 6s, gold, 105¼; Cincinnati 7.30s, J. & J., 132½; Maryland Defense 6s, 103; Marietta and Cincinnati 1st Trust certificates, 125¼; do. 2d do. 96¼; do. 3d, do., 52⅜; Northern Central 5s, 98½; Ohio and Mississippi, Springfield div. 6s, 116¼; Parkersburg Branch, 10½; Richmond and Danville, 99; do. gold bonds, 100; do. bonds, 1890, 107; Virginia Midland pref., 100; do. 2d mort., 108½; do. 3d mort., 90¾; do. 4th mort., 52¼; do. 5th mort., 95; do. inc., 60; Virginia Peelers, 32½; do. coupons, 38; do. 10-40 coupons, 66; Virginia and Tennessee 2d, 103; Wilmington, Columbia and Augusta, 108. The latest quotations are: Atlanta and Charlotte 1st, 106¼@107; Baltimore and Ohio, 193@195; Baltimore City 6s, 1890, 117¼@117⅝; do. 6s, 1902, 130@—; do. 5s, 1894, 116; do. 5s, 1916, 124⅝@—; Canton Co. 6s, 104⅛@106; Columbia and Greenville 1st, 104¼@105; Marietta and Cincinnati 1st, 125@126; do. 2d, 96¾@97⅛; do. 3d, 52½@52¾; Northern Central, 47¼@—; do. 6s, 1900, gold, 119@119½; do. 6s, 1904, gold, —@119½; do. 5s, 1926, 98@98¼; Ohio and Mississippi, Springfield div. 6s, 115¾@117; Pittsburg and Connellsville 7s, 123¾@125; Virginia Consols, 60@63¼; do. 10-40s, 42⅜@42¾; Virginia Midland 5th, 94@95; do. income, 61@67; Virginia and Tennessee 6s, 103@—; do. 8s, 125@—; Wilmington, Columbia and Augusta, 107¼@108¼.

The Hamburg Axe and Edge Tool Co., of Erie county, N. Y., has filed a certificate of increase of its stock from $8,000 to $12,000.

Iron and Steel Production in 1881.

From the annual report of James M. Swank, Secretary of the American Iron and Steel Association, which has just been completed, we obtain the statistics of the production of iron and steel in the United States during the year 1881. This report deals only with the blast furnaces, iron and steel rolling-mills, and iron ore and scrap forges, and does not contain any statistics concerning the foundries, machine shops, etc. that consume the pig iron and rolled iron and steel.

With the exception of iron rails, there is an increase in the production of every article of iron and steel in the United States in 1881 over 1880. Owing to the substitution of steel for iron in the manufacture of rails our iron rail industry has greatly decreased in extent since 1872, when the production of iron rails in this country was 905,930 net tons (2,000 pounds); the largest quantity produced in any one year in our history. In 1881, our production of iron rails was over 488,581 tons. To somewhat compensate for the decreased demand of iron rails the iron rail mills of the country annually roll quite a number of tons of steel rails from imported blooms.

While the production of iron rails in the United States has fallen off considerably during the past nine years the production of Bessemer steel rails has wonderfully increased since 1867, when they were first made to fill orders. In that year the production was 2,550 net tons, and in 1881 the production was 1,330,302 tons. The increase in the production of this class of rails in 1881 over 1880 was 375,840 tons, or nearly forty per cent. Of the total production of Bessemer rails in 1881 there were 77,173 net tons rolled by the iron rail mills of this country, mainly from blooms imported.

In 1878 we first commenced the manufacture of open hearth steel rails in this country, at the close of which year 9,397 net tons were produced. In 1881 the production was 25,217 tons, an increase of 11,602 tons over the production in 1880, or over eighty-five per cent. Of the total production of iron and steel rails in 1882 (1,844,100 net tons), Pennsylvania produced forty-eight per cent, and Illinois produced twenty-four per cent. The approximate consumption of all kinds of rails by the United States in 1881 is given at 2,230,422 net tons, which is obtained by adding the total rail production of the United States in 1881 to the quantity imported in that year—157,013 tons of iron rails and 249,309 tons of steel rails.

In 1881 we produced 1,539,157 net tons of Bessemer steel ingots, 146,946 tons of open-hearth steel ingots, 89,762 tons of crucible steel ingots, and 3,047 tons of blister and miscellaneous steel, making a total production of crude steel in 1881 of 1,778,912 net tons. During the same year our production of rolled iron (bar, angle, bolt, rod, sheet and plate iron, and nail plate), excluding rails, was 4,641,564 net tons, an increase of 346,150 tons over the production of 1880. Our production of pig iron in 1881 was 4,641,564 net tons, while in 1880 it was 4,295,414 tons. Our production of cut nails and spikes last year, the iron from which they were made being included in the total production of rolled iron above, was 5,794,206 kegs, of 100 pounds each, of which 1,914,706 kegs were made in Pennsylvania and 1,241,102 kegs were made in West Virginia.—*Pittsburgh Chronicle.*

The Coal Trade.

The leading coal-carrying companies make the following reports of their tonnage for the week ending June 10th, and for the year to that date, compared with their respective amounts carried to the same time last year:—

	Week.	1882.	1881.
Reading Railroad	152,679	3,761,479	3,642,775
Schuylkill Canal	6,950	129,157	131,997
Lehigh Valley	159,324	2,937,679	2,703,048
Delaware, Lackawanna and Western	100,282	1,687,112	1,700,491
Shamokin	22,688	407,077	443,699
Central R. R. of New Jersey	93,622	1,648,923	1,703,861
United R. R. of New Jersey	36,975	689,998	659,350
Pennsylvania Coal	33,865	467,552	494,078
Delaware and Hudson Canal	69,095	1,291,364	1,440,961
Huntingdon and Broad Top Mountain	5,850	201,722	201,668
Penn. and New York	32,575	721,729	695,112
Clearfield, Pa.	68,130	1,307,994	1,029,429

The total tonnage of anthracite coal from all the regions for the week ending June 10, as reported by the several carrying companies, amounted to 528,692 tons, against 344,933 tons in the corresponding week last year, an increase of 183,750 tons. The total amount of anthracite mined for the year is 10,717,019 tons, against 10,814,066 tons for the same period last year, a decrease of 95,047 tons. The quantity of bituminous coal sent to market for the week amounted to 81,081 tons, against 90,061 tons in the corresponding week last year, a decrease of 9,180 tons. The total amount of bituminous mined for the year is 1,958,322 tons, against 2,084,6333 tons for the corresponding period last year, a decrease of 126,401 tons. The total tonnage of all kinds of coal for the week is 609,773 tons, against 435,194 tons in corresponding week last year, an increase of 174,579 tons, and the total tonnage for the coal year is 12,677,251 tons, against 12,898,699 tons to same date last year, a decrease of 221,448 tons The quantity of coal and coke carried over the Pennsylvania Railroad for the week ending June 3d was 197,265 tons, of which 146,950 tons were coal and 50,315 tons coke. The total tonnage for the year thus far has been 4,661,728 tons, of which 3,352,653 tons were coal and 1,309,075 tons coke. These figures embrace all the coal and coke carried over the road, east and west. For the week ended Saturday, June 10, there were 7,539 tons of coal shipped from the Cumberland coal region, of which 1,183 tons were shipped by the Consolidation Coal Company, 882 tons by the Piedmont Coal and Iron Company, and 5,472 tons from the Elk Garden region. The aggregate for the year is 505,389 tons. The decrease compared with 1881 is 33,096 tons for the week and 310,028 tons for the present year. The Reading Railroad shipment for last week, ending June 17, was about 178,000 tons, of which 43,009 tons were sent to and 52,000 tons shipped from Port Richmond, and 16,900 tons sent to and 15,800 shipped from Elizabethport.—*Philadelphia Ledger, June 19.*

Henry Fink, vice-president and general manager of the Norfolk and Western Railroad, and East Tennessee, Virginia and Georgia Railroad, has been appointed general manager of the Shenandoah Valley Railroad, with office at Lynchburg, Va. Major Fink assumed the duties of the position on the 19th inst., simultaneously with the completion of the Shenandoah Valley Railroad and the commencement of through business in connection with the East Tennessee, Virginia and Georgia.

The Anne Arundel County (Md.) authorities have invited proposals, to be received at Annapolis, for the construction of the contemplated bridge over the Severn River, the right of way to cross the Government premises having been granted by Congress. The bridge is to be constructed of wood and iron, will be about 1,825 feet in length, and is to be located from a point near Meadow Bar, on the Annapolis side, to Brice's Point on the north side of Severn.

RAILROAD AND CANAL DIVIDEND STATEMENT.

Showing the amount of Stock Outstanding, the Dividend Periods and the date of last Dividend.

Marked thus(*)are leased roads.	Stock out-standing.	Divide'd Periods.	Last Dividend Payable.
Albany and Susq*...100	2,500,000	semi-an	July '82 2
Ashuelot.....100	210,000	q'arterly	Oct. '81 3½
Atch., Top. and S. Fe100	54,000,000	q'arterly	May '82 1½
Atlanta and W. Point100	1,232 200	semi-an	Jan. '82 6
Atlantic and St. Law*100	5,840,000	semi-an	Mar. '82 3
Augusta and Savan'h100	1,022,900	semi-an	June'81 3½
Avon, Genesee&MtM*100	225,000	semi-an	July '81 3
Baltimore and Ohio.100	14,792,566	semi-an	May '82 5
" " pref.100	5,000,000	semi-an	July '82 3
Washington Br....100	1,650,000	semi-an	Apl. '82 5
Berkshire*.....100	600,000	q'arterly	Apl. '82 1¾
Boston and Albany..100	20,000,000	q'arterly	June'82 2
Bos.&N.Y.AirLine pf.100	2,795,227	q'arterly	June'82 1
Bos., Cl., F.&N.B.pref.100	1,750,100	.....	Apl. '82 3½
Bos., Conc.&Mont.pf*100	800,000	semi-an	May '82 3
Boston and Lowell..500	3,940,000	semi-an	July '82 2
Boston and Maine...100	6,921,274	semi-an	May '82 4
Boston & Providence100	4,000,000	semi-an	May '82 4
Attleborough Br...100	131,700	semi-an	Jan. '82 3½
Bos., Revere B&Lynn100	419,400	semi-an	Jan. '82 3½
Buffalo, N. Y. & Erie*.100	950,000	semi-an	June'82 3
Camden & Atlantic.. 50	377,400	q'arterly	Apl '80 38
" " pref. 50	880,650	q'arterly	Apl '80 3½8
Camden & Burl. Co..100	381,925	semi-an	July '82 3
Canada Southern....100	15,000,000	.....	Feb. '81 2½
Cape May & Millville* 50	447,000	semi-an	June'81 3
Catawissa*..... 50	1,159,500	annual	Oct. '81 $1½
" pref..... 20	2,200,000	semi-an	May '82 3½
" new pref.. 50	1,000,000	semi-an	May '82 3½
Cayuga and Susq.*.. 50	589,110	semi-an	July '81 4½
Cedar Rapids&Mo.R*100	6,850,400	q'arterly	May '82 1½
" " pref.100	769,600	semi-an	Feb. '82 3½
Central of Georgia...100	7,500,000	semi-an	June '82 4
Central of New Jersey100	18,563,200	q'arterly	July '76 2½
Central Ohio*..... 50	2,437,950	semi-an	Jan. '82 3
" pref... 50	411,550	semi-an	Jan. '82 3
Central Pacific 100	59,275,500	semi-an	Feb. '82 3
Chemung*..... 100	380,000	q'arterly	July '81 1½
Cheshire preferred ..100	2,155,300	semi-an	Jan. '82 1½
Chicago and Alton...100	11,181,741	semi-an	Mar. '82 4
" " pref 100	2,245,400	semi-an	Mar. '82 4
Chi., Burl. & Quincy.100	55,337,455	q'arterly	June'82 2
Chi., Iowa & Nebras*.100	3,916,200	semi-an	July '82 4
Chi., Mil. & St. Paul.100	20,404,261	semi-an	Apl. '82 3½
" " pref 100	14,401,483	semi-an	Apl. '82 3½
Chi. & N. Western...100	14,988,257	semi-an	June'82 3½
" pref.100	21,525,353	q'arterly	June'82 2
Chi., R. I. & Pacific..100	41,960,000	q'arterly	May '82 1¾
Chi. and West Mich .100	6,151,000	semi-an	Feb. '82 2½
Chi., St. P., M. & O. pref.100	10,390,000	q'arterly	July '82 1¾
C., Ind., St. L. & Chi..100	6,000,000	q'arterly	Apl. '82 1½
Cin., Sand. & Clev.pf. 50	429,037	semi-an	May '82 3
Clev. and Mahoning* 50	3,759,200	semi-an	Nov. '81 3½
Clev. and Pittsburg* 50	11,244,336	q'arterly	June'82 1¾
Columbus & Xenia*. 50	1,786,200	q'arterly	June'82 2
Colum. & Hocking Val.100	2,500,200	semi-an	Aug. '81 208
Concord 100	1,500,000	semi-an	May '82 5
Concord and Ports.*..100	350,000	semi-an	Jan. '82 3½
Conn. & Passump. Riv100	2,244,400	semi-an	Feb. '82 3
Connecticut River ..100	2,100,000	semi-an	July '82 4
Cumberland Valley.. 50	1,292,950	q'arterly	Apl. '82 2½
" 1st pref 50	241,900	semi-an	Apl. '82 4
" 2d pref. 50	243,000	semi-an	Apl. '82 4
Danbury & Norwalk. 50	600,000	.....	Apl. '82 1½
Dayton and Mich.*.. 50	2,402,573	semi-an	Oct. '81 1¾
" " pref. 50	1,211,250	q'arterly	Oct. '81 2
Delaware*..... 25	1,468,940	semi-an	Jan. '82 3
Del. & Bound Brook*100	1,652,000	q'arterly	May '82 1¾
Del., Lack. & Western 50	26,200,000	q'arterly	July '82 2
Denver & Rio Grande.100	29,160,000	q'arterly	Jan. '82 1½
Den., South P. & Pac.100	3,500,000	.....	Aug. '80 4
Detroit, Lans. & Nor.100	1,825,600	semi-an	Aug. '80 2½
" " pref.100	2,503,380	semi-an	Feb. '82 3½
Dubuque&Sioux C'y*100	5,000,000	semi-an	Apl. '82 3
East Pennsylvania*., 50	1,709 550	semi-an	Jan. '82 3
East Mahanoy*..... 50	392,950	semi-an	Jan. '82 3
Eastern (N. H.).....100	492,500	semi-an	June'82 2½
Eel River.....100	3,000,000	q'arterly	June '82 $1
Elmira, Jef. & Canand*100	500,000	annual	Sep. '80 5
Elmira&Williamsp't* 50	500,000	semi-an	May '82 1½
" " pref. 50	500,000	semi-an	Jan. '82 3½
Erie and Pitsburg*.. 50	1,998,400	q'arterly	Dec. '81 1¾
Evansville & Terre H.100	100,000	semi-an	Nov. '81 2
Fitchburg.....100	4,500,000	semi-an	July '82 3
F. & P. Marquette pf.100	6,500,000	semi-an	July '82 3
Ft. W. & Jackson pref.100	2,000,000	.....	May '82 2
Georgia. 100	4,200,000	q'arterly	July '82 2½
Granite 100	1,250,000	semi-an	July '82 3
Han. & St. Jo. pref .100	5,083,024	semi-an	Feb. '82 3½
Harrisbg&Lancaster 50	1,182,500	semi-an	Jan. '82 3½
Housatonic pref. ...100	1,180,000	q'arterly	Apl. '82 2
Illinois Central.....100	39,000,000	semi-an	Mar. '82 3½
Ia. Falls & Sioux City*100	4,623,500	q'arterly	June'82 1¾
Iowa R. Land Co....100	7,620,000	q'arterly	May '82 1
Jeffersonv. Mad. & Ind100	2,000,000	q'arterly	May '82 1¾
Joliet and Chicago*..100	1,500,000	q'arterly	June'82 1¾
Kan. C., Ft. S. & Gulf...100	4,000,000	.....	Feb. '82 2
" " pref..100	2,750,000	semi-an	Feb. '82 4
Kentucky Central...100	500,000	semi-an	June'81 1
" " pref..100	5,583,500	semi-an	June'83 1
Lake Shore&Mich. So.100	49,466,500	q'arterly	May '82 2
" (guar.)100	533,500	semi-an	Feb. '82 5
Lawrence*..... 50	450,000	q'arterly	Apl. '82 2
Lehigh Valley..... 50	27,496,895	q'arterly	July '82 1½
" pref. 50	106,300	q'arterly	July '82 1½
Little Miami..... 50	4,637)300	q'arterly	June'82 2
Little Rock & Ft. S..100	4,096,135	.....	July '81 108
Little Schuylkill*.. . 50	2,646,100	semi-an.	Jan. '82 3½
Louisville & Nashv...100	19,130,913	semi-an.	Feb. '82 3
Lowell & Andover...100	500,000	semi-an.	Jan. '82 3½
Lykens Valley.....100	600,000	q'rterly.	Oct,' 81 2½
Manchester & Law..100	1,000,000	semi-an.	May '82 5
Manhattan 100	13,000,000	.....	.....
" " 1st pref.100	6,500,000	q'rterly.	July '82 1½
" " 2d pref.100	6,500,000	q'rterly.	July '82 1½
Marietta& Cincinnati 50	1,386,350	.....	.....
" " 1st pref 50	8,105,600	semi-an.	Sep. '66 38
" " 2d pref 50	4,440,000	semi-an.	Sep. '66 38
Marq. Hout. & Ont. pf...100	2,259 026	.....	Feb. '82 4
Massawippi*..... 100	400,000	semi-an.	Feb. '82 3
Michigan Central....100	18,378,204	q'rterly.	Aug. '81 1
Middlesex Central...100	280,000	semi-an.	Feb. '82 3
Mill Creek&Minehill* 50	323,000	semi-an.	Jan. '82 5
M. Hill& Schuyl. Hav* 50	4,022,500	semi-an.	Jan. '82 3½
Missouri Pacific.....100	28,169,800	q'rterly.	July '82 1½
Mobile&Montgomery100	3,022,517	semi-an.	Feb. '80 2½
Mont. & Wells River100	800,000	annual	Feb. '80 2
Morris and Essex.... 50	15,000,000	semi-an.	July '82 3½
Mt Carbon&PtCarbon 50	282,350	semi-an.	Jan.. '82 6
Nashua and Lowell..100	800,000	semi-an.	May '82 4
Nashua & Rochester..100	1,305,800	semi-an.	Apl. '82 1½
Nashv. & Decatur...100	1,827,000	semi-an.	June'81 3
Nash., Chat. & St Louis 25	6,670,325	semi-an.	Apl. '82 1½
Naugatuck.....100	2,000,000	semi-an.	Jan. '82 5
Nesquehoning Val'y* 50	1,300,000	semi-an.	Mar. '82 3
N. Castle&Beaver Val* 50	600,000	q'rterly.	Oct. '81 —
New London North'n*100	1,500,000	q'rterly.	July '82 1½
N. Y. Cen. & Hud. R.100	89,428,330	q'rterly.	July '82 2
N. Y. and Harlem....100	7,950,000	q'rterly.	July '82 4
" " pref.100	1,500,000	q'rterly.	July '82 4
" City Line.. —	.....	annual	Apl. '82 3
N.Y., Lake Erie&West.100	77,083,900	.....	.....
" " pref.100	8,156,825	.....	Jan. '82 6
N. Y., N. H. & Hart...100	15,500,000	semi-an.	Jan. '82 5
N. Y., Prov. & Boston100	3,000,000	q'rterly.	May '82 2
Niag. Bridg&Canand*100	1,000,000	semi-an.	July '81 3
North Carolina*.....100	3,000,000	semi-an.	Sep. '81 3
" " pref.100	1,000,000	semi-an.	Sep. '81 3
N. Eastern (S.C.) pref100	86,000	semi-an.	May '81 4
Norfolk & Western pref.	15,000,000	q'rterly.	June '82 $1
North Pennsylvania. 50	4,527,150	q'rterly.	May '82 1¾
Northern Central.... 50	6,142,000	semi-an.	Jan. '82 3
Northern N. Hampsh100	3,068,400	semi-an.	June'82 3
Northern N. Jersey*..100	1,000,000	semi-an.	July '80 2½
Norwich&Worcester*100	2,604,400	semi-an.	Jan. '82 5
Ohio 100	18,500,000	.....	.....
Ohio and Miss. pref..100	4,030,000	semi-an.	Mar. '75 3½
Old Colony.....100	7,333,800	semi-an.	July '82 3½
Oregon R'way&Nav.100	6,000,000	q'rterly.	May '82 2
Oswego & Syracuse..100	1,320,400	semi-an.	Aug. '81 4½
Panama..... 100	7,000,000	.....	July '82 6½
Paterson & Hudson*..100	630,000	semi-an.	Jan. '82 4
Paterson & Ramapo.100	248,000	semi-an.	Jan. '82 4
Pember. & Hightst'n*. 50	342,150	semi-an.	Jan. '82 3
Pennsylvania..... 50	77,672,750	semi-an.	May '82 4
Pennsylvania Co..... 50	20,000,000	semi-an.	June'81 2½
Peoria & Bureau Val*100	1,200,000	semi-an.	Feb. '82 4
Philadelphia & Erie*. 50	7,013,700	semi-an.	.....
" " pfd 50	2,400,000	semi-an.	Jan. '75 4
Phil, Ger. & Norrist'n* 50	2,231,900	q'rterly.	June'82 3
Phil. and Reading... 50	32,726,375	q'rterly.	Jan. '76 2½
" " pref. 50	1,551,800	q'rterly.	July '76 3½
Phila. and Trenton...100	1,259,100	q'rterly.	Apl. '82 2½
Phila., Wil. and Balt. 50	11,585,750	semi-an.	July '82 4
Pittsb., Ft. W. & Chi.*100	19,714,285	q'rterly.	Apl. '82 1¾
" Special Imp.100	6,770,900	q'rterly.	Apl. '82 1¾
Pittsfield&N. Adams..100	450,000	semi-an.	Jan. '82 2½
Portl., Saco & Portsm100	1,500,000	semi-an.	Jan. '82 3
Providence & Worces.100	2,000,000	semi-an.	July '82 3
Rensselaer&Saratog.*100	7,000,000	semi-an.	Jan. '82 4
Rhode Island & Mass..100	100,000	.....	Jan. '81 3
Richmond & Danv...100	3,866,000	q'rterly.	May '82 2
Richmond & Petersb100	1,009,300	semi-an.	Jan. '81 3
Roch. & Genesee Val.*100	555,200	semi-an.	Jan. '82 3
Rome, Watert. & Ogd..100	5,293,900	semi-an.	July '75 1½
Rutland preferred.. 100	4,000,000	semi-an.	Feb. '82 1
St. L., Alt. & T. Haute.100	2,300,000	.....	.....
" " pref.100	2,468,406	.....	May '82 3
St. L. & S. Fran. 1st pref100	4,500,000	.....	Aug. '82 3½
St. L., I. Mt. & South'n.100	21,459,921	semi-an.	Feb. '74 3
St. P. & Duluth pref.100	4,705,000	q'rterly.	June'82 1¾
St. P., Minn. & Man..100	15,000,000	semi-an.	Aug. '82 3½
Schuylkill Valley*... 50	576,050	semi-an.	Jan. '82 2½
Seaboard & Roanoke.100	1,229,600	semi-an.	May '82 5
Shamokin V. & Pottsv 50	669,450	semi-an.	Feb. '82 3
Shore Line*.....100	1,000,000	semi-an.	Jan. '82 4
Sioux C. & Pacific pref100	169,000	semi-an.	Apl. '82 3½
South Br. (N. J.)*....100	438,300	semi-an.	Jan. '82 3
South Western (Ga.)*100	3,892,300	semi-an.	Dec. '81 3½
Stockbridge&Pitts.*.100	448,700	semi-an.	Oct. '81 1½
Summit Branch*.... 50	4,010,150	semi-an.	Feb. '76 3
Syr., Bingham&N.Y.*100	2,500,000	semi-an.	Feb. '81 2
Terre Haute & Ind...100	1,988,150	semi-an.	Feb. '82 4
Troy and Boston....100	1,609,000	semi-an.	Feb. '80 2
Union Pacific. 100	61,000,000	q'rterly.	July '82 1¾
United Cos of N. J.*.100	20,490,000	q'rterly.	Apl. '82 2½
Utica, Shenango&S V100	4,000,000	semi-an.	Nov. '81 3
Utica and Black Riv.100	1,772,000	semi-an.	Mar. '82 2
Vermont and Mass..100	3,050,000	semi-an.	Apl. '82 3
Wab. St. L. & Pac. pref.100	22,615,100	q'rterly.	Nov. '81 1½
Ware River*.....100	750,000	semi-an.	Jan. '82 3½
Warren (N. J.).....100	1,800,000	semi-an.	Apl. '82 3½
Warwick Valley.....100	340,000	semi-an.	Jan. '82 2½
Westchest&Phil. pref100	821,300	semi-an.	July '80 2
West Jersey.....100	1,359,750	semi-an.	Apl. '83 38
Wilmingt'n&Weld'n.100	1,456,200	semi-an.	Dec. '81 3
Wil., Col., & Aug 100	960,000	semi-an.	Dec. '81 3
Winchester&Poto'c.*100	180,000	semi-an.	Jan. '82 3
Winchester&Strasb.*100	74,700	semi-an.	Jan. '82 3
Worcester & Nashua. 75	1,789,800	semi-an.	Jan. '82 1½
HORSE-POWER R. R.			
Albany City.....100	200,000	annual	.....'80 5½
Baltimore City..... 25	1,000,000	semi-an.	July '82 3
Balt., Cat. & El. Mills..100	....	semi-an.	Jan. '82 2
BleeckerSt. & Ful. F'y.100	900,000	semi-an.	July '81 ¾
Boston&Chelsea pref. 50	110,000	semi-an.	Apl. '82 3
Broadway (Brooklyn)100	250,000	q'arterly	Oct. '81 3
B'way&7th Av. (N.Y.)100	2,100,000	q'arterly	Oct, '81 2
B'klyn&Hunter's Pt.100	400,000	semi-an.	Apl. '79 3
Brooklyn City.....100	2,000,000	q'arterly	Dec. '81 3½
Bushwick (Brooklyn)100	309,000	semi-an.	July '81 2½
Cambridge.....100	908,000	q'arterly	Apl. '82 4½
Cen. Park, N. & E. Riv.100	1,800,000	q'rterly.	Jan. '82 2
Christoph'r&TenthSt100	650,000	semi-an.	Aug. '81 2½
Citizens' (Phil.)..... 50	192,500	q'rterly.	Jan. '82 2½
Citizens' (Pbg.)..... 50	200,000	annual..	....'80 14½
Coney Island&Bklyn100	500,000	semi-an.	Oct. '80 5
Continental (Phil.) .. 50	580,000	semi-an.	July '82 6
D. Dock, E. B'way&Bat100	1,200,000	q'arterly	Nov. '81 4
Eighth Av. (N. Y.)...100	1,000,000	q'rterly.	Oct. '81 3
42d St. & G. St. Ferry100	747,000	semi-an.	Nov. '81 6
Frankf. & Southw (Ph) 50	600,000	q'rterly.	Jan. '82 6
Germantown, (Ph.).. 50	$572,800	q'rterly.	Apl. '82 2½
Girard College (Ph.) . 50	500,000	semi-an.	July '71 3
Grand St. & Newton..100	170,091	semi-an.	July '81 2½
Green&Coates St. (Ph) 50	150,000	q'rterly.	Apl. '82 3
Heston, Mantau&F'm 50	299,381	semi-an.	Jan. '75 4
Highland.....100	600,000	semi-an.	Jan. '82 4
Lomb. & SouthSts(Ph) 25	195,000	semi-an.	Oct. '75 4
Lynn and Boston....100	200,000	semi-an.	May '82 4
Malden and Melrose..100	165,000	.....	.....
Metropolitan (Bost.). 50	1,500,000	semi-an.	Jan. '82 4
Middlesex (Boston)..100	650,000	semi-an.	May '82 3½
N. Y., Bay Ridge&Jam100	150,000	..... .	Oct. '78 7
Ninth Av. (N. Y.)....100	797,320	....	.....
Orange & Newark....100	282,555	.....	.....
People's (Phila.)..... 25	124,744	..... .	Apl. '82 2
Philadelphia City... 50	475,000	semi-an.	Jan. '82 5
Phila. and Darby.... 20	200,000	semi-an.	July '81 3½
Phila. & Grey's Ferry. 50	308,000	semi-an.	Jan. '82 6
Pbg, Alleg. & Manches. 50	300,000	q'rterly.	Oct. '81 3
Ridge Avenue (Ph.).. 50	420,000	semi-an.	Oct. '81 11
Second Avenue (N.Y.)100	1,199,500	semi-an.	July '81 2½
Second&ThirdSt. (Ph) 50	771,076	q'rterly.	Jan. '82 4½
17th & 19th sts (Ph.).. 50	250,000	semi-an.	July '81 3
Sixth Avenue (N. Y.)100	750,000	semi-an.	Oct. '81 5
Somerville (Boston).100	113,000	semi-an.	May '82 3
South Boston..... 50	600,000	semi-an.	Jan. '82 4
Third Avenue, N. Y..100	2,000,000	q'rterly.	Nov. '81 5
13th and 15th sts., Ph 50	334,529	q'rterly.	Jan. '82 4
23d street, N. Y.....100	600,000	semi-an.	Aug. '81 4
Union, Boston.....100	374,300	semi-an.	Jan. '82 4
Union, Phila..... 50	1,005,000	semi-an.	Jan. '82 7
West Philadelphia... 50	750,000	semi-an.	July '77 10
CANALS.			
Chesapeake and Dela 50	2,078,038	semi-an.	June'75 2
Delaware Division... 50	1,633,350	semi-an.	Feb. '82 $1
Delawa. and Hudson100	20,000,000	q'rterly.	June'82 1¾
Delaware & Raritan*.100	5,847,400	q'rterly.	Apl. '82 2½
Lehigh Coal and Nav 50	11,204,250	semi-an.	June'82 2
Monongahela Nav... 50	1,004,500	semi-an.	July '81 $2
Morris, consolidated.100	1,025,000	semi-an.	Feb. '81 2
" preferred....100	1,175,000	semi-an.	Feb. '81 5
Pennsylvania..... 50	4,501,200	.....	.....
Schuyl. Nav., com.*. 50	859,100	annual..	Au. '81 50c.
" " pref... 50	3,200,000	annual..	Aug. '81 $1
MISCELLANEOUS.			
Adams Express.....100	12,000,000	q'rterly.	June'82 2
American Express... 50	18,000,000	semi-an.	July '82 3
Amoskeag Manuf. Co.100	3,000,000	semi-an.	June'81 5
Calumet&HeclaMin'g —	100,000 S.	q'rterly.	May '82 $5
Central Mining Co. ...100	.....	semi-an.	Feb. '82 2½
Consolidation Coal..100	10,250,000	semi-an.	Jan. '82 2
George's Creek C.&I.100	....	semi-an.	Jan. '82 3
Maryland Coal.....100	4,400,000	semi-an.	Feb. '76 1¾
Mariposa L. & Mining100	10,000,000	..... .	.....
" pref100	5,000,000	..... .	.....
Missouri Val. Land Co100	200,000	semi-an.	July '82 12
National Tube Works100	1,000,000	q'rterly.	Apl. '82 3
Pac. Mail Steamship.100	20,000,000	q'rterly.	Sept. '69 3
Pennsylvania Coal... 50	5,000,000	q'rterly.	May '82 3
Pullman Palace Car...100	10,032,800	q'rterly.	May '82 2
Quicksilver, com....100	5,708.700	..... .	May '82 0.4
" pref....100	4,291,300	..... .	May '82 6
Quincy Mining Co... 25	40,000 shs	semi-an.	Feb. '82 $8
Quincy R. R. Bridge.100	1,750,000	semi-an.	Jan. '82 5
SiouxC. & I. F. L. & L. Co100	500,000	semi-an.	June'82 5
Spring Mt. Coal.....100	1,500,000	semi-an.	June'82 3½
Topeka Equip'nt Co.100	255,500	semi-an.	Apl. '82 5
United States Ex....100	7,000,000	q'rterly.	May '82 1
Wells-Fargo & Co. Ex100	6,250,000	semi-an.	Jan. '82 4
Western Union Tel..100	80,000,000	q'rterly.	July '82 1½

RAILROAD EARNINGS.—MONTHLY.

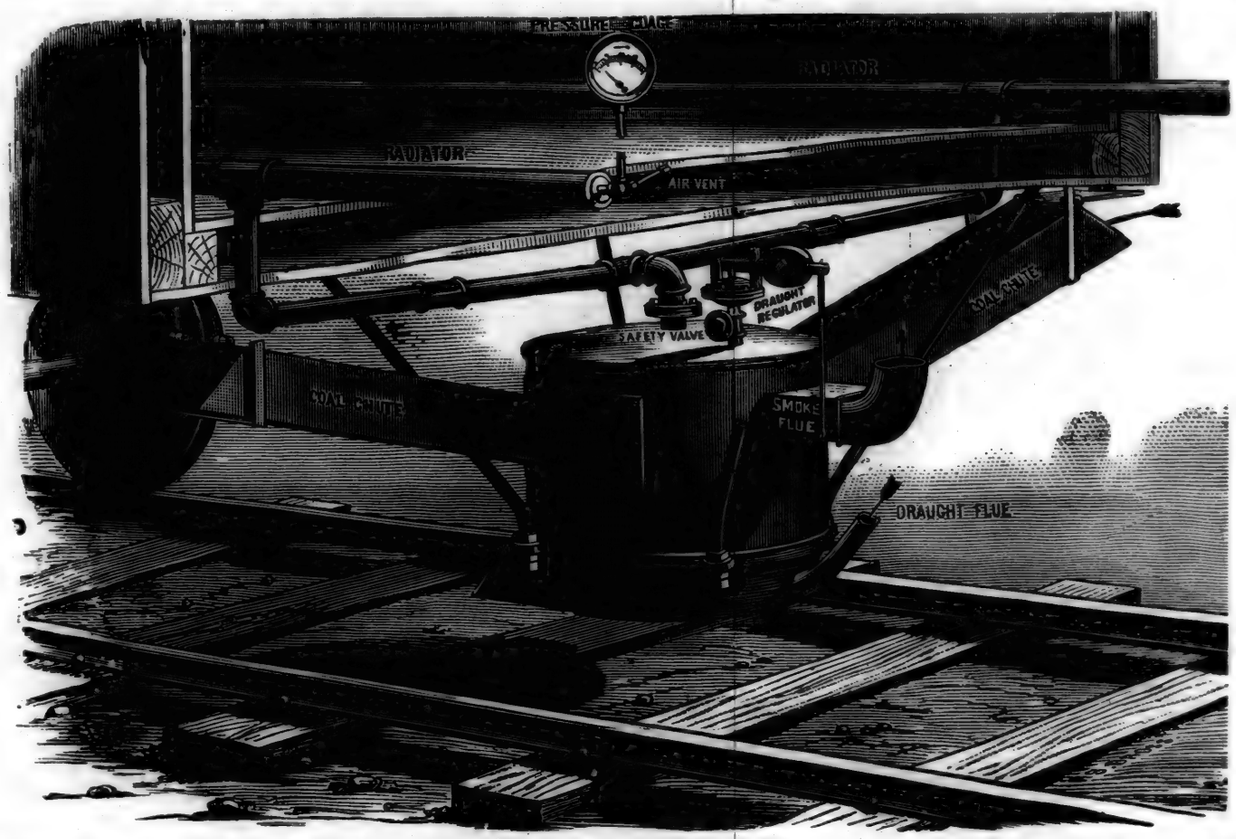
	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total.
Burl., Cedar Rap. & Northern:													
1880	184,316	165,170	188,325	141,652	149,504	153,378	143,432	160,160	179,804	204,991	189,330	193,419	2,053,484
1881	167,750	124,510	148,551	184,680	165,630	205,912	174,351	209,112	221,801	221,748	203,880	232,812	2,259,037
1882	252,823	225,631	224,107	178,304	199,278	.....	.....	.....	.....	.....	.....	.....	.....
Central Pacific:													
1880	1,200,614	1,070,487	1,373,438	1,356,716	1,778,488	1,724,950	1,840,067	1,973,438	1,964,997	1,120,229	2,199,466	1,905,221	20,508,112
1881	1,602,907	1,454,218	1,709,637	1,872,370	2,091,410	2,063,000	1,859,000	2,059,000	2,293,000	2,514,000	2,267,000	2,110,000	23,947,951
1882	1,876,000	1,702,000	1,987.000	2,052,000	2,353,000	.....	.....	.....	.....	.....	.....	.....	.....
Chesapeake and Ohio:													
1880	202,335	198,681	222,762	221,559	199,443	214,352	238,236	259,110	247,303	211,820	240,795	218,009	2,674,308
1881	162,540	184,389	228,479	227,343	252,235	241,135	225,096	262,858	247,144	237,303	235,585	203,562	2,702,762
1882	210,455	209,708	208,981	267,454	255,939	.....	.....	.....	.....	.....	.....	.....	.....
Chicago and Alton:													
1880	534,054	497,013	626,473	542,961	616,128	617,524	708,906	761,120	767,349	785,199	696,776	574,695	7,718,198
1881	487,890	461,641	529,915	558,190	548,556	616,935	671,466	771,466	768,897	750,359	680,133	635,307	7,553,988
1882	579,447	530,480	584,483	561,787	553,412	.....	.....	.....	.....	.....	.....	.....	.....
Chicago and Northwestern:													
1880	1,154,632	1,131,683	1,361,725	1,294,573	1,875,608	1,671,177	1,699,686	1,767,938	2,020,245	2,105,217	1,855,671	1,477,902	19,416,007
1881	1,240,667	963,208	1,178,795	1,474,612	1,879,006	2,306,640	1,983,031	2,315,164	2,292,676	2,341,097	2,019,037	1,855,476	21,849,209
1882	1,620,336	1,471,945	1,696,568	1,634,819	2,058,133	.....	.....	.....	.....	.....	.....	.....	.....
Chicago, Burlington and Quincy:													
1880	1,432,740	1,411,870	1,732,518	1,489,894	1,909,627	1,682,956	1,773,643	1,834,321	1,862,285	1,934,762	1,837,860	1,552,018	20,454,494
1881	1,307,948	1,034,821	1,418,149	1,574,371	1,679,455	2,083,803	1,888,558	2,173,945	2,262,981	2,031,001	1,816,133	1,905,490	21,324,150
1882	1,658,834	1,457,300	1,566,217	1,530,838	.....	.....	.....	.....	.....	.....	.....	.....	.....
Chicago, Milwaukee and St. Paul:													
1880	764,298	738,749	900,675	871,041	1,134,745	1,037,958	1,026,708	991,297	1,257,677	1,493,620	1,472,037	1,397,308	13,086,119
1881	990,847	682,717	916.989	1,259,946	1,538,491	1,371,000	1,560,000	1,678,000	1,645,000	1,590,000	1,569,000	1,855,000	17,025,462
1882	1,435,000	1,377,000	1,561,000	1,518,000	1,629,000	.....	.....	.....	.....	.....	.....	.....	.....
Chicago, St. Paul, Minneapolis and Omaha:													
1880	193,827	173,078	259,783	259,208	232,146	218,093	236,995	251,013	300,833	342,052	342,894	312,173	3,122,097
1881	257,786	158,594	251,648	261,211	350,124	404,562	392,702	385,586	363,685	382,714	380,733	391,950	3,981,296
1882	307,498	315,100	405,779	356,558	406,420	.....	.....	.....	.....	.....	.....	.....	.....
Cincinnati, Indianapolis, St. Louis and Chicago:													
1880	155,697	172,541	198,220	168,199	186,995	200,332	204,138	233,478	343,627	239,881	209,014	198,254	2,412,185
1881	182,523	171,511	191,005	183,710	191,096	188,256	178,861	229,858	219,977	212,606	194,805	192,623	2,296,916
1882	200,042	186,879	208,066	204,269	199,110	.....	.....	.....	.....	.....	.....	.....	.....
Denver and Rio Grande:													
1880	124,759	126,922	160,883	164,882	193,925	295,455	373,132	400,133	406,583	473,318	408,562	349,196	3,478,007
1881	307,476	317,681	398,493	433,111	514,767	584,230	548,284	606,193	620,643	665,686	566,819	643,417	6,206,812
1882	491,914	412,987	535,055	559,917	614,298	.....	.....	.....	.....	.....	.....	.....	.....
Hannibal and St. Joseph:													
1880	176,079	166,965	216,061	206,735	191,317	179,396	224,312	238,081	233,448	242,214	207,147	279,635	2,561,391
1881	154,401	122,874	176,356	190,812	172,950	194,949	198,110	215,308	202,567	313,433	201,782	180,376	2,230,966
1882	138,284	154,717	168,798	148,913	154,917	.....	.....	.....	.....	.....	.....	.....	.....
Illinois Central:													
1880	595,212	613,806	613,008	535,732	665,120	681,736	724,095	732,755	806,836	880,211	783,120	673,182	8,304,812
1881	631,281	524,499	557,789	662,493	673,259	803,887	720,004	868,407	828,847	815,238	737 218	763,475	8,586,397
1882	728,173	689,387	695,371	674,603	674,749	.....	.....	.....	.....	.....	.....	.....	.....
Indiana, Bloomington and Western:													
1880	80,498	89,690	116,185	90,374	85,733	106,954	103,438	116,732	110,622	121,343	96,621	104,619	1,233,079
1881	90,283	83,261	192,085	203,677	200,064	96,586	83,764	117,956	195,307	181,674	160,826	156,697	.....
1882	195,824	175,755	206,235	205,934	182,554	.....	.....	.....	.....	.....	.....	.....	.....
Louisville and Nashville:													
1880	674,455	575,035	612,593	563,883	655,014	976,229	772,537	827,088	931,910	1,000,326	953,086	949,184	9,491,346
1881	816,960	805,124	947,959	850,862	828,726	1,227,885	817,135	876,192	951,566	1,002,950	1,065,223	1,122,285	11,326,859
1882	950,065	960,036	1,073,745	950,007	946,435	.....	.....	.....	.....	.....	.....	.....	.....
Mobile and Ohio:													
1880	250,116	204,094	168,301	140,091	129,249	121,855	131,621	140,593	184,246	264,714	251,368	287,373	2,373,621
1881	224,347	216,768	230,916	163,551	145,803	136,517	131,009	159,348	209,044	252,921	252,434	262,025	2,460,437
1882	161,433	158,154	152,651	145,272	137,645	.....	.....	.....	.....	.....	.....	.....	.....
Nashville, Chattanooga and St. Louis:													
1880	205,633	191,154	169,457	155,466	158,839	144,155	151,594	169,326	167,473	178,266	182,087	175,996	2,049,448
1881	178,143	190,866	207,710	183,525	104,430	154,549	150,430	168,317	179,979	172,121	152,059	173,127	2,075,256
1882	156,994	159,961	161,005	154,155	137,645	.....	.....	.....	.....	.....	.....	.....	.....
New York and New England:													
1880	164,232	149,907	183,845	179,689	183,701	219,891	205,056	249,885	235,642	215,491	210,856	198 108	2,396,302
1881	189,749	173,614	212,019	216,913	217,185	231,518	246,821	280,524	299,573	261,199	242,412	237,729	2,809,255
1882	213,840	217,261	256,222	263,544	283,244	.....	.....	.....	.....	.....	.....	.....	.....
New York, Lake Erie and Western:													
1879	1,147,173	1,207,391	1,356,780	1,372,755	1,350,574	1,230,419	1,273,533	1,450,223	1,492,497	1,713,697	1,515,835	1,398,224	16,509,127
1880	1,296,381	1,252,218	1,644,958	1,643,151	1,592,544	1,661,812	1,580,976	1,606,874	1,786,417	1,899,910	1,799,338	1,726,788	19,149,361
1881	1,443,437	1,425,765	1,847,261	1,709,057	1,776,891	1,794,982	1,787,081	1,772,895	1,734,200	.....	.....	.....	.....
Northern Central:													
1880	334,494	330,860	415,325	386,130	329,788	419,193	450,298	453,923	464,093	512,918	459,054	494,310	5,050,387
1881	386,157	382,657	452,906	487,273	465,588	487,287	440,811	498,008	429,565	449,664	487,160	476,622	5,443,697
1882	407,368	413,551	430,194	435,129	.....	.....	.....	.....	.....	.....	.....	.....	.....
Northern Pacific:													
1880	81,390	77,259	119,357	185,700	217,613	253,105	241,277	223,500	330,300	358,456	300,822	220,993	2,629,710
1881	116,508	78,803	162,984	216,210	312,705	368,276	404,180	411,624	490,096	565,485	428,903	434,331	4,044,576
1882	239,800	269,000	384,000	438,000	568,332	.....	.....	.....	.....	.....	.....	.....	.....
Philadelphia and Erie:													
1880	224,307	245,372	327,678	334,947	311,470	331,024	308,699	347,532	322,737	367,082	324,966	281,919	3,727,733
1881	224,303	225,501	285,573	293,323	343,792	350,585	291,669	303,849	276,522	292,392	284,078	282,772	3,454,309
1882	252,727	246,246	265,311	277,851	.....	.....	.....	.....	.....	.....	.....	.....	.....
St. Louis and San Francisco:													
1880	198,091	195,948	193,146	176,164	167,664	173,607	213,297	259,995	280,873	328,194	290,329	226,063	2,698,371
1881	212,435	178,234	262,050	265,298	283,399	260,254	252,333	286,373	279,064	308,569	284,320	287,914	3,160,245
1882	256,784	244,654	274,959	242,806	253,419	.....	.....	.....	.....	.....	.....	.....	.....
St. Louis, Alton and Terre Haute:													
1880	153,139	163,737	168,994	155,462	147,928	150,207	191,077	216,759	204,295	221,863	188,773	184,503	2,146,741
1881	175,725	166,012	201,137	197,447	172,177	165,896	158,674	189,295	187 299	179,921	162,544	153,852	2,112,801
1882	168,987	149,619	178,145	157,450	162,842	.....	.....	.....	.....	.....	.....	.....	.....
St. Louis, Iron Mountain and Southern:													
1880	555,983	490,195	451,560	408,241	349,053	363,454	432,655	565,869	671,219	688,365	632,052	656,951	6,265,597
1881	570,957	560,791	704,002	548,300	479,075	474,302	533,512	644,386	690,400	719,239	687,280	709 498	7,319,744
1882	516,370	501,127	585,008	581,977	519,120	.....	.....	.....	.....	.....	.....	.....	.....
St. Paul, Minneapolis and Manitoba:													
1880	180,239	137,645	261,798	333,014	281,899	243,407	272,089	232,579	274,188	345,057	300,675	297,641	3,160,231
1881	254,187	159,482	320,962	425,685	382,642	405,322	387,488	414,954	485,736	605,708	508,530	528,262	4,878,960
1882	395,461	418 358	531,004	570,890	858'902	.....	.....	.....	.....	.....	.....	.....	.....
Texas and Pacific:													
1880	245,785	219,165	215,070	174,177	141,083	153,066	195,711	226,073	266,570	303,666	312,184	301,858	2,754,408
1881	281,176	260,781	319,928	295,066	281,782	264,204	320,466	354,082	337,117	578,668	357,724	381,218	3,921,569
1882	310,785	255,644	332,911	359,543	409,228	.....	.....	.....	.....	.....	.....	.....	.....
Union Pacific Railway:													
1880	1,433,636	1,393,992	1,730,509	1,937,220	2,027,269	1,028,528	1,934,215	1,913.035	2,270,179	2,707,860	2,251.148	1,869,335	23,448,445
1881	1,339,799	1,374,740	1,674,860	1,766,894	2,319,238	2,590,969	2,528,826	2,638,659	2,844,357	3,289 350	2,773,608	2,267,004	27,451,831
1882	1,961,088	1,759,863	2,226,832	2,462,004	2,491,590	.....	.....	.....	.....	.....	.....	.....	.....
Wabash, St. Louis and Pacific:													
1880	776,790	759,451	978,629	892,024	948,773	953,468	1,966,742	1,189,478	1,178,950	1,501,203	1,131,787	1,050,816	12,428,113
1881	811,617	818,922	1,121,592	1,023,482	1,144,660	1,308,993	1,131,752	1,542,838	1,490,027	1,396,300	1,399,555	1,328,278	14,461,579
1882	1,229,965	1,134,768	1,315,776	1,378,194	1,204,864	.....	.....	.....	.....	.....	.....	.....	.....

Baker's New Patent Car Heater.

Upon no point connected with the safety and comfort of railroad passengers has there been more discussion of late than upon the methods of heating cars; and railroad officials and car builders have an important duty to perform before the coming of cold weather again, to meet the demands in this direction which their most frequent patrons and the public generally are forcibly making, and will continue to make with additional force, when the season for heated cars is at hand. The terrible scenes that have been experienced through the burning of cars in railroad accidents have created a feeling that must be heeded by all railroad officials who would re-establish confidence among the traveling public. The inconvenience which passengers have endured from smoky cars where stoves were used with their unsatisfactory attempts at heating, and their accompanying nuisances of dirt, cinders, unequal distribution of heat, and other objectionable features, will no longer be quietly submitted to since the dangers attending the use of these primitive heaters have been so terribly enforced upon their minds.

Steam has become the acceptable agent for car heating, and its appliances are now being so perfected that it would seem that the danger has been reduced to a minimum, while the comfort of passengers has been vastly enhanced and at the same time a way for great saving in fuel and room afforded to the railroads. The Baker Car Heater Company, of 92 Liberty street, New York, and Pittsburgh, Pa., who have done much in the past toward securing perfection in methods for heating, have brought out a new patent car heater, the result of long study and experience, in which the fire is altogether outside of the cars, and the heat is wholly from low pressure steam. It has been thoroughly tested under a great variety of conditions during the past year on several cars of the New York Central and Hudson River Railroad Company, which company is said to have adopted it, and which company also, it may be remarked, had about as good reasons for aiming to have their cars provided with the best possible safeguards as any railroad could have, after its shocking and disgraceful experience of last winter. Other roads have ordered the new Baker heater on their entire equipment of passenger cars, and it certainly looks as though the demands of the public were likely to be well satisfied in this important matter.

We give below an illustration of the new car heater, showing the parts of the apparatus which are placed outside of the car; and the general features of the heater are described as follows:—



The boiler encased, is about 2½ feet in diameter; and, with the ash-pan, is about 2 feet high. The top is about 9 inches from the under side of the car body, and the bottom 9 inches above the top of the rails of the road. It is suspended by four stay rods, placed at proper bracing angles, and bolted through timbers fastened in the frame-work of the car. If it becomes necessary to remove the boiler for repairs or other purposes, the detaching of a single flanged steam joint, and removing the nuts from the bottom ends of the stay rods, are all that is required. The boiler is preferably located just back of the truck, so as not to interfere with the break and stay rods, air cylinders, etc. The "cow-catcher" of the locomotive being about three inches, and the break beams nine inches above the rails, there is no danger of even the lowest projection of the boiler (the ash pan), encountering any object in its course. The boiler is beneath, *in the cellar* of the car, as shown, and operates substantially the same as the domestic steam heater placed in the cellar of a dwelling. The ash-pan, with the fire grate resting upon it, is a separate piece of casting, and is screwed to the ring which supports the boiler, and, in case of an accident, would be the first to become detached, carrying with it the fire, the boiler remaining intact. The smoke pipe may be secreted from view in some closet or corner, thus avoiding even the suggestion of a heater or fire. The draft to the fire is through a small tube leading from the inside of the car, where a sliding cover may be moved to regulate the flow of air; but the main controller of the draft is an automatic regulator operating a damper in the under side of the throat of the smoke flue, opening and closing it at any given pressure, say from one-half of a pound to fifteen pounds. Even with the ash pit door left open, it will check the draft by shutting off the fire, and letting cold air into the smoke flue at the same time. No dangerous pressure can accumulate. The boiler is capable of sustaining at least four times the amount of pressure that is ever carried. The draft to the fire is independent of any current caused either by the wind or the motion of the car. A simple pipe leading from the center of the boiler conducts the steam to the radiators. No water can lodge in them, as their inclination assures the return of the water to the boiler—the steam ascending and the water trickling back *in the same pipe*. At points in the car where extra heat is required, the radiator can be increased in size, or made double or triple to suit the case. In portions of the car where little or no heat is needed, the pipe may be packed and the heat deadened, to suit any requirement—this is one of the important claims of Mr. Baker's patent. By thorough

protection of the boiler and outside connections, the heater has stood the tests of the coldest weather, high winds, and heavy snow storms. Snow and icicles have hung for days and nights on every part of the boiler, coal shutes, etc., with the fire burning steadily, and the heat within the car evenly maintained at a temperature of 70 degrees. It does not require the attendant to get under the car more than once or twice within twenty-four hours, and then only for the purpose of raking the fire. The coal may be supplied from the outside, without loss of time, by the brakeman or station-man while standing upon the station platform. The grate can be cleared of clinkers, as well as ashes, without deadening the fire, as it has a double motion of rocking and dumping. The labor of lugging coal up the car steps, and through the car doors is avoided; and the accumulation of ashes and cinders is conveniently got rid of by dropping them on the track. With proper attention, say about three times within twenty-four hours, the fire need never go out. As a duplicate of each part of the apparatus, duly numbered, is always kept on hand, repairs can be easily and promptly made.

For sleeping, parlor and drawing-room cars the new heater affords peculiar advantages. We give an illustration of the interior of a sleeping-car showing the method of shutting off the heat from the berths. A single straight radiator is run the whole length of the cars on the truss plank (the same as in ordinary cars); the Pillow Boxes being moved outward a little for the purpose. The radiator is cased, leaving sufficient space for the free circulation of air, either from the inside or outside of the car, and is left open at both ends. There is an opening in this casing between each seat (the center of each berth), to be closed when the berth is to be made up—thus shutting the heat from these points, and driving it into the four corners of the car—the only point where heat is wanted at night. But the exclusion of the fire, and its attendant evils, from the sleeping apartment, is of paramount consideration. A stove is not desirable *in a bedroom*, nor in a "parlor," or "drawing-room."



Postal Telegraph Company.

THE proposition to get telegraphing into the postal system of the country is rapidly taking shape. Mention has hitherto been made of the new telegraph company recently organized for that purpose. The Chicago *Times* has the following in reference to this organization:

"There has recently been organized in the East a company incorporated under the title of the "Postal Telegraph Company of New York," the design of which is to establish a system of trunk lines of telegraph between the large cities of the country for the transmission by telegraph of the mail of business firms at a much lower rate than is charged by the present telegraph companies. The idea was broached some time ago, but the perfection of the plans and the organization of the company have been kept somewhat close. The incorporators claim to be able to send long letters of any description over the proposed wires at very much less than the present rates. They also claim that their business will not be delayed by the weather or any such cause. To prove this, they bring forward the wire now being manufactured by their own company at Ansonia, Conn., which is a compound wire, composed of copper in steel, which they claim resists the effects of rain and snow. Its conductivity to the mile is such as to reduce the time between Chicago and New York to equal that between New York and Boston by the present system. The first line, that between here and New York, is already some weeks under way, and it is expected to have the system in working order before January 1, 1883. It will only take in the larger cities on the way, but afterward touch all points, and eventually do a local trade. The letters are to be wired from one point to another, copied out by clerks at the latter place, and placed in the post-office, so as to make the mail service do the delivery. Business mail can therefore be sent at the close of the day's work in Chicago, and delivered by mail carriers in New York next morning. The company has an authorized capital of $21,000,000, and the privilege of issuing an extra $10,000,000 worth of bonds. Of the capital, $700,000 has already been subscribed, and bonds will be issued as the work proceeds. Among those interested in the scheme are John B. Alley and ex-Collector Beard, of Boston; George D. Roberts and S. D. White, of New York; Governor Charles Foster and several of the latter's friends, of Ohio. The system of telegraphy used will be the 'harmonic,' invented by Prof. Elisha Gray, of Highland Park, Illinois."

BY an ancient Anglo-Saxon law, which still remains in force, it is enacted, "Albeit as often as Leape Yeare doathe occurre, the woman holdeth prerogative over the menne in matter of courtship, love and matrimonie; soe that when the ladie proposeth, it shall not be lawful for menne to say her nae, but shall receive her proposal in all good courtesi."

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A Railroad Sanitary Service.

Editor American Railroad Journal:

In a previous communication, I spoke of the advantages of a surgical and medical service to railroad companies. I now desire to urge the higher importance of a sanitary service, for the purpose of preventing those occurrences which would necessitate medical and surgical relief. Preventive medicine is still in its early infancy, and a child of so unpretending growth that the majority of the great public who are already aware of its existence still question the legitimacy of its birth, and even its right to live. But, on reflecting that curative medicine has had precedence of sanitation for more than twenty centuries, we ought to feel greatly encouraged at the appreciation which the latter has lately won among the leading minds of the civilized world.

Though it is apparent that the progress of the latter is, partially at least, at the expense of the former, we find that the cultivation of sanitary science has been chiefly pursued by the very class of men whose occupations would be most diminished by its progress. This paradox may be explained by the sound principle, recognized by intelligent people, that no legitimate occupation can permanently prosper under circumstances depressing to all others; and physicians clearly see that an undue amount of sickness so diminishes the public wealth as to leave little for the support of a class who can never refuse relief to the distressed and needy, while in a state of general prosperity medical relief is freely sought and fairly remunerated.

Railroad sanitation has for its object the prevention of various untoward occurrences destructive to life, health and property, only one feature of which can now be noticed. It is unquestionably of the highest importance that trainmen (engineers, firemen, conductors and brakemen) and signal-men should have unimpeachable eyesight and hearing, and such integrity of the vital organs as to run no risk of sudden break-down at the post of duty. Investigation of railroad accidents has been so conducted that it is impossible to say what proportion could be traced to physical defects of employes, but it is approximately known what proportion of men labor under infirmities which should disqualify them entirely for responsible positions connected with the movement of trains. Color blindness affects about 4 per cent of men, but the late compulsory examination in Connecticut disclosed a lower percentage among engineers, indicating that some of them had been weeded out for being incorrigibly unlucky. Recent examinations on the Pennsylvania Railroad show a percentage of 17¾ deficient in the full acuteness of vision and nearly 2 per cent defective in hearing.

The examiner-in-chief does not state what proportion of these individuals were near-sighted, but probably it was a large one. This defect, though now rather eclipsed by color-blindness, must be a more serious disqualification than the latter. A near-sighted engineer can not distinguish danger ahead far enough to stop his train in time to prevent a disaster. He can not wear glasses, for a puff of steam in the face would make them opaque; so he must conceal his defect, if indeed he is aware of it, and blunder on in recklessness or terror, until repeated accidents eliminate him from service.

The late Dr. C. B. White, of this city, himself near-sighted, was of the opinion that the failure of some engine-drivers to keep the schedule time of fast trains may be due to this defect. Such men must feel like an engineer running at night without a head-light, and must be in a frame of mind unsuitable to a grave responsibility. While the color-blind person is at fault only when he has to determine the color of a signal, the near-sighted man is constantly at disadvantage, and is never safe when in rapid motion. Of course, if this defect exists in a high degree, the subject and those acquainted with him must be aware of it, and he would be regarded as disqualified for any position on a train, but, in a moderate degree, he would conceal it and make the best of the situation.

Sudden failure of the heart from organic diseases, paralysis from rupture of a cerebral artery, and epilepsy, in case of an engineer or signal-man, might cause a serious disaster. Such infirmities would be discovered by a careful medical examination, though the subject might not be aware of his situation, and the superintendent of the road certainly would not, in season to avert the consequences.

Our national government requires recruits for the army and navy to undergo strict medical examination before acceptance; it certainly seems that the duties of train and signal men are even more responsible, and that railroad managers ought to require even better physical qualifications for those employes who are entrusted with the lives and property of the public. That the dangers just alluded to are not imaginary, the following newspaper cutting of a recent date will show:

Recently on the Richmond and Danville Railroad, Pat Doucey, the engineer on a freight train, lost control of his engine entirely. The fireman noticing that the whistle was not sounded as usual, went into the cab and found the engineer sitting there paralyzed and unconscious. In great alarm he closed the throttle and jumped off the engine, but the velocity which the train had already acquired caused it to run into the rear of a freight train ahead, doing considerable damage. The engineer was not injured by the collision, but remains unconscious from paralysis.

Railroad officials generally try and often succeed in suppressing particulars of their accidents, and it is likely that more of the above sort actually occur than ever acquire currency. Newspaper publishers are not fond of displeasing their advertising patrons, and property damages, without loss of life or limb, are readily enough settled without publicity.

But it is otherwise when lives are lost. Political economists set a value upon human beings as producers of wealth, and railroad companies are apt to find that juries appreciate this, and also make liberal allowance for the lacerated affections of relatives. When the company has also neglected to provide ample surgical relief, private practitioners are sure to think highly of their services in the emergency. Besides, it would be worth to a railroad company much more than the actual damage of disaster to have been able to prevent it, for people naturally conclude that an unlucky management is safer let alone.

We may fairly take it for granted that a surgical and medical relief service will be generally adopted, at no distant day, on the important railroad lines throughout this country, as being not only in accordance with the enlightened humanity of the age, but also as a measure of economy in obviating suits for personal damages and extravagant claims for professional services. The sanitary or preventive service briefly outlined in this communication would readily attach to the other, under the same management, and thus its expense would come within extremely moderate limits, considering its importance and advantages. No new officers would be required, and the additional duties imposed upon the medical and surgical staff would be certain to diminish their functions in the relief branch of service.

S. S. H.

New Orleans, June 21, 1882.

Statistics of Immigration.

In the month of May there arrived in the customs districts of Baltimore, Boston, Detroit, Huron, Minnesota, New Orleans, New York, Passamaquoddy, Philadelphia and San Francisco 141,035 immigrants. Of this total number of immigrants there arrived from England and Wales, 13,404; Ireland, 19,747; Scotland, 3,015; Austria, 4,290; Belgium, 100; Denmark, 2,700; France, 645; Germany, 41,747; Hungary, 646; Italy, 5,141; Netherlands, 1,947; Norway, 7,161; Russia, 1,986; Poland, 1,138; Sweden, 19,372; Switzerland, 1,849; Dominion of Canada, 10,622; China, 4,861; and from all other countries, 664. The total number of immigrants arrived in the customs districts named from the principal foreign countries for the eleven months ended May 31, 1882, as compared with the same period of the previous year, was as follows:

	1882.	1881.
England and Wales	77,137	57,841
Ireland	66,086	61,796
Scotland	16,666	12,628
Austria	17,897	15,606
Germany	226,819	175,301
Norway	23,386	17,404
Sweden	52,964	39,661
Dominion of Canada	84,559	110,875
China	26,710	7,443
All other countries	93,419	64,596
Totals	685,634	563,151

The *Philadelphia Record* signalized on the 19th inst. the "house warming" of its new building by appearing in a brand new, neat and clear typography. The new building is situated at Ninth above Chestnut streets, adjoining the new United States Post Office, and, according to *The Record's* own description of it, must be a perfect beauty to look at, a very costly one to build, and a most convenient one for its purpose. Hereafter *The Record* is to be published every day in the year—with no "skips" for Sundays or holidays.

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In effect January 9th, 1882, and subject to changes.

The Grand Canon of the Arkansas.

Of the canon itself I would rather say not one word, but bow the head in reverent silence before this handiwork of the Lord. Those who have looked upon its awful grandeur will realize the powerlessness of description. The railway runs through a deep, narrow passage at the base of opposing and overlapping spurs of mountains, always following the tortuous windings of the stream which flows between, with the same wild swiftness which made Clear Creek Canon so dreadful to weak nerves. Grown more familiar now, we scarcely notice this headlong rush as cause for dismay, but we cannot grow familiar with the massive wildness of the overhanging cliffs above. Gradually the sweeping peaks rise higher, the rushing river deeper and louder; its color changes to a perfect raw sienna, which makes a delightful warm tint in the foreground. The tumbled mountains rise more boldly skyward till they seem to scale the very ramparts of heaven—cleft through their center of everlasting rock by some stupendous power we can only guess at. Whatever is grandest and wildest in nature pours itself with prodigious lavishness above and around, until, as the train thunders upon a hanging bridge which spans a deep abyss, the sense of might and awfulness is so heavy on the soul that it results in a sense of real physical oppression. The roaring of the rapids, intensified by the precipices which lift themselves at each side, the solemn shadow thrown even at noonday from those mighty ledges, the stupendous majesty which seems to sweep you from all familiar things and set you face to face with the Creator, combine to impress an unearthly feeling of loneliness and awe, which remains stamped with the memory of the place forever. In the bit of dazzling blue which showed itself over the high fortress-like crags—so high that eye as well as spirit had to soar to reach their summits—two immense eagles went sweeping in airy circles till they disappeared behind the topmost peak of all. It was the only sign of life which would not have been out of harmony with the solemnity of the spot. A sombre veiling of firs covered the lower levels of the mountains, but above only the bare, barren rock rose with splintered edges into pinnacles and domes, stained here and there with the blackness of age, riven by thunderbolts or jewelled with the sparkling spray of leaping waterfalls. Even after passing this culminating point there was no anti-climax. As the road and river bed widen the heights open here and there, showing still other peaks beyond, but all yet dark and awful. By and by a single tree or a group of cottonwoods throw their fleecy, silver-stemmed branches like a point of light against the grim background, or a single snow-powdered peak of the Sangre de Cristo rises far away. Constantly changing as the whirling roads fly east or west, you get by instants some new picture, until at last through a sudden sweeping cleft the whole beautiful sunny range rises against the horizon, one rounded dazzling peak superbly prominent in the center—"clothed in white samite, mystic, wonderful." Just as this glorious vision bursts upon your raptured vision there rushes down through the center of a gorge in the rocky chain, as sombre as blackened trunks of dead trees and funereal firs can make it, an avalanche, a torrent of tender, glowing green, a perfect cascade of verdure, where a thick belt of young trees has followed the windings of the mountain side into the open space below. For hours there is nothing to break the strain produced by this immense manifestation of sublimity. You are obliged to sit in awed and awful silence, while it pours in upon your overwrought nerves and brain, without, as one of the party aptly remarked, even being able to dam it for awhile, and take a rest. —*Correspondence of Boston Journal.*

How to Treat a Boiler While Out of Use.

If you are to stop the boiler for any length of time, there are two things essential to know. If your boiler is situated in a place where it will be dry, and not in a wheel pit, or where floating moisture or the vapor from water can come in contact with it, or moisten the room about it, then the boiler should be blown off—and right here stick a pin; we do not mean blow off at 60 or 80 pounds pressure; many a boiler has been ruined the first time it has been blown off. Draw your fires, no matter what the pressure may be, and leave the boiler for half an hour or an hour—two or three hours is better—let the pressure gradually drop to at least 25 pounds, but 20 is still better. When you commence to blow off, don't open the blow-off cock full head; open it gradually until it is wide open, then shut the ash-pit and fire-pit doors, shut the damper close, but don't pull off the breech-plate or cover; leave the whole thing so that when the last drop of water and steam has gone out of it, you can close the blow-off cock and allow the boiler and brick to contract very gradually. If the room is perfectly dry, as we have stated before, the boiler can be left in this condition for months.

As a rule, it is better to blow the boiler off, leave it until it is cool—that means from 24 to 36 hours—then allow the water to run in and fill it full, clear up into the steam nozzles and steam dome, until there is positively no chance for any dead-room; then shut it up tight, not allowing the air to circulate through it, under it, or about it, and in this way the least injury will probably come to the shell of the boiler and connections. Very great care must be taken that it does not freeze in that way, for it will commence to freeze invariably in the small pipes and in those parts of the boiler where the smallest bodies of water really offer the greatest surface for refrigeration, or for the cold air to work upon. It is no use to use anti-incrustators, soft-soap, grease, potatoes, or any other kind of slush or swill. Blow the boiler off under a pressure varying from 25 pounds downward, and either one of the modes we have described here will be found safe and sure. In any event the boiler should never be filled with cold water until after a number of hours from the time it was blown off. If it is above the ground, it is perfectly safe to blow the boiler off as we have described, and then, if it be a modern, well-constructed boiler, take out the hand-holes at each end of the boiler at the bottom, the man-holes at the top, cover over these places with coarse burlap or something that will allow of a reasonably free circulation of air, and your boiler is perfectly safe in hot or cold weather.

There may be circumstances that might require some variation, but these are the only general rules we can give as applicable to any and all conditions of locations. One thing more must always be remembered: If the boiler is in an old shed, or in such boiler-rooms as we have seen—if the boiler is where it is exposed to the droppings through leaky roofs, where frosts can gather, thaw, and fall—if the boiler is located so that water can get into the brickwork or upon the shell, there is no such thing as keeping the boiler safe and sound, or in shape to work reliably. The outside of the boiler must be kept dry when not in use, and it must be kept dry when in use; these conditions are arbitrary; that is, they admit of no qualification in either case. If the rain and frost can get upon the shell of the boiler, or upon the brickwork in which it is fixed, the mortar, brick and moisture will do more to injure the boiler than the genus sap-head engineer.—*Boston Journal of Commerce.*

The *New York Herald,* in referring to the announcement made by President Garrett of the Baltimore and Ohio Railroad Company, that another Atlantic cable would soon be laid between Europe and this country to connect with the Baltimore and Ohio Telegraph system, says: We cannot have too many cables, and it is to be hoped that the enterprise of the Baltimore and Ohio Company will be emulated by other great railroad corporations like the Pennsylvania Railroad Company, the Chesapeake and Ohio Railway Company, and the South Carolina and Georgia Railroad operators, who are endeavoring to build up Charleston, Savannah and other Southern ports as great terminal transportation points. Mr. Garrett will, of course, have to obtain the consent of Congress to land his proposed cable on our shores, but there should be no difficulty in that direction. One restriction only is necessary, namely, that a consolidation or pooling of business with other companies should be prohibited.

The "Tamarack Swamps," near Sharpsville, Penn., were supposed to be an innocent sort of bog until the New York, Pennsylvania and Ohio Railroad Company undertook to lay a solid roadbed across them. At first a few thousand cubic yards of earth were dumped upon the surface by the contractor with careless generosity, as much as if to say, "That will satisfy your appetite, my soft friend." But when the earth immediately disappeared and left no trace behind, a coarser diet was substituted. The company purchased from a furnace the accumulated cinders of ten years, and since January about 5,000 car loads of this substantial provender have been dropped into the swamp's voracious maw without visibly decreasing its capacity. Occasionally at night there are evidences of repletion, but in the morning the murky water presents an unruffled face and asks for more. A solid roadbed could be laid close by, entirely avoiding the swamp, but the company has elevated its corporate back and does not intend to be beaten by a miserable tamarack swamp so long as there is a dollar in the treasury.

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A New and Cheap Insulating Material.

The immense strides which have been made in electrical discovery, particularly in practical applications, have compelled electricians to seek for new and cheaper insulating materials than those already in use. Hitherto they have been limited to glass, porcelain, stoneware, gutta percha, india rubber and ebonite. Owing to the greatly increased demand, the price of the last three named has risen very much, and is likely to rise still more, and, while the quality has deteriorated, it is impossible for the existing sources to supply what is needed, not only for telegraph and telephone work, but for the immense field opening in electric light work. The public require, before everything, safety in the use of electricity, and there is a corresponding demand for a cheap insulating material, the supply of which shall be equal to the demand likely to arise. This has now been met by the invention of a material called "insulite." A method has been discovered by which wood, sawdust, cotton-waste, paper pulp, and other fibrous materials can be converted into a material perfectly impervious to moisture and acids, easily molded under pressure into any shape and capable of being worked or cut into any form. This material is an excellent non-conductor of electricity, and can be used for all forms of battery cells, telegraph insulators, supports for electric light leads and telephone work. It affords the means of securing perfect insulation at a very much less cost than ebonite or gutta percha. As it is perfectly impervious to moisture, articles made of it cannot shrink or warp. It supplies exactly what is wanted in practical work, in which ordinary wood cannot be used because it absorbs moisture, and ebonite is inhibited on account of its cost.—*London Times.*

The Sources of Perpetual Fertility.

In a recent speech in the United States House of Representatives at Washington, on the subject of "Our National Inheritance and How to Enjoy it," the Hon. Abram S. Hewitt is reported to have said:

"I never contemplate the great maps of the United States which hang in this hall, or consider the natural resources of this broad continent, without a deep feeling of wonder, love and praise. The soils, their character, chemistry, origin and value, form a vast theme of themselves, of which time will only permit me to give a single illustration. In Europe, in the fertile valley of the Rhine; in China, in the great Yellow River Valley; and in our own Mississippi basin, there is a geological formation called the loess, which is as wonderful as it is almost entirely unknown, even to the intelligent members of the House. This formation has the marvellous property of fertilizing itself forever by drawing upward from the deeper sources of fertility all the elements which are required for the perennial nourishment of the cereal crops. In China an area of about 250,000 square miles of this loess formation has for the last 300 years supported a population of not less than 150,000,000 human beings, which is about one person to the acre, and this is the explanation of the amazing capacity of China to support the dense population which she is known to possess. The area, depth and nature of our own vast loess field, which covers a considerable part of the grain region of the West, are perhaps the most important factors in the prosperous growth of America for centuries to come."

Railroad Life-Preservers.

A Mild-Mannered man came down the aisle of the car before we got to Utica and said, softly:

"Can I sell you a life-preserver to-day, sir?"

The Jester looked at him in amazement. "Well, hardly," he said. "If you could sell me something with which I could kill the train boy without risk of detection, now, I would consider that as near a life-preserver as anything; but I have no use for the ordinary cork jacket that is never found under the berths nor in the cabins of the ocean steamers."

"And yet," the agent softly assured him, "every day you travel on the train you run a risk of awful death. You need a life-preserver as much in a railway parlor car as on the ocean steamer. Now, I have here a very neat and useful contrivance. It is built, as you see, by this model, on the general architectural plan of the complete armor of the middle ages and gives the wearer a Richard Cœur de Lion appearance."

"I should think it would make him look more like the scrap heap of a prosperous railroad," said the Jester, "where the rusty looking old man year after year weighs and sorts rusty odds and ends that nobody ever uses. If I wore that armor of yours, the boys would kidnap me and sell me to the junkman every time the circus came around."

"This invulnerable armor," continued the agent, "is an infallible and indestructible protection against the severest shocks. You might lie down on the track, clad in this suit of mail, and let a 38-ton locomotive run over you. Steam could not scald you, and if, by the concussion of the collision, another passenger ran into you head on, it would be a cold day for the other passenger. Here at your side hangs the regulation pattern old Front de Bœuf battle-ax, with which to hew your way through the roof or sides of the overturned car and hack your unhappy passengers free from encumbering clutches of the tangled seats. Should the flames of the burning car approach near enough to threaten to roast you in your armor before you can get out, this fire-extinguisher at your back will avert the danger. This Sir Hildebrand Hildesprit railway life-saving armor is the only positive assurance a man's family have that they will ever see him again when he buys a ticket to the next station; and no wise man will travel without it. And then it secures you plenty of room in a crowded car, for the man with the big overcoat, who crowds into two-thirds of your seat and smothers you up in a corner without looking at you, can make no impression on this armor, and he wont want to dig his vicious elbows into these ribs of steel more than twice. And when—"

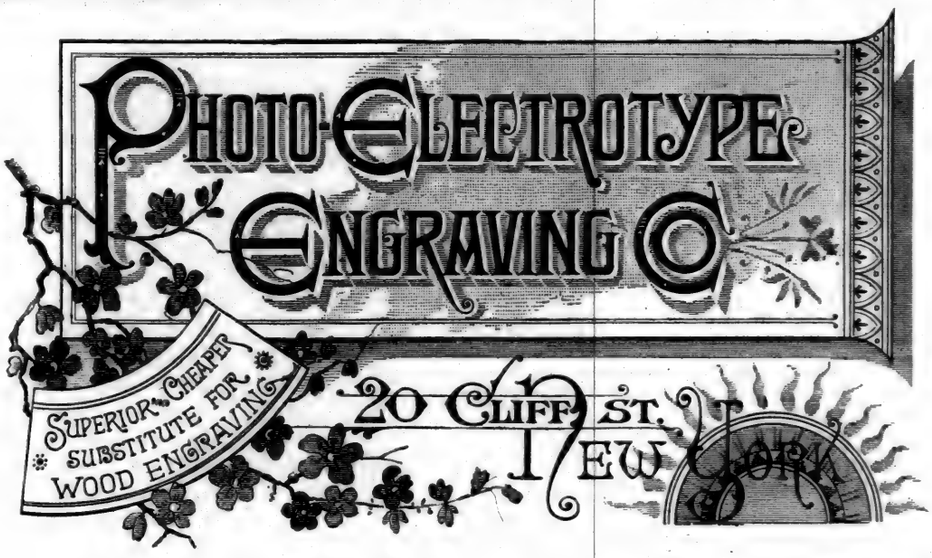
"That settles it," said the Jester; "you may take my measure right here."

And although he had to pay twelve and a half cents a pound, delivered at the foundry, the Jester ordered two suits—one to wear and one to set up in the seat beside him to keep out the bore who loves to shriek and howl amid the roar and rattle of the train, under the impression that he is carrying on a "conversation."—*Ex.*

In Houston there seems to be an innate animosity toward Galveston, and it does not do to express your opinion about any particular Houston institution unless the opinion is prepared expressly for the Houston market. For instance, I was in a drug store, getting some medicine, and I inadvertently remarked: "Your city seems to be pretty well laid out." All in the world I meant to say was that the streets were broad and straight, but the druggist glared at me, and then bawled out: "Houston is well laid out, is she? you leprous outcast from Galveston! I tell you, you vile Galveston emissary, that Houston is a lively enough corpse to lay out that little fishing town at the other end of the bayou. You come here swelling around and trying to break up our trade, do you? So Houston is well laid out is she? We will see who is laid out next," and he began blowing a police whistle. The cashier ran up stairs for his shot-gun, while a junior member of the firm bawled out to the porter: "John, turn the bull-dog loose; it's time to feed him." These episodes tended to make my stay in that portion of the city monotonous. Besides, I was afraid, if I kept on, I might become exasperated, so I said; "Don't let me detain you from your business," and adjourned *sine die.*—*Texas Siftings.*

Beef in Transit.—A great many complaints are rife as to the poor condition in which cattle arrive at the seaboard, and this is generally attributed to the negligence of the railroads in caring for stock in transit. The Protestant Episcopal Bishop of Nebraska expresses himself as follows in regard to the matter:

"The cattle from the plains of Wyoming, Dakota, Colorado and Montana are driven hundreds of miles without suffering, and with little or no loss, to the shipping point, where their misery and the risk of the shippers begin. They are loaded into cars as thickly as they can possibly stand, and carried for days together without rest, food or water. Within the four walls of the cars thus crowded there is an endless struggle for mere existence. The horning and trampling are as terrible as anything the imagination can conceive. If a steer is overthrown, or sinks from exhaustion, he is trodden to death, and the carcass will not be drawn out until the train reaches an unloading station. There the creatures are driven out, with blows and shouts, into a muddy yard, perhaps in the midst of a storm of sleet and snow, and fed and watered at an enormous expense to the shipper. But what must be their condition when they are landed in an eastern city after such a journey as that? They have lost flesh heavily; some are dead; many are sick and weak; all are bruised in a manner frightful for the consumer to think of, and few or none are really fit to slaughter. Yet with this beef people are regularly fed. Much is said about the adulteration of liquors and of food—why not look after the condition of our beef.

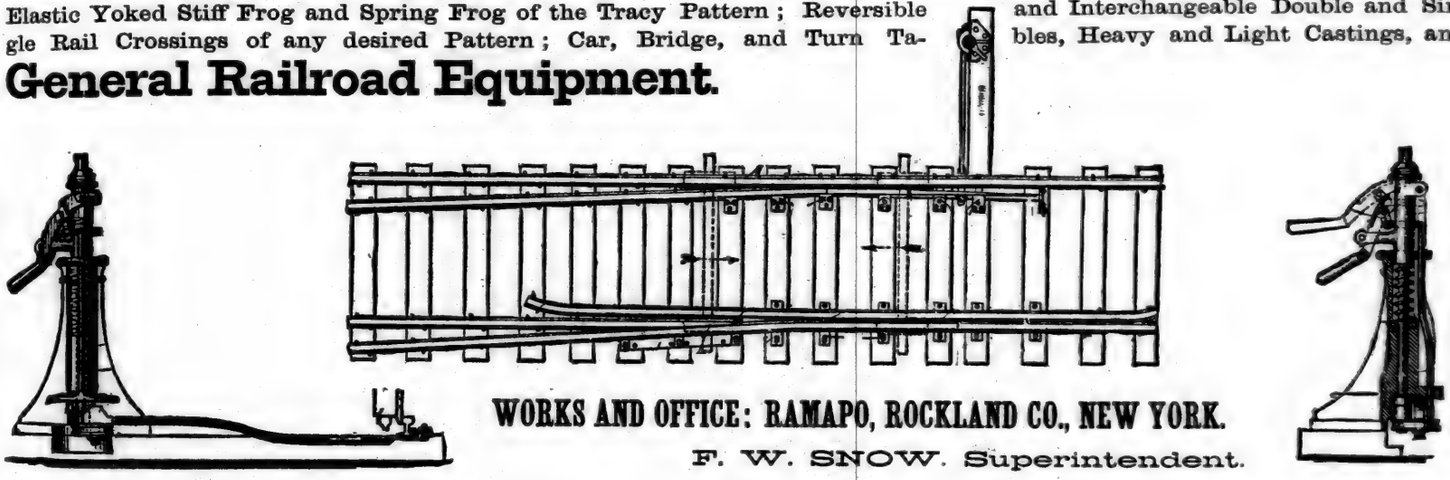


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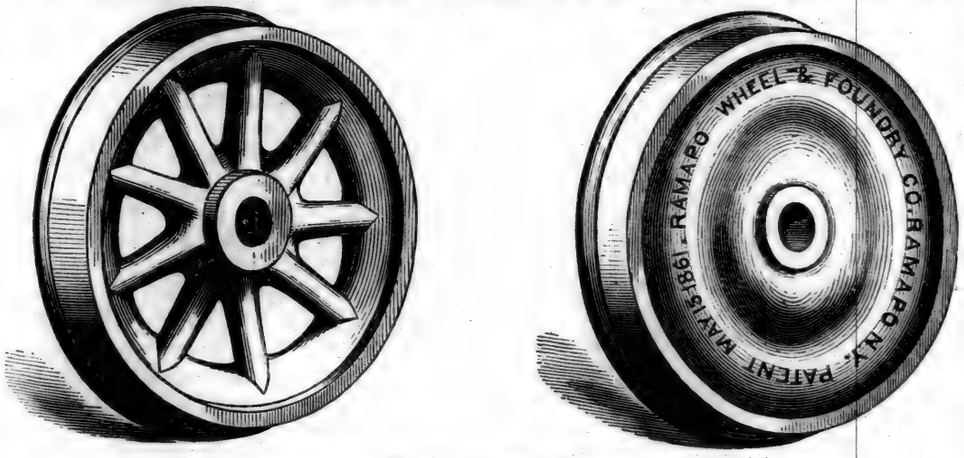
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In the Long Run.

In the long run fame finds deserving man.
The lucky wight may prosper for a day,
But in good time true merit leads the van,
And vain pretence, unnoticed, goes its way.
There is no chance, no destiny, no fate,
But fortune smiles on those who work and wait,
In the long run.

In the long run all godly sorrow pays;
There is no better thing than righteous pain.
The sleepless nights, the awful, thorned-crowned days,
Bring sure reward to tortured soul and brain.
Unmeaning joys enervate in the end,
But sorrow yields a glorious dividend
In the long run.

In the long run all hidden things are known:
The eye of Truth will penetrate the night
And, good or ill, thy secret shall be known,
However well 'tis guarded from the light.
All the unspoken motives of the breast
Are fathomed by the years and stand confest
In the long run.

In the long run all love is paid by love,
Though undervalued by the hearts of earth;
The great eternal Government above
Keeps strict account and will redeem its worth.
Give thy love freely: do not count the cost;
So beautiful a thing was never lost
In the long run.

ELLA WHEELER.

Night-Work Versus Day-Work.

In a short article containing an abundance of true remarks, the *Lancet* discusses the question of morning work against night work. The point of it is, that though people now-a-days are not such sluggards as they used to be, yet the brain-workers do not, as a rule, get up early to do their work, although when the brain is fresh from sleep and the atmosphere comparatively pure, the work done in the morning would be infinitely better than that done at night. Also, that men who will work at night, although they may get on very well for a time, will have to pay for their mistake in the end. No doubt all this, and much more of the same sort, is true enough; but how does the matter appear when looked at practically? Is the brain-worker to revolutionize the whole household for his own convenience? If not, and supposing his wife can sleep on while he gets up, he comes down to a library with the fire out and the ashes in the grate. Shall he light his fire, or go to work in a great-coat? If the latter, what is his life worth when the housemaid comes in to clean the grate and sweep the dust? And nothing is more certain than that if he is to get up early, he must go to bed early—between nine and ten every night, in fact. It might be conceit on his part to suppose that he would be much missed from the giddy throng, but it is not easy to see where he is to work in much enjoyment of life. Again, if he be a married man, he must possess a rare treasure in his wife, or something quite the opposite, if she will be content to never be taken to ball, opera, concert or theatre by the man whose guardianship she has a right to expect. It would be well, unquestionably, if we could all live more naturally, and so never fear "nervousness." But one member of a family keeping Nature's hours would be an incongruity and a nuisance. As to the maladies which late work will bring in its train, it will be Nature's business to adapt our organizations to our requirements.—*Evening Standard (London).*

Trade Commissions.

After a year of litigation, a decision of interest to business men, as to what shall be recognized as the usage of trade in paying commissions on sales, has been rendered in the case of Moses Newman against the firm of Rosenthal & Co. The plaintiff was a salesman for the defendants, having sole charge of the Western territory of the United States. In addition to his sales there he made other sales in New York, and for the latter defendants refused to pay commission. Suit was brought to recover the amount claimed, and the case was referred to ex-Judge George A. Halsey as referee, before whom the litigation has been conducted by Mr. Charles Strauss as counsel for plaintiff and by Mr. William A. Coursen for defendant. The referee, in his decision in favor of the plaintiff, holds as a matter of usage that salesmen are entitled to commission on all sales personally made regardless of territory; on all sales to customers, when such sales are first sales in any season, regardless of the fact that the purchasers may be customers of the house; on all sales made in New York, if the house have paid him on any single sale so made; and on all sales made during the season, whether made by the salesman or not, if the customer is introduced by him as new at the opening of the season.

The American's Motto.

The following story is related of an immensely wealthy American in Europe, who had made his fortune suddenly, and as suddenly found out that it was the correct thing to have a coat-of arms on his carriage. So he ordered one. The celebrated advertising heraldic stationer was a bit of a wag in his way, and took the old fellow's measure at a glance. "What you want is a crest and motto, sir," said he, politely. "I guess so." He was requested to call the next day and see the design, and promptly went. The crest was a mailed arm holding a dagger—"something uncommon," the heraldry man said—and the motto, Semper nolis omnibus benignus, which means," he explained, translating freely, "Always noble and kind to everybody." The old man was delighted. "Now the latest style of printing mottoes," pursued the shopman, "is initializing the words after the fashion of the old Roman motto, 'Senatus populus que Romanus, which the ancients abbreviated into S. P. Q. R. Of course you'd like yours done like that, sir?' "Most assuredly," replied the living gold mine, and he forthwith ordered reams of note paper, and envelopes to match, stamped instanter, in gold and silver and every known hue. Well, he and his wife used the stationery a month or so, writing to every one they could think of, when, one fine morning, while studying with more scrutiny than usual the beauty of the decoration, it suddenly dawned upon him that the caption of the sheet to which he had been daily and hourly affixing his valuable signature was nothing more nor less than S. N. O. B.—*Galignani.*

Solomon was the first man who proposed to part the heir in the middle.

Oil Well Drillers.

The men who drill oil wells become wonderfully expert at their work; or perhaps it would be more accurate to say that only those who are very expert can get work. A correspondent who has watched the process thus describes a driller's skill: "He has spent years learning his trade, and learns something new with each well he drills. He knows the stratification of the earth more minutely than any geological books teach, and he can tell how near the bit is to the oil-bearing sand by the little particles that cling to it when he takes it out, or by the few grains of gravel washed out of the balings. With his hand upon the cable he marks the quivering as delicately as a physician with his finger on a patient's pulse, and by the faint varied tremor understands what the bit is doing, sometimes almost half a mile down the narrow hole. The style of different drillers varies as does the handwriting of different men, or as the touch of players upon the piano. They know each other's peculiarities, and an experienced driller can frequently tell who is in the derrick without seeing him, if he is allowed to watch the work awhile, or, what is more important in these days of mysteries, if he knows the driller he can guess the depth of the well within a hundred feet if he gets his eyes on the outside machinery for a short time."

Iron and steel are not consumed like bread nor worn out like clothing. Every ton of these metals that is imported stays here and permanently displaces a ton of the same product that might be made at home. Even when iron and steel "wear out" in one form they reappear in another. As a matter of fact, however, the iron and steel rails and some other iron and steel articles that have recently been imported will last a long time in their present forms. Importations of iron and steel had, therefore, to be checked in some way if we would not prevent the future prosperity of the domestic producers of these articles. Low prices may be a distasteful remedy for our manufacturers and their workmen, and for iron ore producers, to apply to the evil mentioned, but no other remedy is available. It is a pity that good use was not made of it a few months ago.

The greatest river of the world is the Amazon. It rises in the Peruvian Andes, about 60 miles from the Pacific Ocean, and flows, including its windings, a distance of 4,000 miles to the Atlantic, which it enters under the equator in Brazil. The average velocity of the current is 3 miles an hour. It is navigable for large ships 2,200 miles from its mouth. The area drained by the Amazon and its tributaries is estimated at 2,000,000 square miles. The Amazon enters the sea through an estuary about 150 miles wide. So great are the volume and impetus of the river that its fresh water is carried unmixed into the sea about 200 miles. If the Missouri and the lower Mississippi were considered one river, as many geographers claim they should be, it would exceed the length of the Amazon by about 300 miles. The length of the Mississippi from Itaska Lake to the Gulf of Mexico is estimated at 3,160 miles.

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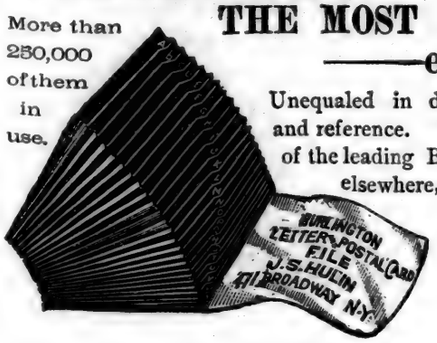
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N. B.—Send for Stock List.

Canadian Pacific Railway.

The following is a condensation, by the Toronto *Mail*, of the very elaborate speech of Sir Charles Tupper, the Canadian Premier, in the Dominion Parliament a few weeks since :—

1. The Sault Ste. Marie line is to become, in fact, a part of the main line of the Pacific Railway. This is effected by means of a crossing at Sturgeon River, and the construction of the line away on from that to Algoma Mills.

2. The company expect to lay down tracks on 50 miles west of Callendar Station. From Algoma Mills near the waters of the lake, a section of 50 miles has been laid under contract, running eastwardly to meet the line beginning at Callendar.

3. The main line of the Pacific Railway as now projected will run west from Algoma Mills to within twenty or thirty miles of the Sault Ste. Marie. This location is still under the consideration of the Government. It has some obvious advantages which cannot be overlooked.

4. Until this question of the route is settled the Government will pay no subsidy on the link of 60 or 70 miles common to both the Pacific main line as formerly projected and the Sault Ste. Marie line. This indicates business-like caution on the part of the Government.

5. It is expected that the line from Prince Arthur's Landing to Winnipeg will be opened in July next for all practical purposes of freight and passenger accommodation, though the road will not be actually complete in all its appointments.

6. Traffic will be taken to the Georgian Bay, thence by water to Prince Arthur's Landing, and thence on the Winnipeg and beyond by rail, a route through our own territory accomplished after long labors and great expense.

7. Of the 433 miles from Prince Arthur's Landing to Winnipeg the rails are laid on 401 miles, leaving only 32 miles more to cover. But the line will not be actually finished till next season.

8. The total expenditure on this section of the road to the present time—that is, to the last payment—is $13,224,000, and the balance of expenditure will not exceed $1,400,000.

9. The line is now located definitely 470 miles west from Winnipeg, and the Government does not intend to assent to further location till it is seen whether the Kicking Horse pass is available or not, the evidence so far being in favor of a change from the hitherto accepted Yellow Head Pass.

10. The distance of 116 miles west of Winnipeg is now under traffic. About 8,000 tons of rails are now on the spot, and large quantities are on their way for the purposes of track-laying.

11. Up to the present time the company have been paid only $1,610,000 and 1,610,000 acres of land as their portion of the subsidy.

12. The Pacific Railway Company have, in addition to their main line, graded 89 miles of a branch called the Winnipeg and Pembina Mountain branch, running southwesterly from Winnipeg to the border ; and in addition to a branch connecting with Emerson, it is expected that 100 miles will be under traffic during the present season.

13. A branch from Brandon is also projected in a southeasterly direction, 15 miles to Souris and thence west, in all 195 miles ; and this with the other branch of 225 miles will make a total, apparently, of 420 miles of branch lines which the company are building without subsidy.

14. The question of the Rocky Mountain pass is not yet settled. The government, in view of the probability of another pass being chosen, takes power to adopt it ; but in the meantime there are only strong probabilities in favor of the change.

15. This change to the Kicking Horse Pass will, if it takes place, make a saving of 79 miles in the length of the road ; but as in the case of the change on the eastern section, the cost to the company will be increased, not diminished, as was said, by the alteration of the route.

16. The Yale-Kamloops section is progressing very favorably. It is the most expensive and difficult section of the road. The total value of the work done is, so far, $1,979,973. The date of completion is July, 1885, and the Minister anticipates it will be accomplished within that time.

17. The portion from Emory's Bar to Port Moody has lately been placed under contract at a probable cost of $2,486,000, to be finished in July, 1885.

18. The estimates of cost of the various sections and the actual cost as now ascertained or estimated, are as follows :—

	Present Estimate.	*Contract Sum.*
Kaministiquia to Sunshine Creek, 45 miles, reduced to 32½	$313,200	$293,360
Sunshine Creek to English River	1,417,208	1,037,061
English River to Eagle River	1,767,357	2,300,196
Eagle River to Keewatin	2 904,153	4,130,707
Keewatin to Cross Lake	2,619,585	1,844,085
Cross Lake to Selkirk	733,602	402,950
British Columbia	1,192,600	1,746,150
	1,368,670	2,056,950
	1,927,000	2,573,640
	2,324,000	2,727,300
	2,486,000	2,486,000

19. The actual commercial value of the road when completed is stated so concisely by the Minister that we shall not attempt to abridge it. He says : "Now, assuming that the 79 miles on the British Columbia line are saved, our position will be this : From Montreal to Port Moody by the Canadian Pacific Railway, the distance will be 2,850 miles ; from New York to Port Moody via the Canadian Pacific Railway and Montreal, the distance will be 3,260 miles. From New York to Port Moody by the Canadian Pacific Railway and Brockville, the distance will be 3,140 miles. Now the distance from New York to San Francisco via the Central and Union Pacific railroads is 3,331 miles. As the distance from Montreal to Port Moody is only 2,850 miles, we shall be able, with our better line, better grades and freedom from the bonded debt under which the Union and Central Pacific railroads suffer, to compete with the lines to the south of us, and with the aid of fast steamers, connecting San Francisco with Victoria, to secure a considerable portion of the trade with San Francisco and the Western States. From Liverpool to Montreal, 2,790 miles ; from Liverpool to New York, 3,040 miles ; from Liverpool to Port Moody via Montreal and the Canadian Pacific Railway, 6,063 ; from Liverpool to San Francisco via United States roads, the shortest route that could be obtained, 6,836 ; from Liverpool to Yokohama and Japan via Montreal and the Canadian Pacific Railway, 10,963 ; from Liverpool to Yokohama via San Francisco, 12,038. So we shall have a route from Liverpool to Port Moody via Montreal and the Canadian Pacific Railway 767 miles shorter than via New York and San Francisco, showing that so far as through traffic is concerned it will be utterly impossible for any road on the continent to begin to compete with the Canadian Pacific. From Liverpool to Yokohama via the Canadian Pacific the route will be 1,075 miles shorter than via New York and San Francisco. Looking at it a little closer home, I am glad to find the result is such as will be favorably received by the House. From Liverpool to Halifax it is 2,480 miles ; from Halifax to Quebec, 680 miles ; from Quebec to Montreal, 176 miles ; from Montreal to Port Moody, 2,850, or 3,706 from sea to sea, from Halifax to Port Moody. Liverpool to Port Moody, 6,186 miles ; from Liverpool to New York it is 3,040 ; New York to San Francisco, 3,790—making a total of 6,830 miles."

A Street Car Which Carries its Track.

The Accommodation Car Company has begun operations in Chicago with a capital stock of $1,000,000 divided between the patentee, T. T. Prosser, and F. F. Cole, a real estate man. The object of the company is to build and equip a thousand cars and put them upon the streets of Chicago. The car is the patent of Mr. Prosser, and, as regards present appearance, is a queer, oglesome looking craft, which carries its track along with it, and to all intents and purposes is designed to traverse any and all lines of streets. The car, which is of the ordinary kind, is mounted, in the middle, upon a truck which sits on four wheels, each about one foot in diameter. These wheels run around the inside of two steel tires, each ten feet in diameter, and which rest upon the ground, and are only held to the car by a set of wheel-clamps. The car is designed to hold 50 people, and the owners claim that the more it carries the easier it runs. It will be stopped in the usual manner, and two horses will be required to pull it. The owners say they intend putting the cars upon the principal streets of the city, and placing the cash fares at four cents, and selling 30 rides for $1.

When Captain Cook first discovered Australia, he saw some natives on the shore, one of whom held a dead animal in his hand. The Captain sent a boat's crew ashore to purchase the animal, and finding, on receiving it, that it was a beast quite new to him, he sent the boatswain back to ask the natives its name. "What do you call this 'ere animal?" said the sailor to the naked native. The latter shook his head and answered, "Kan-ga-roo," which means in Australian lingo, "I don't understood." When the sailor returned to the ship the Captain said, "Well, and what's the name of the animal?" The sailor replied, "Please, sir, the black party says it's a kangaroo." The beast has kept the name ever since.

American Railroad Journal.

ESTABLISHED 1831.

Steam Navigation, Commerce, Finance, Banking, Machinery, Mining, Manufactures.

SECOND QUARTO SERIES.—VOL. XXXVIII., No. 25.] NEW YORK, JULY 1, 1882. [WHOLE NO. 2,410.—VOL. LV.

INCORPORATION.

THE Alfred E. Smith & Warner Axle Company was organized at Wilmington, Del., on the 19th inst., by the election of the following officers: President, D. H. Kent; Vice-President, Alfred E. Smith; Secretary and Treasurer, Samuel G. Warner.

UNDER the provisions of the General Railway Act passed at the last session of the Manitoba Legislature, articles have been filed by the Manitoba Southwestern Railway Company to build and operate a line from Winnipeg to the southeast quarter of the Province. The incorporators are James Gillespie, Arthur F. Eden, Duncan McArthur, A. W. Ross, S. P. Howell and T. H. Kennedy.

THE St. Croix and Chippewa River Railroad Company has been incorporated in Wisconsin, with a capital stock of $500,000. The officers are: I. McGregor, President; J. D. Putnam, Vice-President; J. B. Thayer, Secretary. The road is to be constructed between a point on Lake St. Croix near Catfish Bar, and a point on the Chippewa River near Duran, to connect with the Chippewa Valley and Superior road.

A MAP exhibiting the route of the White River Branch of the St. Louis, Iron Mountain and Southern Railway, has been filed in the office of the Secretary of State, of Arkansas. The new railway will begin at Newport, on White River, and run through the counties of Independence, Izard, Stone, Baxter, Marion and Boone to Eureka Springs, a distance of 170 miles. It will open up a country rich in agricultural and mineral resources. Work on the proposed line will be commenced at an early day.

ARTICLES of incorporation of the Cincinnati, Atlantic and Columbus Railway Company were filed on the 15th inst., in the office of the Secretary of State, of Ohio. The capital stock is $3,500,000. The incorporators are: W. E. Town and Edwin H. Patten, of New York; Henry T. Niles, James Taylor, J. H. Ayers and Jno. S. Leedom, of Ohio. The line as projected is from Cincinnati to a point on the Ohio River in Gallia county, opposite Point Pleasant, West Virginia, with a branch from Fayetteville, Brown county, to the city of Columbus. The principal offices of the company will, for the present, be at Fayetteville.

A CERTIFICATE of incorporation was filled at Albany, N. Y., on the 19th inst., of the Addison and Northern Pennsylvania Railway Co. The company is to continue in existence one hundred years. The road is to run from the New York, Lake Erie and Western Railroad at Addison, Steuben county, to a point on the State line between New York and Pennsylvania, on the southerly boundary of Steuben county. The length of the road will be twelve miles. The capital is $600,000. The directors are: Thomas C. Platt, W. C. Sheldon, H. P. Degraff, J. D. Fish, Roscoe Conkling, G. R. Blanchard, B. W. Spencer, H. C. McKay, H. Y. Baldwin, J. E. Jones, R. G. Taylor, W. S. Gurnee and J. H. Starin.

CONSTRUCTION.

SIXTEEN thousand men are now employed in railroad construction in Florida.

HORSE cars commenced running from Lynn, Mass., to East Saugus, on the 24th of June.

THE Charles River Railroad, Cambridge, Mass., was formally opened on the 13th ult.

THE Boston, Hoosac Tunnel and Western Railroad will be completed to Saratoga on the 3d of July.

THE Canadian Pacific track now extends to a distance of 91 miles West of Brandon, Manitoba, and Mr. Grant is still pushing on the work vigorously.

ENGINEERS of the Peach Bottom and York Railroad are at work leveling the graded track from Delta to Peach Bottom, preparatory to laying the rails.

THE Seashore and Cape May Point Railway, a new railroad to extend along the entire beach between Cape May Point and Sewell's Point, N. J., is to be finished and ready for travel in 30 days.

THE grading on the road between Atlanta and Macon, Ga., has been completed, and track-laying is progressing. Trains are expected to be running between the two points by August 1.

LANGDON, SHEPARD & Co., have 3,500 men and 1,700 teams employed on the Canadian Pacific Railway construction west. Track is now laid 100 miles west of Brandon and grading 75 miles further.

SUPERINTENDENT WOOLSTON returned to Marshalltown, Iowa, from New York, on the 24th ult., with authority to let the contracts for grading and bridging 100 miles of the Wisconsin, Iowa and Nebraska Railroad.

A NEW railroad is to be constructed at once, from East St. Louis to Chester, Illinois, following the bluff through Monroe and Randolph counties. Men are already engaged in securing the right of way along the proposed route.

AT a special meeting of the directers of the Connecticut Valley Railroad Company, held on the 23d ult., President Babcock was instructed to go forward immediately with contracts to build the extension from Hartford to Springfield.

WORK is progressing well on the new elevator now in course of construction in Cincinnati, for the Cincinnati, Indianapolis, St. Louis and Chicago Railroad Company. It will have a capacity of 750,000 bushels of grain, and can load and unload 200 cars a day.

IT is now understood that work on the Ontario and Quebec Railway will be commenced within ten days, starting at the site of the old Peacock tavern, at Carlton. The work will be rapidly pushed eastward, and has been let out in 5-mile sections.

AT the close of business on the 24th ult., the track of the Fort Worth and Denver City Railway had reached a point 85 miles distant from Fort Worth, and within 9 miles of Henrietta, in Clay county, to which point it is to be completed by the 1st of July.

THE Wilmington *Every Evening* says that the result of the election of the Central Railroad Company of New Jersey "probably has an important bearing upon the building of the new line between Philadelphia and Baltimore, since it secures to the Baltimore and Ohio its long-coveted entrance to New York City."

THE Chicago, Milwaukee and St. Paul Railway Company commenced work on the 24th ult., at Ottumwa, Iowa, on their extension from Cedar Rapids, southwesterly to Kansas City via Homstead, Iowa county and Sigourney, Keokuk county. This is one of the extensions begun last year, which the Milwaukee Company proposes to complete this season.

THE first regular passenger trains of the Manitoba Southwestern Railway left Winnipeg on the 22d ult. for Carman City, a distance of 51 miles. The road is graded to Nelsonville, 30 miles further, and it is thought trains will run that distance in about another month. In the meantime a system of stages has been organized to accommodate public travel.

LEVI C. BIRD, resident counsel for the Baltimore and Ohio Railroad Company, at Wilmington, Del., stated in his argument before the

Levy Court Bridge Committee at that place on the 23d ult., that the work of building the new line will be commenced in July, but that it has not yet been decided which of two surveyed routes through Wilmington will be chosen.

THE Nebraska extension of the Sioux City and Pacific Railway will be opened for business on the 1st of July. This extension runs from the Missouri Valley up the Elkhorn Valley to its source, thence across to Fort Niobrara. The new line is 306 miles in length and opens up one of the best portions of Northern Nebraska, which no doubt will soon be settled with a thrifty class of settlers.

THE line of the Lake View Desert Railroad Company is projected in a northwesterly direction from Menominee, Mich., the intention being to strike the Milwaukee, Lake Shore and Western at Lake Agogebic on the Peninsula. During the past year, and until very recently, the surveyors have been at work on this route. At the Menominee meeting, on the 24th ult., it was decided to defer construction work until 1883.

THE Baltimore and Catonsville Short Line Railroad is to run from a point near St. Agnes Hospital to Catonsville, a distance of nearly 4 miles, and will pass through the Spring Grove Asylum property. The right of way has been obtained from all except four or five of the property-holders. Nearly $41,000 of the stock is subscribed and 10 per cent paid up. It is contemplated to begin work at as early a day as is practicable.

THE announcement is made that the new Saratoga connections of the Tunnel Line will be completed and opened on the 5th of July, when the Fitchburg, in connection with the Boston, Hoosac Tunnel and Western, will commence running through trains of first-class cars. The distance from Boston to North Adams is 143 miles, and from North Adams to Saratoga, over the new road of the Boston, Hoosac Tunnel and Western, 63 miles.

WORK on the Atlantic and Pacific Railroad at Mohave, is moving forward slowly. On the 13th ult. the track had been laid east 21 miles, and graders and surveyors were out 20 miles further. No work has been done on the Southern Pacific Railroad in Texas since June 1st, owing to the character of the country. It is rough and mountainous, and bridging and tunneling are necessary. Southeasterly from the bridge over the Rio Grande at El Paso the track is laid over 329 miles.

THE Cairo (Ills.) *Argus Journal* says that "there is a line building from Kansas City to Memphis, and that work on it is being pushed very vigorously. The company building that line are now surveying a branch road through Poplar Bluff to Cairo, and will commence grading it as soon as practicable. This is a road that has not hitherto been embraced in the calculations of our business men, and it will make three railroads running from this point southwest. It will afford a more direct route to Kansas City from here than we have now."

THE St. Louis and Western Railway, formerly known as the Laclede and Fort Scott Railroad, extends from Lebanon, Laclede county, Mo., due West across the State to Fort Scott, Kan. Under its charter it has the power to extend its lines at will through any part of the State of Missouri, and it is understood that the new board of directors have decided to take immediate advantage of the privileges thus accorded them. A branch line is to be built from Lebanon to a point opposite Chester, Ill., making connections there with the trunk lines south from Chicago. Other branches projected will extend from Bolivar on the main line to Kansas City, passing through Clinton; a continuation of the branch from Clinton passes through Tuscumbia, meeting there another branch from Bolivar, thence going to St. Louis. From Bolivar there is also a branch to extend through Lamar to Carthage, making a direct line to the southwestern part of the State. The system is to embrace about 600 miles, giving a road from Kansas City to St. Louis with advantages over other routes. Mortgage bonds to the amount of $12,000,000 are to be issued as the new lines are constructed. Work on the extensions is to begin immediately.

ORGANIZATION.

The directors of the Lake View Desert Railroad Company, elected at the recent annual meeting in Menominee, Michigan, are: F. W. Rhinelander, S. S. Sands, Gordon Norrie, F. F, Thompson, H. G. H. Reed, Alfred L. Cary, Albert Conro, and Joseph Villas.

The election for directors of the Central Railroad Company of New Jersey, which was held on the 23d of June, resulted in the choice of the following: Henry S. Little, John Kean, Edward Clark, Sidney Shephard, Samuel Sloan, Robert Garrett, Franklin B. Gowen, Theodore F. Randolph and Edward C. Knight.

At the annual meeting of the stockholders of the old Chicago, Danville and Vincennes Railroad Company, the following directors were elected: S. O. Rutter and Edwin Walker, of Chicago; Daniel Dodd of Newark, N. J.; Charles F. Elwell, E. C. Bagert, W. D. Judson, Amos Tenney, A. T. Cline, and A. M. Judson, of New York.

The directors of the Sedalia, Warsaw and Southern Railroad Company, recently elected, are: R. S. Hayes, J. H. Dowling, D. S. H. Smith, C. S. Wheeler, D. M. Edgerton, and C. G. Warner. The officers are: R. S. Hayes, vice-president; J. H. Dowling, Secretary; D. S. H. Smith, treasurer. The road is 42 miles long, connecting Sedalia and Warsaw.

The directors of the Baltimore and Catonsville Short Line Railroad Company, elected on the 23d ult., are: James A. Gary, Henry James, Dr. C. G. Magill, Gustave Giskie, T. L. Tinsley, John Glenn and Eugene Carrington. The directors organized by electing Mr. Gary president, Mr. James vice-president, Mr. Carrington secretary, and Mr. Glenn treasurer.

At a meeting of the stockholders of the Fargo Southern Railroad Company, held at Fargo on the 20th ult., the following board of directors was elected: N. K. Hubbard, W. A. Kindred, C. W. Darling, Charles Sweatt, J. S. Huntington, J. B. Raymond, E. S. Tyler, John Haggart, J. B. Chapin, E. B. Eddy, L. B. Gibbs, and J. P. Wilson. The board then proceeded to the election of officers, with the following result: President, N. K. Hubbard; vice-president, W. A. Kindred; secretary, C. W. Darling; treasurer, Charles Sweatt; attorney, J. P. Wilson.

At the annual meeting of the Nashua Iron and Steel Company, held in Nashua, N. H., on the 23d ult., the following directors were elected: John A. Burnham, Daniel Hussey, J. A. Burnham, Jr., of Boston. A. Blood of Manchester, V. C. Gilman of Nashua. The board subsequently elected John A. Burnham president, M. A. Herrick of Boston treasurer, proprietors' clerk, Wm. F. Pinkham.

The new board of directors of the St Louis and Western Railway Company, elected on the 24th ult., consists of J. N. B. Dobson and W. W. Prewitt of Nevada City; B. F. Helper, of Fort Scott; J. W. Farmer and C. E. Bushnell, of Bolivar; George W. O'Bannon, of Buffalo, Mo., W. R. Hall and H. Attaway, of Lebanon; Ozias Baily of St. Louis; Z. E. Elkin, D. M. Yeomans, William P. Watson and John C. Short, of New York. Mr. Short is president of the American Finance Company. Mr. Yeomans is president of the New York and Atlantic Railway Company. J. N. B. Dodson has been elected president.

The British Canadian Colonization Company (Limited) has been fully organized with a capital of $1,000,000, all of which was subscribed in a few days. About 100,000 acres of land have been acquired just east of Long Lake in the Qu'Appelle District, Northwest Territory. The board is composed of the Hon. Alexander Mackenzie, M. P., President; James Beaty, Q. C., M. P., vice-president. George A. Cox, Esq., President Midland Railway Company. Robert Jaffray, Esq., vice-president of the Land Security Company. Major Fred. C. Denison, Toronto. The board has elected as manager F. J. Stewart, who has been a director in the Land Security Company, an experience which will now be serviceable.

At the annual meeting of the McLeod Air Railroad Signal Company, held at Hartford, Conn., on the 20th inst., the following gentlemen were elected directors for the ensuing year: Col. Thomas R. Sharp, New York; C. A. Loud, J. S. McLeod, J. G. Stewart, Jr., and C. P. Gorely, Boston. And at a meeting of the directors held at 4 Pemberton Square, Boston, on the following day, C. A. Loud was elected president, Col. Thomas R. Sharp vice-president, J. G. Stewart treasurer, C. P. Gorely secretary, and J. S. McLeod superintendent. We learn that this signal has been fully endorsed by a number of railroad officials and experts, as well as the railroad commisioners who have examined it, and that the company is now making all possible preparations for the manufacture of them on a large scale—more orders having been already received than it can fill for the next twelve months.

THE Secretary of the Treasury has decided not to reverse the decision made by him some time ago in regard to the duties on hoop iron and hoop iron splayed and cut into lengths for barrel hoops.

Niagara in Harness.

Yankee ingenuity and practicality have not been slow in acting upon the suggestions which have been thrown out so frequently of late by the English savants as to the capability of Niagara Falls in producing electrical power. They have computed the force of the falls and announced the prodigious results in illuminating and heating, as well as a motor, which might be accomplished by them if they were only utilized, and now comes an enterprising American, backed by sufficient capital, determined to see if the cataract will perform what the savants say it will.

The preliminary step has been the purchase of the twelve acres known as Prospect Park, adjacent to the falls, which substantially gives the purchaser the control of the water power of the entire American falls, estimated at 2,000,000 horse-power, or ten times the amount of steam horse-power in Chicago and all the rest of Cook county—a force equal to that of 12,000,000 men. The control of this prodigious power having been obtained, it is proposed to erect immense buildings and ponderous machinery upon the brink of the falls, where the water can be easily reached, "to be returned after use." After generating the electricity by this unlimited hydraulic force, it is to be conducted through properly insulated cases to sixty-five prominent American cities and towns for illuminating purposes, and is also to be used for operating machinery and ultimately for heating purposes. Altogether there will be 10,000 miles of copper cables with machinery to correspond.

The project at the first glance is sufficient to take away one's breath, but it is certain that any project proposing to handle Niagara Falls must be on the same scale as the cataract itself. Niagara is not a force to drive a petty mill or run a small grist. Its prodigious force must be handled in a titanic way or else let alone. He would be a rash man who should hasten to predict that this colossal scheme, which looks so well on paper, is going to succeed, or that Niagara is going to allow itself to be harnessed to dynamo machines without a most determined resistance, or that numerous unforseen obstacles will not turn up that will prove insurmountable and convince puny man that nature has some agencies like mountains, oceans, cyclones, and cataracts which she will not allow to be utilized for material purposes, and against which she may protest in some reckless way that will send the whole project to everlasting smash. The most that can be done now is to announce that an effort is to be made to compel this vast 160 foot fall of water, which has been running wild so long and benefiting no one, except the Falls hackmen, who have mainly retired on fortunes after their connivance with a cataract, to do something for a living and to be of some use in the world. If every brawling little millstream in the country has to be of some service, there is no reason why this overgrown and monstrous precipitation of water should not also contribute to the wants of men—if it can be done. If skill, courage, enterprise and money are of any avail, it may not be long before the world will behold Niagara no longer plunging over its brink merely for the profit of hackmen and the pleasure of sentimental sight-seers and poets, but working with its huge power for the comfort of people. It was not long ago that an English writer sneeringly declared that a Yankee could not look at Niagara Falls without calculating its capacity as a water power. The writer probably never dreamed that a Yankee, not content with the mere calculation, would actually attempt to put it in operation.—*Chicago Tribune.*

Negotiability of Bills of Lading.

A RECENT decision of the Supreme Court of the United States invalidates a long practice of merchants concerning the negotiability of bills of lading, and deserves wider publicity than it has yet received as a means of correcting a prevalent error. In the test case a bill of lading had been signed by the agent of a Southern shipping concern for a lot of cotton that was never shipped, and in consequence of non-delivery failed to make good the money paid by a third party upon a draft to which the bill had been attached. The victim sought to recover from the principal of the agent who signed the bill of lading, on the popular notion that, having paid the draft in good faith on the representation of the bill of lading which the defendant has allowed to be issued, the latter is bound to make good the amount involved. The popular view of the law in such cases has been that the bill of lading possessed all the elements of negotiability which belong to a bill of exchange or a promissory note. The Supreme Court, however, has decided that it is not a negotiable instrument or obligation in this sense. According to Mr. Justice Miller, "its transfer does not preclude, as in those cases, all inquiry into the transaction in which it originated because it has come into the hands of persons who have innocently paid value for it. The doctrine of bona fide purchases only applies to it in a limited sense. It is an instrument of a twofold character. It is at once a receipt and a contract. In the former character it is an acknowledgment of the receipt of property on board its vessel by the owner of the vessel. In the latter it is a contract to carry safely and deliver. The receipt of the goods lies at the foundation of the contract to carry and deliver. If no goods are actually received there can be no valid contract to carry or to deliver."

Profits of a National Bank.

THE Philadelphia *Ledger* says that the public mind has been greatly abused as to the profits of National Banks, and shows that "the dividends paid by them between March 1, 1876, and March 1, 1879, greatly exceeded the net earnings, and that their net earnings in 1875 were but a fraction over ten per cent on their capital, and from that period to the date of the last full report in 1880 the banks during no year earned as much as eight per cent on their capital." Furthermore, as appears from the *Ledger*, the profits of private banking, antecedent to the introduction of the National banking system, were much greater than have been realized under that system. In 1836, for example, the banking profit was fifteen per cent; in 1838, eighteen per cent, and in 1853, thirty-two per cent. The earnings of National banking in 1881 were only one-third, and in 1875 only one-fourth, as much as in 1853. These few facts utterly explode a vast amount of nonsense that has been written and spoken about the so-called monopoly and inordinate profits of National banking.

THE Watsontown (Penn.) car shops, after a short suspension, have begun work again, with contracts for 500 cars.

THE Philadelphia and Reading Coal and Iron Company will start several furnaces on the line of the Philadelphia and Reading Railroad on the 1st of July.

THE fine depot of the Cambria and Somerset Railroad, a branch of the Baltimore and Ohio road, at Johnstown, Pa., has been completed. The Johnstown *Tribune* says the business of the new road is large and constantly increasing,

THE new passenger station built at Wilmington, Del., by the Philadelphia, Wilmington and Baltimore Railroad Company is nearly completed, and will be thrown open to the public about the first of July. It is a very fine building, the cost being about $130,000.

THE fishery statistics of the Dominion of Canada for the year 1881, just published, show the total value of the production of the fisheries of Canada to be $15,817,162; the value in the Provinces for the year amounts to $14,499,979, exclusive of the catch in Manitoba and the northwest territories, of which there are no returns.

COMMENCING July, the New York, Lake Erie and Western Railroad Co. will make a radical change in the time limit of the local excursion tickets sold over its line. Heretofore these tickets were valid for but one and two days after date of issue. By the new arrangement they will be good on day of date and for four days thereafter.

THE Attorney General of the United States has decided that the act of May 7, 1876, forbids a cash payment to the Union Pacific Railway Company for special mail facilities. If such a contract is made with the company, the allowance must be passed to the credit of the company, as the regular mail pay is now.

THE Montreal *Witness* notices the arrival in that city on the 24th ult., of "a splendid specimen of car architecture, destined for the through Boston route, over the Central Vermont Railway. It is called by the company their ordinary first-class car, but the improvements make it rather an extraordinary one. It is fitted with the Baker heater, three double chandelier lamps with mineral oil, and its hygienic properties for good ventilation are most finished, comprising three extra ventilators at the end of the car, with ventilating sections in each of the door glass panels. It is intended shortly to have this class of cars placed on the New York route. The car was built at St. Albans in the company's shops, has a seating capacity of sixty-two, and makes night traveling an easy business and comfortable."

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CLASSIFICATION OF TRAINS AND TRAIN LOADS.

THE JOURNAL had something to say recently about the increasing weight of engines and cars, in which it was sought to establish the proposition that railroad companies are expecting more economy in that direction than they are likely to realize. The same line of remark may be brought to bear upon the make-up of the collective train of cars as was made against the individual car and engine. It is a very common feeling among specialists and handicraftmen that outsiders have nothing of value to offer them in the way of counsel; and most railroad superintendents and engineers will be apt to say to all this class of suggestions that they are attempts to instruct them in a business in which they are proficient, and in which all others not so engaged are *ipso facto* incompetent to teach. There are Bourbons among railway operators—who learn nothing and forget nothing—but it is only fair to say that as a class compared with other classes, they are usually ready to accept hints, and sometimes from those outside of their own rank. It has been shrewdly said that the most successful farmers are those who come to it late in life, after having become proficient in other pursuits; and both continents afford conspicuous examples of the adage. But it is equally true of other occupations, and the railroad is not an institution so venerable with age that it is a closed and completed study. The farmer was left to himself for thousands of generations before he got the mould-board plow—and then it was the invention of one not a farmer; so also of the reaper and binder—these were the suggestions of onlookers. Whitney was neither a cotton planter nor a cotton spinner. Neither is navigation indebted for the models of the present ships to the traditional ship builder from birth following the model of his ancestors, but to a skeptical observer who may never have handled a broad-axe or driven a calking iron. In this spirit we desire to offer some criticism on the present phase of forming and running trains in this country, although we confess at the ontset never to have run an engine, nor even framed a time schedule.

We repeat the assertion that the trains are getting to be commonly too heavy for successful handling, for safety and speed to passengers and freight, and for economy to the carriers. In a new road, through sparsely settled territory, it is to be expected that "the train" when it starts will carry about anything that is ready to go, and stop to let off, or take on, anything that offers; but as the country, the business and the road grows the same method is apt to survive. The classification of trains into Passenger, Freight or Mineral, through and local, and these again into further subdivisions, such as "Limited," express, mail, way, accommodation or "mixed," with a corresponding distribution of the traffic to be moved into such divisions or classes as may be best served without each interfering with the other is a growth, and sometimes a very slow one. A disgraceful waste of power, machinery and service is kept up on some old roads to this hour for want of an intelligent grasp by its executive head of the varying requirements of the multiform business which pours upon a great railroad artery.

A concrete illustration may serve to show how. The Pennsylvania R. R. Co., in this respect the foremost teacher in railroad operation, as well as in the maintenance of road bed and tracks, was the first to realize that in the great volume of travel through between New York and Philadelphia it was absurd to do it along with the other great volume of local travel to points between those termini, which, though they passed over the same rails, had nothing else in common. Until a few years ago, as all who made the journey will remember, the passenger to Philadelphia, Baltimore or Washington was huddled into a car not at all distinctive, in which he took his chances with those who came in or got off at a hundred intermediate places, and took all of a long day to do it. To its credit be it said the present company introduced a number of through trains, some passing the ninety miles in two hours, without stop; and others stopping at points where the examination of the machinery, taking of water and the dropping of load are together necessary and convenient.

A similar improvement has come to be made in the through Baltimore and Washington travel; but it is not as thorough as it should be, and perhaps will not be until a competing through line compels a further study of what may be done; in which event we expect to find the Pennsylvania, as heretofore, "hard to beat." Its Chicago "Limited" was not only the first in the field, but was a leap far in advance in our railroad development. For twenty years the through trains from New York to Chicago, and *vice versa*, on all the lines have been long lumbering aggregations bearing business for, and to, and from every town of 2,500 or upwards, all the way between Lake Michigan and the sea. The idea of excluding passengers from a train (especially if it happened to stop at the desired point of destination, though only an hour's ride away) or of stopping a train only to pick up passengers at one end of the journey, and correspondingly only to let them off, but not take on, at the other end, was another stroke of genius which must have amazed the old-fashioned railroad director. But this is the true theory of conducting a large business; a railroad can no longer be conducted on the plan of the old stage coach or mule train where human and animal energies require frequent stops for change and rest.

Some of the roads aspiring to the distinction of Trunk lines are still asleep to the necessity of doing through and local business on different trains, and so as not to interfere one with the other. The example of the Philadelphia line has started some trifling changes; but even now the New York Central and Hudson River, the New York, Lake Erie and Western, and others less noticeable, continue to do their business with points west of Buffalo on the same trains with that east of Buffalo, which is of magnitude enough to deserve a separation. Some superintendent will presently arise who will see the wisdom of dispatching on each of these lines

an express each way, say two hours in advance of the Western "Limited," both morning and evening, and which latter shall not ordinarily take up any passengers, except at junctions of through lines like Albany, Rochester, etc., until Buffalo is reached, where the two lines again united will take up the march for Chicago under similar conditions, except that passengers for other through junction points at the west end will be let off, but none taken on for the short ride. This plan of classification is one that managers may watch for their own great benefit. In freights it forces itself upon the notice.

Another most absurd custom still prevails of uniting in one train the mails; "express" (package freight) through and local; baggage through and local; first and second classes, smoking, sleeping and sometimes, also, parlor cars, all on one train. The result is that the trains are long—10 to 15 coaches aggregating 500 to 700 feet in length and, with engines, 250 to 500 tons in weight, the engine over-burdened, the baggage and ticket men overworked; neither the through nor local being so well accommodated; much time is lost, and at times accidents happen; while at all times there is a loss of power and waste of money. When one line to the seaboard serves as carrier for two or more westerly connections, and each of the latter insists upon having through cars to all points enjoyed by the other, it results in making intolerably long and ridiculously heavy trains, and it not infrequently happens that the train so composed is half or two-thirds empty. The remedy for this state of things is obvious; the mail and express package matter, and way baggage especially, shall be divided from the through passengers and baggage by running a separate train as above suggested. Entirely independent scheduled trains are preferable to the plan of cutting the same train into "sections." The reform, however, should go further; the express packages ought not to burden through passenger, nor even fast-way trains, at all. The contracts made with these private companies for freight service by the car load on passenger trains, after the ideas of long ago, should be abrogated, or at least not renewed.

The justice of this will be acknowledged when it is known that tons of merchandise, machinery, pianos, horses, cattle, half-car loads of butter, eggs, fruits, fish, oysters, etc., are habitually sent as express matter by trains that should be swift. The handling of such stuff while on the way is tedious; the stopping of such trains is less manageable, the starting difficult, even if the monster locomotive can provide steam to move such weighty masses with the required velocity in all weathers and at all seasons. More and lighter trains, classified local and through traffic, fewer stops, and a more vigilant care of track and bridge and trestle structures will, we are satisfied, result in a saving of time to the public, exertion to the employes, and of net earnings at present lost in preventable leaks to the stockholders.

Hydraulic Pressure in Wall Street.

Stock-watering has an evil sound in the public ear, and justly so by reason of its associations. But stock-watering *per se* is not a fraud. It is nothing more, when legitimately done, than realizing the enhanced value of a property. It is just as proper a proceeding as that of the merchant who marks up the price of his stock of goods he has on hand. Nevertheless, it has an evil odor clinging to it, for the operation presents such temptations to fraud on the part of those in control of the property, that it is rare for the thing to be done without fraud at some stage. Sometimes it is a series of frauds from first to last, enriching the few men who planned and executed it, inflicting severe losses on hundreds of innocent investors, while the property itself is irretrievably injured. All this will be called a Wall-street trick, or stock-jobbery; but in fact it is simply corporate dishonesty. Let us take one glaring example. Suppose that there exists a large corporation, having a heavy capital, and performing highly important functions in relation to the public. Its board of directors is composed of the leading men of the financial world, and a large proportion of the stock of the corporation is held as a permanent investment. Another company is started as a rival to the former. It can pay no dividends, and is not likely to, for its promoters repaid themselves double their original outlay through the medium of a construction company, and they propose to make more by selling out. But this concern can and does injure the dividend-paying company, though not much. In course of time the leading spirits in each corporation come together secretly, and arrange what, in a term borrowed from the gambling-table, is called a "deal." The dividend-paying company is to absorb the other, and to double its own stock. An elaborate programme is made out extending over many months. As the first step in it, holders of the dividend-paying stock must be induced to sell out—"shaken out" the Street calls it. The corporate dishonesty begins at this point. The board of directors meet, and in their official capacity they issue a quarterly statement of the company's affairs, which is a carefully concocted falsehood from beginning to end. In it they represent that business has fallen off to the most serious extent; that the revenues have so greatly shrunk that it would be highly impolitic to declare the usual quarterly dividend; that a reduced dividend must be declared, which, it is true, will require most of the surplus in the company's treasury to pay, but by careful economy they hope it may be fully earned in the future. The issuance of this official falsehood has been prepared for by the industrious propagation of rumors that the affairs of the company are in a truly deplorable condition. The board votes the reduced dividend; the men who are in the secret have previously sold their stock, and they set to work to break down the market by short sales. The price begins to sink rapidly; innocent investors are frightened at what they see and hear; they make haste to sell, and the price goes on sinking with every lot offered. At last it reaches a level where the conspirators decide it is time to buy. They have covered their short contracts, and make their profit that way; and under their buying the price rises as rapidly as it went down, which catches the swarm of Wall-street stock operators who had been selling the stock short, and were not in the secret. When the men who are conducting the deal have got all the stock they want, official announcement is made that the rival companies have agreed to combine, and the stock of the consolidated concern will be doubled. This being done, the conspirators desire to sell their enormous holdings of the watered stock. They therefore meet again in their official capacity as directors, and issue another official quarterly statement, in which everything said in the last is unsaid. The revenues are said to have increased in a most unexpected way, great economies have been effected, and the profits of the quarter are large enough to allow a dividend to be declared at the full rate on the whole doubled capital stock, while the outlook for the future is such as to give assurance that it will be continued and possibly increased. This official statement is just as much a falsehood as the last was.—*North American Review.*

Growth in Silk Culture.

A LARGE number of invited guests were present at the American Silk-rearing Exhibition in this city on the 19th ult., to listen to a lecture by Herman Rocke on the purpose and process of and other matters pertaining to silk culture in this country. Before the lecture the guests visited the tables covered with silkworms in all stages of life, from the egg to the butterfly, while a Japanese boy was reeling off the silk from the cocoon, and the weaving process was going on at the loom. Since the opening of the exhibition there has been added a large number of the various kinds of worms, and the hall has been decorated with Japanese pictures representing the silk culture in that country. The object of the exhibition, the lecturer said, was to show what could be done in silk culture in this country. The vast sums of money leaving this country for silk could all be kept here. There were mulberry trees enough that would give food to the worms sufficient to produce all the silk needed. It was easy work, the speaker added, for the children to take part in, by feeding and watching over the 'worms, and that France was able in a large degree to pay her great debt incurred in the Franco-Prussian war through the part the children took in the silk culture. In conclusion, he predicted a large growth in silkworm culture and silk manufacturing in this country within a few years.

THE New Orleans *Picayune* says that mummies are the only well-behaved persons who are now left in Egypt.

[From our Special Correspondent.]

OUR BOSTON LETTER.

Being a Review of Events.

THE PRESENT STATUS OF THE NEW YORK AND BOSTON INLAND RAILROAD.

THE New York and Boston Inland Railroad (proposed) is one of the finest schemes *on paper* that has been before the public for a long time. The project was announced with a flourish of trumpets as a corporation which was going to build a road from New York to Boston, by which trains would be run in three hours and a half, the distance being 234 miles. No stop was to be made at any small place, and only two or three in the whole run; that was by the express trains. One or two local trains per day were to jog over the road and give the people of the small towns some show of getting from one place to another.

The road was to be double tracked with steel rails, as near an air line as possible, and was to cross every highway possible above or below grade; also every other railroad it crossed in order to give the three hours and a half train clean sweep. It was to enter Boston via the Back Bay, to run down the rear of Beacon street on an elevated track, the bottom of which would rest on the shore of the Charles River, and to have its terminus on Charles street at the West End.

This all sounds first-rate. The best of rolling-stock was to be used, and the idea was eagerly seized upon by many that such fast trains (and there were to be fast freight trains too) would be a fine thing. Troubles, however, have gathered about this grand scheme, and in trying to dispel them, unsavory allegations have been made which have caused the public to lose confidence "somewhatly" in this road. In the first place the residents of Beacon street rallied at the war cry, and protested against having an elevated road within 20 feet of their back windows, filling the houses with smoke and noise. As the Beacon street folks represent a good many ducats, the city fathers heard their cry and told the New York and Boston Inland Railroad that they must get another route. Then the good people of Brookline decided to hit them when they were down, and made it so warm for them that they decided to skip that town.

After remaining quiet for some time, they again appear before the public for permission to enter the city through ward 23, and to connect with the Boston and Providence Railroad at West Roxbury station, after which they would get the Railroad Commissioners to order the Providence road to let them use their terminals. It was at this hearing that much that was before unknown to the public was turned up. Among other things it was shown that $1,134,500 of its capital stock was owned by a New York construction company, whose real total capital was said to be only $12,000. It was afterwards vehemantly announced by the company's representatives (presumably with tears in their eyes) that the construction company had been maligned and that its capital was not $12,000 but $36,000, which the public will be glad to know, as they (the company) are to build, as they say, a $5,000,000 railroad. A look at the papers filed with the Commonwealth by your correspondent, showed that there are to be 44 miles of the road in this State, which has since been estimated to cost $6,775,143, and that the capital stock is $500,000.

Of this amount 4,925 shares have been taken by the New York Construction Company, and 3 shares each by 25 individuals, making the whole of the amount.

It is gratifying for the public to know that the whole of the capital stock of any new road is taken, as it is a guarantee that it will be built, but when the plans and figures of this one are looked at, it has the appearance of being a very gauzy corporation, and one which will shine brighter on paper than it ever will upon the greensward of the old Bay State.

Boston capital is always ready to take hold of railroad enterprises which look solid, but a road making the show that this one has so far, will only meet with the greater opposition the further it gets along. More developments may be looked for soon. The Massachusetts Central Railroad has found a plan to earn a little money by running fast excursion trains from Worcester to Boston, by this route, 51 miles, in one hour and thirty minutes, making five stops, for $1.00 per head a round trip, and the train is running full. It is very gratifying to the public that the road has found a way to make a dollar in any manner.

The New York and New England Railroad Co. has a very popular picnic ground on its line called Highland Lake Grove, which is already engaged for more than 40 days of the season. It is a great resort for Sunday schools.

The Eastern Railroad and the Boston Revere Beach and Lynn are side by side at the Point of Pines, one of the most popular of our harbor resorts. So many thousand people cross these tracks each summer, that it has been deemed advisable by the officials of both roads to erect a high board fence between them, and so compel the people to go up over a bridge when they cross either track. Mr. Edwin C. Whorf, for a long time superintendent of the Boston, Revere Beach and Lynn Railroad, has resigned on account of ill health. Mr. Leonard C. Legro, of Lynn, will succeed him. Mr. Legro resigns the position of conductor to accept this one.

If ye Saratoga water-loving and dyspeptic-ailing Bostonian does not visit the mecca of his hopes and desires, and absorb all of the gaseous fluid that he longs for this summer, it will not be because he cannot get transportation, as no less than three drawing-room parlor cars are run daily from the Hub to the Springs.

The Fitchburg has had one in operation for several weeks, and it has been paying well. This car goes via the Boston, Hoosac Tunnel and Western's new Saratoga Branch. On June 26th, the Boston and Albany put on a Wagner car to go through; also a Pullman commenced the same date to run via the Fitchburg, Cheshire, Renssalaer, and Saratoga Division of the Delaware and Hudson Canal Company's road. This last mentioned car will run through to Whitehall.

The Massachussetts Central Railroad committee are still wrestling with the $150,000 problem, and find it uphill work. People seem to have lost confidence in the road. Only about $40,000.00 had been pledged up to the 24th, and the contractor had promised one-half of that amount, leaving only $20,000.00 actually raised from outside bond-holders. If it is not on hand in 60 days the road must be closed up, or put into a receiver's hands, either of which would be disastrous. The State has sued them for $10,000.00 back taxes; their employes are 7 or 8 weeks behind on their pay, and the whole outlook is dismal. Later reports say that the money is coming a little easier.

The New England general passenger and ticket agents held their monthly meeting here last week, but so few put in an appearance that no business was transacted.

The Boston and Albany Railroad are trying to offset the "Shore Line" fast New York train, by putting on a brand new train of a gilt edge engine, smoker, baggage, coach and parlor cars. The latter made their first trip the 26th. They are believed to excel everything of the kind in New England, and are painted a beautiful shade of green on the outside, and provided with Miller platforms and Westinghouse brakes. They run on eight paper wheels, 42 inches in diameter. All the conveniences are in them which are to be found anywhere, and the interior finish is very rich. They were built at the Allston shops of the Boston and Albany, about four miles out of the city. It only remains for the New England road to put on a fast train, and then one can easily obtain a cromo or a sewing-machine by selecting the shortest and quickest route to New York.

The New York and New England Railroad continues to show an increase of earnings as compared with former years. Those of the first weeks of June amounting to $63,034.10—being some $10,313.30 above the same week of last year.

The Fitchburg Railroad pays a $3 dividend on July 1st.

The Boston, Revere Beach and Lynn Railroad pays $3.50; and the Attleboro Branch Railroad the same amount.

The Boston, Revere Beach and Lynn Rail road (3 ft. gauge) has lately bought a 30-ton locomotive—finding that they needed heavier engines to do their work. Heretofore they have used those weighing 20 tons.

The Boston and Albany are testing the workings of two new high-pressure locomotives, and find them very satisfactory, indeed. They claim that much more work can be done by an engine working under 160 lbs. of steam, than by one only using 130 lbs. This principle ought to be as good on locomotives as on tow-boats, and any tug-boat man will tell you that their high-pressure boats will pull much the heavier load.

The Boston and Albany elevator has very little grain in it at present, as compared with other years at this time. Lately only about 150,000 bushels have been received per month, as against 1,500,000 a year ago. The steamship Bulgarian, from this port lately took 50,000 bushels, the first export for several months. Inquiries are being made here for sea-room, for nearly a million bushels to go

soon, and on the strength of it the steamship companies have advanced their rates.

The rumors about the consolidation of the Boston and Maine and Eastern railroads still are in our midst, and some one has figured it out that $400,000.00 per year could be saved by so doing. So many reports are about that it is hardly safe to print them all, but from the present outlook it is very probable that some kind of an arrangement will be entered into before long. The pool and Portland business between these two roads expires on July 1st by limitation, and no steps have been taken yet toward its renewal.

The average woman is not built for speed, and it is useless for her to think she is. The other day the writer was standing in the Fitchburg depot watching a Watertown branch train which had received the first bell toward starting. The depot is perhaps 400 feet long, and this train leaves from the extreme end of it. At this stage of affairs several men and a woman round the corner furtherest from the train, and hurry down the course, the men about neck and neck, with the woman in the rear and showing signs of breaking. The conductor gave a warning yell, and the men let out a little. The outlook now is that the woman may save her distance but nothing more. Down the depot she comes, red in the face, breathing hard, and, either owing to the gait or the make up of her skirts, her head and shoulders oscillate from side to side much as does the back of Jumbo when he walks. Just as she nears the train, the second bell strikes, the men have just climbed on to the rear platform of the last car, from which an eager crowd have watched the race. The woman, entirely winded, gets within 10 feet of the car, when it begins to move out. She gives a frantic look of mixed helplessness and rage, as if she would either like to shake her fist at the train, or else say—"If I were only a man"; and while that grinning crowd on the rear of the car and the gaping crowd left in the depot are having their fun out at her expense, she drops on to the nearest baggage truck and waits 45 minutes for the next train, thinking "Well, there, what a fool I was to run so!" All of which goes to show that a woman is not built properly for running down trains.

CURTIS.

BOSTON, June 27th, 1882.

A NEW locomotive has been added to the rolling-stock of the Boston, Revere Beach and Lynn Railroad Company. It is fully ten tons heavier than any engine ever run on the road before.

A NEW nut lock for railway track couplings has been patented by J. A. Soley, of Winnipeg, Manitoba. It is called the "Peerless," and is intended to supply an apparent defect in these couplings. The invention consisting of a flat plate, with square holes bored to fit exactly over the nuts, thus prevents their coming unscrewed and also does away with the necessity of screwing the bolts up too tightly. A small pin holds the plate in position and prevents it from falling off. Railway foremen state that the ordinary cost of keeping track couplings in order without nut locks is at least $30 per mile per year. This device admits of the free contraction and expansion of the rails, without tendency to become broken.

[From our Special Correspondent.]

OUR CINCINNATI LETTER.

IT is reported that negotiations are in progress for the purchase of the Cincinnati, Georgetown and Portsmouth Narrow-Gauge Railroad, by certain leading railroad men, through the intervention of Hon. T. C. Campbell, and it is further stated that $200,000 cash would buy it. About thirty-five miles of this railway are completed and fairly equipped. The cost of the road, as it stands, was in the neighborhood of $425,000, and if completed to the points originally contemplated, would be a well-paying enterprise. The present termini are Columbia in Hamilton county, and Hamersville in Brown county. If the road were completed to Portsmouth, the gross earnings would probably be doubled. Its earnings for the eleven months ending 30th May were about $30,000, and between $5,000 and $6,000 above expenses.

An extensive freight business is now being done with Cincinnati, mainly in fruits and vegetables, by the Louisville and Nashville Railroad. In one day during the past week 3,000 barrels of potatoes arrived by this line. Fast trains are being specially run for this branch of business.

The bridge spanning the East Fork of Brush Creek River, on the Cincinnati and Eastern Railroad, has just been finished, and this will enable track layers to resume work in the direction of Portsmouth. Some complaints are current that the management of this road has placed rates so high that merchants and manufacturers cannot patronize the road, and that cars are standing idle in consequence of this policy.

It seems that a large stock of unlimited tickets was sold at low rates to a Toledo syndicate about eighteen months ago, by the Chicago and Alton Company, during the war between that company and the Wabash, and that they were principally from Fremont and Sandusky to Kansas City, over the Lake Erie and Western. As an advance of nearly 40 per cent went into effect on the 21st inst. it is probable that these tickets are likely to get into circulation at cut rates, and thus cause considerable trouble. It is thought that these tickets amount to something like $200,000.

A fire company has been organized by the resident employes of the Cincinnati Southern shops for the protection of the workshops, and the organization is being perfected in a highly creditable way. The company is being equipped with hooks, ladders and an ample supply of new hose, and also with chemical fire extinguishers. A full supply of water plugs has been placed in regular circuit of the yards. The company organized with more than fifty members.

Mr. T. W. Burrows, who for several years has been master of transportation of the Columbus and Cincinnati Division of the Bee Line, and has been stationed at Cleveland, has been transferred to Cincinnati, where his new quarters will be in the Plum street depot.

Auditors of the counties in Ohio through which the Pittsburgh, Cincinnati and St. Louis lines pass, appraise the main line at $13,500 per mile, and the sidings at $3,000 per mile. The rolling-stock was appraised at $241,387, or $1,780 per mile.

It is stated that the new management of the Cincinnati, Hamilton and Dayton Road, together with the management of the New York, Chicago and St. Louis, are considering the expediency of establishing a line from Cincinnati southward, in connection with the Knoxville and Ohio Division of the East Tennessee, Virginia and Georgia Road, over the Kentucky Central.

An Indianapolis authority states that there is no longer doubt that the Indiana, Bloomington and Western people are determined to have an independent line to Cincinnati, and, having lost all hope of securing the Cincinnati, Hamilton and Indianapolis, are now working their wires to secure control of the Whitewater Road from Hagerstown to Harrison Junction, their plan being to build from a point on the middle division, six miles east of New Castle to Hagerstown, some four miles. How to get into Cincinnati from Harrison Junction is the puzzle yet to be solved, but one of the officials of the road states that a very feasible plan is rapidly maturing. The Whitewater Road would practically need to be rebuilt before it could be successfully operated.

Certificates of incorporation were filed on the 24th inst., with the Ohio Secretary of State, by the Columbus and Ohio River Railroad Co. for an increase of capital stock from $100,000 to $500,000; and by the Wheeling and Lake Erie Railroad Co. for an increase of capital from $5,250,000 to $6,300,000.

A report from Zanesville, Ohio, states that Mr. T. W. Lee has resigned his position as traveling agent of the Baltimore and Ohio Road, to take effect July 1st, and that he has been appointed Southeastern passenger agent of the Chicago, Burlington and Quincy Railroad, with headquarters at Indianapolis.

Mr. B. E. Beeman, who for several years has been freight agent of the Pennsylvania Co. in Lima, Ohio, has tendered his resignation, to take effect July 1st. As the company is anxious that he should remain in his position, his resignation has not as yet been accepted. It seems that Mr. Beeman has taken this step on account of failing health.

Freight and passenger business here is quiet at present, but as such is usually the case at this period of the year, and as the general outlook is not discouraging, there is no anxiety on this score. Reports as to corn crops and the probable wheat yield are daily improving, so that there is more hopefulness for the future than has been the case during the past few days.

"A."

"WOVEN mops for railroads, steamboats, etc. are coming into use because they wear longer and clean better. $15 a gross. Try them and you will use nothing else. Brown Manufacturing Co., 8 Thomas street, New York, sole manufacturers.

AN ingenious Strasburg dentist lately extracted a molar, and finding it sound with the exception of the joints of the root, he sawed them off, filled the cavity with gold, and replaced it. It has re-established itself, and is now said to be doing business at the old stand in most satisfactory manner.

The Stock Exchanges and Money Market.

New York Stock Exchange.

Closing Prices for the week ending June 28.

	Th.22.	F.23.	Sat.24.	M.26.	Tu.27.	W.28.
Adams Express	.....	.....	.....	.....	.....	.....
Albany and Susq	.....	....	.....	.....	.....	.....
1st mortgage	.....	.....	.....	.....	.....	.....
2d mortgage	.....	.....	.....	.....	.....	.....
American Express	92	.....	.....	92	.....	92
Burl., C. R. & Nor	.....	.....	.....	75	.....	.....
1st mortgage 5s	101¼	101¾	102	.....	.....	102
Canada Southern	52	52½	52¼	52	51½	51⅛
1st mortgage guar	95¾	95½	95¾	.....	95	95½
Central of N. Jersey	75⅞	76½	76¾	76	76¼	76½
1st mort. 1890	.....	.....	.....	.....	.....	.....
7s, consol. ass	.....	.....	.....	109	.....	110½
7s, convertible ass	.....	111	.....	.....	.....	.....
7s, Income	.....	90	.....	.....	.....	.....
Adjustment	.....	106½	.....	.....	.....	106
Central Pacific	90⅞	91⅛	91⅛	91	90⅝	90⅞
6s, gold	.....	.....	118	118½	118¼	.....
1st M. (San Joaq)	.....	.....	.....	.....	.....	.....
1st M. (Cal. & Or.)	.....	.....	.....	.....	.....	.....
Land grant 6s	.....	.....	.....	.....	.....	.....
Chesapeake & Ohio	23¼	.....	22½	.....	21¾	20¾
1st pref	.....	.....	31½	.....	30½	30
2d pref	24	.....	.....	.....	.....	.....
1st mort., series B	.....	.....	.....	.....	80½	.....
Chicago and Alton	132	.....	.....	132	132¼	132½
Preferred	.....	.....	.....	.....	.....	.....
1st mortgage	.....	.....	.....	.....	.....	.....
Sinking Fund	113½	.....	.....	.....	.....	.....
Chi., Bur. & Quincy	131	130⅝	131¼	131½	131½	131
7s, Consol. 1903	.....	.....	.....	.....	.....	.....
Chi., Mil. & St. Paul	111½	111½	112¼	111¾	111¾	112
Preferred	125¾	125⅞	127¼	127½	127⅞	127½
1st mortgage, 8s	.....	.....	.....	.....	.....	.....
2d mort., 7 3-10s	.....	.....	.....	.....	.....	.....
7s, gold	.....	.....	.....	.....	.....	.....
1st M. (La. C. div)	120½	.....	.....	.....	.....	.....
1st M. I. & M. div.)	.....	.....	.....	122	.....	.....
1st M. (I. & D. ext.)	.....	.....	.....	.....	123	.....
1st M. (H.&D. div.)	.....	.....	118¾	.....	119	.....
1st M. (C. & M. div.)	.....	.....	.....	.....	.....	.....
Consolidated S. F.	.....	.....	123	123	.....	.....
Chi. & Northwestern	130½	130¼	131¾	131¼	130⅜	131¼
Preferred	143	144¼	146⅞	147	145	146¼
1st mortgage	.....	.....	.....	.....	.....	.....
Sinking Fund 6s	.....	.....	.....	110½	.....	.....
Consolidated 7s	.....	.....	131½	130½	.....	.....
Consol. Gold bo'ds	124	125	.....	124½	125	.....
Do. reg	.....	.....	.....	.....	.....	125
Chi., R. Isl. & Pac.	130½	130¼	130	130½	130½	130
6s, 1917, c	.....	.....	129½	.....	.....	.....
Clev., Col., Cin. & Ind.	.....	73¼	72⅝	.....	73¾	73
1st mortgage	.....	.....	124¼	.....	.....	.....
Clev. & Pittsburg gr.	.....	137	.....	137½	138¼	137
7s, Consolidated	.....	124½	.....	.....	.....	.....
4th mortgage	.....	.....	.....	.....	.....	.....
Col., Chi., & Ind. Cent	9	9	.....	.....	9	.....
1st mortgage	.....	.....	.....	.....	.....	.....
2d mortgage	.....	.....	.....	.....	.....	.....
Del. & Hud Canal.	110⅝	110¾	112	111¼	112	111¾
Reg. 7s, 1891	.....	.....	.....	.....	.....	.....
Reg. 7s, 1884	.....	.....	.....	.....	.....	.....
7s, 1894	.....	.....	.....	.....	.....	.....
Del., Lack. & Western	126½	126¼	127¼	126⅞	127	127¼
2d mortgage 7s	.....	.....	.....	.....	.....	.....
Consol. 1907	.....	.....	.....	.....	.....	.....
Erie Railway	.....	.....	.....	.....	.....	.....
1st mortgage	.....	.....	.....	.....	.....	.....
2d mort. 5s, ext.	.....	.....	.....	.....	.....	111
3d mortgage	.....	.....	.....	104¼	.....	104
4th mort. 5s, ext.	.....	.....	.....	.....	.....	.....
5th mortgage	.....	.....	.....	.....	.....	.....
7s, Consol. gold	.....	.....	.....	.....	127¼	.....
Great West. 1st mort	.....	.....	.....	.....	.....	.....
2d mortgage	.....	.....	.....	.....	.....	99
Hannibal & St. Jo	.....	.....	.....	.....	.....	.....
Preferred	.....	.....	.....	.....	84¼	85
8s, Convertible	107¼	.....	.....	.....	.....	.....
Houston & Tex. Cen	.....	71½	.....	71	71¾	75
1st mortgage	.....	.....	.....	.....	.....	.....
2d mortgage	.....	.....	.....	119⅝	.....	.....
Illinois Central	133⅝	133¾	133⅛	133¼	134¼	134
LakeShore&MichSo	109⅝	110	111⅛	110¾	110⅝	110¾
Consol. 7s	.....	.....	.....	.....	.....	.....
Consol. 7s, reg	.....	.....	.....	.....	.....	.....
2d Consolidated	.....	.....	.....	.....	124	.....
Leh. & W. B. con. ass	.....	.....	100	.....	100	100¼
Long Dock bonds	.....	.....	.....	.....	.....	.....
Louisville & Nash.	65¾	64½	66¾	66	66¼	66¾
7s, Consolidated	.....	.....	.....	.....	117	.....
Manhattan	53	53	54	54¾	53⅛	53
1st pref	.....	.....	.....	.....	.....	.....
Met. Elevated	.....	.....	86¼	.....	.....	.....
1st mortgage	104	103¾	104	.....	103¼	103¾
Michigan Central	90⅝	91⅛	92¼	90¼	89⅞	89½
7s, 1902	.....	.....	.....	.....	.....	.....
Morris & Essex	.....	.....	122¾	123⅛	.....	.....
1st mortgage	133	.....	.....	134	.....	136
2d mortgage	.....	.....	.....	.....	.....	.....
7s of 1871	.....	.....	.....	121½	.....	.....
7s, Convertible	.....	.....	.....	.....	.....	.....
7s, Consolidated	.....	.....	.....	.....	121	.....
N. Y. Cen. & Hud. R.	130⅜	131½	131¾	130⅝	130⅝	130⅜
6s, S. F. 1883	.....	.....	.....	.....	.....	.....
6s, S. F., 1887	.....	.....	.....	.....	.....	.....
1st mortgage	.....	.....	.....	.....	.....	.....
1st mortgage, reg	.....	.....	.....	.....	.....	.....
N. Y. Elevated	.....	.....	.....	.....	.....	.....
1st mortgage	118	.....	.....	118½	.....	118⅜
N. Y. & Harlem	.....	.....	.....	.....	.....	.....
Preferred	.....	.....	.....	.....	.....	.....
1st mortgage	.....	.....	.....	.....	.....	.....
1st mortgage, reg	.....	.....	.....	.....	132	.....
N. Y., Lake Erie & W	35¾	36	36¼	35⅝	35¾	36⅛
Preferred	73	.....	.....	72	71¾	73
2d Consolidated	94	93¾	94¼	93⅛	93⅝	94
New 2d 5s fund	.....	.....	.....	.....	.....	.....
N. Y., N. Hav'n & Hart	.....	.....	.....	.....	.....	.....
North Mo. 1st mort	.....	.....	.....	.....	.....	.....
Northern Pacific	41½	41⅜	41½	40¾	40⅞	40⅞
Preferred	79½	79	78⅝	78½	78¾	78⅝
Ohio & Mississippi	31	33¾	32½	33⅛	32½	.....
Preferred	.....	.....	.....	100	.....	.....
2d mortgage	.....	.....	.....	.....	.....	.....
Consolidated 7s	.....	.....	.....	.....	.....	.....
Consol. S. Fund	.....	.....	.....	.....	.....	.....
Pacific Mail S. S. Co	41¾	41¾	42¾	42⅞	42⅞	42⅛
Pacific R. R. of Mo.	.....	.....	.....	.....	.....	.....
1st mortgage	.....	.....	.....	.....	.....	.....
2d mortgage	.....	.....	.....	.....	.....	.....
Panama	.....	.....	.....	.....	.....	.....
Phila. & Reading	60¾	59½	59¾	58¾	58¼	58¾
Pitts, Ft. W. & Chi. gtd	.....	.....	.....	132	130	130¾
1st mortgage	.....	.....	.....	.....	.....	.....
2d mortgage	.....	.....	138	.....	.....	.....
3d mortgage	.....	.....	.....	.....	.....	.....
Pullman Palace Car	124	124⅞	125	125	125⅜	125⅝
Quicksil'r Min'g Co	8¾	8¾	.....	.....	.....	.....
Preferred	.....	.....	.....	.....	.....	.....
St. Louis & San Fran	.....	.....	.....	.....	35⅛	.....
Preferred	48	.....	.....	.....	.....	.....
1st Preferred	90	.....	.....	90	.....	.....
St. L., Alt'n & T. H.	.....	.....	.....	.....	.....	.....
Preferred	63	.....	.....	.....	.....	.....
1st mortgage	.....	.....	.....	116	.....	.....
2d mort. pref	109¼	.....	.....	.....	.....	.....
Income bonds	.....	.....	.....	.....	.....	.....
St. L., Iron Mt. & S	.....	.....	.....	.....	.....	.....
1st mortgage	.....	115	115	115⅛	115⅛	116
2d mortgage	.....	.....	.....	105	.....	.....
Toledo and Wabash	.....	.....	.....	.....	.....	.....
1st mortgage	.....	.....	.....	.....	.....	.....
2d mortgage	.....	.....	.....	.....	.....	.....
7s, Consolidated	.....	.....	.....	.....	.....	.....
St. Louis Division	.....	.....	101	.....	.....	.....
Union Pacific	111⅜	111⅛	111½	111⅜	111⅛	111½
1st mortgage	.....	.....	118⅞	119	119	119¼
Land Grant 7s	114¼	.....	.....	.....	.....	.....
Sinking Fund 8s	.....	.....	.....	.....	119¼	.....
United States Ex	.....	.....	.....	.....	72½	72⅝
Wabash, St. L. & Pac	28⅛	29	28¾	28¼	27¼	27⅛
Preferred	50⅜	51	51⅜	50⅜	50	50¾
New mort. 7s	.....	.....	.....	.....	94⅜	.....
Wells-Fargo Ex	.....	.....	130	.....	130	.....
Western Pacific b'ds	.....	.....	114¾	.....	.....	.....
Western Union Tel.	83⅛	83¾	84¼	83⅛	83⅜	84⅛
7s., S.F conv., 1900	117	.....	.....	.....	.....	.....
FEDERAL STOCKS:—						
U. S. 4s, 1907, reg	119½	119½	.....	119½	.....	.....
U. S. 4s, 1907, coup	120⅝	.....	.....	.....	120⅝	120⅜
U. S. 4½s, 1891, reg	.....	.....	.....	.....	.....	.....
U. S. 4½s, 1891, coup	.....	.....	.....	114⅛	114¼	.....
U. S. 5s, cont'd at 3¼	101¾	.....	.....	.....	.....	.....
U. S. 6s cont'd at 3½	.....	.....	.....	.....	.....	.....
Dt. of Col. 3-65s, reg	.....	.....	.....	.....	.....	.....
Dt. of Col. 3-65s, coup	.....	.....	.....	.....	.....	111

Boston Stock Exchange.

Closing Prices for the Week Ending June 28.

	Th.22.	F.23.	Sat.24.	M.26.	Tu.27.	W.28.
Atch., Top. & San. Fe.	86⅜	87½	87	86⅞	86¾	87¾
1st mortgage	.....	118½	.....	119	.....	.....
Land Grant 7s	.....	.....	.....	.....	.....	.....
Boston & Albany	165	.....	165¼	.....	165	.....
Boston and Lowell	.....	102½	.....	.....	.....	.....
Boston & Maine	147	.....	.....	146½	146½	148
Boston & Providence	.....	.....	.....	.....	.....	.....
Bos'n, Hart. & Erie 7s	.....	.....	.....	.....	50⅜	.....
Burl. & Mo. R. L. G. 7s	.....	.....	.....	.....	.....	.....
Burl. & Mo. R. in Neb	.....	.....	.....	.....	.....	.....
6s, exempt	.....	.....	.....	.....	.....	.....
4s	81¼	.....	.....	81¾	.....	82
Chi., Burl. & Quincy	131½	131	131½	131¾	131⅜	130¾
Cin., Sand. & Clev ($50)	.....	.....	.....	26½	.....	29
Concord ($50)	.....	.....	.....	.....	.....	.....
Connecticut River	.....	.....	.....	.....	.....	.....
Eastern	43¾	44¾	.....	43	43	44
New 4½ Bonds	.....	.....	.....	.....	.....	110
Fitchburg	.....	.....	.....	.....	124¼	.....
N. Y. & New England	49½	50	.....	.....	.....	49½
7s	.....	.....	116¾	.....	116¾	116¾
Northern N. H	.....	108	108½	.....	.....	109
Norwich & Worcester	.....	.....	.....	.....	.....	.....
Ogden & Lake Cham	.....	.....	.....	.....	.....	.....
Old Colony	133	.....	.....	132⅜	131½	131¼
Ph., Wil. & Balt. ($50)	.....	.....	.....	.....	.....	.....
Portl'd, Saco & Ports	.....	.....	.....	.....	.....	.....
Pueblo & Ark Val 7s	.....	114	114	.....	.....	.....
Pullman Palace Car	.....	.....	.....	.....	.....	125
Union Pacific	111	111½	111⅝	111¾	111¼	111
6s	.....	116½	.....	116¾	.....	.....
Land Grant 7s	.....	.....	.....	.....	112½	112½
Sinking Fund 8s	.....	.....	.....	119	118⅞	118¾
Vermont & Mass	.....	.....	.....	.....	.....	.....
Worcester & Nashua	.....	.....	.....	.....	.....	.....
Cambridge (Horse)	.....	.....	.....	.....	.....	.....
Metropolitan (Horse)	.....	.....	.....	.....	.....	.....
Middlesex (Horse)	.....	.....	.....	.....	.....	.....
Cal. & Hecla Min'g Co	.....	.....	.....	245	.....	248
Quincy	54½	.....	.....	54¼	55	55

Philadelphia Stock Exchange.

Closing Prices for the Week Ending June 27.

	W.21.	Th.22.	F.23.	Sat.24.	M.26.	Tu 27.
Allegh'y Val. 7 3-10s	.....	.....	.....	.....	.....	.....
7s, Income	.....	.....	.....	.....	50	50
Buff., Pitts & West.	15⅞	16	15⅞	15¾	16	.....
Camd'n & Am. 6s, '83	.....	.....	.....	.....	.....	103½
6s, 1889	.....	.....	.....	.....	.....	.....
Mort. 6s, 1889	112¾	.....	.....	.....	.....	.....
Camden & Atlantic	.....	.....	.....	.....	.....	.....
Preferred	.....	.....	.....	.....	.....	.....
1st mortgage	120	.....	.....	.....	.....	.....
2d mortgage	.....	.....	.....	.....	.....	.....
Catawissa	23¾	23¾	24	.....	.....	24
Preferred	54	.....	.....	.....	.....	.....
2d pref	.....	52½	.....	.....	.....	.....
7s, new	.....	.....	.....	.....	.....	.....
Del. & Bound Brook	.....	.....	.....	.....	.....	.....
7s	.....	.....	.....	.....	.....	.....
Elmira & Williamsp't	.....	.....	.....	.....	.....	.....
Preferred	.....	.....	.....	.....	.....	.....
Hunt. & B. Top Mt.	.....	14	.....	.....	.....	.....
Preferred	.....	.....	.....	.....	.....	.....
2d mortgage	.....	.....	.....	.....	.....	.....
Lehigh Navigation	38	38¾	38⅛	38⅜	38¼	.....
6s, 1884	.....	102¾	x103	.....	.....	.....
Gold Loan	109	.....	.....	.....	109	.....
Railroad Loan	.....	.....	.....	.....	.....	.....
Conv. Gold Loan	.....	.....	.....	.....	.....	.....
Consol. Mort, 7s	.....	.....	.....	.....	.....	.....
Lehigh Valley	59	.....	.....	58¼	59	58⅞
1st mort. 6s, coup	.....	.....	.....	.....	.....	120
1st mort. 6s, reg	.....	.....	.....	.....	.....	.....
2d mort. 7s	.....	.....	.....	.....	.....	135
Consol mort. 6s	.....	120¾	.....	120¾	.....	.....
Consol. mtg. 6s, reg	.....	.....	.....	.....	.....	.....
Little Schuylkill	.....	.....	58	.....	.....	.....
Minehill & Sch. Hav'n	.....	.....	.....	.....	.....	.....
North Pennsylvania	.....	.....	.....	.....	64	64
1st mortgage 6s	.....	.....	.....	.....	.....	.....
2d mortgage 7s	.....	.....	.....	120	.....	119
Genl. mtg. 7s, coup	.....	.....	.....	.....	.....	.....
Genl. mtg. 7s, reg	.....	.....	.....	.....	.....	.....
Northern Central	.....	47¾	48	48¼	.....	.....
5s	.....	.....	.....	.....	.....	.....
Northern Pacific	40⅞	41⅜	41¾	41⅞	41	40⅞
Preferred	78½	79	78¾	78⅞	78¾	78⅝
Pennsylvania R. R.	57⅝	57⅞	57⅝	58¼	57½	57½
1st mortgage	.....	.....	.....	.....	.....	.....
Gen'l mort	.....	125	.....	125	.....	.....
Gen'l mort reg	.....	.....	.....	.....	.....	123¾
Consol. mort. 6s	.....	.....	.....	.....	.....	.....
Consol. mort. reg	.....	.....	.....	.....	.....	.....
Pa. State 5s, new	.....	.....	.....	.....	.....	.....
do 4s, new	116½	.....	.....	.....	117	.....
do 3½s, 1912	.....	.....	107	.....	.....	.....
Phila. & Reading	29½	30⅜	29¾	39¾	29½	29⅜
1st mortgage 6s	.....	.....	.....	.....	.....	.....
7s of 1893	119	.....	.....	.....	.....	119
7s, new convert	80	81	79¾	79¾	.....	79
Consol. mort. 7s	123¼	.....	123⅜	123⅜	.....	124¼
Consol. mort. reg	.....	.....	.....	.....	.....	.....
Gen'l mort. 6s	101	102	98x	98	98	98¼
Def. Income bonds	.....	.....	27½	.....	.....	.....
Philadelphia & Erie	.....	15¾	.....	.....	.....	.....
1st mortgage 5s	103¾	103¾	.....	.....	.....	.....
2d mortgage 7s	.....	.....	.....	.....	.....	.....
Pittsb., Cin. & St. L. 7s	119	.....	119	.....	119	.....
Pitts., Tit. & Buff. 7s	96	.....	.....	.....	.....	.....
Schuylkill Navi't'n	.....	.....	.....	.....	.....	.....
Preferred	13	13	.....	.....	.....	.....
6s, 1895	.....	.....	66	.....	.....	.....
6s, 1882	.....	.....	90	.....	.....	.....
United Co. of N. J.	184½x	.....	184	.....	.....	.....
Hestonville, (Horse)	.....	.....	.....	.....	.....	.....
Chestnut & Wal. (do)	.....	.....	.....	.....	.....	.....

Baltimore Stock Exchange.

Closing Prices for the Week Ending June 27.

	W.21.	Th.22.	F.23.	Sat.24.	M.26.	Tu.27.
Baltimore & Ohio..	.....	194	.....	194	.....	.....
6s, 1885.....	.....	.....	.....	.....	.....	.....
Central Ohio ($50)..	...	.....	.....	.....	.....	.....
1st mortgage.....	110	.....	.....	.....	.....	.....
Marietta & Cincin'ti	.....	.....	.....	.....	.....	.....
1st mortgage, 7s..	.....	.....	.....	.....	.....	.....
2d mortgage, 7s..	.....	.....	.....	.....	.....	.....
3d mortgage, 8s..	.....	.....	.....	.....	54	53⅞
Northern Cen. ($50)	.....	45¼	48¼	48¼	48⅝	.....
2d mort., 6s 1885..	.....	.....	.....	.....	.....	.....
3d mort., 6s, 1900.	.....	.....	117½	.....	.....	.....
6s, 1900, gold.....	119	.....	.....	.....	.....	.....
6s, 1904, gold.....	.....	.....	.....	.....	.....	.....
Pitts.& Connellsv.7s	124	123¾	....	.....	124	124
Virginia 6s, Consol.	59¼	59	59¼	59½	59¾	59¾
Consol. coupons..	.....	.....	.....	.....	.....	.....
10 40 bonds.....	43½	43¾	43	43½	43¾	43¾
Def'd Certificates.	.....	.....	.....	.....	12	.....
Western Maryland..	.....	17¼	17	17	.....	.....
1st M.,end.by Balt	.....	.....	.....	....	.....	.....
2d M. do	.....	.....	.....	.....	.....	.....
3d M., do	.....	.....	.....	.....	.....	.....
1st M.,unendors'd	.....	114¼	114¼	.....	.....	.....
2d M.,end.WashCo	.....	.....	.....	.....	.....	.....
2d M., preferred..	.....	.....	.....	.....	.....	.....
City Passenger R R.	....	.....	.....	.....	.....	....

London Stock Exchange.

	Closing Prices — June 16.	June 9.
Baltimore & Ohio 5s, 1927.....	105	107
Central of N. J., $100 shares....	93	98	93	98
Do. consol. mort.....	110	112	112	115
Do. Income Bonds.....	93	97	93	97
Det.,G'd Haven & Mil. Equip bds	115	117	115	117
Do.Con.M.5p.c.,till'83aft'r6p.c	113	114	112	114
Illinois Central $100 shares.....	137	139	135	137
Lehigh Valley Cons. mortgage..	115	119	115	119
Louisville & Nashville mort 6s.	99	101	99	101
Do. capital stock $100 shares.	69	71	67	69
N. Y. Cent. & Hud. R. mt. bds..	132	135	135	138
Do. $100 shares.....	131⅛	132½	129	131
Do mort. bonds (stg.).....	124	126	124	126
N.Y.,Lake Erie & West.,$100 shs	36½	37	34⅛	35
Do. 6 p. c. pref. $100 shares ..	72	74	71	73
Do. 1st Con. Mort. bds (Erie) .	128	130	128	130
Do. do. Funded Coupon bds.	124	126	124	126
Do. 2d Consol Mort. bonds...	95	96	90	92
Do. do. Funded Coupon bds..	91	93	87	89
N.Y.,Pa.& Ohio 1st mort. bonds.	45	46	42⅛	43⅛
Do. Prior Lien bds (sterling)..	103	108	103	108
Pennsylvania, $50 shares.....	59⅛	59¾	56¼	56¾
General Mortgage.....	122	126	122	126
Philadelphia & Reading $50 shs	29½	30	27½	28
General Consol Mortgage.....	115	117	115	117
Do. Improvement Mortgage..	103	105	102	104
Do.Gen.Mtg.'74,ex-def'd coup.	102	104	89	101
St. L. Bridge 1st mort. gold b'd.	125	127	125	127
Do. 1st pref. stock.....	95	98	98	102
Union Pacific 1st. mtg	115	117	118	120
Wabash, St. L. & P. $100 shs.....	27	29	25⅛	26½
Do. $100 pref. shares.....	51	52	49	50
Do. gen. mort. bonds.....	80	82	76	78

AMERICAN RAILROAD JOURNAL.

Financial and Commercial Review.

THURSDAY EVENING, June 29, 1882.

THE quotation for call loans this morning on stocks was 3@3½ per cent, in the afternoon it was 3 per cent, and though in the last hour the rate was bid up to 6 per cent, at the close it fell to 3½@4 per ceut.

The posted rates for prime bankers' sterling were 4.86 and 4.86½ and 4.89. The actual rates were 4.84¾@4.85 and 4.88, cable transfers 4.88¾ and prime commercial bills 4.83¼@4.83½. The actual rates for Continental bills are as follows: Francs, 5.19⅛@5.18¾ and 5.16¼@5.15⅝; Marks, 94⅞@95 and 95⅝@95¾, and Guilders, 40 1-16@40¾.

The Governing Committee of the New York Stock Exchange have admitted to dealings at the Board the following securities:—

Oregon Short Line Railway Company—An additional $1,500,000 first mortgage 6 per cent bonds, 1,501 to 3,000, issued on an additional 120 miles of completed road, or at the rate of $12,500 per mile.

Iron Steamboat Company—Capital of 20,000 shares of the par value of $100 per share, $2,000,000, and $500,000 mortgage bonds payable July 1, 1901, interest at the rate of 6 per cent, payable semi-annually—January 1 and July 1.

Mutual Union Telegraph Company—Capital stock, $10,000,000, divided into 100,000 shares of $100 each, and $5,000,000 mortgage sinking fund 6 per cent bonds, due May 1, 1911—the former when certificates, now being engraved by the American Bank Note Company, are ready for use; and the latter when evidence is furnished that the mortgage has been recorded.

The last meeting for the summer of the Governing Committee was held on the 28th ult. The Board will meet again on the second Wednesday in September.

An agreement for the lease of the Boston and New York Air Line Railroad to the New York, New Haven and Hartford Railroad Company for ninety-nine years from the 1st of October next, was approved and signed by the directors of the former company on the 28th ult., and but little doubt is entertained that it will be ratified by the stockholders. By the terms of the lease the latter company guarantees to a pay a dividend of 4 per cent per annum, payable April 1 and October 1, on the preferred stock of the former, and 7 per cent interest on the $500,000 first mortgage bonds, together with all taxes on the stocks and property. The preferred stock amounts to nearly $3,000,000, including the old first mortgage bonds of the original organization, which have been converted into preferred stock. The lease is regarded as likely to save money to the lessee; under the present traffic contract the New Haven Company paid the Air Line Company last year $297,000. The roads is 50 miles in length, extending from New Haven to Willimantic, Conn. Should the proposed arrangement go into effect, the stock transfer books will be kept, and the interest and dividends paid, by the New York, New Haven and Hartford Railroad Company at their office in the Grand Central Depot, this city.

The officers of the Board of Sinking Fund Commissioners of the State of Virginia, say that about $5,000,000 of the new Riddleberger bonds will be finished on the 1st of July, and that the funding under the new act will shortly commence. The first and second series of the $1,000 and $500 bonds will bear upon their face the vignettes of Governor Cameron. The same series of $100 that of Senator elect Riddleberger. The West Virginia series will bear the colonial coat of arms of Virginia. About $2,000,000 of the old bonds are now said to be in Richmond waiting to be exchanged for the new ones.

The Committee on Ways and Means of the House of Representatives, at Washington, on the 27th ult., heard C. C. Norvell, of this city, on the question of finance. Mr. Norvell asserted that the Government could readily negotiate a loan of $200,000,000 or $300,000,000 from persons in New York at a rate of interest not exceeding 2 per cent. He thought it might be advisable for the Government to secure this money for the purposes of redeeming a part of the outstanding continued bonds, which are now drawing 3½ per cent interest.

Wheeling, West Va., has voted 576 to 187, in favor of subscribing $150,000 to the Grafton and Greenbrier Railroad.

It is thought that toward the end of the present week the Secretary of the Treasury will issue a call for extended sixes to the amount of the surplus revenues for the month of June. It is supposed the amount will be about $15,000,000. Of the seven calls that have matured since 30th of January last, aggregating $90,000,000, there are now outstanding bonds amounting to about $10,000,000. The next call that matures is for about $13,000,000 on the 1st of July. This, together with the heavy interest and dividend payments to be made at the period, should insure an easy money market for some time. Of the extended sixes there are now only about $34,000,000 outstanding and uncalled.

The directors of the Eastern (Mass.) Railroad Company voted unanimously on the 27th ult., to instruct their committee as to the leasing of the Eastern Railroad to the Boston and Maine Railroad Company on the following conditions: First—Payment on the bonded debt of both companies. Second—Eight per cent on the Boston and Maine Railroad Company's stock. Third—Six per cent on the Eastern Railroad Company's stock. Fourth—A division of the net earnings thereafter on the basis of $1 per share to each stock.

The gross earnings of the Northern Central Railway Company for the month of May were $482,667.01; expenses, $288,855.31; net earnings, $193,811.70; corresponding month of last year, $170,234.25—increase, $23,577.45. Gross earnings for five months of 1882, $2,168,908.96; expenses, $1,465,161.13; net earnings, $703,777.83; corresponding period of last year, $858,770.67; decrease, $154,992.84, of which about $150,000 was the increase in expenses.

The gross earnings of the Philadelphia and Erie Railroad for the month of May were $341,414.69; the expenses, $212,634.55, and the net earnings, $128,780.14; corresponding month of last year, $139,287.87—decrease, $10,507.73. Net earnings for five months of 1882, $446,203.78; corresponding five months of 1881, $477,642.50—decrease, $31,438.72.

The following quotations of sales of railway and other securities, for the week, are in addition to those given elsewhere in our columns:

New York.—Am. Dock and Imp. 5s, 95; Atchison, Colorado and Pacific 1st, 92; Alleghany Central 1st, 103; Boston and New York Air Line pref., 79; Boston, Hartford and Erie 1st, 50; Chicago, Burlington and Quincy, Iowa div. 4s, 86½; Chicago, St. Paul, Minneapolis and Omaha, 40½; do. pref., 104½; do. consol., 103; Chicago, Milwaukee and St. Paul, 2d, 102; do. La Crosse and Davenport div. 1st, 95; do. Southern Minn. div. 1st, 109¾ do. Chicago and Pacific West div. 1st, 94¼; Chesapeake and Ohio Series A, 101½; do. cur. int., 48; Cairo and 1st, 109; Chicago, St. Paul and Minneapolis 1st, 114; Chicago, St. Paul and Minneapolis 1st, 114; Chicago, St. Louis and New Orleans 5s, 104; Columbus, Chicago and Indiana Central 1st Trust Co. certif. ass. sup., 115; Chicago and Northwestern S. F. 5s, 101; Cedar Falls and Minnesota 1st, 116; Denver, South Park and Pacific 1st, 101⅝; Denver and Rio Grande, 56; do. 1st, 112⅝; do. consol., 105; Dubuque and Sioux City, 85; do. 2d div., 112; East Tennessee, Virginia and Georgia, 10; do. pref., 17; do. 5s, 76; do. inc., 46; Evansville and Terre Haute 1st, 97; Elizabethtown, Lexington and Big Sandy 6s, 95; Fort Worth and Denver, 1st, 95⅞; Green Bay, Winona and St. Paul 1st, 85; do. 2d inc., 20; Gulf, Colorado and Santa Fe 1st, 108; Houston and Texas Central 2d, M. L., 119¾; Hannibal and St. Joseph 6s, consol., 106½; Hudson River 2d, S. F., 106½; Indiana, Bloomington and Western, 39½; do. 1st, 90; do. 2d, 75; do. Eastern div. 6s, 93; Indianapolis, Decatur and Springfield 1st, 103; International and Gt. Northern 1st, 106½; Iowa Midland 8s, 130; Jefferson 1st, 105¼; Kansas Pacific 6s, 113: do. 1st consol., 102¼; do. 6s, Denver div. ass., 109¼; Keokuk and Des Moines 1st, 106½; Lake Shore Shore div. bonds, 122; Little Miami 1st, 100½; Lake Erie and Western, 28; do. 1st, 101; Long Island, 58½; do. consol. 5s, 97½: do. 1st, 117; Louisville, New Albany and Chicago, 58; Louisiana and Missouri River, 14⅞; Louisville and Nashville 2d, 101; do. St. Louis div. 1st, 107¾; Mobile and Ohio, 17¼; do. 1st deben., 77; do. 1st mort., 107; Missouri, Kansas and Texas, 33¾; do. gen'l mort. 6s, 85½; do. consol. 7s, 106½; do. 2d, 63; Missouri Pacific, 94; do. 1st consol., 100; Milwaukee, Lake Shore and Western, 47½; do. 1st, 100¾; Manhattan Beach, 29; Metropolitan Elevated 2d, 90½; Minneapolis and St. Louis, 25; Michigan Central 5s, 103; Michigan Southern S. F., 107½; New York City and Northern Gen'l mort., 51; New York, Chicago and St. Louis, 11; do. pref., 28¾; do. 1st, 84; Nashville, Chattanooga and St. Louis, 56¼; do. 1st, 116¾; New York, Ontario and Western, 23⅞; Norfolk and Western pref., 50¾; do. General mort., 101¼; New Orleans Pacific 1st, 86; Northern Pacific 1st consol., 103¾; Ohio Central, 13¾; do. 1st, 97; do. inc., 32; Oregon Transp., 70¾; Oregon Railway and Nav., 138; do. 1st, 110; Oregon Short Line 6s, 103½; Ohio Southern 1st, 83; Peoria, Decatur and Evansville, 28; do. 1st, 105¾; do. inc., 77; Richmond, Danville and West Point, 52½; Rensselaer and Saratoga, 135; Rochester and Pittsburgh, 25; do, 1st, 103½; Richmond and Danville, 104; do. deben., 68¾; do. 1st, 103; Richmond and Alleghany 1st, 87⅜; St. Paul and Duluth, 30¾; do. pref, 80½; St. Paul, Minneapolis and Manitoba, 134½; do. 1st, 111; do. Dakota ext., 1st, 108; St. Louis and San Francisco 2d, Class B, 87½; St. Paul and Sioux City 1st, 111; St. Louis, Kansas City and Northern, Omaha div. 1st, 106½; St. Louis, Vandalia and Terre Haute 1st, 118; Scioto Valley 1st, 94; Southern Pacific of California 1st, 105¾; Texas and Pacific, 44⅜; do. inc. Land Grants, 63; do. Rio Grande div. 6s, 83⅝; Toledo, Peoria and Western 1st, 109½; Utah Southern Gen'l mort. 7s, 108; Wabash, St. Louis and Pacific, Gen'l mort. 6s, 77¾; do. Chicago div. 1st, 82: do. Cairo div. 7o, Winona and St. Peter 1st, 110; do. 2d, 120; Louisiana 7s, consols., 71; Missouri 6s, 1886, 106; do. 6s, 1887 107½; do. 6s, 1889-'90, 114; North Carolina consol. 4s, 81; Tennessee 6s, 55; Colorado Coal and Iron, 45¾; do. 6s, 91¼; Maryland Coal, 15; Sutro Tunnel, ⅜; Excelsior, 1; Homestake, 17½; Ontario, 34¾; Robinson, 1; Standard, 18½.

Philadelphia.—Am. Steamship Co. 6s, 105½; Allegheny Valley Income scrip, 47; Belvidere Delaware 2d mort., 106; Central Transportation, 33⅛; Connecting R. R. 6s, 118½; Elmira and Williamsport 5s, 100½; Huntingdon and Broad Top Mt. consol. 5s, 85; New Orleans Pacific 6s, 87½; Nesquehoning Valley, 53½; Pennsylvania Co. 4½s, 98; Philadelphia City 6s, 1900, 131½; Philadelphia, Germantown and Norristown, 111; Philadelphia and Reading deben. 6s, 63; do. scrip, 106; do. consol. gold 6s, 112½; Philadelphia, Wilmington and Baltimore 4s, 93; Philadelphia and Reading Coal and Iron mort. 7s, Helfenstein trust, 90; Susq. Coal 6s, 111; Susq. Canal 6s, 60¼; Schuylkill Nav. 6s, 1907, 92; do. 6s, 1897, 106; do. 6s, Boat Loan, 1913, 64; Texas and Pacific consol. mort. 6s, 96; Union and Titusville 7s, 94. The latest quotations are: City 6s, 108@118; do. free of tax, 127@133; do. 4s, new, 108@113; Pennsylvania State 5s, new loan, 118½@119½; do. 4s, old, 108@112; do. 4s, new, 115¼@116¼; Philadelphia and Reading R. R., 29½@29¼; do. consol. mort. 7s, reg. 124@125; do. gen'l mort. 6s, coupon, 97½@98⅛; do. 7s, 1893, 118½@119¼; do. new conv., 79@80; United New Jersey R. R. and Canal, 183½@184½; Buffalo, Pittsburg and Western, 15⅞@16; Pittsburgh, Titusville and Buffalo 7s, 95@97; Camden and Amboy mort. 6s, 1889, 112@113; Pennsylvania R. R., 57⅝@57¾; do. general mort. 6s, coupon, 125@125½; do. reg., 123@124; do. consol. mort. 6s, reg., 120@121; Little Schuylkill R. R., 57½@58½; Schuylkill Navigation, pref., 12½@13⅜; do. 6s, 1882, 91@95; Elmira and Williamsport pref., 58@60; do. 5s, 100¼@102; Lehigh Coal and Navigation, 38@38¼; do. 6s, 1884, 102½@103½; do. R. R. loan, 116@116½; do. Gold Loan, 109@109½; do. consol. 7s, 116@116½; Northern Pacific, 40⅝@41; do. pref., 78½@78⅝; North Pennsylvania, 63½@64¼; do. 6s, 107½@108; do. 7s, 119@119½; do. 7s, General mort. reg., 122@123; Philadelphia and Erie, 15@17; do. 7s, 117@118; do. 5s, 103@104; Minehill, 62½@63¼; Catawissa 23@25; do. pref., 54@55; do. new pref., 52@53; do. 7s, 1900, 120@—; Lehigh Valley, 58¾@59¼; do. 6s, coupon, 120@122; do. reg., 120@121; do. 7s, 134½@135; do. consol. mort. 120@121; Fifth and Sixth streets (horse), 150@160; Second and Third, 110@112; Thirteenth and Fifteenth, 72@75; Spruce and Pine, 40@45; Green and Coates, 80@90; Chestnut and Walnut, 90@93; Germantown, 70@75; Union, 110@115; West Philadelphia, 108@111; People's 13¼@14⅛; Continental, 100@102.

Boston.—Atlantic and Pacific blocks, 111¼; Boston Water Power, 4; Boston Land, 7½; Boston, Clinton, Fitchburg and New Bedford, 65; do. pref., 130; Burlington and Missouri River in Nebraska 6s, non-exempt, 103¾; Chicago, Burlington and Quincy 4s, old, 86⅛; do. Denver extension 4s, 84¾; Chicago, Milwaukee and St. Paul, Wisconsin Valley div. 6s, 100; Connotten Valley, 7⅛; California Southern 6s, 81; Chicago and West Michigan, 67; Flint and Pere Marquette, 23; do. pref., 97; Iowa Falls and Sioux City, 90; Kansas City, Fort Scott and Gulf, 70; do. 7s, 112½; Kansas City, St. Joseph and Council Bluffs 7s, 113⅛; Little Rock and Fort Smith 7s, 107½; Maine Central, 72; Marquette, Houghton and Ontonagon, 70; do. pref., 120; do. 6s, 101; Mexican Central 7s, 84; do. Block No. 2, 110½; Massachusetts Central, 5; do. 6s, 42; Northern Pacific 6s, 100⅝; New Mexico and Southern Pacific 7s, 113¾; New York and New England 6s, 104⅞; Oregon Short Line 6s, 101; do. subscriptions, 112; Portsmouth, Gt. Falls and Conway, 20; Rutland, 4½; do. pref., 24½; do. 6s, 98½; Sonora 7s, 104¼; Toledo, Cincinnati and St. Louis, 6¾; do. 6s, 63; do. inc., 17; do. Southeast div. 6s, 65; do. inc., 17; Allouez Mining Co., 2; Franklin, 12½; Napa Consol. Quicksilver, 5½; Osceola, 31½; Pewabic, 9¾;

Baltimore.—Atlantic Coal, 1.10; Atlanta and Charlotte, 70½; do. 1st, 107½; Baltimore City 6s, 1890, 117¼; do. 6s, 1893, exempt 125; do. 5s, 1916, 125; do. 5s, 1894, 116; do. 5s, 1900, 118; Columbia and Greenville 1st, 104½; Maryland State 6s, 1885, 107½; do. Defense 6s, 102¾; Marietta and Cincinnati 1st Trust certificates, 126; do. 2d do. 97½; do. 3d, do., 53⅜; Northern Central 5s, 98¾; Virginia Midland pref., 109; do. 2d mort., 109¼; do. 4th mort., 51½; do. 5th mort., 95; do. inc., 70. The latest quotations are: Atlanta and Charlotte 1st, 107@107½; Baltimore and Ohio, 193@196; do. 6s. 1885, 106¼@—. Baltimore City 6s, 1890, 117½@118; do. 5s, 1900, 129@—; do. 5s, 1916, 124½@125; Columbia and Greenville 1st, 104¾@104⅜; Marietta and Cincinnati 1st, 125⅞@126; do. 2d, 97@98; do. 3d, 53¼@53½; Northern Central, 47¾@48¾; do. 6s, 1900, gold, 119@119¼; do. 5s, 1926, 98⅛@99; Pittsburg and Connellsville 7s, 123¾@124½; Richmond and Danville 1st, 1885, 102@103¼; Virginia Midland 5th, mort., 94⅜@95¼; Virginia and Tennessee 6s, 103½@104¾; Virginia Consols, 59⅜@59⅞; do. 10-40s, 43⅛@44; Wilmington, Columbia and Augusta, 107¾@108½; Western Maryland 2d pref., 107½@—; do. 2d mort., Washington Co. guar., 114@—.

The Coal Trade.

THE leading coal-carrying companies make the following reports of their tonnage for the week ending June 17th, and for the year to that date, compared with their respective amounts carried to the same time last year:—

	Week.	1882.	1881.
Reading Railroad	179,661	3,941,140	3,823,342
Schuylkill Canal	9,148	138,300	153,265
Lehigh Valley	163,193	3,100,871	2,862,356
Delaware, Lackawanna and Western	112,507	1,799,619	1,794,024
Shamokin	21,699	428,706	463,512
Central R. R. of New Jersey	115,315	1,764,273	1,795,455
United R. R. of New Jersey	39,880	729,877	687,943
Pennsylvania Coal	37,757	505,309	530,554
Delaware and Hudson Canal	81,555	1,372,920	1,516,369
Huntingdon and Broad Top Mountain	6,152	207,874	211,718
Penn. and New York	33,016	754,745	732,618
Clearfield, Pa.	70,549	1,378,543	1,083,865

The total tonnage of anthracite coal from all the regions for the week ending June 10, as reported by the several carrying companies, amounted to 695,782 tons, against 640,831 tons in the corresponding week last year, an increase of 54,951 tons. The total amount of anthracite mined for the year is 11,404,601 tons, against 11,464,896 tons for the same period last year, a decrease of 60,295 tons. The quantity of bituminous coal sent to market for the week amounted to 83,596 tons, against 102,258 tons in the corresponding week last year, a decrease of 18,662 tons. The total amount of bituminous mined for the year is 2,041,856 tons, against 2,186,890 tons for the corresponding period last year, a decrease of 145,034 tons. The total tonnage of all kinds of coal for the week is 779,378 tons, against 743,089 tons in corresponding week last year, an increase of 36,289 tons, and the total tonnage for the coal year is 13,446,457 tons, against 13,651,786 tons to same date last year, a decrease of 205,329 tons. The quantity of coal and coke carried over the Pennsylvania Railroad for the week ending June 17 was 231,091 tons, of which 176,549 tons were coal and 54,542 tons coke. The total tonnage for the year thus far has been 5,115,558 tons, of which 3,699,530 tons were coal and 1,416,019 tons coke. These figures embrace all the coal and coke carried over the road, east and west. The shipments of bituminous coal from the mines of the Cumberland coal region for the week ended June 17 were 8,047 tons and for the year to that date 513,436 tons, a decrease of 341,488 tons as compared with the corresponding period of last year. The shipments were: To the Baltimore and Ohio Railroad—For the week, 6,317 tons; year, 427,436 tons; decrease as compared with 1881, 188,400 tons. Chesapeake and Ohio Canal—Week, 1,728 tons; year, 7,325 tons; decrease as compared with 1881, 18,768 tons. The Reading Railroad shipment for last week, ending June 24, was about 184,000 tons, of which 54,700 tons were sent to and 53,500 tons shipped from Port Richmond, and 22,000 tons sent to and 21,500 shipped from Elizabethport.—*Philadelphia Ledger, June 26*

A Compressed-Air Locomotive.

AT the foot of Ninth street and the East River is now to be seen the first Beaumont compressed-air motor which has been brought to this country. A company has been formed to establish the business of making and selling these motors in the United States, having bought the patents for this country from Colonel Beaumont, the well-known English engineer, whose name is connected with the most successful attempts made to build traction engines worked by compressed air. The American Company is known as the Beaumont Compressed Air Company of New York, and is composed of Messrs. James R. Keene, C. N. Jordan, A. B. Ten Broeck; and J. S. Moore, Managing Director. The locomotive, together with the compressing engine, was brought here a few weeks ago and for the last few days has been running upon a track laid on the wharf. An ordinary portable steam-engine on wheels drives the air-pumps, which are in water and kept reasonably cool by this means. Two reservoirs, like big soda-water retorts, of a capacity of forty cubic feet each, are charged with air at a pressure of 1,000 pounds to the square inch. The air-tank of the locomotive is a somewhat larger retort, having a capacity of about sixty cubic feet. When it is desired to charge the locomotive boiler, it is connected with the ground reservoirs by means of a pipe, and the compressed air obtained from the reservoirs at a pressure of nearly one thousand pounds. When charged such a locomotive, weighing eight tons, like the one on exhibition, can pull two cars as large as our ordinary street cars for eight miles. This estimate of its power is given by the English agents, who tested the locomotive on one of the tramways running out of London. At a test made last January to determine the quantity of fuel consumed, indicated horse-power of compressing engines, and power given out by the locomotive, the pressure during four hours was kept at 1,000 pounds. The power exerted by the compressing engines was 65.29 horse-power, with an actual consumption of coal of 4.5 lbs. per hour and per horse-power. The power exerted by the locomotive equalled 13-12 horse-power. From other experiments it was stated that the amount of coal required to haul one ton one mile on a railway was 0.292 lb.

Colonel Beaumont used a small fire in his locomotive to heat the air when it reaches the cylinders, but the quantity of coal consumed in this way is insignificant, only fifty-two pounds having been used in a four-hours' trial. The locomotive runs along the temporary track without noise, and can attain almost any speed at will. It starts and stops with almost marvellous rapidity. There is no dust, gas, or smoke from it, and for that reason it is hoped that the elevated roads will give the system a trial.—*N. Y. Evening Post.*

THE Railway Master Mechanics' Convention has concluded its annual session at Niagara Falls. Among others in attendance was David Joy, of England, who came to this country expressly for the purpose of reading a paper on a valve motion invented by himself, entirely new in principle, and intended to replace the old-fashioned link motion. This appliance is of vast importance to railroads, as its adoption admits of many hitherto impossible improvements in locomotives. This paper was received, and ordered to be printed in the proceedings—while the Association presented a vote of thanks to Mr. Joy. Following this came a paper by Mr. Powell, of Concord, N. H., showing an improved attachment for cocks and valves on locomotive boilers, intended to prevent the escape of steam in case of ruptured pipes. This was also received, and ordered printed. A paper by Mr. Fry, on the best material and form of parallel rods of locomotives, to prevent breaking, and another by Mr. Woodcock, of New Jersey, who discussed some new plans of construction and improvement of locomotive boilers.

RAILROAD AND CANAL DIVIDEND STATEMENT.

Showing the amount of Stock Outstanding, the Dividend Periods and the date of last Dividend.

Marked thus(*)are leased roads.	Stock outstanding.	Divide'd Periods.	Last Dividend Payable.
Albany and Susq*...100	2,500,000	semi-an	July '82 2
Ashuelot.....100	210,000	q'arterly	Oct. '81 3½
Atch., Top. and S. Fe100	54,000,000	q'arterly	May '82 1½
Atlanta and W. Point100	1,232 200	semi-an	Jan. '82 6
Atlantic and St. Law*100	5,840,000	semi-an	Mar. '82 3
Augusta and Savan'h100	1,022,900	semi-an	June'81 3½
Avon, Genesco & MtM*100	225,000	semi-an	July '81 3
Baltimore and Ohio.100	14,792,566	semi-an	May '82 5
" " pref.100	5,000,000	semi-an	July '82 3
Washington Br....100	1,650,000	semi-an	Apl. '82 5
Berkshire*.....100	600,000	q'arterly	Apl. '82 1¾
Boston and Albany...100	20,000,000	q'arterly	June'82 2
Bos. & N.Y. Air Line pf.100	2,795,227	q'arterly	June'82 1
Bos., Cl., F. & N.B. pref.100	1,750,100	.....	Apl. '82 3½
Bos., Conc. & Mont. pf*100	800,000	semi-an	May '82 3
Boston and Lowell..500	3,940,000	semi-an	July '82 2
Boston and Maine...100	6,921,274	semi-an	May '82 4
Boston & Providence100	4,000,000	semi-an	May '82 4
Attleborough Br...100	131,700	semi-an	July '82 3½
Bos., Revere B & Lynn100	419,400	semi-an	July '82 3½
Buffalo, N. Y. & Erie*.100	950,000	semi-an	June'82 3
Camden & Atlantic.. 50	377,400	q'arterly	Apl '80 38
" " pref. 50	880,650	q'arterly	Apl '80 3½38
Camden & Burl. Co...100	381,925	semi-an	July '82 3
Canada Southern....100	15,000,000	.....	Feb. '81 2½
Cape May & Millville* 50	447,000	semi-an	June'81 3
Catawissa*..... 50	1,159,500	annual	Oct.'81 $1½
" pref..... 20	2,200,000	semi-an	May '82 3½
" new pref.. 50	1,000,000	semi-an	May '82 3½
Cayuga and Susq.*.. 50	589,110	semi-an	July '81 4½
Cedar Rapids & Mo. R*100	6,850,400	q'arterly	May '82 1½
" " pref.100	769,600	semi-an	Feb. '82 3½
Central of Georgia...100	7,500,000	semi-an	June '82 4
Central of New Jersey100	18,563,200	q'arterly	July '76 2½
Central Ohio*..... 50	2,437,950	semi-an	Jan. '82 3
" pref.. . 50	411,550	semi-an	Jan. '82 3
Central Pacific 100	59,275,500	semi-an	Feb. '82 3
Chemung*..... 100	380,000	q'arterly	July '81 1½
Cheshire preferred ..100	2,155,300	semi-an	Jan. '82 1¾
Chicago and Alton...100	11,181,741	semi-an	Mar. '82 4
" " pref 100	2,245,400	semi-an	Mar. '82 4
Chi., Burl. & Quincy.100	55,337,455	q'arterly	June'82 2
Chi., Iowa & Nebras*.100	3,916,200	semi-an	July '82 4
Chi., Mil. & St. Paul.100	20,404,261	semi-an	Apl. '82 3½
" pref 100	14,401,483	semi-an	Apl. '82 3½
Chi. & N. Western...100	14,988,257	semi-an	June'82 3½
" pref.100	21,525,353	q'arterly	June'82 2
Chi., R. I. & Pacific..100	41,960,000	q'arterly	Aug. '82 1¾
Chi. and West Mich .100	6,151,000	semi-an	Feb. '82 2½
Chi., St.P., M. & O. pref.100	10,390,000	q'arterly	July '82 1¾
C., Ind., St. L. & Chi..100	6,000,000	q'arterly	July '82 1½
Cin., Sand. & Clev.pf. 50	429,037	semi-an	May '82 3
Clev. and Mahoning* 50	3,759,200	semi-an	Nov. '81 3½
Clev. and Pittsburg* 50	11,244,336	q'arterly	June'82 1¾
Columbus & Xenia*. 50	1,786,200	q'arterly	June'82 2
Colum. & Hocking Val.100	2,500,200	semi-an	Aug. '81 208
Concord 50	1,500,000	semi-an	May '82 5
Concord and Ports.*.100	350,000	semi-an	July '82 3½
Conn. & Passump. Riv100	2,244,400	semi-an	Feb. '82 3
Connecticut River ...100	2,100,000	semi-an	July '82 4
Cumberland Valley.. 50	1,292,950	q'arterly	July '82 2½
" 1st pref 50	241,900	semi-an	Apl. '82 4
" 2d pref. 50	243,000	semi-an	Apl. '82 4
Danbury & Norwalk. 50	600,000	.....	Apl. '82 1½
Dayton and Mich.*.. 50	2,402,573	semi-an	Apl. '82 1¾
" " pref. 50	1,211,250	q'arterly	July '82 2
Delaware*..... 25	1,468,940	semi-an	July '82 3
Del. & Bound Brook*100	1,652,000	q'arterly	May '82 1¾
Del., Lack. & Western 50	26,200,000	q'arterly	July '82 2
Denver & Rio Grande.100	29,160,000	q'arterly	Jan. '82 1½
Den., South P. & Pac.100	3,500,000	.....	Aug. '80 4
Detroit, Lans. & Nor.100	1,825,600	semi-an	Aug. '80 2½
" " pref.100	2,503,380	semi-an	Feb. '82 3½
Dubuque & Sioux C'y*100	5,000,000	semi-an	Apl. '82 3
East Pennsylvania*., 50	1,709 550	semi-an	Jan. '82 3
East Mahanoy*..... 50	392,950	semi-an	Jan. '82 3
Eastern (N. H.).....100	492,500	semi-an	June'82 2½
Eel River.....100	3,000,000	q'arterly	June '82 $1
Elmira. Jef. & Canand*100	500,000	annual	Sep. '80 5
Elmira & Williamsp't* 50	500,000	semi-an	May '82 1½
" " pref. 50	500,000	semi-an	July '82 3½
Erie and Pitsburg*.. 50	1,998,400	q'arterly	June '82 1¾
Evansville & Terre H.100	100,000	semi-an	Nov. '81 2
Fitchburg.....100	4,500,000	semi-an	July '82 3
F. & P. Marquette pf.100	6,500,000	semi-an	July '82 3
Ft. W. & Jackson pref.100	2,000,000	.....	May '82 2
Georgia. 100	4,200,000	q'arterly	July '82 2½
Granite 100	1,250,000	semi-an	July '82 3
Han. & St. Jo. pref .100	5,083,024	semi-an	Aug. '82 3½
Harrisbg & Lancaster 50	1,182,500	semi-an	Jan. '82 3½
Housatonic pref. ...100	1,180,000	q'arterly	Apl. '82 2
Illinois Central.....100	39,000,000	semi-an	Mar. '82 3½
Ia. Falls & Sioux City*100	4,623,500	q'arterly	June'82 1½
Iowa R. Land Co....100	7,620,000	q'arterly	May '82 1
Jeffersonv. Mad. & Ind.100	2,000,000	q'arterly	May '82 1¾
Joliet and Chicago*..100	1,500,000	q'arterly	June'82 1¾
Kan. C., Ft. S. & Gulf...100	4,000,000	.....	Feb. '82 2
" " pref..100	2,750,000	semi-an	Feb. '82 4
Kentucky Central...100	500,000	semi-an	June'81 1
" " pref..100	5,583,500	semi-an	June'83 1
Lake Shore & Mich. So.100	49,466,500	q'arterly	Aug. '82 2
" (guar.)100	533,500	semi-an	Aug. '82 5
Lawrence*..... 50	450,000	q'arterly	July '82 2
Lehigh Valley..... 50	27,496,895	q'arterly	July '82 1½
" pref. 50	106,300	q'arterly	July '82 1½

Marked thus(*)are leased roads.	Stock outstanding.	Divide'd Periods.	Last Dividend Payable.
Little Miami..... 50	4,637)300	q'arterly	June'82 2
Little Rock & Ft. S..100	4,096,135	.....	July' 81 108
Little Schuylkill*.. . 50	2,646,100	semi-an.	Jan. '82 3½
Louisville & Nashv..100	19,130,913	semi-an.	Feb. '82 3
Lowell & Andover...100	500,000	semi-an.	Jan. '82 3½
Lykens Valley.....100	600,000	q'rterly.	Oct,' 81 2½
Manchester & Law...100	1,000,000	semi-an.	May '82 5
Manhattan 100	13,000,000	.....	.....
" " 1st pref.100	6,500,000	q'rterly.	July '82 1½
" " 2d pref.100	6,500,000	q'rterly.	July '82 1½
Marietta & Cincinnati 50	1,386,350	.....	.....
" " 1st pref 50	8,105,600	semi-an.	Sep. '66 38
" " 2d pref 50	4,440,000	semi-an.	Sep. '66 38
Marq. Hout. & Ont. pf..100	2,259 026	.....	Feb. '82 4
Massawippi*.....100	400,000	semi-an.	Feb. '82 3
Michigan Central....100	18,738,204	q'rterly.	Aug. '81 1
Middlesex Central...100	280,000	semi-an.	Feb. '82 3
Mill Creek & Minehill* 50	323,000	semi-an.	Jan. '82 5
M. Hill & Schuyl. Hav* 50	4,022,500	semi-an.	Jan. '82 3½
Missouri Pacific.....100	28,169,800	q'rterly.	July '82 1½
Mobile & Montgomery100	3,022,517	semi-an.	Feb. '80 2½
Mont. & Wells River100	800,000	annual	Feb. '80 2
Morris and Essex.... 50	15,000,000	semi-an.	July '82 3½
Mt Carbon & Pt Carbon 50	282,350	semi-an.	Jan.. '82 6
Nashua and Lowell..100	800,000	semi-an.	May '82 4
Nashua & Rochester.100	1,305,800	semi-an.	Apl. '82 1½
Nashv. & Decatur....100	1,827,000	semi-an.	June'81 3
Nash., Chat. & St Louis 25	6,670,325	semi-an.	Apl. '82 1½
Naugatuck.....100	2,000,000	semi-an.	Jan. '82 5
Nesquehoning Val'y* 50	1,300,000	semi-an.	Mar. '82 3
N. Castle & Beaver Val* 50	600,000	q'rterly.	Oct. '81 —
New London North'n*100	1,500,000	q'rterly.	July '82 1½
N. Y. Cen. & Hud. R.100	89,428,330	q'rterly.	July '82 2
N. Y. and Harlem....100	7,950,000	q'rterly.	July '82 4
" " pref.100	1,500,000	q'rterly.	July '82 4
" City Line.. —	.....	annual	Apl. '82 3
N.Y., Lake Erie & West.100	77,083,900	.....	.....
" " pref.100	8,156,825	.....	Jan. '82 6
N. Y., N. H. & Hart..100	15,500,000	semi-an.	Jan. '82 5
N. Y., Prov. & Boston100	3,000,000	q'rterly.	May '82 2
Niag. Bridg & Canand*100	1,000,000	semi-an.	July '81 3
North Carolina*.....100	3,000,000	semi-an.	Sep. '81 3
" " pref.100	1,000,000	semi-an.	Sep. '81 3
N. Eastern (S.C.) pref100	86,000	semi-an.	May '81 4
Norfolk & Western pref. 50	15,000,000	q'rterly.	June '82 $1
North Pennsylvania. 50	4,527,150	q'rterly.	May '82 1¾
Northern Central.... 50	6,142,000	semi-an.	July '82 3
Northern N. Hampsh100	3,068,400	semi-an.	June'82 3
Northern N. Jersey*.100	1,000,000	semi-an.	July '80 2½
Norwich & Worcester*100	2,604,400	semi-an.	Jan. '82 5
Ohio 100	18,500,000	.....	.....
Ohio and Miss. pref..100	4,030,000	semi-an.	Mar. '75 3½
Old Colony.....100	7,333,800	semi-an.	July '82 3½
Oregon R'way & Nav.100	6,000,000	q'rterly.	May '82 2
Oswego & Syracuse..100	1,320,400	semi-an.	Aug. '81 4½
Panama.....100	7,000,000	.....	July '82 6½
Paterson & Hudson*.100	630,000	semi-an.	Jan. '82 4
Paterson & Ramapo.100	248,000	semi-an.	Jan. '82 4
Pember. & Hightst'n*. 50	342,150	semi-an.	Jan. '82 3
Pennsylvania..... 50	77,672,750	semi-an.	May '82 4
Pennsylvania Co..... 50	20,000,000	semi-an.	June'81 2½
Peoria & Bureau Val*100	1,200,000	semi-an.	Feb. '82 4
Philadelphia & Erie*. 50	7,013,700	semi-an.	.....
" " pfd 50	2,400,000	semi-an.	Jan. '75 4
Phil, Ger. & Norrist'n* 50	2,231,900	q'rterly.	June'82 3
Phil. and Reading... 50	32,726,375	q'rterly.	Jan. '76 2½
" " pref. 50	1,551,800	q'rterly.	July '76 3½
Phila. and Trenton...100	1,259,100	q'rterly.	July '82 2½
Phila., Wil. and Balt. 50	11,585,750	semi-an.	July '82 4
Pittsb., Ft. W. & Chi.*100	19,714,285	q'rterly.	Apl. '82 1¾
" Special Imp.100	6,770,900	q'rterly.	Apl. '82 1¾
Pittsfield & N. Adams..100	450,000	semi-an.	Jan. '82 2½
Portl., Saco & Portsm100	1,500,000	semi-an.	Jan. '82 3
Providence & Worces.100	2,000,000	semi-an.	July '82 3
Rensselaer & Saratog.*100	7,000,000	semi-an.	Jan. '82 4
Rhode Island & Mass.100	100,000	.....	Jan. '81 3
Richmond & Danv...100	3,866,000	q'rterly.	May '82 2
Richmond & Petersb100	1,009,300	semi-an.	Jan. '81 3
Roch. & Geneses Val.*100	555,200	semi-an.	Jan. '82 3
Rome, Watert. & Ogd.100	5,293,900	semi-an.	July '75 1½
Rutland preferred.. 100	4,000,000	semi-an.	Feb. '82 1
St. L., Alt. & T. Haute.100	2,300,000	.....	.....
" " pref.100	2,468,406	.....	May '82 3
St. L. & S. Fran. 1st pref100	4,500,000	.....	Aug. '82 3½
St. L., I. Mt. & South'n.100	21,459,921	semi-an.	Feb. '74 3
St. P. & Duluth pref.100	4,705,000	q'rterly.	June'82 1¾
St. P., Minn. & Man..100	15,000,000	semi-an.	Aug. '82 3½
Schuylkill Valley*... 50	576,050	semi-an.	Jan. '82 2½
Seaboard & Roanoke.100	1,229,600	semi-an.	May '82 5
Shamokin V. & Pottsv 50	669,450	semi-an.	Feb. '82 3
Shore Line*.....100	1,000,000	semi-an.	Jan. '82 4
Sioux C. & Pacific pref100	169,000	semi-an.	Apl. '82 3½
South Br. (N. J.)*....100	438,300	semi-an.	Jan. '82 3
South Western (Ga.)*100	3,892,300	semi-an.	Dec. '81 3½
Stockbridge & Pitts.*.100	448,700	semi-an.	Oct. '81 1½
Summit Branch*.... 50	4,010,150	semi-an.	Feb. '76 3
Syr., Bingham & N.Y.*100	2,500,000	semi-an.	Feb. '81 2
Terre Haute & Ind....100	1,988,150	semi-an.	Feb. '82 4
Troy and Boston.....100	1,609,000	semi-an.	Feb. '80 2
Union Pacific. 100	61,000,000	q'rterly.	July '82 1¾
United Cos of N. J.*.100	20,490,000	q'rterly.	July '82 2½
Utica, Shenango & S V100	4,000,000	semi-an.	Nov. '81 3
Utica and Black Riv.100	1,772,000	semi-an.	Mar. '82 2
Vermont and Mass..100	3,050,000	semi-an.	Apl. '82 3
Wab. St.L. & Pac. pref.100	22,615,100	q'rterly.	Nov. '81 1½

Marked thus(*)are leased roads.	Stock outstanding.	Divide'd Periods.	Last Dividend Payable.
Ware River*.....100	750,000	semi-an.	Jan. '82 3½
Warren (N. J.).....100	1,800,000	semi-an.	Apl. '82 3½
Warwick Valley.....100	340,000	semi-an.	Jan. '82 2½
Westchest & Phil. pref100	821,300	semi-an.	July '80 2
West Jersey.....100	1,359,750	semi-an.	Apl. '83 38
Wilmingt'n & Weld'n.100	1,456,200	semi-an.	Dec. '81 3
Wil., Col., & Aug 100	960,000	semi-an.	Dec. '81 3
Winchester & Poto'c.*100	180,000	semi-an.	Jan. '82 3
Winchester & Strasb.*100	74,700	semi-an.	Jan. '82 8
Worcester & Nashua. 75	1,789,800	semi-an.	July '82 1½
HORSE-POWER R. R.			
Albany City.....100	200,000	annual	..... '80 5½
Baltimore City..... 25	1,000,000	semi-an.	July '82 3
Balt., Cat. & El. Mills...100	....	semi-an.	Jan. '82 2
Bleecker St. & Ful. F'y.100	900,000	semi-an.	July '81 3½
Boston & Chelsea pref. 50	110,000	semi-an.	Apl. '82 3
Broadway (Brooklyn)100	250,000	q'arterly	Oct. '81 3
B'way & 7th Av, (N.Y.)100	2,100,000	q'arterly	Oct, '81 2
B'klyn & Hunter's Pt.100	400,000	semi-an.	Apl. '79 3
Brooklyn City.....100	2,000,000	q'arterly	Dec. '81 3½
Bushwick (Brooklyn)100	309,000	semi-an.	July '81 2½
Cambridge.....100	908,000	q'arterly	Apl. '82 4½
Cen. Park, N. & E. Riv.100	1,800,000	q'rterly.	Jan. '82 2
Christoph'r & Tenth St100	650,000	semi-an.	Aug. '81 2½
Citizens' (Phil.)..... 50	192,500	q'rterly.	Jan. '82 2½
Citizens' (Pbg.)..... 50	200,000	annual.	....'80 14½
Coney Island & Bklyn100	500,000	semi-an.	Oct. '80 5
Continental (Phil.) .. 50	580,000	semi-an.	July '82 6
D. Dock, E. B'way & Bat100	1,200,000	q'arterly	Nov. '81 4
Eighth Av. (N. Y.)...100	1,000,000	q'rterly.	Oct. '81 3
42d St. & G. St. Ferry100	747,000	semi-an.	Nov. '81 6
Frankf. & Southw (Ph) 50	600,000	q'rterly.	Jan. '82 6
Germantown, (Ph.).. 50	572,800	q'rterly.	July '82 2½
Girard College (Ph.) . 50	500,000	semi-an.	July '71 3
Grand St. & Newton..100	170,091	semi-an.	July '81 2½
Green & Coates St. (Ph) 50	150,000	q'rterly.	Apl. '82 3
Heston, Mantau & F'm 50	299,381	semi-an.	Jan. '75 4
Highland.....100	600,000	semi-an.	Jan. '82 4
Lomb. & South Sts (Ph) 25	195,000	semi-an.	Oct. '75 4
Lynn and Boston....100	200,000	semi-an.	May '82 4
Malden and Melrose.100	165,000	.....	.....
Metropolitan (Bost.). 50	1,500,000	semi-an.	July '82 4
Middlesex (Boston)..100	650,000	semi-an.	May '82 3½
N.Y., Bay Ridge & Jam100	150,000	..... .	Oct. '78 7
Ninth Av. (N. Y.)....100	797,320	.....	.....
Orange & Newark....100	282,555	.....	....
People's (Phila.)..... 25	124,744	..... .	Apl. '82 2
Philadelphia City... 50	475,000	semi-an.	Jan. '82 5
Phila. and Darby.... 20	200,000	semi-an.	July '81 3½
Phila. & Grey's Ferry. 50	308,000	semi-an.	Jan. '82 6
Pbg, Alleg. & Manches. 50	300,000	q'rterly.	Oct. '81 3
Ridge Avenue (Ph.).. 50	420,000	semi-an.	Oct. '81 11
Second Avenue (N.Y.)100	1,199,500	semi-an.	July '81 2½
Second & Third St. (Ph) 50	771,076	q'rterly.	Jan. '82 4½
17th & 19th sts (Ph.).. 50	250,000	semi-an.	July '81 3
Sixth Avenue (N. Y.)100	750,000	semi-an.	Oct. '81 5
Somerville (Boston).100	113,000	semi-an.	May '82 3
South Boston..... 50	600,000	semi-an.	Jan. '82 4
Third Avenue, N. Y..100	2,000,000	q'rterly.	Nov. '81 5
13th and 15th sts., Ph 50	334,529	q'rterly.	Jan. '82 4
23d street, N. Y.....100	600,000	semi-an.	Aug. '81 4
Union, Boston.....100	374,300	semi-an.	Jan. '82 4
Union, Phila..... 50	1,005,000	semi-an.	Jan. '82 7
West Philadelphia... 50	750,000	semi-an.	July '77 10
CANALS.			
Chesapeake and Dela 50	2,078,038	semi-an.	June'75 2
Delaware Division... 50	1,633,350	semi-an.	Feb. '82 $1
Delawa. and Hudson100	20,000,000	q'rterly.	June'82 1¾
Delaware & Raritan*.100	5,847,400	q'rterly.	July '82 2½
Lehigh Coal and Nav 50	11,204,250	semi-an.	June'82 2
Monongahela Nav... 50	1,004,500	semi-an.	July '81 $2
Morris, consolidated.100	1,025,000	semi-an.	Feb. '81 2
" preferred....100	1,175,000	semi-an.	Feb. '81 5
Pennsylvania..... 50	4,501,200	.....	.....
Schuyl. Nav., com.*. 50	859,100	annual..	Au. '81 50c.
" " pref... 50	3,200,000	annual..	Aug. '81 $1
MISCELLANEOUS.			
Adams Express.....100	12,000,000	q'rterly.	June'82 2
American Express... 50	18,000,000	semi-an.	July '82 3
Amoskeag Manuf. Co.100	3,000,000	semi-an.	June'81 5
Calumet & Hecla Min'g —	100,000 S.	q'rterly.	May '82 $5
Central Mining Co...100	.....	semi-an.	Feb. '82 2½
Consolidation Coal..100	10,250,000	semi-an.	Jan. '82 2
George's Creek C. & I..100	....	semi-an.	Jan. '82 3
Maryland Coal.....100	4,400,000	semi-an.	Feb. '76 1½
Mariposa L. & Mining100	10,000,000	..... .	.....
" pref100	5,000,000	..... .	.....
Missouri Val. Land Co100	200,000	semi-an.	July '82 12
National Tube Works100	1,000,000	q'rterly.	Apl. '82 3
Pac. Mail Steamship.100	20,000,000	q'rterly,	Sept. '69 3
Pennsylvania Coal... 50	5,000,000	q'rterly	May '82 3
Pullman Palace Car..100	10,032,800	q'rterly.	May '82 2
Quicksilver, com....100	5,708.700	..... .	May '82 0-4
" pref....100	4,291,300	..... .	May '82 6
Quincy Mining Co... 25	40,000 shs	semi-an.	Feb. '82 $8
Quincy R. B. Bridge.100	1,750,000	semi-an.	Jan. '82 5
Sioux C. & I. F. L. & L. Co100	500,000	semi-an.	June'82 5
Spring Mt. Coal.....100	1,500,000	semi-an.	June'82 3½
Topeka Equip'n t Co.100	255,500	semi-an.	Apl. '82 5
United States Ex....100	7,000,000	q'rterly.	May '82 1
Wells-Fargo & Co. Ex100	6,250,000	semi-an.	July '82 4
Western Union Tel..100	80,000,000	q'rterly.	July '82 1½

RAILROAD EARNINGS—MONTHLY.

	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total.
Burl., Cedar Rap. & Northern:													
1880	184,316	165,170	188,325	141,652	149,504	153,378	143,432	160,160	179,804	204,991	189,330	193,419	2,053,484
1881	167,750	124,510	148,551	184,680	165,630	205,912	174,351	209,112	221,801	221,748	203,880	232,812	2,259,037
1882	252,823	225,631	224,107	178,304	199,278	.....	.....	.....	.....	.....	.....	.....	.....
Central Pacific:													
1880	1,200,614	1,070,487	1,373,438	1,356,716	1,778,488	1,724,950	1,840,067	1,973,438	1,964,997	1,120,229	2,199,466	1,905,221	20,508,112
1881	1,602,907	1,454,218	1,709,637	1,872,370	2,091,410	2,063,000	1,859,000	2,059,000	2,293,000	2,514,000	2,267,000	2,110,000	23,947,951
1882	1,876,000	1,702,000	1,987.000	2,052,000	2,353,000	.....	.....	.....	.....	.....	.....	.....	.....
Chesapeake and Ohio:													
1880	202,335	198,681	222,762	221,559	199,443	214,352	238,236	259,110	247,303	211,820	240,795	218,009	2,674,308
1881	162,540	184,389	228,479	227,343	252,235	241,135	225,096	262,858	247,144	237,303	235,585	203,562	2,702,762
1882	210,455	209,708	208,981	267,454	255,939	.....	.....	.....	.....	.....	.....	.....	.....
Chicago and Alton:													
1880	534,054	497,013	626,473	542,961	616,128	617,524	708,906	761,120	767,349	785,199	696,776	574,695	7,718,198
1881	487,890	461,641	529,915	558,190	548,556	616,935	671,466	771,466	768,897	750,359	680,133	635,307	7,553,988
1882	579.447	530,480	584,483	561,787	553,412	.....	.....	.....	.....	.....	.....	.....	.....
Chicago and Northwestern:													
1880	1,154,632	1,131,683	1,361,725	1,294,573	1,875,608	1,671,177	1,699,686	1,767,938	2,020,245	2,105,217	1,855,671	1,477,902	19,416,007
1881	1,240,667	963,208	1,178,795	1,474,612	1,879,006	2,306,640	1,983,031	2,315,164	2,292,676	2,341,097	2,019,037	1,855,476	21,849,209
1882	1,620,336	1,471,945	1,696,568	1,634,819	2,058,133	.....	.....	.....	.....	.....	.....	.....	.....
Chicago, Burlington and Quincy:													
1880	1,432,740	1,411,870	1,732,518	1,489,894	1,909,627	1,682,956	1,773,643	1,834,321	1,862,285	1,934,762	1,837,860	1,552,018	20,454,494
1881	1,307,948	1,034,821	1,418,149	1,574,371	1,679,455	2,083,803	1,888,558	2,173,945	2,262,981	2,031,001	1,816,133	1,905,490	21,324,150
1882	1,658,834	1,457,300	1,566,217	1,530,838	. .....	.....	.....	.....	.....	.....	.....	.....	.....
Chicago, Milwaukee and St. Paul:													
1880	764,298	738,749	900,675	871,041	1,134,745	1,037,958	1,026,708	991,297	1,257,677	1,493,620	1,472,037	1,397,308	13,086,119
1881	990,847	682,717	916.989	1,259,946	1,538,491	1,371,000	1,560,000	1,678,000	1,645,000	1,590,000	1,569,000	1,855,000	17,025,462
1882	1,435,000	1,377,000	1,561,000	1,518,000	1,629,000	.....	.....	.....	.....	.....	.....	.....	.....
Chicago, St. Paul, Minneapolis and Omaha:													
1880	193,827	173,078	259,783	259,208	232,146	218,093	236,995	251,013	300,833	342,052	342,894	312,173	3,122,097
1881	257,786	158,594	251,648	261,211	350,124	404,562	392,702	385,586	363,685	382,714	380,733	391,950	3,981,296
1882	307,498	315,100	405.779	356,558	406,420	.....	.....	.....	.....	.....	.....	.....	.....
Cincinnati, Indianapolis, St. Louis and Chicago:													
1880	155,697	172,541	198,220	168,199	186,995	200,332	204,138	233,478	343,627	239,881	209,014	198,254	2,412,185
1881	182,523	171,511	191,005	183,710	191,056	188,256	178,861	229,858	219,977	212,606	194,805	192,623	2,296,916
1882	200,042	186,879	208,066	204,269	199,110	.....	.....	.....	.....	.....	.....	.....	.....
Denver and Rio Grande:													
1880	124,759	126,922	160,883	164,882	193,925	295,455	373,132	400,133	406,583	473,318	408,562	349,196	3,478,007
1881	307,476	317,681	398,493	433,111	514,767	584,230	548,284	606,193	620,643	665,686	566,819	643,417	6,206,812
1882	491,914	412,987	535,055	559,917	614,298	.....	.....	.....	.....	.....	.... .,	.....	.....
Hannibal and St. Joseph:													
1880	176,079	166,965	216,061	206,735	191,317	179,396	224,312	238,081	233,448	242,214	207,147	279,635	2,561,391
1881	154,401	122,874	176,356	190,812	172,950	194,949	198,110	215,308	202,567	313,433	201,782	180,376	2,230,966
1882	138,284	154,717	168,798	148,913	154,917	.....	.....	.....	.....	.....	.....	.....	.....
Illinois Central:													
1880	595,212	613,806	613,008	535,732	665,120	681,736	724,095	732,755	806,836	880,211	783,120	673,182	8,304,812
1881	631,281	524,499	557,789	662,493	673,259	803,887	720,004	868,407	828,847	815,238	737 218	763,475	8,586,397
1882	728,173	689,387	695,371	674,603	674,749	.....	.....	.....	.....	.....	.....	.....	.....
Indiana, Bloomington and Western:													
1880	80,498	89,690	116,185	90,374	85,733	106,954	103,438	116,732	110,622	121,343	96,621	104,619	1,233,079
1881	90,283	83,261	192,085	203,677	200,064	96,586	83,764	117,956	195,307	181,674	160,826	156,697	.....
1882	195,824	175,755	206,235	205,934	182,554	.....	.....	.....	.....	.....	.....	.....	.....
Louisville and Nashville:													
1880	674,455	575,035	612,593	563,883	655,014	976,229	772,537	827,088	931,910	1,000,326	953,086	949,184	9,491,346
1881	816,960	805,124	947,959	850,862	828,726	1,227,885	817,135	876,192	951,566	1,002,950	1,065,223	1,122,285	11,326,859
1882	950,065	960,036	1,073,745	950,007	946,435	.....	.....	.....	.....	.....	.....	.....	.....
Mobile and Ohio:													
1880	250,116	204,094	168,301	140,091	129,249	121,855	131,621	140,593	184,246	264,714	251,368	287,373	2,373,621
1881	224,347	216,768	230,916	163,551	145,803	136,517	131,009	159,348	209,044	252,921	252,434	262,025	2,406,437
1882	161,433	158,154	152,651	145,272	137,645	.....	.....	.....	.....	.....	.....	.....	.....
Nashville, Chattanooga and St. Louis:													
1880	205,633	191,154	169,457	155,466	158,839	144,155	151,594	169,326	167,473	178,266	182,087	175,996	2,049,448
1881	178,143	190,866	207,710	183,525	104,430	154,549	150,430	168,317	179,979	172,121	152,059	173,127	2,075,256
1882	156,994	159,961	161,005	154,155	137,645	.....	.....	.....	.....	.....	.....	.....	.....
New York and New England:													
1880	164,232	149,907	183,845	179,689	183,701	219,891	205,056	249,885	235,642	215,491	210,856	198 108	2,396,302
1881	189,749	173,614	212,019	216,913	217,185	231,518	246,821	280,524	299,573	261,199	242,412	237,729	2,809,255
1882	213,840	217,261	265,222	263,544	283,244	.....	.....	.....	.....	.....	.....	.....	.....
New York, Lake Erie and Western:													
1879	1,147,173	1,207,391	1,356,780	1,372,755	1,350,574	1,230,419	1,273,533	1,450,223	1,492,497	1,713,697	1,515,835	1,398,224	16,509,127
1880	1,296,381	1,252,218	1,644,958	1,643,151	1,592,544	1,661,812	1,580,976	1,606,874	1,786,417	1,899,910	1,799,338	1,726,788	19,149,361
1881	1,443,437	1,425,765	1,847,261	1,709,057	1,776,891	1,794,982	1,787,081	1,772,895	1,734,200	.....	.....	.....	.....
Northern Central:													
1880	334,494	330,860	415,325	386,130	329,788	419,193	450,298	453,923	464,093	512,918	459,054	494,310	5,050,387
1881	386,157	382,657	452,906	487,273	465,588	487,287	440,811	498,008	429,565	449,664	487,160	476,622	5,443,697
1882	407,368	413,551	430,194	435,129	482,067	.....	.....	.....	.....	.....	.....	.....	.....
Northern Pacific:													
1880	81,390	77,259	119,357	185,700	217,613	253,105	241,277	223,500	330,300	358,456	300,822	220,993	2,629,710
1881	116,508	78,803	162,984	216,210	312,705	368,276	404,180	411,624	490,096	565,485	428,903	434,331	4,044,576
1882	239,800	269,000	384,000	438,000	568,332	.....	.....	.....	.....	.....	.....	.....	.....
Philadelphia and Erie:													
1880	224,307	245,372	327,678	334,947	311,470	331,024	308,699	347,532	322,737	367,082	324,966	281,919	3,727,733
1881	224,303	225,501	285,573	293,323	343,792	350,585	291,669	303,849	276,522	292,392	284,078	282,772	3,454,309
1882	252,727	246,246	265,311	277,851	341,415	.....	.....	.....	.....	.....	.....	.....	.....
St. Louis and San Francisco:													
1880	198,091	195,948	193,146	176,164	167,664	173,607	213,297	259,995	280,873	328,194	290,329	226,063	2,698,371
1881	212,435	178,234	262,050	265,298	283,309	260,254	252,333	286,373	279,064	308,569	284,320	287,914	3,160,245
1882	256,784	244,654	274,959	242,806	253,419	.....	.....	.....	.....	.....	.....	.....	.....
St. Louis, Alton and Terre Haute:													
1880	153,139	163,737	168,994	155,462	147,928	150,207	191,077	216,759	204,295	221,863	188,773	184,503	2,146,741
1881	175,725	166,012	201,137	197,447	172,177	165,896	158,674	189,295	187 299	179,921	162,544	153,852	2,112,801
1882	168,987	149,619	178,145	157,450	162,842	.....	.....	.....	.....	.....	.....	.....	.....
St. Louis, Iron Mountain and Southern:													
1880	555,983	490,195	451,560	408,241	349,053	363,454	432,655	565,869	671,219	688,365	632,052	656,951	6,265,597
1881	570,957	560,791	704,002	548,300	479,075	474,302	533,512	644,386	690,400	719,239	687,280	709 498	7,319,744
1882	516,370	501,127	585,008	581,977	519,120	.....	.....	.....	.....	.....	.....	.....	.....
St. Paul, Minneapolis and Manitoba:													
1880	180,239	137,645	261,798	333,014	281,899	243,407	272,089	232,579	274,188	345,057	300,675	297,641	3,160,231
1881	254,187	159,482	320,962	425,685	382,642	405,322	387,488	414,954	485,736	605,708	508,530	528,262	4,878,960
1882	395,461	418.358	531,004	570,890	858'902	. .....	.....	.....	.....	.....	.....	.....	.....
Texas and Pacific:													
1880	245,785	219,165	215,070	174,177	141,083	153,066	195,711	226,073	266,570	303,666	312,184	301,858	2,754,408
1881	281,176	260,781	319,928	295,066	281,782	264,204	320,466	354,082	337,117	578,668	357,724	381,218	3,921,569
1882	310,785	255,644	332,911	359,543	409,228	.....	.....	.....	.....	.....	.....	.....	.....
Union Pacific Railway:													
1880	1,433,636	1,393,992	1,730,509	1,937,220	2,027,269	1,928,528	1,934,215	1,913.035	2,270,179	2,707,860	2,251.148	1,869,335	23,448,445
1881	1,339,799	1,374,740	1,674,860	1,766,894	2,319,238	2,590,969	2,528,826	2,638,659	2,844,357	3,289 350	2,773,608	2,267,004	27,451,831
1882	1,961,088	1,759,863	2,226,832	2,462,004	2,491,590	.....	.....	.....	.....	.....	.....	.....	.....
Wabash, St. Louis and Pacific:													
1880	776,790	759,451	978,629	892,024	948,773	953,468	1,966,742	1,189,478	1,178,950	1,501,203	1,131,787	1,050,816	12,428,112
1881	811,617	818,922	1,121,592	1,023,482	1,144,660	1,308,993	1,131,751	1,542,838	1,490,027	1,396,300	1,399,555	1,328,278	14,461,579
1882	1,229,965	1,134,768	1,315,776	1,378,194	1,204,864	.....	.....	.....	.....	.....	.....	.....	.....

A Ship Brake.

An apparatus has been invented the introduction of which, it is claimed, will prevent any further appalling disasters caused by the collision of vessels in rivers, channels and at sea. John McAdams, of Boston, has perfected an arrangement which he asserts will bring any vessel, however large and fast steaming to a dead stop in from one to ten feet, and will hold her steady as a rock, with full steam on. This invention he terms a "ship brake," and attached to this novel contrivance is a self-acting appliance which, during dark nights, thick or foggy weather, will render impossible, in his opinion, any collision with floating bodies, such as boats, ships, icebergs, or with submerged bodies in the shape of mudbanks, shoals, rocks or piers. The patentee, who is an experienced machinist and inventor, conceived the idea of insuring the safety of steaming vessels immediately after the Narragansett and Stonington disaster on Long Island Sound, the thrilling details of which caused such a horror at the time of its occurrence. A sister of Mr. McAdams happened to be aboard of one of the ill-fated vessels, and it was while listening to the recounting of her terrible experience that he determined to set his mind to work. The simplicity of nature was his guide, a fish being the subject he chose to work upon. He built "fins" for his ship, but placed them at the rear instead of on the side of the ship's body, and kept on experimenting until assured that the desired object was attained.

The construction of the device is very simple and consists of a pair of iron shutters, or "fins," hinged one on each side of the stern-post of a vessel and shutting close to its sides from the stern post forward. The "fins" are kept tightly closed by a simple apparatus on deck, which is connected wich the pilot-house, and when "let go" the stays connected with the "fins" allow them to open at right angles with the ship, bringing it at once to a standstill and holding it fast as if anchored. The area of the "fins" is in direct ratio with the size of the ship, and the immediate stoppage of the vessel when they are suddenly opened is a certainty. "Fins" much larger than are needed may be fitted to all vessels without looking out of proportion to the size of the ship. For example, a vessel requiring fins with a superficial area of 100 square feet to stop it could be supplied with fins of an area of 500 feet, and they would not look large or disproportionate to the ship. When the fins are released the experiment proves that no jarring or shock is experienced, such as is felt on a railroad when the brakes are applied. The water, being a yielding body, acts as a spring or a cushion. For foggy weather or darkness a self-acting guard is rigged out at the bow of the vessel, and should it meet with any rigid body in the path of the ship, when touched, it at once releases the "fins" and stops the vessel before it can reach the obstruction, without any movement or direction on the part of the pilot or navigating officer. When closed the fins follow the outline of the ship, and being flush with its sides can in no way diminish its speed. The inventor's first experiment was made with a 37½ foot fast steam yacht, to which was attached a pair of "fins" 4 feet long by 2½ feet wide. This power proved to be at least twice as much as was needed to stop the vessel instantly when at full speed. A second trial demonstrated this fact when only one fin was used. The space traveled after the brake was applied was so small that it could not be discerned by persons watching the experiment from the shore.

To ascertain what sized fins would be required to stop a certain steamship of 1,400 tons measurement a raft or float was constructed to carry a pair of fins in position without fixing them to a vessel. The float and fins were towed out by a powerful tugboat, being attached thereto by a new six-inch manila hawser. When the tugboat was going at full speed with full steam on the fins were released and the effect was to snap the hawser like a piece of thread, making a report like a cannon. The fins remained firm. The breaking strain of a six-inch manila hawser is said to be 27,000 pounds. The fins used on this occasion were each 9 feet by 8, or together an area of 144 square feet. When they were tried with the 1,400 ton vessel they proved to be abundantly large, stopping the ship instantly and holding her fast against all her power within a less distance than five feet.

In the opinion of the inventor a collision like that of the Stonington and Narragansett could have been averted if the steamers had been provided with the brakes. The Stonington—the colliding vessel—had several minutes in which to stop. The same number of seconds would have been sufficient with the brake to bring her to a standstill. Another case in point was the loss of the steamship Bohemian which was wrecked on the southern point of Mizzen Head, by collision with rocks. Out of fifty-seven persons on board thirty-five perished, including the officers. One of the survivors stated in evidence that he was on the lookout and gave warning of "breakers ahead" ten minutes before the steamer struck.

Lake Shore and Michigan Southern Railway.

The Lake Shore and Michigan Southern Railway Company,
Grand Central Depot, N. Y., June 27, 1882.

At a meeting of the Board of Directors, held this day, a quarterly dividend of two per cent was declared, payable on the 1st day of August next.

The following is the half-yearly statement, which was presented at the meeting—June, 1882, being partly estimated:—

	1882.	1881.
Gross earnings	$8,026,200	$8,954,926
Operating expenses and taxes.	5,403,791	5,285,164
Percentage of earnings	(67.32)	(59.02)
Net earnings	$2,622,409	$3,669,762
Interest, rentals and dividends on guaranteed stock	$1,500,000	$1,362,000
Balance	$1,122,409	$2,307,762
Equals per share	(2.27)	(4.66)

Quarterly Dividends.

Paid May 1, 2 per cent...	$989,330	
Payable Aug. 1, 2 per cent..	989,330	
		$1,978,660
Deficiency		$856,251

The half-year has been exceptionally peculiar in its conditions. During the first part the tonnage was maintained, but the contest that existed between the trunk lines produced unprecedentedly low rates, and a settlement of the disputed questions was reached just at a time when there occurred a marked diminution in the volume of traffic. This diminution was due to the deficient crops of the previous year, the deficiency having proved to be greater than had been estimated. At the close of the half year the outlook is clear for an active and healthy business and a return to fairly natural conditions. All contracts of every kind and description will expire with the present month The line and its largely increased equipment and other facilities are in the best possible condition, and prepared to do the large amount of business which we have now reason to believe must come to it (even with full allowance for the effect of new lines) at prices which will not be subject to the disregard consequent upon an active railroad contest. In view of these circumstances, and of the fact that during the preceding four years the net result exceeded the amount of dividends by $2,620,000, besides charging against revenue the cost of large additions to the equipment, it has been considered unadvisable, in justice to the stockholders, to make any change in the rate of quarterly dividends.

E. D. Worcester, Treasurer.

Pennsylvania Railroad.

The statement of the business of all the lines of the Pennsylvania Railroad Company east of Pittsburgh and Erie for May, 1882, as compared with the same month in 1881, shows

An increase in gross earnings of	$251,980
An increase in expenses of	173,801
An increase in net earnings of	$78,179

The five months of 1882, as compared with the same period in 1881, show

An increase in gross earnings of	$810,690
An increase in expenses of	1,663,512
A decrease in net earnings of	$852,822

All lines west of Pittsburgh and Erie for the five months of 1882 show a deficiency in meeting all liabilities of $159,543, being a decrease as compared with the same period in 1881 of $1,713,312.

Michigan Central Railroad.

The Michigan Central Railroad Co.,
Grand Central Depot,
New York, June 27, 1882.

At a meeting of the Board of Directors, held this day, the following half-yearly statement was presented—June, 1882, being partly estimated:—

	1882.	1881.
Gross earnings	$4,177,500	$4,340,000
Operating expenses and taxes	3,250,000	3,045,000
Percentage of earnings	(77.80)	(70.16)
Net earnings	$927,500	$1,295,000
Interest and rentals	900,000	853,000
Balance	$27,500	$442,000

In common with others so situated, this line was adversely affected by the extremely low prices caused by the warfare of the trunk lines during a part of the half year, and the marked falling off in the volume of business which occurred almost simultaneously with the settlement of the issues and the restoration of substantially fair rates. Besides the general deficiency in the crops of last year, to which this last effect was due, this line was affected, independently and especially, by a deficiency

in the crops of the State of Michigan relatively greater than that in the other States, and the crops of Michigan are ordinarily carried, to a very great extent, upon this line. The facilities of the line and its equipment have been materially increased and improved and are in complete condition. With very little encouraging indications for the general crop of this year those for that of Michigan are particularly so, and it is believed that the disputes which so affected the result of the present half year have been adjusted upon a basis practically permanent.

C. VANDERBILT, Treasurer.

Steam from Naphtha and Water.

A LOCOMOTIVE has just been completed at one of the locomotive shops in Paterson, N. J., the active power of which is steam generated by the consumption of naphtha and water. Under the boiler are a number of burners, and the inventor claims that after a certain quantity of oil is consumed hydrogen is liberated from the water, and that the expense of running an engine will be about five per cent of what it is at present. As the quantity of oil consumed is comparatively small the necessity of a large tender is done away with, and the inventor claims that if the same principle is applied to ocean steamships a large portion of the space at present used for fuel may be utilized for other purposes. When the engine was first taken from the shop it would not work, but the inventor pointed out the defects and after a number of parts had been changed over and over again the engine was supposed to be perfect. It was then tried on the New York, Lake Erie and Western Railroad at Paterson, but it was found that the smoke from the oil entered the engineer's cab so that he could not see what was going on. This was remedied and several experiments were tried with the completed invention last week. After being run up and down the road several times, it was attached to a train consisting of four loaded freight cars, three passenger cars and two flat cars, the latter being loaded with a locomotive and tender. The large freight engines on the Erie find it difficult to draw such a load up the grade near Paterson, but the new engine accomplished the feat with ease.

The Ridgeway Refrigerating System.

Job Harvey Ridgeway, the inventor of the Ridgeway Refrigerating System, died in this city on the 25th ult., in the 53d year of his age. He was born in Salem, N. J., in 1829. About the year 1850, he removed to Mount Vernon, Virginia, and while there made experiments with a view of storing snow, and its conversion into ice for use in sections of the country where falls of snow occur, but in which cold weather is not of sufficient intensity or duration to make ice fit for preservation. At the close of the war he moved to this city and engaged in the produce commission business. The perishability of the goods in which he dealt led him to the further study of the methods of refrigeration. His first plan was by means of fans, which forced a circulation of air over ice, and then to the substances to be preserved. In this manner, it is said that, in the summer of 1866, a cargo of fresh beef was brought to this city in the steamer Fire Fly from Texas in perfect condition. He afterwards discarded the use of fans and perfected a system which depends upon automatic circulation. By this method the ice is placed in a grated holder at the top of the car or room to be cooled. The drip from the ice is caught and conveyed away in a series of troughs, so that not only the entire cooling power of the ice is utilized, but the moisture of the chamber is condensed, and a very dry and cold atmosphere constantly maintained with the employment of a minimum of ice. This or similar methods are in use in several breweries and other places requiring refrigeration in this city. Professor Baird, of the United States Fish Commission, has, it is stated, adopted the Ridgeway system for the transportation of fish ova, and also several railroad companies for the transportation of meat and perishable articles.—*Philadelphia Ledger.*

The Father of the Anthracite Iron Manufacture.

DAVID THOMAS, who died at his home at Catasauqua, Penna., on the 20th of June, was a man of more than usual importance in the vast field of the iron industries of the country. He was born in Glamorganshire, Wales, Nov. 3, 1794, and was, therefore, nearly 88 years old at his death. His parents were in comparatively humble circumstances, and the young man, with but little education in the schools, started out early to make his own way in life. In 1812, when he was 17 years old, he went to work in the Neath Abbey Iron Works. For five years he worked in the blast furnaces there, showing a wonderful aptitude for the business, and gaining a vast store of experience even in that short space of time. In fact, so well did he occupy his time and talents that in 1817 he went to Yniscedwyn, in the neighboring county of Breconshire, where he was made general superintendent of the blast furnaces, and of the iron and coal mines. Here he remained for twenty years, and while here he commenced experimenting with anthracite coal as a fuel for smelting. In describing his experiences, Mr. Thomas says:

"As early as 1820 I had some anthracite coal put into the furnace with coke, in the proportion of from one part in twenty to one part in twelve. This did very well. But whenever anything went wrong with the furnace the fault was always laid on the coal, and the men became so prejudiced against it that I had to give it up. Still, every year I would try some experiments with it, both in cupolas and blast furnaces. In 1825 I had a small blast furnace built with a 9-foot bosh and a 25-foot stack. After blowing it in with coke, I introduced anthracite coal, increasing the amount of it more and more. But the tuyeres would close up, so that we had to abandon it. In 1830 I enlarged the furnace, giving it an 11-foot bosh and a 45-foot stack. This resulted in a greater amount of success. Still, the whole thing was so unprofitable that it was given up."

In 1828 Mr. Neilson, of Glasgow, invented the hot blast which Mr. Thomas adapted to his anthracite furnaces and made a complete success. In 1839 Mr. Thomas was invited to come to this country, and in June of that year the Crane Iron Company, of Catasauqua, was organized, and, in the following month, the construction of the first of the present six furnaces of the Crane Company was commenced. It was not a large one. It had only an eleven-foot bosh and a forty-seven foot stack. The first run of iron was made on the 4th of July, 1840, with the most encouraging success; and that furnace has run on steadily till the present time, making 180 tons of pig iron per week regularly. In 1841 the company built a second furnace, in 1846 a third, two more in 1849, and a sixth in 1868. In 1854 Mr. Thomas built the first two furnaces of the Thomas Iron Works, at Hokendauqua, about a mile above Catasauqua, on the Lehigh River. In addition to his interest in the Crane and Thomas works, Mr. Thomas was interested in the Carbon Iron Company, which has furnaces at Parryville, in the large rolling-mills at Catasauqua, and other iron enterprises. He was also largely interested in coal mines and ore beds, and both from his position and vast wealth ranked among the very foremost iron manufacturers of the world. His home was in Catasauqua, where he lived in quiet and unostentatious elegance and comfort.

Advantage of Dirt-Burning Locomotives.

THE order recently placed with the Baldwin Locomotive Works by the Philadelphia and Reading Railroad Company calls for one hundred locomotives of the consolidated or dirt-burning pattern. The whole order, deliverable in installments, will be completed by the 1st of January, 1884. A test has been made of these locomotives which has fully satisfied the management of the economy to be obtained by their adoption, and all stationary engines and locomotives built hereafter by them will be of this pattern. The company now has 85 of them in use, and a report just made upon their work shows that for the six months ending May 31st of the current year their use resulted in a direct saving to the company in fuel of $94,500, and that, although the tons hauled one mile during the same period exceed the performance of the corresponding period of last year to the extent of 66,000,000 tons, or about 15 per cent, yet the cost of fuel used by all engines for the six months ending May 31 has been $51,000 less than for the same period last year. The saving in cost of transporting 100 tons one mile during the six months ending May 31, 1882, compared with the same period of 1879, when there were no consolidated engines in service, was 17 5.10 per cent. It is estimated that next year the saving in fuel will be over $150,000, as the fifty consolidated engines now being built at the Baldwin Works, and deliverable by December next, will then be in service.—*Phila. Record.*

THE new New York, Chicago and St. Louis road is called the "nickel plate" because everything about it is so gorgeously fine. It is reported that an employe was discharged lately because he failed to sandpaper one of the ties to suit the fastidious tastes of the contractor.

The Train Telegraph.

C. F. McGlashan, of Santa Barbara, Cal., has invented "a certain method of preventing railroad collisions." Two ordinary telegraph wires are used. Wheels or electric brushes attached to the moving train touch these wires, conveying the electric current from one wire to an instrument in the car, and returning it to the wire, along which it passes until its destination is reached, when it is connected with a ground wire and completes the circuit through the earth. The same current is made to pass through several trains by a simple method of switching at stations. It enables dispatchers to have control of every train at each moment of its progress, and approaching trains are constantly advised of the position of each. So, too, when one train is following another. By this method accidents can be reported the moment they happen, and messages be received and sent for passengers while the train is in motion. It is claimed that trains can be run on better time, as there will be no stopping for orders, no apprehension of colliding with other trains, or telescoping or being telescoped; and no uncertainty as to whether orders have been obeyed or connections properly made. The telegraph stations need not be abandoned; flagmen may be sent out as usual; and the entire present system of running trains may be continued in order to more fully insure the safety of freight and passengers. The telegraph poles must be set close to the track to allow the trucks or wheels conducting the current to run freely. These trucks are light metallic devices that are drawn along the wires by the moving train by rubber hose encasing the connecting wires. March 25th the invention had a trial at San Francisco on the Southern Pacific Railroad, and worked satisfactorily. There the two wires were supported on telegraph poles, each with a horizontal arm projecting toward the track like the old-fashioned gallows tree. From these arms were suspended by means of an iron rod, branching into two hooks at the bottom, like flukes of an anchor, two telegraph wires, running exactly parallel on the same plane with each other and about six inches apart, forming a sort of wire railroad track. On this track ran a little brass truck with eight wheels, two large ones running on the top of each wire and two running under each. The connection between the wheels on the two sides was under the wire, swinging clear of the rods on which the track hangs suspended. The upper wheels passed, two on each side of the rod, and met with no obstruction. From this little truck two wires, inclosed in gutta percha, descended to a car and connected with an instrument in charge of an operator. The metallic wheels of a little truck running on the wires, and being always in contact with them, kept up a perfect connection with the two wires descending to the car, and formed an electric circuit, the same as at any ordinary telegraph station. An instrument was placed in a car that was left standing stationary on the track. The instrument simply had the usual form of connection with the wires as above. That on the car to which the engine was attached had its connection with the little brass truck that ran on the wires. The *Call* says it worked to a charm. At any rate of speed, perfect communication was kept up with the stationary car. The inventor, in answer to an objection that the cost of wires and poles is great, replies that safeguards to life and property are not dear at any price. He adds that his "train telegraph" will give train dispatchers absolute control over train-men, and nothing will be left to their judgment, and trainmen will thus become what railroad men desire, machines to run by order. Each truck is provided with scrapers and knives to keep these wires clear of obstructions, and so fitted are the trucks that they cannot be torn from the wires.—*Sacramento Record-Union.*

"Our Railroad Boys."

GOD bless the boys who ride the plains
With Commerce's highway strong!
Bless all who make and man the trains
That bear her wealth along!

Bless those whose eyes no storm must blind.
Who stand 'side engine's door,
And watch, 'tween precious lives behind
And treach'rous track before!

From pilot's point to sleeper's 'daft,
On all pour blessings fair,
Including captain of the craft
With "punch" for "passenjaire!"

Bless all the girls, whose Sunday nights
Wait "orders down the line!"
And keep their loves as pure and bright
As gold from richest mine!

And bless the wives who bless the homes!
Their hearts with fear oft vexed,
O shield from lightning's cruel tongue,
That tells of murd'rous wrecks.

And bless the babes, with dimpled fists,
Who beat the roadway pane,
'Midst tears for papa's parting kiss—
With cheers for coming train!

Lord bless you all! With low and high
Make brotherhood prevail—
Ne'er let old Friendship's Engine die
Upon the frosty rail!

But keep her fires aglow as bright,
Through all the future years,
As those that burn on hearts to-night
That greet each other here!

When brakeman's last proclaim shall be,
"Next Station's Heaven's Court!"
May all North-western's company
Be loaded for that port!

J. W. S.

The Liverpool Overhead Railway.

THE overhead railway along the line of docks at Liverpool, which has just received the sanction of both houses of Parliament, is an undertaking of a novel and unique character in railway construction, so far as this country is concerned, although in New York a railway on a similar principle has for some time past been in active operation. The Liverpool Docks, as is pretty generally known, stretch along the frontage of the river Mersey, to the length of upwards of seven miles, from North to South, and the intended railway will run parallel with the docks, on a high level above the ground line to the entire length. The line, which will be constructed almost entirely on the Mersey Dock Board's property, will commence near the Northern boundary of the Board's Liverpool estate, in the adjoining borough of Bootle, and terminate at the Herculaneum Dock (which is the extreme South boundary of the Dock Board's system) in the parish of Toxteth Park. There will thus be railway communication between the two densely populated localities at the extreme North and South ends of Liverpool, as well as stations at different points within those portions of the City of Liverpool itself immediately contiguous to the line of docks. The line will be carried chiefly on piers and columns at an elevation of from fifteen to twenty feet above the roadway, and will pass over several thoroughfares leading from the interior of the city to the river. The railway, which is to be constructed as a double line throughout, is to cost £650,000 for construction only, no purchase of land or compensation being required. Passengers only are to be carried, the railway not being in any sense a goods line.—*Herapath's Railway Journal.*

AN enterprising citizen of Massachusetts is now in Russia advocating a general canal process that promises watery-ways to all creation. In Moscow he has told the potentates and people of the benefits of the project of a canal for uniting the Sea of Azov with the Caspian, the plans for which have been worked out by the Russian Lieut.-Col. Blum. Both in its political and commercial aspect the execution of the scheme would be of the first importance to Russia, but chiefly in the latter, since it would open a direct way for Russian commerce from the Black Sea to Khiva and Bokhara, through the Caspian and the Sea of Aral. The Amu Daria flowed into the Sea of Aral ages ago, and even as recently as the sixteenth century it still flowed through that sea; and an arm of that river, which has long been sanded up, found its way into the Caspian. The Caspian is eleven metres lower than the Sea of Aral, while the Sea of Azov is twenty-five metres higher than the Caspian. The water-way would, consequently, fall between the Sea of Azov and the Caspian, but rise again between the Caspian and Sea of Aral.

It was a singular accident that happened to the special train conveying President William H. Vanderbilt, Vice-President Tillinghast, General Superindent Toucey, General Priest and other magnates of the New York Central and Hudson River Railroad Company in their recent trip to Denver, Colorado. All the switches were locked, crossings flagged, the entire train had been most carefully examined, and no preparation conducive to lightning speed had been overlooked. Ten miles east of Rome the train was flying along at the rate of seventy-miles an hour. At this point the passengers heard an unusual clatter and felt an unusual sensation—a series of bumps under the train, mighty uncertain and decidedly unpleasant. The train jumped through Oneida at undiminished speed. Every switch trembled and the train was jolted frightfully. The bumpings underneath the cars continued with alarming suggestiveness. Suddenly the bell cord was pulled. The air brakes were applied. In a quarter of a minute the train was standing still. An examination was made. When the tender was reached the heavy brake beams were resting on the ground, and depending on nothing but the slender safety chains. Had the chain broken—well, the imagination can supply the rest.

The St. Gothard Tunnel.

In his report on the trade of Antwerp during last year, Mr. Consul Grattan points out that the preponderance of that port over the other ports of Northern Europe is likely to be increased rather than diminished by the opening of the Gothard Tunnel, as Belgium will in all probability profit by the transfer to this shorter an cheaper commercial highway of much of the International transit trade at present monopolized by the French lines via the Mount Cenis tunnel. The overland traffic between Northwestern Europe, and especially England, and Italy, India and the Levant, will, of course, be chiefly affected. Mr. Grattan gives the following comparative statement of the distance from the several ports to Milan, via the rival railway routes:—Calais to Milan, via Mont Cenis, 846 miles; Boulogne to Milan, via Mont Cenis, 849 miles; Ostend to Milan, via St. Gothard, 786 miles; Antwerp to Milan, via St. Gothard, 736 miles. From this it will be seen that Antwerp possesses an advantage of 83 miles over Boulogne and 110 miles over Calais. The route under the Simplon, which France proposes as a set-off to the St. Gothard route, would shorten the distance from Calais to Milan to 774 miles, and from Boulogne to Milan to 746 miles, so that Antwerp would still have an advantage of 38 miles over Calais and 10 miles over Boulogne. Another drawback to the traffic through France is the higher rates on the French railways than on the Belgian and Alsatian lines.—*Morning Post London.*

Presence of Mind.

A great diplomatist, who had spent many years in the service of his country with more than common opportunities for forming a correct judgment, once declared, that among all the remarkable men with whom he had been acquainted, he never met above one or two who possessed presence of mind. We shall be the less inclined to question this assertion if we attempt to realize the essential qualities which "presence of mind" implies. Panic, as we have within the last few months had too frequent and fatal reason to discover, is the temporary suspension or paralysis of the reasoning faculties. The word is preferable to the the Greek mythology, and is said by Archbishop Potter to be derived from Pan, who, being once in command of an army, and encompassed by a greatly superior force, ordered his men to raise a general shout in the night, which so surprised the enemy that they immediately fled from their camp, "whence it came that all sudden fears impressed upon men's spirits without any just reason were called by the Greeks and Romans 'Panic terrours.'" Presence of mind, on the other hand, is the maintenance of the judgment under circumstances of panic or emergency which call for immediate action. That the faculty of doing the right thing at the right moment is entirely independent of merely animal or, as it may be called, constitutional courage, is shown by its occasional manifestation by those in whom the latter quality is largely tempered with discretion. Jones, of Nayland, asserts, indeed, that truest courage is always mixed with circumspection; while Addison points out that the courage which grows simply from constitution very often forsakes a man just at the moment when he has occasion for it. Napoleon also refers to this distinction when he says "I have very rarely met with the 2-o'clock-in-the-morning courage. I mean unprepared courage; that which is necessary on an unexpected occasion, and which in spite of the most unforeseen events leaves full freedom of judgment and decision."

As wit pierces the ordinary current of conversation, so does presence of mind, in the form of a flash of ratiocination, illuminate a catastrophe or a panic. The phrases, "having your wits about you" and "not losing your head," which are ordinary vernacular equivalents for presence of mind, show in fact this exceptional quality to be essentially wit in action. There is an old tradition which recounts how, when William the Conqueror landed for the first time on English soil, he slipped and fell on his face. Divining by some swift intuition that his followers might regard this as an ill omen, he rose with each hand full of earth, and exclaimed, "Thus do I take possession of England! I grasp it with both hands." To this readiness the quality of wit can hardly be denied; but it was practical wit as well, and is therefore properly regarded as one of the typical instances of presence of mind.—*London Globe.*

The largest church in the world is the basilica of St. Peter's in Rome. Its dimensions are as follows: Length of interior, 613 feet; breadth of the nave and aisles, 197¾ feet; height of the nave, 152 feet; length of the transepts, 446½ feet; diameter of the dome, including the walls, 195 feet, or nearly two feet more than that of the Pantheon; diameter of the interior, 139 feet; height from the pavement to the base of the lantern, 405 feet; to the summit of the cross outside, 448 feet. The whole of St. Paul's Cathedral in London might stand within the shell of St. Peter's with room to spare. The towers of the Cologne Cathedral, when completed will be the highest church towers in the world, 511 feet, which is the length of the Cathedral. The breadth of this edifice is 231 feet.

HANNIBAL AND ST. JOSEPH RAILROAD COMPANY, 78 Broadway,
NEW YORK, June 27, 1882.

The directors of this company have this day declared a dividend of THREE AND ONE-HALF per cent upon its preferred stock, payable TUESDAY, August 1, 1882, at this office. The transfer books of the preferred stock will be closed at 3 o'clock P. M. on Friday, June, 30, 1882, and reopen Friday, August 4, 1882.

JOHN A. HILTON, Secretary.

OFFICE OF THE
CENTRAL PACIFIC RAILROAD COMPANY,
23 BROAD STREET, NEW YORK, June 25, 1882.

THE coupons of the first mortgage bonds of the Central Pacific Railroad Company, the Western Pacific Railroad Company and the California and Oregon Railway Company, due July 1, 1882, will be paid at the office of Fisk & Hatch, No. 5 Nassau street.

Holders presenting ten or more coupons will leave them for examination, in which case a receipt will be given and payment made on the following day.

E. H. MILLER, Jr., Secretary.

THE LAKE SHORE AND MICHIGAN SOUTHERN RAILWAY CO.
TREASURER'S OFFICE, GRAND CENTRAL DEPOT,
NEW YORK, June 27, 1882.

The Board of Directors of this company have this day declared a QUARTERLY DIVIDEND of TWO PER CENT upon its capital stock, payable on Tuesday, the first day of August next, at this office.

The transfer-books will be closed at 3 o'clock P. M. on MONDAY the THIRD DAY of JULY next, and will be re-opened on the morning of Friday, the fourth day of August next.

E. L. WORCESTER, Treasurer.

BUSINESS CARDS.

ALLEN PAPER CAR WHEEL CO., 240 BROADWAY, New York.

BROWN BROTHERS & CO., BANKERS AND BROKers, 59 Wall Street, N. Y.

BABCOCK & WILCOX CO., WATER TUBE STEAM Boilers, 30 Cortlandt Street, N. Y.

BROWN MANUFACTURING CO., ABSORBENT Wiper Cloths, Providence, R. I.

BEARDSLEY, D. N. & CO., MANUFACTURERS OF Superior Oak and Chestnut Lumber, and Railroad Ties, 9 Murray Street, N. Y.

CHESTER STEEL CASTING CO., MANUFACTURE Steel Castings, Cross-heads, Rocker-arms, Pistonheads, etc., for Locomotives, 407 Library St., Phila., Pa.

DAVIDS, JOHN B. & CO., WRITING INKS, 184 William Street, N. Y.

DAVIS, JOHN H. & CO., BANKERS AND BROKERS, 17 Wall Street, N, Y.

DODGE & SINCLAIR, MANUFACTURERS OF RUBber and Leather Belting, 21 Park Row, N. Y.

EVANS, GEO. A. IRON AND STEEL RAILS, 74 WALL Street, N. Y.

EAGLE TUBE CO., BOILER TUBES, 614 to 626 WEST Twenty-fourth Street, N. Y.

EAMES VACUUM BRAKE CO., RAILWAY TRAIN Brakes, 15 Gold Street, N. Y.

FAIRBANKS & CO., STANDARD SCALES, RAILROAD and Warehouse Trucks, and Copying-presses, 311 Broadway N. Y.

GORDON & DUGGAN, RAILWAY SWITCHES, 28 State Street, Boston, Mass.

GUEST, WM. A. & CO., IRON AND STEEL RAILS, 41 and 43 Pine Street, N. Y.

GEORGE, EVAN P. Jr., COUNSELLOR AT LAW AND Solicitor of Patents, 4 and 6 Warren Street, N. Y.

HARLAN & HOLLINGSWORTH CO., MANUFACTURE Passenger Cars, Wilmington, Del.

HAYWARD, S. F. GENERAL AGENT BABCOCK Fire Extinguisher, 407 Broadway, N. Y.

IVISON, BLAKEMAN, TAYLOR & CO., STEEL PENS 753 and 755 Broadway, N. Y.

JOHN STEPHENSON CO., TRAM-CAR BUILDERS, New York.

KAOLATYPE ENGRAVING CO., 104 FULTON ST., New York.

KNOX & SHAIN, MANUFACTURERS OF ENGINEERing and Telegraphic Instruments, 716 Chestnut Street, Philadelphia, Pa.

MOLLER & SCHUMANN, MANUFACTURERS OF Coach and Car Varnishes, Brooklyn, N. Y.

NATIONAL TUBE WORKS CO., MANUFACTURE Wrought Iron Pipes and Tubes, 104 and 106 John Street, N. Y.

PARDEE CAR WORKS, PARDEE, SNYDER & CO., (Limited) Watsontown, Pa.

PERKINS & CHOATE, AGENTS FOR STEEL OR IRON Rails, 23 Nassau Street, N. Y.

RIEHLE BROS., STANDARD SCALES AND TESTING Machines, 115 Liberty Street, N. Y.

SHUGG BROS., DESIGNERS AND ENGRAVERS ON Wood and Photo-Engravers, 18 Cortlandt St., N. Y.

SWIFTS IRON AND STEEL WORKS, MANUFACturers of all Weights of Standard and Narrow Gauge Rails, 26 West Third St., Cincinnati, Ohio.

THE PHOTO-ELECTROTYPE ENGRAVING CO., Engravings for Books, Newspapers, Catalogues, etc. 20 Cliff Street, N. Y.

UNITED STATES MINERAL WOOL COMPANY, 16 Cortlandt Street, N. Y.

VANDERBILT & HOPKINS, RAILROAD TIES, 120 Liberty Street, N. Y.

VALENTINE & CO., MANUFACTURERS OF FINE Coach and Car Varnishes, 323 Pearl Street, N. Y.

WOOD, GEO. R., IRON AND RAILWAY BUSINESS, 19 William Street, N. Y.

WHARTON RAILROAD SWITCH CO., SAFETY RAILroad Switches, 28 South Third Street, Philadelphia, Pa.

BETHLEHEM IRON COMPANY,

IRON AND STEEL RAILS.

GEO. A. EVANS, - 74 Wall Street, N. Y.

RAILROAD



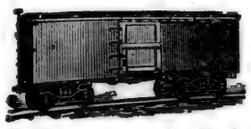
TRACK SCALES.

RIEHLÉ BROS. STANDARD SCALES AND TESTING MACHINES

PHILADELPHIA: 50 South Fourth Street.
NEW YORK: 115 Liberty Street.
PITTSBURG: Library St., cor 7th Ave.
ST. LOUIS: 609 North Third Street.
NEW ORLEANS: 142 Gravier Street.

PARDEE CAR WORKS,

WATSONTOWN, PA.



PARDEE, SNYDER & Co., LIMITED,

Proprietors.



Manufacturers of Mail, Baggage, Box, Gondola, Flat, Gravel, Ore, Coal, Mine, and Hand Cars; Kelley's Patent Turn-Tables, and Centers for Wooden Turn-Tables; Car Castings, Railroad Forgings, Rolling-Mill Castings, Bridge Bolts, Castings.

We have, in connection with our Car Works, a Foundry and Machine-Shop, and are prepared to do a general Machine Business.

Chairman: ARIO PARDEE. *Secretary:* N. LEISER.
Treasurer and General Manager: H. F. SNYDER.

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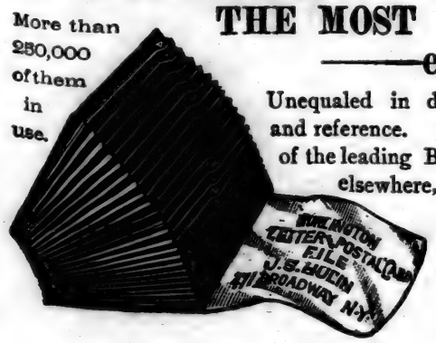
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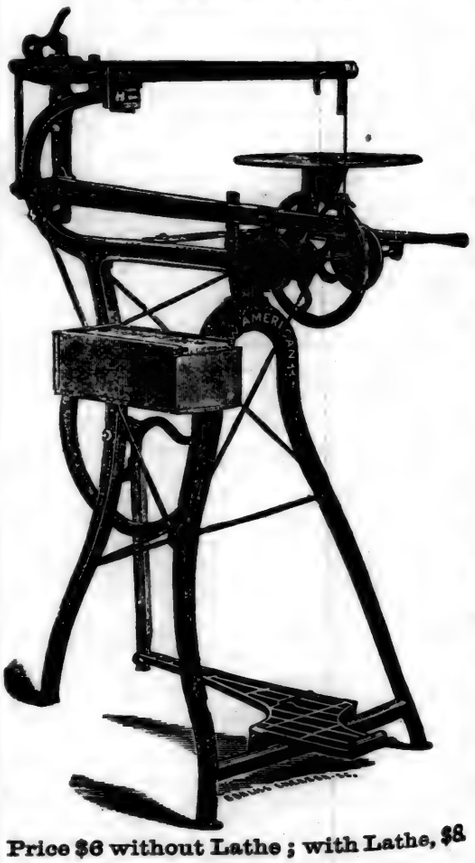
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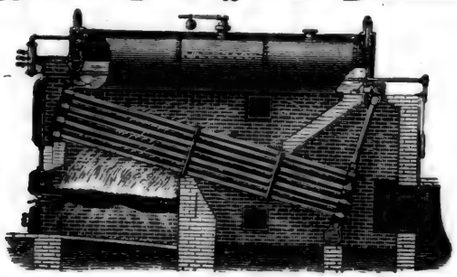
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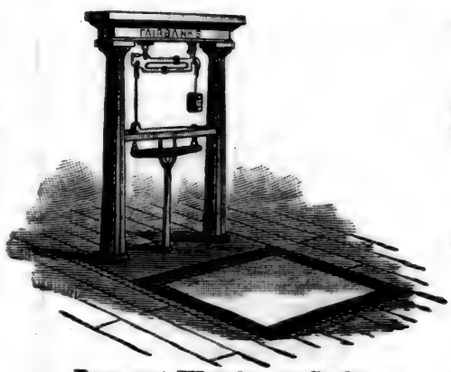
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AMERICAN Railroad Journal.

ESTABLISHED 1831.

Steam Navigation, Commerce, Finance, Banking, Machinery, Mining, Manufactures.

SECOND QUARTO SERIES.—VOL. XXXVIII., No. 26.] NEW YORK, JULY 8, 1882. [WHOLE No. 2,411.—VOL. LV.

INCORPORATION.

THE Toledo Belt Railroad Company has been incorporated with a capital of $300,000.

THE Titusville and Sheffield (Penn.) Railroad Company has been chartered, with a capital of $100,000.

ARTICLES of association of the Ashland Railroad Company have been filed with the Secretary of State of Wisconsin, the capital stock being $100,000, divided into 1,000 shares of $100 each. The road contemplated is to be constructed from a point of junction with the Chicago, St. Paul, Minneapolis and Omaha Railway, in the county of Bayfield, and will extend to and beyond the village of Ashland, in the county of Ashland. The length of the road will be about ten miles. The directors for the first year are: E. W. Winter, of St. Paul; W. H. Phipps, J. C. Spooner, C. W. Porter and D. B. Taylor, of Hudson.

CHARTERS were issued at the State Department, Harrisburg, Penn., on the 30th ult., to the State Line, Brockland and Pine Creek Railroad Company, with a capital stock of $120,000, which proposes the construction of a road in Potter county, twenty miles long. The Pike Mills and Kettle Creek Railroad Company, with a capital stock of $250,000, which proposes the construction of a narrow gauge road from Pike Mills, Potter county, to Westport Clinton, a distance of forty miles. The Tinnemahony and Pine Creek Railroad Company, which proposes the construction of a narrow gauge road, twenty-seven miles long, in Potter county, with a capital stock of $200,000. The Garfield and Cherry Grove Railroad Company, which proposes the construction of a narrow gauge road between Sheffield and Iona, Warren county, to Garfield, a distance of fifteen miles, with a capital stock of $200,000.

CONSOLIDATION.

THE Pittsburgh, Cleveland and Toledo Railroad Company of Ohio, and the Pittsburgh, Cleveland and Toledo Railroad Company of Pennsylvania, have been consolidated under the name of the "Toledo, Cleveland and Pittsburgh Railroad Company." The capital stock is $3,000,000. The road extends from Akron, Ohio, to New Castle Junction, Penn. This is the part of the Pittsburgh, Youngstown and Chicago Railroad an interest in which was recently purchased from Andrews, McCreery and their associates. The directors of the new road are: C. H. Andrews, Abram Garrison, James Callery, J. W. Chalfant and Wm. S. Bissell, of Pittsburgh; W. C. Andrews, Wm. Garrison, Commodore C. K. Garrison and Solon Humphries, of New York; Lucius C. Cochran, W. J. Hitchcock, Henry G. Garlick and Mason Evans, of Youngstown. Chauncey H. Andrews, of Pittsburgh, was elected president; Mason Evans, of Youngstown, secretary; and Henry G. Garlick, of Youngstown, treasurer. The principal offices will be at Youngstown, Ohio.

ORGANIZATION.

AT the recent annual meeting of the stockholders of the Salt Lake and Western Railway Company, in Salt Lake City, the following-named persons were elected directors: Sidney Dillon, New York; Fred. L. Ames, Boston; S. H. H. Clark, Omaha; W. B. Doddrige, Evanston; W. W. Riter, A. F. Doremus and LeGrande Young, Salt Lake City.

THE officers of the Burlington and Ohio Railroad Company, recently elected, are: W. C. Shirley, president; George P. Merrill, first vice-president and general manager; James Walker, second vice-president; M. McClure, treasurer; L. C. Glessner, secretary; W. F. Garts, chief engineer; R. Towner, acting audi tor and cashier; Robert Shirley, solicitor.

THE officers of the Central Railroad Company of New Jersey, elected on the 29th ult., are: President, H. S. Little, vice-president, John Kean; treasurer, John W. Watson; secretary, Samuel Knox.

J. B. MOORES has been unanimously elected president of the Nantasket Beach Railroad Company.

PERSONAL.

E. P. WHITE has been elected president of the New York Iron and Metal Exchange.

HENRY FINK, vice-president and general manager of the Norforlk and Western Railroad, has been made general manager of the Shenandoah Valley Railroad.

THE old Board of Directors of the Bethlehem Iron Company has been re-elected, with the exception of Joseph F. Levering, who retired. His place was filled by the election of William W. Thurston.

THE degree of LL. D. has been conferred on President Arthur by Union College; on Mr. Charles O'Connor and Chief-Justice Marcus Morton by Harvard; on Governor Hoyt, of Pennsylvania, by Lafayette College; on Chancellor Runyon by Yale, and on Mr. A. L. Spofford, the Librarian of Congress, by Amherst.

W. F. SMITH has resigned his position as general passenger agent of the Central Vermont Company, and has been appointed to the position of general eastern psssenger agent, to take effect July 1st. He will have charge, under the general passenger agent, of the agencies of this company in New York, New England and Canada.

CONSTRUCTION.

THE Juniata Division of the Pennsylvania Canal is being resurveyed.

THE Council Bluffs extension of the Chicago, Milwaukee & St. Paul Railway has been completed.

THE Salt Lake and Western Railroad is nearly completed to Tintic, its destination, and is in good condition and satisfactory to the stockholders.

THE construction of the Canada Atlantic Railway is progressing satisfactorily. The road is now completed to Eastman's Springs, eight miles from Ottawa.

A CALIFORNIA company has begun work on a railway from Ritalhuien to Champerica, which will tap the extensive haciendas on the Costa Grande and Costa Cucu.

THE grading and track-laying of the New York, Chicago and St. Louis Railroad is progressing rapidly. The track is laid within a mile of Grand Crossing, the proposed terminus of th road.

THE Count De Lesseps has already begun work on the canal across the Isthmus of Corinth. It is only four miles long, but will save many days' sailing between the Black Sea and Ægean seaports.

THE track-layers on the St. Louis, Des Moines and Northern Railroad reached Boone, Ia., on the 26th of June, which is the present terminus of the road. Regular trains commenced running the 1st of July between Boone and Des Moines.

WORK was commenced on the 26th of June on the branch road designed to connect the Memphis and Little Rock Railroad at Forest City with the St. Louis, Iron Mountain and Southern at Knobel Station. The contract calls for completion by October 1.

A THOUSAND laborers will shortly, it is said, be added to the one thousand two hundred now employed on the railway works in Newfoundland.

THE formal transfer of the Chicago, Texas and Mexican Railroad to the officers of the Gulf, Colorado and Santa Fe Railroad Company was made at Dallas on the 30th ult.

ONE hundred and fifty men are at work on the Rochester and Ontario Belt Railway, which will afford facilities with the port of Geneseo for the New York Central and all its branches, the Genesee Valley, the New York, Lake Erie and Western, and the New York, West Shore and Buffalo railroads.

AT a recent meeting of the shareholders of the South Shore Railway and Tunnel Company it was resolved that the president be authorized to go on with the construction of the road, and also to enter into negotiations with a view to disposing of the road to any parties desirous of purchasing.

THE Grand Trunk, Georgian Bay and Lake Erie (late Stratford and Huron) Railway has been completed to Georgian Bay. It is laid throughout with steel rails and is in first-class order. It is leased to the Grand Trunk Railway Company of Canada.

THE chief engineer of the Burlington and Ohio Railroad Company has commenced locating the line of the road from Gillespie to Carlinville, Ill. A full corps of surveyors is in the field, and it is said that the work will be pushed to early completion. The first section of ten and a half miles from Carlinville to Gillespie will be contracted for at once.

ON the 1st inst. the trains of the New York, Pennsylvania and Ohio Railroad, which for some months have been entering Cincinnati over the track of the Pittsburgh, Cincinnati and St. Louis Railway from Springfield, resumed the old arrangement, whereby they enter the city over the track of the Cincinnati, Hamilton and Dayton Railroad.

IT is announced that 180 miles, double track, of the New York, Lackawanna and Western Railroad have been completed, and that the road will be opened to the International Bridge the latter part of this month, and through to Buffalo a little later on. The $9,000,000 of bonds issued thus far have all been placed. The remainder will be issued only upon the completion of the road.

THE main line of the St. Louis and San Francisco Railroad was opened for business to Claremore, Indian Territory, on the 2d inst. Claremore is 38 miles west from Vinita, on the Atlantic and Pacific division, just constructed. Twenty-six miles more of this road will be opened in about thirty days. This will take the road to the Arkansas River, in the Choctaw nation, 64 miles into the Indian Territory west of Vinita.

THE last rail of the Grand Rapids, Indiana and Mackinaw Railroad has been laid at Mackinaw City, Mich., opening up another route to the straits. The new road is virtually an extension of the Grand Rapids and Indiana, and will be operated by that company as a continuous line from Richmond, Ind., a distance of 455 miles. Trains run through, making close connection with Detroit, Mackinaw and Marquette for all points on the upper peninsula.

"I SAY, sir, do you want to hire a boy, sir?" said a bright-looking little fellow, as he stepped into a business office. "What can you do, sir?" was the respondent inquiry. "I can tell the truth, sir," was the bright reply." "Don't want you, my little man; my business can't stand truth-telling." "Better take the boy," said a bystander. "I know him. When he says he can tell the truth he lies like blazes. He can't do it, nor his father before him couldn't either." Boy engaged on modern business principles.

Imports of Dry Goods at New York.

THE Imports of Foreign Dry Goods at New York for the month of June, were :—

ENTERED FOR CONSUMPTION.

	1880.	1881.	1882.
Manufs. of wool....	$986,413	$838,869	$1,265,554
Manufs. of cotton...	1,315,859	1,231,306	1,377,704
Manufs. of silk.....	1,747,076	1,855,769	2,454,313
Manufs. flax.....	602,738	759,198	759,202
Miscell. dry goods...	322,731	324,390	464,527
Total ent. for consumption.....	$5,974,817	$5,009,460	$6,321,300

WITHDRAWN FROM WAREHOUSE.

	1880.	1881.	1882.
Manufs. of wool.....	$353,944	$372,990	$408,807
Manufs. of cotton...	291,208	224,513	183,612
Manufs. of silk.....	358,869	261,322	324,795
Manufs. of flax.....	254,970	253,655	221,665
Miscell. dry goods..	40,478	105,763	84,223
Total withdr'n from warehouse.....	$1,299,469	$1,218,243	$1,223,078
Add ent. for con....	4,974,817	5,009,460	6,321,300
Total thrown on the market.....	$6,274,286	$6,227,703	$7,544,378

ENTERED FOR WAREHOUSING.

	1880.	1881.	1882.
Manufs. of wool....	$1,273,689	$448,311	$645,635
Manufs. of cotton..	696,198	259,393	279,664
Manufs. of silk.....	677,908	264,426	598,765
Manufs. of flax....	409,463	242,645	307,404
Mis. dry goods.....	126,425	87,150	114,434
Total ent. for warehouse	$2,183,683	$1,301,925	$1,945,902
Add entered for consumption	4,974,817	5,009,460	6,321,300
Total ent. at port....	$8,158,500	$6,311,385	$8,267,202

The Imports of Foreign Dry Goods at New York for six months from January 1, were:—

ENTERED FOR CONSUMPTION.

	1880.	1881.	1882.
Manufs. of wool...	$9,527,239	$7,428,766	$10,346,803
Manufs. of cotton	12,845,720	11,525,647	13,581,059
Manufs. of silk....	14,968,728	12,783,168	18,090,335
Manufs of flax....	8,180,222	6,078,881	7,403,317
Mis. dry goods....	4,608,190	4,139,176	4,790,478
Total entered for consumption ...	$50,130,099	$41,955,638	$54,271,992

WITHDRAWN FROM WAREHOUSE.

	1880.	1881.	1882.
Manufs. of wool..	$2,755,688	$3,891,995	$3,188,186
Manufs. of cotton.	1,782,810	2,786,321	2,056,534
Manufs. of silk....	2,512,633	2,775,772	2,813,499
Manufs. of flax...	2,101,471	2,914,933	2,082,642
Mis. dry goods....	1,026,833	1,357,888	1,368,352
Total withdrawn from warehouse.	$10,179,435	$13,726,819	$11,509,213
Add entered for consumption ...	50,130,099	41,955,638	54,271,992
Total thrown on the market.....	$60,309,534	$55,682,457	$65,781,205

ENTERED FOR WAREHOUSING.

	1880.	1881.	1882.
Manufs. of wool...	$4,439,976	$3,191,963	$3,667,513
Manufs. of cotton.	2,325,796	2,299,977	2,211,383
Manufs. of silk....	2,878,632	2,397,072	2,965,918
Manufs. of flax....	3,410,401	2,152,462	2,024,994
Mis. dry goods....	1,165,477	1,420,220	1,261,129
Total entered for warehouse	$14,220,382	$11,461,616	$12,130,937
Add entered for consumption ...	50,130,099	41,955,638	54,271,992
Total ent. at port.	$64,350,481	$53,417,254	$66,402,932

The Imports of Foreign Dry Goods at New York for the fiscal year ending with June were:

	1880.	1881.	1882.
Mfs. of wool.....	$18,399,012	$16,288,954	$20,797,051
Mfs. of cotton.....	20,466,360	20,183,039	23,349,035
Mfs. of silk.....	28,225,715	26,682,865	34,849,565
Mfs. of flax.....	14,068,893	10,772,640	13,722,195
Mis. dry goods.....	8,049,111	8,073,042	9,008,499
Total entered for consumption.....	$89,209,091	$81,950,340	$101,636,345

WITHDRAWN FROM WAREHOUSE FOR CONSUMPTION.

	1880.	1881.	1882.
Mfs. of wool.....	$6,064,940	$9,084,842	$7,429,705
Mfs. of cotton.....	3,312,602	4,985,447	3,631,462
Mfs. of silk..	4,452,761	6,224,655	5,326,384
Mfs. of flax.....	3,827,781	5,263,178	4,034,615
Mis. dry goods.....	1,707,587	2,452,070	2,402,170
Total withdra'n from warehouse.s.,....	$19,365,671	$28,910,192	$22,884,336
Add entered for consumption....:.....	89,209,091	81,950,340	101,636,345
Total thrown on the market.....	$108,574,762	$109,960,532	$124,520,681

ENTERED FOR WAREHOUSING.

	1880.	1881.	1882.
Mfs. of wool.....	$7,729,114	$8,591,032	$7,223,201
Mfs. of cotton.....	3,935,520	4,682,540	3,705,604
Mfs. of silk.....	5,009,566	5,992,564	5,043,712
Mfs. of flax.....	5,498,876	4,692,049	3,930,156
Mis. dry goods.....	1,955,740	3,002,469	2,377,677
Total ent. for warehouse.....	$24,128,816	$26,960,653	$22,886,350
Add entered for consumption.....	89,209,091	81,950,340	101,636,345
Total entered at port.	$113,337,907	$108,910,993	$124,522,695

The Imports of Foreign Dry Goods at New York monthly for the last four fiscal years ending with June, have been as follows:—

	1878-'79.	1879-'80.	1880-'81.	1881-'82.
July.....	$5,347,370	$7,985,348	$11,070,161	$8,972,182
August...	10,047,274	11,817,521	15,267,941	14,032,574
Sept.....	6,647,449	9,781,789	10,112,285	10,818,275
Oct.....	5,326,421	6,876,726	7,129,985	8,458,797
Nov.....	5,214,452	6,506,680	5,577,627	8,024,488
Dec.....	4,460,708	6,019,362	6,335,739	7,223,450
Jan.....	5,987,719	10,714,881	10,128,486	12,320,440
Feb.....	12,589,363	15,691,575	13,085,298	16,604,077
March...	8,613,592	12,238,350	10,979,035	11,597,078
April....	6,037,243	10,076,286	7,796,972	9,974,427
May....	4,487,202	7,470,789	5,206,078	7,734,005
June.....	4,846,055	8,158,500	6,111,385	8,207,202
Total.....	79,606,048	113,337,907	108,910,993	124,522,695

The comparative value of each class of Dry Goods imported at New York for the fiscal year ending with June were :—

	1880.	1881,	1882.
Mfs. of wool.....	$26,128,126	$24,829,986	$27,930,251
Mfs. of cotton.....	24,401,880	24,865,579	24,054,639
Mfs. of silk.....	33,235,281	32,675,229	40,493,277
Mfs. of flax.....	19,507,769	15,464,688	17,058,351
Mis. dry goods.....	10,004,851	11,075,511	11,380,176
Total imports.....	$113,337,907	$108,910,593	$124,522,695

The Imports of Foreign Dry Goods at New York for each year since 1850, have been as follows :—

1850-1	$64,613,747
1851-2	57,221,002
1852-3	79,192,513
1853-4	92,389,627
1854-5	62,918,443
1855-6	85,898,090
1856-7	92,669,088
1857-8	67,317,736
1858-9	93,549,083
1859-60	107,843,205
1860-1	83,319,345
1861-2	38,155,720
1862-3	61,963,037
1863-4	83,234,900
1864-5	49,853,939
1865-6	137,056,854
1866-7	108,407,276
1867-8	77,254,182
1868-9	92,499,840
1869-70	96,414,276
1870-1	126,123,210
1871-2	139,903,902
1872-3	125,080,671
1873-4	106,700,044
1874-5	106,501,248
1875-6	88,058,966
1876-7	77,330,026
1877-8	74,717,031
1878-9	79,606,048
1879-80	113,337,908
1880-1	108,910,993
1881-2..	124,522,695

These figures represent only the foreign cost of the goods in gold, freight and duty not being included.

Rights of Patentees.

Suppose a workman in the employ of a large establishment invents a valuable improvement in the machinery or processes—does the patent for it belong to him or to his employers? They say that they were paying him for his time and are entitled to whatever he accomplishes. He argues that inventing is a matter quite outside the duties for which he was hired. For example, a plow manufacturing company in Indiana employed a superintendent of their business, and he, during his engagement, took out a patent for improvements he made in the plows they were selling. They sued him, claiming that he should transfer the patent to them, for they said that they were led to engage him by his assurances that he had large experience in making and selling plows and devising improvements, and that he would devote his time and services to manufacturing and perfecting their plows: also that the improvement he had patented was made partly by aid of suggestions from other employes and with materials belonging to the company. The judge said that these facts were not enough to make out their case. Persons are not deprived of the right to the inventions they make while in the service of others, unless they have been hired and paid to exercise their inventive faculties for their employers. A contract for the time, labor, and skill of an employe in manufacturing and selling does not give the employer the right to an improvement which the employe invents. If, in this case, the superintendent was materially aided by suggestions from other persons he was not sole inventor, and perhaps his coadjutors were entitled to share in the patent, but the fact would not give the employers a right to it.

The Telegraph in China.

We are glad to observe that the telegraph is making rapid way in China. The Shanghai-Tientsin line has been working now for a few months, and a line is being constructed in the South between Canton and Hongkong—a distance of about 100 miles. The first section is to connect Canton, which is practically the commercial capital of China, with the frontier of British Kowloon, situated opposite the town of Victoria. After some consideration it has been decided that a land-line is preferable to a submarine cable, as it will be more economical, and the latter also would seriously interfere with the enormous junk traffic and fishing operations in the estuary of the Canton river. It is interesting to remark that this line is purely a private undertaking of a company of Chinese merchants in Canton, who, doubtless, want to be on a level with their brethren in the North in rapidity of communication with the markets of the world. The line, as above stated, will for the present terminate on the confines of British territory. It seems hardly credible—but the fact is stated in the Hongkong journals—that opposition is made by the British authorities to the further construction of the line, and especially to the cable across the harbor necessary to connect Kowloon with Hongkong, unless it is constructed by a British company. This illiberal demand seems also illogical and unfair, because one of the telegraphic cables between Hongkong and the outer world belongs to a foreign company—the Danish Great Northern Telegraph Company.—*Nature.*

Boxed Electricity.

The Faure discovery by which electrical energy may be stored in great quantities and used at will has been practically applied to lighting the steamship Labrador, lately arrived in New York. The *Herald* says:—

There were 145 accumulators, containing 30,000 amperes of two volts tension. They had been charged with electricity by means of a dynamo machine on the day previous to the departure of the Labrador, and carted to the steamer on the day the vessel left Havre—April 30. Fifty of the batteries were placed in the engine-room and were used in supplying the light aboard the steamer. Upon the arrival of of the steamer yesterday it was found that less than 500 amperes had been used, leaving the balance in good condition for future purposes. There were eight lamps kept continually lighted, six of "eight-candle" power, one of six and one of fifty-candle light. The lamps used were those of the Edison, Maxim and Swan lamps, the first named emitting the brightest light and seemingly the most preferable. The steady, soft, white light of the Edison, incandescent carbon threads in the little sealed glass lamps—these tiny horseshoes burning not consumed—were approved and greatly admired by all aboard the vessel. To read by them was a pleasure, and to write by them as nearly delightful as writing aboard ship can be. The smallest newspaper print could be easily read, and the beauty of the light was its unvarying steadiness and brilliancy. None gave a less brilliant light than the other, and any single one could be put out without the others being affected. The experiment proved to all on board the possibility of satisfactorily lighting in every compartment a steamship by electricity.

An Underground City.

For the past six months the work of digging the canal to connect lakes Eustis and Dora, in order to open up the more southern lakes of the "Great Lake Region of Florida," has been prosecuted. At the outlet of Lake Dora the sandbar has already been cut to the depth of nearly or quite three feet on the previous digging, and was dug about two feet deeper last week. At a distance of over four feet below the old level of Lake Dora a mound was discovered. The first excavation revealed the existence of a clearly defined wall lying in a line tending toward the southwest from where it was first struck. The wall was composed of a dark brown sandstone, very much crumbled in places, but more distinct, more clearly defined and the stone more solid as the digging in, creased in depth. The wall was evidently the eastern side of an ancient home or fortification, as the slope of the outer wall was to the west.

About eight feet from the slope of the eastern wall a mound of sand was struck, embeded in the muck formation above and around it. This sand mound was dug into only a few inches, as the depth of the water demanded but a slightly increased depth of the channel at that point, but enough was discovered to warrant the belief that here on the northwestern shore of Lake Dora is submerged a city or town or fortification older by centuries than anything yet discovered in this portion of Florida. Small, curiously shaped blocks of sandstone, some of them showing traces of fire, pieces of pottery and utensils made of mottled flint, were thrown out by the men while working waist-deep in water. A spear-head of mottled flint, five and a half inches long by one and a quarter inches wide, nicely finished, was taken from the top of the sand mound and about four feet below the water level of the lake.

The sleeping-coaches "Montreal," "Ottawa," and "Toronto," of the Canadian Pacific Railway Company, were manufactured by Barney Smith & Co., of Dayton, Ohio, and are very elegant. They are heated by Baker's patent heating apparatus, and have the famed Armstrong lamps. Ventilation is a studied feature in connection with the coaches, and, taken altogether, it is asserted that the Pullman Company has nothing to compare with them in ease and luxuriance.

The new cars which have been under construction for some time at the Allston shops of the Boston and Albany Railroad Company for their fast trains to and from New York, have been completed and were run out to South Framingham and back on the 23d ult., for a trial trip. It was the intention to have these cars a little ahead of anything the Allston works have yet turned out, and the intention appears to have been fully carried out.

A. L. Blackman was at Ottawa, Ontario, on the 26th ult., in conference with Sir Charles Tupper, Minister of Railways, in reference to a scheme by which it is proposed to lessen the distance of ocean travel from Europe to America by at least two days. The proposition is to build a line of railway to Holyhead, Wales, crossing the Menai Strait, to be connected by a specially constructed steamer with an air line railroad across Ireland, and from this terminus to St. Johns, Newfoundland, a distance of 1,640 miles; from St. Johns to Cape Ray, a distance of about 320 miles; for the line to be thus constructed the Newfoundland Government having granted a land subsidy of 3,000 acres per mile and the exclusive right for forty years; from Cape Ray, Newfoundland, to Cape North, Cape Breton, a distance of fifty-six miles, which will be traversed by a large steamer, the harborage for which will be constructed artificially at the most advantageous point in regard to the drift-ice of the Gulf of St. Lawrence. From Cape North it is proposed to construct a line of railway to traverse the entire length of Cape Breton Island to the Strait of Canso, a distance of about 120 miles, the subsidy for the construction of which is $2,000 and $3,200 per mile. From Canso the eastern extension of the Inter-Colonial Railway is to be used to New Glasgow, whence to Oxford, Nova Scotia, a railway 80 miles in length is now constructing.

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LABOR COMBINATIONS TO OBSTRUCT TRANSPORTATION.

FOR two weeks past the men employed to load and unload freight sent into and out of this city by the railroads, some thousand or fifteen hundred in number, have been on a "strike," as it is called; that is to say, they have quit work in a body and in concert. The pretext given out is a demand for higher wages, in consequence of the higher prices of food and other commodities. They have been paid seventeen cents an hour, and now demand twenty, or two dollars for a day of ten hours. Being to a certain extent skilled laborers—for it requires a certain strength and expertness which only long practice can give—they have been able to elicit considerable sympathy in their behalf, and to cause great inconvenience to the public; indeed far more to innocent people than to their immediate employers. They have, moreover, been very much encouraged by the chronicle of their doings in the daily press, as if it were a legitimate movement. The railroad companies have endeavored to supply the places of the strikers with new men; but partially from the inexperience of the latter, most of whom are foreigners, and in part from intimidating visits from the strikers, there has been a serious embargo of freight. One result of this state of things is to deprive the residents of the city of their accustomed supply of fresh meats, fruits and vegetables, and to curtail in the surrounding country the supply of groceries, fabrics and wares consumed, for which this city is headquarters. We are credibly informed that in the smaller towns of this and the adjoining States customers cannot purchase the required amount of sugar, coffee, tea, etc. to supply their daily wants, and on the other hand the butchers and green-grocers of the metropolis are at a loss for supplies to fill their orders. Fortunately New York is approachable by sea and river, as well as by land, or the results might be aggravated. One may be excused some expressions of impatience at the comtemplation of how much injury a few discontented men may do to a multitude of others who have no concern in their alleged grievance.

A good deal of thoughtless criticism and some malicious comment has been visited on the railroad companies for not acceding to the demands of the freight handlers. It is said they might better yield to this claim for say thirty cents a day extra than have so much trouble. This is the shallowest and silliest of talk. How long would it be before another demand for a second advance, and so on? It seems to be taken for granted that by employing a day laborer the employer guarantees to maintain the employe in a certain scale of comfort; in other words, if crops fail, or prices for any reason advance, the misfortune is to be made good out of the employing class, and not borne by the employed class—which is absurd. Another class of consigners who would like to find some one to shoulder their losses, talk of suing the railroad companies for non-performance of contract. Let this be tried by all means; and if any court can be found to hold that a common carrier is bound to receive goods which he is prevented from forwarding by the threats of a mob, then very few will enter that business.

Of course there will be demagogues who will pander to these strikers, and who will try and excuse if they cannot justify their crime. Although they have not yet resorted to any very pronounced act of physical violence toward the railroad employes, their action in visiting the several depots in crowds, and hooting at their successors, is none the less criminal. It is intimidation; they have some purpose in making these parades and visits, and that purpose is felonious. Most of them are armed; and no doubt if an accident should precipitate a collision with the extemporized police, blood would be shed. The disgrace in all this matter lies, not with the railroad officials, who appear to have done all they could to meet the emergency, but with our civil government, which is reluctant to suppress riot in its beginnings, but must always wait until it becomes tragical before any attempt is made to assert the authority of the State.

This is the high price we pay for liberty of person and speech. Anybody is privileged to threaten and endanger the public peace by assembling in the streets, by marching, banners, speeches, and by such demonstrations as fall short of actual assault, and the civil arm is not exerted. Having votes, no considerable body of men is likely to be interrupted in their conspiracies until they have become a nuisance and a terror to a much larger number—also having votes. This question, whether we have any government which can be used to maintain order against any considerable number of discontented workingmen, is one which has to be met, and the sooner it comes to a crisis perhaps the better for the stability of future industry. The rumors of coming strikes among railroad operatives, such as locomotive enginemen, coupled with the remembrance of the Pittsburgh and Chicago riots some years back, throw a shadow of insecurity over the tenure of all property. It should be remembered in that case, as in the present strike, that no one class of workmen can so wholly dissociate themselves from their neighbors as to injure society without themselves sharing the burden.

A stoppage of the wheels of the principal railroads for three days would produce so much confusion and mischief that the indignation of the masses would compel the strikers either to resume their posts or give way to others who would perform the services in their stead. This is the touchstone of law and justice in the matter of such collisions of the employers and employed. Labor has a perfect right to stop work and demand higher pay; but capital must have an equal right to replace the strikers by others willing to work at the same, or a different, rate of wages. All attempts at coercion, intimidation or interference with the work, or the presence of the idlers on or about the premises of the employers, should be treated summarily as criminal. Something of this nature seems to have dawned upon the freight handlers, for they have been careful to avoid force or open threats; but all the same their conduct is unlawful and not deserving of the sympathy or

encouragement given by the suffering shippers.

The Grand Trunk and Great Western Lease.

THE arrangement between the Grand Trunk and Great Western railways has, after no long delay, been signed. It is in the form of a lease; the Grand Trunk being the lessee and the Great Western the lessor. But the transaction means a great deal more than would ordinarily be implied by the execution of a lease. The Great Western not only surrenders its independence: its very name will cease to exist. Of the Great Western nothing but its history now remains. The two corporations have been rivals ever since they came into existence, and the rivalry was sometimes marked by the acrimony born of adverse interests. The Great Western, the older of the two, viewed the appearance of the Grand Trunk on the scene as a rival, and each did what it could to injure the other. Both roads were aided by government funds; part of the advance to the Great Western was remitted; of the advance to the Grand Trunk nominally nothing was written off and practically everything.

Of the two roads, the Great Western has, on the whole, had the more prosperous career. For a long time it paid a good dividend; the Grand Trunk shareholders never got a shilling return on their capital. They were allured to subscribe by the most enticing of prospectuses, put forth, we doubt not, in perfect good faith, by which they were encouraged to hope for exceptionally high dividends. The miscalculations of the promoters were greater than ordinarily occurs in American railways, and they must have been based on very inadequate information. The weak point was in estimating the working expenses far below the rate which experience proved had to be paid. The Grand Trunk was for a time perhaps somewhat handicapped by a government representation in the directorate. But there is no reason to suppose that that representation had any controlling influence on the management. And the sacrifice of the Government directors did not bring a dividend. So that the case presents no evidence of value on the question of Government control of railways; for there never was any Government control of the Grand Trunk, and the abolition of Government directors did not put the road in a better condition financially. The Great Western was never subjected to even the semblance of Government control; and its last days have been worse than its first.

The Great Western, no one can now doubt, showed too much of the ambition which seeks to command traffic by contributing to the construction of numerous branches. It allowed itself to be goaded into those expenditures by local rivalry, of which the managers perhaps scarcely understood the motives. As a rival of the Grand Trunk its influence was, locally considered, confined to a small area; and for through traffic the two roads were not more rivals than many others which the united companies will still have to encounter.

This lease gives the Grand Trunk practical control over the western peninsula of Ontario. All the outspread arms of the Great Western, by which it hoped to gather in local traffic, are henceforth devoted to the service of the Grand Trunk. The last battle between the two companies was fought over the control of the Toronto, Gray and Bruce Railway. The Great Western, just before it made a surrender of itself, snatched a nominal victory by means of a reckless bid, which the shareholders of the broken down road, forming the prize, clutched at. That bad bargain the Grand Trunk must now, we presume, father. But the monopoly of the Grand Trunk will be absolute, even over the western peninsula. There is still the opposition of the Canada Southern at one point, and that of the Credit Valley is likely henceforth to count for something, under the connections it is understood to have formed. The practical evils likely to arise from the union of the Grand Trunk and the Great Western will be mitigated by the competition of these roads, unless some traffic agreement be made among them, which is possible, but not probable.—*Toronto Monetary Times.*

Labor Questions.

MUCH has been said and written concerning the relation between labor and capital. The question has been presented to the public in almost every light of which it is susceptible, and yet the discussion is ever new. The problem is still unanswered, and presents itself again and again for solution. Students of political economy, full of the learning which comes from reading many books, have nothing to offer but visionary schemes of Utopia and Arcadia, that had little in them that commended itself to the more sober judgment of their contemporaries. Occasionally some prophet arises from the ranks of labor and foretells the near approach of a millenium when men shall have all things in common. There are many questions which can be relegated, without much danger to the commonwealth, to the arena of academic debate. Philologists may decipher the inscriptions on the pyramids, and astronomers study the universe, and with their telescopes seek to discover yet more distant stars; metaphysicians may find out the recondite laws of thought, and the outside public will trouble itself but little about their proceedings, for all these things touch not the daily lives of common men. But questions of public policy, especially those which relate to the employment and remuneration of labor, interest all, and either directly or indirectly come home to every man; for a very little consideration will show that almost every man is a wage-giver or a wage-taker—all who receive remuneration in any way for their services are laborers for pay, and ready to a man to maintain the doctrine that the hireling is worthy of his hire. The wage-givers are not only those who pay others to work for them, but also every shareholder in every corporation is an employer. It often happens that a person is both a shareholder in and an employe of the same company, and is thus both a wage-giver and a wage-taker, through the same association. The workman who has laid by in a savings bank a little money for a rainy day is an employer, for his money is loaned out to individuals and to corporations that great enterprises may be carried on. Insurance companies, the main stay of the thrifty poor, do not keep their funds locked up in a vault; they must engage in all sorts of business and enterprises. It is true that this is done indirectly by merely purchasing an interest in these undertakings. When one really makes an honest attempt to arrive at some satisfactory solution of the labor questions he is lost in a bewildering maze of interests. We all know how easily a child in attempting to unravel a skein of silk will only tangle it, and so the wisest of us when we deal with these questions are but as little children, ignorant, helpless—often so helpless and so ignorant that we know not even our own deficiencies. Any one who has paid attention to the troubles in the Cumberland region, for instance, cannot but see that both masters and men are only trying experiments, neither knowing what a day may bring forth. While all hope that a decision will be reached without a disturbance of the peace. The precaution which the company has adopted of enrolling special policemen in large numbers is not reassuring to quiet minds. In labor troubles, which assume large proportions, these two facts ever stand out in ugly relief: First, the absence of intelligent discussion between the parties opposed, and secondly the continued idleness, voluntary or enforced, of large numbers of strong and healthy men. When men are relieved from work, whether by their own choice or because none will give them work to do, there is sure to be much mischief afoot. Strikes and lock-outs are too often examples of the adage that "Idle brains are the devil's workshop and idle hands his tools."—*Baltimore Herald.*

Compound Engines.

THE superintendent of the London and Northampton Railroad, in England, has invented what he names a "compound locomotive." Its purpose is to economize fuel by the use of both high and low steam. There are two sets of driving-wheels, which are not connected, but each set is driven by independent engines. The steam is first received under high pressure in two cylinders placed on each side of the boiler, and about half way back. The pistons of these work the rear drivers by direct motion. The steam from them is then exhausted into pipes which are conducted in front of the boiler flues to keep the steam hot, and then into one large cylinder located directly under the front of the boiler. This cylinder carries, by a shaft under the boiler, the forward drivers. The new locomotive has run 5,900 miles in the "Irish Mail" service, and the consumption of coal has only averaged 22 3-10 pounds per train mile, including that required to get up steam—a saving of over 25 per cent upon the ordinary requirements.

THE longest line of fence in the world will be the wire fence extending from the Indian Territory west across the Texas Panhandle, and 35 miles into New Mexico. We are informed that 58 miles of this fence is already under contract. Its course will be in the line of the Canadian River, and its purpose is to stop the drift of the northern cattle. It is a bold and splendid enterprise, and will pay a large percentage on the investment. The fence will be over 200 miles long.

Importance of Making the Canals Free.

Upon the question of "free canals" and the permanent necessity, not only to the City but to the State of New York, of passing the amendment to the Constitution providing for it at the coming fall election, ex-Governor Seymour's views as expressed to a correspondent of the *New York Herald*, are emphatic and vigorously given. He said:

"Has it occurred to you that it is within the power of the railroads to close up the canals while the Constitution remains as it is? Under it the expenditures for repairs and for operating in any one year cannot exceed the receipts from tolls for the year preceding. The receipts are now barely sufficient to keep the canals in order. In any year, from an extensive break or from an unusually long winter, these receipts might be so greatly curtailed that the amount to be expended for the following year would be totally insufficient for the needs of the canals. With not enough money to meet necessary expenses, the receipts would still further fall off, and the amount to be expended for each succeeding year would be less and less. It is in the same manner possible for the railroads to cut off the income from tolls in any one year so that not enough money could be appropriated for the following year to keep the canals in operation. They need only to reduce their freight charges for one year so that the boatmen, who now find it difficult to run their boats with profit, could not compete with them. The receipts would, therefore, be so small that the canals could not be operated on the amount during the next year. The railroads probably would not venture on so desperate a course, although they would find their merely pecuniary advantage in it; but the possibility illustrates the danger to which the canals are exposed under present conditions. I think it of vastly more importance to the interests of the State and to the cause of anti-monopoly that the canals should be made free than that a railroad commission should be established. While the canals exist they must always regulate freight charges. As the expenses of canal traffic are lessened this power to regulate freight charges is, of course, proportionately increased.

"I can add, perhaps, nothing to what I have already said and written as to the advantage to the whole State of making the canals free, granting that the immediate advantage is to New York City. There is opposition to the proposed amendment in St. Lawrence, Lewis and in other counties off the line of the canals. Now I own lands in the two first named of these counties. I have given the matter careful consideration, and I have no hesitation whatever in asserting that what additional taxes I shall have to pay on these lands to keep the canals free will be more than made up to me by the fact that they are free. The additional commerce thus brought to the city of New York must add to the value of real estate there. If rival waterways in the West and in Canada divert, as they are diverting, commerce from New York City, the value of real estate there must be diminished. In the one case the State taxes to be paid by New York City will be increased; in the other they will be lessened. Who in this last contingency must make up the difference? The farmers of the rest of the State must make it up by increased taxes on their lands. As New York City, and Brooklyn, and Utica, and Syracuse and Buffalo profit by the increase of products brought to their docks and wharves, taxes on lands elsewhere in the State must of necessity be diminished. That the taxable value of real estate in these cities will be so much increased by making the canals free that what is paid by the rest of the State in taxes to pay the running expenses will be more than made up, I have no manner of doubt.

"Beyond this, the farmers of the State should be reminded that because of her wealth and prosperity, largely due to the fact that the State built the canals that have made her the center of trade, New York City pays and is able to pay, much more than her due proportion of taxes. If trade leaves New York, wealth will go with it. If the price of houses and lots falls off, then those who live outside of the city must make up the loss when taxes are paid. The farmers must remember that in 1877 the State had to lessen the assessment on real estate in the cities, because of commercial depression there, and the country had to make up the amount of taxes to be levied. There was great complaint, therefore, among the farmers. They will find occasion for much more complaint if they vote down next fall the amendment providing for free canals.

"I regard the danger as an imminent one. The improvements in the Welland Canal and the great increase of traffic down the Mississippi within the past two years, threaten the loss to us of a large part of our commerce by the Erie Canal. This would greatly affect the prosperity of New York City. We must meet these rivals by offering every advantage to our boatmen. While New York and Brooklyn remain great and prosperous they give us an easy and close market for our products. A large share of our land would be of little value but for the fact that we can sell what we raise to our large cities. The West cannot send to New York at profit fruit or milk or vegetables, or many other things for which we get good prices, and these keep up the value of our lands. By so much as our large cities lose their trade, and therefore their wealth and their people, by so much will we lose our markets. I will repeat here what I have said before:—'Let the farmers of New York think where their crops and other things which they sell go to for a market, and they will find that if those who buy are not doing well the farmer will not only have to pay more taxes, but he will have to take lower prices for his products and to feel the loss in the worth of his lands.'

"There are other facts often repeated in discussions of this subject, that show how clearly it is to the advantage of the whole State that the canals be made free. The necessity is now an imperative one. If the amendment should not be carried the failure could not be regarded as other than a great public misfortune. Those who would vote against it would only too soon discover what a fatal error they had made. On the part of those who recognize the importance of carrying the amendment no effort should spared to make the true facts plain before all the people and leave no room for defeat."

Seats in the Exchanges Subject to Sale to Pay the Owner's Debts.

It has been for a long time a much-mooted question, about which the judges of the lower courts have held widely differing opinions, as to whether a seat in the Stock Exchange, or in one of the other exchanges of like character, was property in the sense that would make it liable to sale on an execution against the property of the owner. The highest appellate Court in Pennsylvania has held that it was not, and that it could not be sold to pay debts. In the Common Pleas in this city the judges have been pretty evenly divided in opinion, although it was decided at General Term (reversing Judge Van Hoesen; and Judge Van Brunt dissenting) that it was property and subject to sale. The Superior Court General Term reached the same conclusion. The question has, however, been set at rest by a decision of the Court of Appeals, recently rendered, in the case of Powell, receiver, against Waldron and another.

The Court in that case affirmed the judgment of the Supreme Court, General Term, in Brooklyn, in holding that such a seat was property and passed to a receiver appointed in supplementary proceedings as any other property would. The judgment debtor was Louis L. Robbins, who was a member of the firm of L. N. Freeman & Co. When Mr. Robbins went into the firm he signed a partnership agreement that his seat in the New York Cotton Exchange should be liable for the payment of any firm debts. Mr. Freeman died and the administrator recovered judgment against Mr. Robbins in January for more than $1,000; Mr. Robbins was ordered to transfer his seat in the Exchange to pay the debt and was enjoined from using it any longer. The defendants, Waldron and Taintor, held the seat as collateral for a loan of $250. The present suit was brought by the receivers of Mr. Robbins' property, appointed in supplementary proceedings, that the receiver might be allowed to redeem the seat by paying the amount of the claim of Waldron & Taintor, and that the latter should then transfer the seat to the receiver to be sold to pay the Freeman judgment. Judge Finch writes the opinion of the Court of Appeals, to which there is no dissent. He says:

"We think the right of the judgment debtor to a seat in the Cotton Exchange was property. That it had value was proved and is conceded; and that it could be transferred to a certain class of purchasers under prescribed rates and conditions, is also established. The defendants took it as collateral to the note of Robbins and held it as security for that debt, and thereby plainly treated it as valuable property. Although of a character somewhat peculiar, its use restricted, its range of purchasers narrow, and its ownership clogged with conditions, it was nevertheless a valuable right capable of transfer and correctly decided to be property. It was something more than a mere personal license or privilege, for it could pass from one to another of a certain class of persons and

belong as fully to the assignee as it did to the assignor. That characteristic gave it not only value which might attach to a bare personal privilege, but market value, which usually belongs only to things which are the subject of sale. However it differed from the incorporeal rights, earlier recognized and described, it possessed the same essential characteristics. It could be transferred from hand to hand and all the time keep its inherent value, and be as freely and fully enjoyed by the permitted purchaser as by the original owner. We should make of it an anomaly difficult to deal with and to understand if we failed to treat it as property. The authorities which determine it to be such seem to us better reasoned and more wisely considered than those which deny to it that character, although the subject of ownership, of use and of sale. Being property it passed to the receiver in the supplementary proceedings, subject to the lien or right of the defendants."

Canadian Pacific Railway.

THE announcement that the Canadian Pacific Railway has been completed from Lake Superior to the west of Manitoba cannot but give general satisfaction to the country. When the present Government took power in 1878 they found that there had been, under the Mackenzie regime, 112 miles to the westward of Lake Superior, and 112 miles to the eastward of Red River constructed, and between these there was a great gap of 189 miles of country, impassable, full of rocks and chasms, and on which a blow had not been struck. Sir Charles Tupper, the able Minister of Railways, inquired what had been done concerning the putting in of contracts for this work; and Mr. Mackenzie replied that he had not decided to contract it for years to come. Let it be borne in mind that the territory in question is a portion of that now claimed by the Grits as belonging to Ontario, and as being of such great, almost inestimable, value. Sir Charles Tupper in a late speech characterized it as an almost impassable region, full of bogs and boulders, and the opening up of which the late Minister of Public Works, Mr. Mackenzie, saw no reasons to attempt. But the closing of that gap was recognized by the present Goverment as necessary in order to carry out the railway policy to which the country had pledged itself. The contract was let right off, and the work carried forward as speedily as possible. The last rail was laid the other day, and the railway is now ready to run through from Prince Arthur's Landing to the new prairie town of Brandon. Sir Charles has given us his promise that within three months a thousand miles of railway line will be opened westward from Lake Superior, and he has further pledged himself that when next the Government appeals to the people, they will be able to say that four thousand miles of railway have been built, from Halifax to Port Moody. One will be able to travel from the Atlantic Ocean to the Pacific by a continuous line without leaving the cars. All this will have been accomplished without a penny of actual cost to the tax-payers of Canada. By the sale of the land along the route, it is calculated that the Government will be able to wipe out every obligation which the construction of the railway laid upon the country. The construction of this railway under such happy conditions as these is a matter of great importance to the Eastern Provinces. It guarantees to them the building of new Birminghams, Manchesters and Sheffields ; and with all their facilities and all their industry they cannot provide more than will be required to supply the wants of the great and magnificent country thus thrown open.—*London (Ont.) Free Press.*

The American Wool Clip.

THE census returns give one hundred and fifty-five million pounds as the amount of wool clipped from thirty-five million sheep in the United States in the spring of 1880. This shows encouraging progress since 1870, when the reported clip was a hundred million pounds from twenty-eight million sheep. Nearly a fourth of the entire production of 1880 is returned from two States—namely, Ohio, which is credited with twenty-five million pounds of wool and three million sheep; and California, which shows nearly seventeen million pounds of wool and four million sheep. In 1870 the clip of California was eleven million and that of Ohio twenty million pounds. After these two States come, in 1880, Michigan with twelve; New York, nine; Pennsylvania, eight; Missouri, seven; and Wisconsin seven—million pounds; The rapid growth of sheep-raising in Texas is shown by the fact that the number of sheep increased between 1870 and 1880 from seven hundred thousand to nearly two millions, and the amount of wool shorn from a million and a quarter to nearly seven—million pounds. The increase in the production of wool has also been marked in Michigan, Missouri, Pennsylvania and Wisconsin, but in New York the reported clip of 1882 was more than a million and a half pounds less than that of 1870, while the number of sheep was nearly half a million smaller in 1880 than in 1870.

Cairo as a Railroad Center.

CAIRO is fast becoming a railroad center. Aside from the Illinois Central, extending from the great lakes on the north, to the Gulf of Mexico on the south—an unbroken line of nearly a thousand miles, besides its other divisions in Illinois and Iowa, reaching to Sioux City in the west, aggregating nearly another thousand miles—aside from this, the pioneer of all, there are : The Cairo Branch of the St. Louis, Iron Mountain and Southern, extending from Cairo to Poplar Bluff, Mo., 74 miles ; the Wabash, St. Louis and Pacific, from Cairo to Vincennes, Ind., 158 miles ; the Cairo and St. Louis, from Cairo to St. Louis, Mo., 146 miles ; the Mobile and Ohio, from Cairo to Mobile, Ala., 495 miles—besides other chartered roads not yet built. With her railroads and steamboats, Cairo enjoys transportation facilities inferior to no city in America.

The Illinois Central Elevator, with a capacity of 750,000 bushels, is equal in construction, convenience and safety to any in the world. It was built a year ago by the Illinois Central Railroad Company, who spared no expense in obtaining the best results in its construction. It is owned by this company, but is operated by the Halliday Brothers, of Cairo. It stands on the Levee, near the north end of the city, washed on the east by the broadest and deepest part of the beautiful Ohio ; while on the western side run the main and side tracks of the Illinois Central. By it, grain can be changed from the cars to barges in an astonishingly short time—only one other change at New Orleans being necessary, before its final shipment to Europe, if so consigned.

The Paramore Narrow Gauge Railroad will be completed to Cairo in July some time. The country opened up by the road is the finest in the world, and naturally should be tributary to this city. From New Madrid, Mo., a branch road connects with the narrow gauge at Pawpaw station, and the trains on this branch make four trips per day. This puts New Madrid within a few hours' ride of this city, a convenience which our business men will appreciate.—*Du Quoin Tribune.*

THE contract for furnishing scales for the use of the Customs service has been awarded by the Secretary of the Treasury to Messrs. Fairbanks & Co., of this city.

THE Charlotte (N. C.) *Observer* says that large quantities of ores are now being concentrated at the Baltimore and North Carolina mine preparatory for shipment. Valuable developments have very recently been made in this mine, adding to its immense value, and an increase of ore-dressing machinery will soon be added, the present plant being inadequate to take care of the ores.

THE Baltimore *Herald* says that the Citizens' Street Passenger Railway Company of that city, have added four new cars to their already large equipment. They will be run on the Carey street route, and correspond in size and color with most of those heretofore on that line. The new cars were built at the celebrated car works of John Stephenson, in New York, and are provided with all the recent improvements.

THE Western Maryland Railroad Company has received from the Grant Locomotive Works, Paterson, N. J., three of the nine locomotives recently ordered to be constructed for that road. They weigh 80,000 pounds each, have cylinders 17 by 24 inches, and were built especially for drawing heavy trains. More will be ready for shipment in a few days, besides some of the freight locomotives which are now in course of construction for the company at the same works.

THE property of the Allentown Rolling Mill Company, which was sold by auction in Philadelphia on the 27th ult., comprises about fifty acres of ground, together with all the furnaces, shops, engine-houses, railroads, machinery, fixtures, buildings and all improvements on the premises, being the same as granted and conveyed by mortgage in November, 1873, by the company to the Fidelity Insurance, Trust and Safe Deposit Company in trust, to secure the payment of $800,000 of outstanding bonds. The buyer was Charles Gilpin, and the sum $200,000. Mr. Gilpin made the purchase in the interest of the bondholders.

The Stock Exchanges and Money Market.

New York Stock Exchange.

Closing Prices for the week ending July 5.

	Th. 29.	F. 30.	Sat. 1.	M. 3.	Tu. 4.	W. 5.
Adams Express						137
Albany and Susq.						
1st mortgage						
2d mortgage						
American Express	92	92	92			92
Burl., C. R. & Nor.	75					
1st mortgage 5s		102				101½
Canada Southern	52		51¾			51½
1st mortgage guar	96		93x			93
Central of N. Jersey	76¾	76⅞	77			75¾
1st mort. 1890			118⅛			
7s, consol. ass	110½					
7s, convertible ass.	109¾					109¾
7s, Income						
Adjustment						
Central Pacific	91	91¼	91¼			91⅜
6s, gold	118½	119				116x
1st M. (San Joaq)						111
1st M. (Cal. & Or.)						105x
Land grant 6s						
Chesapeake & Ohio		23	22¾			
1st pref	30⅛					30¼
2d pref		23				24
1st mort., series B	80½					81
Chicago and Alton	134	134				133½
Preferred						
1st mortgage						
Sinking Fund						
Chi., Bur. & Quincy	129½	130½	128¼x			127
7s, Consol. 1903						
Chi., Mil. & St. Paul	112	112⅜	112¼			112
Preferred	127⅝	127¼				127
1st mortgage, 8s	135					
2d mort., 7 3-10s		122				
7s, gold		124				
1st M. (La. C. div)		122				
1st M. I. & M. div.)						
1st. M. (I. & D. ext.)						
1st M. (H. & D. div.)						
1st M. (C. & M. div.)						
Consolidated S. F.						
Chi. & Northwestern	131⅜	131⅛	131¼			130¾
Preferred	147⅛	146¼	147½			146¼
1st mortgage						100⅛
Sinking Fund 6s						
Consolidated 7s	132½	132				
Consol. Gold bo'ds	125½	125¾				
Do. reg						
Chi., R. Isl. & Pac.	130⅜	129¾	128¼x			126¼
6s, 1917, c		129¾				
Clev., Col., Cin. & Ind.	73	73½	73			73
1st mortgage						
Clev. & Pittsburg gr.		138	138¼			138½
7s, Consolidated						
4th mortgage	109					
Col., Chi., & Ind. Cent						
1st mortgage						
2d mortgage						
Del. & Hud Canal	113¼	112⅞	112⅝			114¾
Reg. 7s, 1891						
Reg. 7s, 1884						
7s, 1894	117					
Del., Lack. & Western	127⅝	127⅝	127⅞			125½x
2d mortgage 7s						
Consol. 1907						
Erie Railway						
1st mortgage						
2d mort. 5s, ext.						
3d mortgage	104½					104¼
4th mort. 5s, ext.						107½
5th mortgage						
7s, Consol. gold			127			
Great West. 1st mort						103¾
2d mortgage			100			99⅞
Hannibal & St. Jo.						
Preferred	86	86	82¾x			82½
8s, Convertible						
Houston & Tex. Cen	80	81⅛	81			81½
1st mortgage						110
2d mortgage						
Illinois Central						134
Lake Shore & Mich So	110¾	110⅝	109x			108¾
Consol. 7s						
Consol. 7s, reg						
2d Consolidated	124	124	123			
Leh. & W. B. con. ass						
Long Dock bonds	116					
Louisville & Nash.	67⅜	67⅜	67⅞			65⅛
7s, Consolidated	117					
Manhattan	53	52½				51
1st pref	91½					
Met. Elevated						
1st mortgage	103¾		100½x			
Michigan Central	89¼	89	89			88¾
7s, 1902						125½
Morris & Essex	123	124				
1st mortgage			136¼			135
2d mortgage	115					
7s of 1871						
7s, Convertible						
7s, Consolidated			121			
N. Y. Cen. & Hud. R.	130¾	131	130⅞			130½
6s, S. F. 1883	102⅜	102				
6s, S. F., 1887						
1st mortgage						
1st mortgage, reg.						
N. Y. Elevated						
1st mortgage	118½		114¾x			114½
N. Y. & Harlem						
Preferred						
1st mortgage						
1st mortgage, reg						
N. Y., Lake Erie & W	35⅞	36	36			35¾
Preferred	73¾					73
2d Consolidated	94¾	95	95			94½
New 2d 5s fund	91					
N. Y., N. Hav'n & Hart						
North Mo. 1st mort						
Northern Pacific	40¾	41⅝	41⅛			41¼
Preferred	78¾	78⅞	79			79⅛
Ohio & Mississippi	34¾	34⅛				36¼
Preferred	102½					100
2d mortgage						
Consolidated 7s						
Consol. S. Fund						
Pacific Mail S. S. Co	42⅜					42½
Pacific R. R. of Mo.						
1st mortgage						
2d mortgage						
Panama						
Phila. & Reading	58⅜	56½	57			57
Pitts, Ft. W. & Chi. gtd		130				133½
1st mortgage						130½
2d mortgage						
3d mortgage						
Pullman Palace Car		125⅞	125⅞			
Quicksil'r Min'g Co						
Preferred						
St. Louis & San Fran	37⅛		37⅛			36⅛
Preferred	49⅞		48⅛			
1st Preferred						
St. L., Alt'n & T. H.	25¾	26				
Preferred			61			
1st mortgage						
2d mort. pref						
Income bonds						
St. L., Iron Mt. & S						
1st mortgage		117				
2d mortgage		104⅞	104¾			
Toledo and Wabash						
1st mortgage						
2d mortgage						
7s, Consolidated						
St. Louis Division						
Union Pacific	111	110¾	111			110½
1st mortgage	119¼	120	117x			
Land Grant 7s						
Sinking Fund 8s		12:3¾				
United States Ex	71½		71¼			
Wabash, St. L. & Pac	27¾	27⅞	28⅜			28⅛
Preferred	51	51⅜	51½			51
New mort. 7s						
Wells-Fargo Ex						
Western Pacific b'ds		114				
Western Union Tel.	84¾	84⅜	84⅞			84¾
7s., S. F conv., 1900						
FEDERAL STOCKS:—						
U. S. 4s, 1907, reg						
U. S. 4s, 1907, coup.	120⅛		119			128⅞
U. S. 4½s, 1891, reg.						
U. S. 4½s, 1891, coup		114⅜	114			
U. S. 5s, cont'd at 3½						101
U. S. 6s cont'd at 3½						
Dt. of Col. 3-65s, reg						
Dt. of Col. 3-65s, coup						111

Boston Stock Exchange.

Closing Prices for the Week Ending July 5.

	Th. 29.	F. 30.	Sat. 1.	M. 3.	Tu. 4.	W. 5.
Atch., Top. & San. Fe.	87¼	87⅜				87⅛
1st mortgage						119
Land Grant 7s	115					
Boston & Albany	165	165				
Boston and Lowell	102½					
Boston & Maine	148½	148½				
Boston & Providence		157				158
Bos'n, Hart. & Erie 7s						
Burl. & Mo. R. L. G. 7s						
Burl. & Mo. R. in Neb						
6s, exempt						
4s						
Chi., Burl. & Quincy	129¾	130				128
Cin., Sand. & Clev ($50)		26½				
Concord ($50)	93⅞					
Connecticut River						
Eastern	44	44				40¼
New 4½ Bonds	110	110				114
Fitchburg						
N. Y. & New England						48¾
7s						
Northern N. H						
Norwich & Worcester						
Ogden & Lake Cham						
Old Colony	131¾					
Ph., Wil. & Balt. ($50)						
Portl'd, Saco & Ports						115
Pueblo & Ark Val 7s						111½
Pullman Palace Car		125				125½
Union Pacific	111⅛	111				111
6s						
Land Grant 7s	112¾					113¼
Sinking Fund 8s		119½				
Vermont & Mass						
Worcester & Nashua						
Cambridge (Horse)						
Metropolitan (Horse)						
Middlesex (Horse)						
Cal. & Hecla Min'g Co	248					248
Quincy	55	55				57¾

Philadelphia Stock Exchange.

Closing Prices for the Week Ending July 4.

	W. 28.	Th. 29.	F. 30.	Sat. 1.	M. 3.	Tu 4.
Allegh'y Val. 7 3-10s		125	125			
7s, Income						
Buff., Pitts & West.	16⅛	16⅛	16	16¼		
Camd'n & Am. 6s, '83						
6s, 1889						
Mort. 6s, 1889	112½					
Camden & Atlantic						
Preferred						
1st mortgage						
2d mortgage						
Catawissa		24				
Preferred		54½				
2d pref		52				
7s, new						
Del. & Bound Brook						
7s						
Elmira & Williamsp't						
Preferred						
Hunt. & B. Top Mt.	14	14	14½			
Preferred		26	25¾	25¾		
2d mortgage						
Lehigh Navigation	39	39¼	39	38⅞		
6s, 1884						
Gold Loan	109½		110			
Railroad Loan						
Conv. Gold Loan						
Consol. Mort, 7s		116	116			
Lehigh Valley	59¼		59½	59⅝		
1st mort. 6s, coup						
1st mort. 6s, reg						
2d mort. 7s						
Consol mort. 6s	120¾					
Consol. mtg. 6s, reg						
Little Schuylkill			58			
Minehill & Sch. Hav'n						
North Pennsylvania		65	65			
1st mortgage 6s						
2d mortgage 7s						
Genl. mtg. 7s, coup						
Genl. mtg. 7s, reg						
Northern Central	48	48	48			
5s						
Northern Pacific	40½	41	40⅞	41⅛		
Preferred	78⅞	78⅞	78¾	78¾		
Pennsylvania R. R.	57⅞	58¼	58⅜	58¾		
1st mortgage						
Gen'l mort			123¾			
Gen'l mort reg	123½					
Consol. mort. 6s						
Consol. mort. reg						
Pa. State 5s, new						
do 4s, new						
do 3½s, 1912						
Phila. & Reading	29⅛	29¼	28	28¾		
1st mortgage 6s						
7s of 1893						
7s, new convert		79		78½		
Consol. mort. 7s		123¼		123¼		
Consol. mort. reg.						
Gen'l mort. 6s	98¼	98	98¼			
Def. Income bonds						
Philadelphia & Erie						
1st mortgage 5s						
2d mortgage 7s						
Pittsb., Cin. & St. L. 7s	119	119				
Pitts., Tit. & Buff. 7s						
Schuylkill Navi't'n						
Preferred						
6s, 1895						
6s, 1882						
United Co. of N. J.	185¾	185	185	185		
Hestonville, (Horse)						
Chestnut & Wal. (do)						

Baltimore Stock Exchange.

Closing Prices for the Week Ending July 4.

	W.28.	Th.29.	F.30.	Sat.1.	M.3.	Tu.4.
Baltimore & Ohio..	.....	.....	.....	.....	.....	.....
6s, 1885.....	.....	.....	.....	.....	.....	.....
Central Ohio ($50)..	...	.....	.....	.....	.....	.....
1st mortgage.....	.....	.....	.....	.....	.....	.....
Marietta & Cincin'ti	.....	.....	.....	.....	.....	.....
1st mortgage, 7s..	.....	.....	.....	.....	.....	.....
2d mortgage, 7s..	.....	.....	98	.....	.....	.....
3d mortgage, 8s..	53¼	.....	.....	.....	.....	.....
Northern Cen. ($50)	.....	.....	.....	.....	.....	.....
2d mort., 6s 1885..	.....	.....	.....	.....	.....	.....
3d mort., 6s, 1900.	.....	.....	.....	.....	.....	.....
6s, 1900, gold.....	.....	.....	.....	.....	.....	.....
6s, 1904, gold.....	.....	.....	.....	.....	.....	.....
Pitts.& Connellsv.7s	124	....	....	.....	.....	.....
Virginia 6s, Consol.	60	50	59¼	. ...	.....	.....
Consol. coupons..	.....	61	62	58	.....	.....
10 40 bonds.....	43¾	.....	44¼	42¾	.....	.....
Def'd Certificates.	.....	....	.....	.....	.....	.....
Western Maryland..	.....	17⅛	.....	.....	.....	.....
1st M.,end.by Balt	.....	.....	.....	.....	.....	.....
2d M. do	.....	.....	.....	.....	.....	.....
3d M., do	.....	.....	.....	.....	.....	.....
1st M.,unendors'd	.....	.....	.....	.....	.....	.....
2d M.,end.WashCo	.....	.....	.....	.....	.....	.....
2d M., preferred..	.....	.....	.....	.....	.....	.....
City Passenger R R.	....	.....	.....	.....	.....	....

London Stock Exchange.

	Closing Prices — June 16.		June 23.	
Baltimore & Ohio 5s, 1927.....105	107	105	107	
Central of N. J.,. $100 shares.... 93	98	93	98	
Do. consol. mort.....110	112	110	112	
Do. Income Bonds..... 93	97	93	97	
Det.,G'd Haven & Mil. Equip bds.115	117	115	117	
Do.Con.M.sp.c.,till'83aft'r6p.c.113	114	112	114	
Illinois Central $100 shares.....137	139	137	139	
Lehigh Valley Cons. mortgage..115	119	115	119	
Louisville & Nashville mort 6s. 99	101	90	100	
Do. capital stock $100 shares. 69	71	66	68	
N. Y. Cent. & Hud. R. mt. bds..132	135	132	135	
Do. $100 shares.....131½	132½	134	136	
Do mort. bonds (stg.).....124	126	124	126	
N.Y.,Lake Erie & West.,$100 shs 36¼	37	36¼	37	
Do. 6 p. c. pref. $100 shares.. 72	74	74	76	
Do. 1st Con. Mort. bds (Erie) .128	130	128	130	
Do. do. Funded Coupon bds.124	126	124	126	
Do. 2d Consol Mort. bonds... 95	96	95	96	
Do. do. Funded Coupon bds.. 91	93	91	93	
N.Y.,Pa.& Ohio 1st mort. bonds. 45	46	43	45	
Do. Prior Lien bds (sterling)..103	108	103	108	
Pennsylvania, $50 shares..... 59½	59¾	59	59⅛	
General Mortgage.....122	126	122	126	
Philadelphia & Reading $50 shs 29⅛	30	30¾	31¼	
General Consol Mortgage.....115	117	116	118	
Do. Improvement Mortgage..103	105	103	105	
Do.Gen.Mtg.'74,ex-def'd coup.102	104	100	102	
St. L. Bridge 1st mort. gold b'd.125	127	125	127	
Do. 1st pref. stock..... 95	98	95	98	
Union Pacific 1st. mtg 115	117	115	117	
Wabash, St. L. & P. $100 shs..... 27	29	28	30	
Do. $100 pref. shares..... 51	52	51½	52½	
Do. gen. mort. bonds..... 80	82	79	81	

AMERICAN RAILROAD JOURNAL.

Financial and Commercial Review.

THURSDAY EVENING, July 6, 1882.

The call loan quotation this morning was 2@3 per cent, the time loan 3@5 per cent, and prime mercantile paper 4½@5 per cent. In the afternoon the rate for call loans at the Stock Exchange was 2½ per cent, and at the close 2@2½ per cent.

The actual rates for prime bankers' sterling are 4.84½@4.84¾ for 60 day, and 4.87⅛@4.87¾ for demand, with cable transfers 4.88¼@4.88⅜ and prime commercial bills 4.83@4.83¼. The actual rates for Continental bills are as follows: Francs, 5.20@5.18¾ and 5.16¼@5.15⅝; Marks, 94⅛@95⅛ and 95⅛@95½, and Guilders, 40@40 5-16.

By referring to the statement of the Public Debt of the United States, given on another page, it will be seen that there was a decrease during June of $12,560,696.70, and a decrease since June 30, 1881, of $151,684,351.26. The interest-bearing debt amounts to $1,463,810,400; debt on which interest has ceased since maturity, $16,260,805.26; debt bearing no interest, $438,241,788.77, total debt, $1,918,312,994.03; interest, $13,890,986.47; gold and silver certificates, $71,133,830; United States notes held for redemption of certificates of deposit, $13,320,000; cash balance available July 1, 1882, $140,604,474.26; total cash in Treasury July 1, 1882, $243,289,519.78.

The total indebtedness of the District of Columbia at the close of the fiscal year, June 30, 1882, was $21,707,-

About $14,469,450 of this sum bears 3.65 per cent and is redeemable in 1924; the residue, some $7,237,550 bears interest at from 5 to 7 per cent., and is redeemabl. at dates ranging from 1892 to 1902. Since July 1, 1878, $1,125,450 of the funded debt has been retired by the sinking fund. The amount of debt outstanding on which interest has ceased is $5,340.

Cornell University has just closed a prosperous year. Its fund amounts to $1,263,999.48, which with the sums received from students yielded $140,501.71. Its Ithaca real estate is valued at $713,673.52, and the equipment provided for its various departments at $289,889.01. Besides its already invested endowment, the University still owns a body of western lands comprising 293,708 acres.

Of the total funded indebtedness of the United States on the 30th day of June, $250,000,000 bears 4½ per cent. interest, $739,349,350 bears 4 per cent., $401,503,900 bears 5 per cent, $58,957,150 bears 3½ per cent. and $14,000,000, navy pension fund, bears 3 per cent.

The Wabash, St. Louis and Pacific Railway Company have decided to extend the Illinois and Southern Iowa first mortgage bonds for 30 years from August 1, 1882, at 6 per cent. interest. Bondholders who desire to avail themselves of this privilege are requested to notify O. D. Ashley, Second Secretary, on or before the 20th instant.

The shareholders of the Panama Canal Company, at the meeting held in Paris on the 30th ult., approved the report of M. de Lesseps, and authorized the directors to issue obligations to the amount of £250,000, bearing 5 per cent. interest, for the purchase of the Panama Railroad.

The result of the poll of the shareholders of the Great Western Railway company of Canada, held in London on the 30th ult., on the question of amalgamation with the Grand Trunk Railway Company, shows that 1,072 proprietors, commanding 83,492 votes, favored amalgamation, and eight proprietors, commanding 1,100 votes, opposed it. The amalgamation resolution was declared carried.

The act relating to the sale of railway passenger tickets in Canada is now in force throughout the Dominion. Under the new law no person, unless he be authorized by the railway company, can sell a railway passenger ticket without being liable to fine or imprisonment. This, if carried out, puts an end to all second-hand ticket selling. Those who travel only a portion of the journey on a ticket can demand the return of that portion of his money within thirty days, less the ordinary fare between the two points for which the ticket was issued.

During the five months ending May 31, 1882, Great Britain has sent to the United States 5,337,641 tons of iron and steel. This is over 100,000 tons greater than for the same period last year. With falling prices and such heavy foreign importation embarassing our manufactures and wiping out their profits, the phenomenal folly of the present strike ought to be apparent to the dullest workingman engaged in it.

At a meeting of the holders of Virginia State bonds in London, Eng., on the 4th inst., resolutions were adopted authorizing a committee, in conjunction with the Council of Foreign Bondholders, to take steps to call in the State bonds and issue certificates instead, for the purpose of protecting the interests of the bondholders, and that a memorial be addressed to President Arthur drawing his attention to the facts attending the repudiation of the solemn obligations of Virginia by the Legislature, and praying the assistance of the Federal Government to enable the bondholders to vindicate their claim to be reimbursed for their advances.

The payments made from the United States Treasury by warrants during the month of June, 1882, were as follows: On account of civil and miscellaneous, $5,169,661.06; War, $2,414,608.98; Navy, $913,458.68; Interior, (Indians), $270,262.13; Interior (Pensions), $4,595,304.33; total, $13,363,385.18. The above does not include payments made on account of the interest or principal of the public debt.

Within the last sixty days charters have been granted by the State Department at Harrisburg, Penn., for railroads of three feet gauge with an aggregate mileage of 169 miles, the entire capital stock of all the companies being $1,370,000.

The Philadelphia and Reading Railroad Company gave notice on the 1st inst. of its intention to pay on and after the 5th inst., at the London office of the company, the first mortgage bonds which matured on that day, amounting to $134,000. The company also commenced on the 1st inst. the payment of interest on their first mortgage 6s, general mortgage 6s and all leased line interest that fell due, together with sundry coal land mortgage interest. They are also paying interest on the income mortgage 7s. They are not paying July interest on the debenture 6s, scrip or convertible 7s, excepting on fractional scrip and Perkiomen scrip. They expect to pay on the third Tuesday of July interest on the East Pennsylvania Railroad loan.

The Governor of Louisiana says that the passage of the act for the settlement of the State debt should be the occasion of general rejoicing, for the reason that "the power and integrity of the State are vindicated."

According to the statement of the Controller the total funded debt of the city of New York on the 30th of June, 1882, amounted to $136,041,802.59, not including $13,971,729.40 revenue bonds, issued in anticipation of taxes. The bonded debt of the annexed district above the Harlem River, which is included in this statement, is $875,500. The amount in the sinking fund for the redemption of the city debt was $38,384,989.21, making the net funded debt $97,656,813.38, against $98,290,206.17 on the 31st of December, 1881, a decrease of $633,392.79. During the month of June warrants amounting to $4,786,106,49 were drawn against the City Treasury, making a total of $22,844,258.88 since the beginning of the year. From January 1 to June 30, inclusive, stocks and bonds were issued to the amount of $14,265,784.40. Of this sum $953,500 was for public works, street openings and improvements, $465,000 was for Croton water purposes, $427,000 was for docks and slips, $160,000 was for expenses and awards of the Assessment Commission, and $12,154,100 was for current expenses of the City Government.

The following quotations of sales of railway and other securities, for the week, are in addition to those given elsewhere in our columns:

New York.—Boston and New York Air Line pref., 76; Chicago, Milwaukee and St. Paul, Chicago and Pacific West div. 1st, 94¾; Chicago, St. Paul, Minneapolis and Omaha, 40½; do. pref., 102½; do. consol., 103; Chicago, St. Louis and New Orleans 5s, 102¾; Chicago, St. Paul and Minneapolis 1st, 114½; Chicago, Burlington and Quincy, Iowa div. 4s, 87½; Chesapeake and Ohio Series A, 80½; Denver and Rio Grande, 55⅝; do. 1st, 113; do. consol., 101¼; East Tennessee, Virginia and Georgia,11; do. pref., 19; do. inc., 47; Fort Worth and Denver, 1st, 96¾; Flint and Pere Marquette 1st., 113¾; Gulf, Colorado and Santa Fe 1st, 115; Indiana, Bloomington and Western, Eastern div., 6s, 91; Kansas Pacific 6s, 113; do. 1st consol., 103; Long Island consol. 5s, 97⅝; Lake Erie and Western, 28¾; Louisville and Nashville gen'l mort. 6s, 95; Manhattan Beach, 28; Mobile and Ohio, 17¾; Missouri, Kansas and Texas, 34; do. consol. 7s, 107¾; do. 2d, 63⅛; do. gen'l mort. 6s, 85¾; Missouri Pacific, 94⅛; do. 1st consol., 100¾; Memphis and Charleston, 45; Michigan Central 5s, 103¾; Milwaukee, Lake Shore and Western 1st, 101; New York, Chicago and St. Louis, 11¾; do. 1st, 84¼; New York, Ontario and Western, 24⅞; Norfolk and Western pref., 50⅞; Nashville, Chattanooga and St. Louis, 58; Northern Pacific 1st consol., 100½; Ohio Central, 14¾; Oregon Railway and Nav., 134½; do. 1st, 102½; Oregon Short Line 6s, 103⅜; Peoria, Decatur and Evansville, 29⅝; do. Evansville div. 1st, 100¼; Rome, Watertown and Ogdensburg 1st consol., 89; Rochester and Pittsburgh, 26⅞; Richmond, Danville and West Point, 53; Richmond and Danville, deben., 68⅜; do. 7s, 100; Southern Pacific of California 1st,, 105⅝; St. Paul, Minneapolis and Manitoba, 134½; do. Dakota ext., 1st, 108½; St. Louis, Iron Mountain and Southern 5s, 77¾; St. Louis, Kansas City and Northern, Omaha div. 1st, 106⅝; Texas and Pacific, 43⅞; do. inc. Land Grants, 63⅛; do. Rio Grande div. 1st, 84½; Texas Central 1st, 106½; Toledo, Peoria and Western 1st, 108½; Utah Southern Gen'l mort. 7s, 104½; Wabash, St. Louis and Pacific, Chicago div. 1st, 80; Alabama, Class A, 84; Louisiana consol. 7s, 70½; Missouri 6s, 1889-90, 112; Tennessee 6s, 56½; Maryland Coal, 16¼; Homestake Mining Co., 18; Ontario, 35½; Standard, 18⅜.

Philadelphia.—Allegheny Valley Income scrip, 47; do. 7.30s, 121½; Buffalo, Pittsburgh and Western, 16½; Catawissa, 24¼; Lehigh Navigation, 40; do. 6s, 1884, 102⅝; Lehigh Valley, 60; do. 1st mort. 6s, reg., 120½; do. consol. mort. 6s, reg., 121¼; Northern Pacific, 41¾; do. pref., 79; North Pennsylvania, 65; Philadelphia and

Reading 28½; do. gen. mort. 6s, ex-int., 95⅞; do. consol. mort. 7s, 123¼; Philadelphia, Wilmington and Baltimore 4s, 93; Pennsylvania Canal 6s, 90; Pennsylvania R. R., 58¾; St. Paul and Duluth pref., 84¾; Texas and Pacific consol. mort. 6s, 96; United Companies of New Jersey, 185; Western Pennsylvania 6s, J. and J., 103. The latest quotations are: City 6s, 108@120; do. free of tax, 127@133; do. 4s, new, 108@113; Pennsylvania State 5s, new loan, 118½@119½; do. 4s, old, 108@112; do. 4s, new, 115@116; Philadelphia and Reading R. R., 28⅝@28⅝; do. consol. mort. 7s, reg. 124@125; do. gen'l mort. 6s, coupon, 95½@96; do. 7s, 1893, 118½@119¼; do. new conv., 78@79; United New Jersey R. R. and Canal, 184½@185½; Buffalo, Pittsburg and Western, 16⅛@16⅜; Pittsburgh, Titusville and Buffalo 7s, 96@98; Camden and Amboy mort. 6s, 1889, 112½@113; Pennsylvania R. R., 58¾@58⅞; do. general mort. 6s, coupon, 124@125; do. reg., 124@125; do. consol. mort. 6s, reg., 120@121; Little Schuylkill R. R., 57½@58¼; Schuylkill Navigation, pref., 12½@13½; do. 6s, 1882, 91@95; Elmira and Williamsport pref., 58@60; do. 5s, 100@101; Lehigh Coal and Navigation, 39⅞@40; do. 6s, 1884, 102½@103; do. R. R. loan, 116@116½; do. Gold Loan, 109@111; do. consol. 7s, 116@116¼; Northern Pacific, 41¼@41⅜; do. pref., 79@79⅛; North Pennsylvania, 64½@65½; do. 6s, 107¼@108; do. 7s, 118@119; do. 7s, General mort. reg., 122@123; Philadelphia and Erie, 14½@15½; do. 7s, 117@118; do. 5s, 103@104; Minehill, 62½@63½; Catawissa 24@24½; do. pref., 54@55; do. new pref., 53@54; do. 7s, 1900, 120@—; Lehigh Valley, 59⅛@60; do. 6s, coupon, 120@122; do. reg., 120@121; do. 7s, 134½@135⅜; do. consol. mort. 121@121½; Fifth and Sixth streets (horse), 150@160; Second and Third, 110@112; Thirteenth and Fifteenth, 69@75; Spruce and Pine, 40@45; Green and Coates, 80@90; Chestnut and Walnut, 90@92; Germantown, 70@72; Union, 110@115; West Philadelphia, 108@111; People's 14¼@14½; Continental, 100@102.

Baltimore.—Atlanta and Charlotte 7s; do. 1st, 107½; Baltimore City 6s, 1890, 117¾; do. 5s, 1916, 125; Baltimore and Ohio 2d pref., 120; Canton Company 6s, gold, 102¼; George's Creek Coal, 95; Marietta and Cincinnati 1st Trust certificates, 126¼; do. 2d do. 97½; do. 3d, do., 53⅝; Maryland Defense 6s, 104¼; Northern Central 6s, 1900, 116; do. 5s, 1926, 96; Virginia consols, 57½; do, consol. conpons, 58; do. 10-40s, 42½; do. Peeler coupons, 38; Virginia Midland 5th mort., 95. The latest quotations are: Atlanta and Charlotte 1st, 107¾@108; Baltimore and Ohio, 193@196; do. 6s, 1885, 106⅜@107; Baltimore City 6s, 1885, 108@—; do. 6s, 1890, 117½@118; do. 6s, 1902, —@132; do. 5s, 1916, 124½@125; Columbia and Greenville 1st, 101¾@102; Marietta and Cincinnati 1st, 125⅞@126½; do. 2d, 97½@97¾; do. 3d, 53½@53¾; Northern Central, —@49; do. 5s, 1926, 96@97; Ohio and Mississippi, Springfield div. 1st, 116@116½; Pittsburg and Connellsville 7s, 120@121; Virginia and Tennessee 2d, 100½@—; Virginia Midland 5th, 94⅞@95; Western Maryland 1st, unindorsed, 111@—; do. 2d, guar. by Washington county, 114½@—.

Boston.—Chicago, Burlington and Quincy 4s, old, 86¼; do. Denver extension 4s, 84½; Chicago, Milwaukee and St. Paul, Dubuque div. 6s, 104; Kansas City, St. Joseph and Council Bluffs 7s, 114⅞; Maine Central, R. R. 7¾; Mexican Central stock, No. 1, 21¾; do. 7s, 84¼; Northern Pacific 6s, 100⅝; New York and New England 6s, 104⅞; Sonora 7s, 104; Toledo, Cincinnati and St. Louis, 6½; Wichita and Southwestern 8s, 108; Osceola Mining Co., 31⅞.

The Coal Trade.

THE leading coal-carrying companies make the following reports of their tonnage for the week ending June 24th, and for the year to that date, compared with their respective amounts carried to the same time last year:—

	Week.	1882.	1881.
Reading Railroad	186,664	4,127,805	3,929,219
Schuylkill Canal	7,715	146,015	173,359
Lehigh Valley	144,205	3,245,078	2,935,262
Delaware, Lackawanna and Western	107,869	1,907,486	1,864,641
Shamokin	29,135	457,841	484,904
Central R. R. of New Jersey	105,683	1,869,957	1,881,441
United R. R. of New Jersey	37,323	767,200	710,525
Pennsylvania Coal	37,518	542,827	550,468
Delaware and Hudson Canal	82,028	1,454,949	1,567,255
Huntingdon and Broad Top Mountain	6,011	213,885	223,962
Penn. and New York	33,309	788,055	759,819
Clearfield, Pa.	65,612	1,444,155	1,135,699

The total tonnage of anthracite coal from all the regions for the week ending June 24, as reported by the several carrying companies, amounted to 680,559 tons, against 416,683 tons in the corresponding week last year, an increase of 263,876 tons. The total amount of anthracite mined for the year is 12,085,560 tons, against 11,874,159 tons for the same period last year, an increase of 211,401 tons. The quantity of bituminous coal sent to market for the week amounted to 80,613 tons, against 106,009 tons in the corresponding week last year, a decrease of 25,396 tons. The total amount of bituminous mined for the year is 2,112,952 tons, against 2,292,898 tons for the corresponding period last year, a decrease of 169,946 tons. The total tonnage of all kinds of coal for the week is 761,172 tons, against 522,692 tons in corresponding week last year, an increase of 238,480 tons, and the total tonnage for the coal year is 14,208,512 tons, against 14,167,057 tons to same date last year, an increase of 41,455 tons. The quantity of coal and coke carried over the Pennsylvania Railroad for the week ending June 24 was 225,175 tons, of which 179,188 tons were coal and 45,977 tons coke. The total tonnage for the year thus far has been 5,340,723 tons, of which 3,878,727 tons were coal and 1,461,966 tons coke. These figures embrace all the coal and coke carried over the road, east and west. The shipments of bituminous coal from the mines of the Cumberland coal region for the week ended June 24 were 7,322 tons and for the year to that date 520,758 tons, a decrease of 381,689 tons as compared with the corresponding period of last year. The shipments were: To the Baltimore and Ohio Railroad—For the week, 5,265 tons; year, 432,701 tons; decrease as compared with 1881, 208,067 tons. Chesapeake and Ohio Canal—Week, 2,056 tons; year, 9,382 tons; decrease as compared with 1881, 149,825 tons. The Reading Railroad shipment for last week, ending July 2, was about 201,000 tons, of which 68,000 tons were sent to and 51,000 tons shipped from Port Richmond, and 18,500 tons sent to and 21,000 shipped from Elizabethport.—*Philadelphia Ledger, July 3.*

The Corinth Canal.

REFERRING to the Corinth Canal, the construction of which has just been commenced, a London paper says that perhaps the most interesting feature of the work is to be found in the fact that Gen. Turr is following, without the variation of a foot, the route laid out by the engineers for Nero 1,800 years ago. Nero was not the earliest worker, however. Periander is said to have projected such a canal 2,500 years ago, and three centuries afterwards Demetrius Poliocetes revived the scheme, but was dissuaded by the representations of his engineers that, as the sea in the Gulf of Corinth was higher than in the Saronic Gulf the water would run through the canal and drown out Ægina and the other islands on the east. Cæsar had a plan for canalizing the isthmus, and Caligula sent an officer to explore the route, but went no further. Nero made a serious endeavor to perform the work, which endeavor is thus described: Having raised a hymn, Lucian tells us, to Amphitrite and Poseiden, and sung a song to Melicerte and Leucothea, he thrice struck the ground with a golden spade, and set his army to work at the trench, while a corps of convicts tackled the rocky ridge. After twelve days' work, however, Nero left Greece to quell an insurrection, and the cutting was abandoned. The lines of the trench in the lowland still remain, the ditch being about 130 feet wide, and there are cuttings in the limestone at different levels, all of which, with the 26 wells sunk to try the rock and the large cistern to furnish water for the workmen, have been utilized by the French engineers. According to Dio Cassius, when Nero turned the first sod blood gushed from the earth and dismal groanings were heard; and Pausanians records that all the presumptuous engineers and contractors had been slain by the gods. It is likely enough that the Corinthian priests worked on the fears of the superstitious to prevent the destruction of a canal which would make the stay of visitors briefer and their offerings smaller in amount; but the people were always convinced of the importance of such a work, and indeed built a diolces, or polished way across the isthmus, on which ships were drawn from one harbor to the other. As, according to Pausanius, the Isthmian sanctuary was situated at or very near the shortest line across the isthmus, it is not unlikely that in the work of cutting the canal important Græco-Roman archæological discoveries may be made.

The Electric Railway in Ireland.

IRELAND, though a "most distressful country," in political matters, can show Great Britain the way in some things. The first electric railway in the United Kingdom is already completed, and will be very shortly running between Portrush and Bushmills, the pretty little town so noted for salmon and whisky, close to the famed Giant's Causeway. The track is laid on a side path, and not in the center of the high-road, and consequently will not interfere with the regular wheeled traffic. I have seen the same thing in Lombardy, where steam-trams run along one side of the main roads, sometimes for 20 or 30 miles at a stretch. Our first electric railway, from Charing Cross to Waterloo, has only passed its first parliamentary stage.—*London World.*

Debt of Louisiana.

THE Louisiana State Debt ordinance, which has passed both branches of the Legislature, and which, it is understood, will receive the signature of the Governor, fixes the interest to be paid on the consolidated bonds at 2 per cent for five years from January 1, 1880, and 4 per cent annually thereafter. A tax of not more than three mills is to be levied on all property to pay this interest. This proposition will be submitted to the popular vote at the next election, but as the election does not take place until 1884 further provision is made for payment of the accrued and accruing interest coupons, now at the rate of 2 per cent from January 1, 1880, to January 1, 1885 inclusive, out of any moneys to the credit of the interest tax fund, on presentation and surrender of the coupons. This payment shall not impair or change any right of the holders in case the proposed amendment to the constitution relative to the State debt on submission to the people is not adopted. It is further ordered that the coupons shall not be destroyed or defaced, but kept in packages for indentification, with the names of the holders, until the proposed amendment is agreed to.

THE iron steamship San Blas, constructed at Roach's shipyard, Chester, Penn., for the Pacific Mail Steamship Company, was launched on the 1st inst. She is 283 feet long, 36 feet beam, 21 feet depth of hold, and 2,000 tons burden.

RAILROAD AND CANAL DIVIDEND STATEMENT.

Showing the amount of Stock Outstanding, the Dividend Periods and the date of last Dividend.

Marked thus(*)are leased roads.	Stock out-standing.	Divide'd Periods.	Last Dividend Payable.
Albany and Susq*...100	2,500,000	semi-an	July '82 2
Ashuelot.....100	210,000	q'arterly	Oct. '81 3½
Atch., Top. and S. Fe100	54,000,000	q'arterly	May '82 1½
Atlanta and W. Point100	1,232 200	semi-an	Jan. '82 6
Atlantic and St. Law*100	5,840,000	semi-an	Mar. '82 3
Augusta and Savan'h100	1,022,900	semi-an	June'81 3½
Avon, Genesee&MtM*100	225,000	semi-an	July '81 3
Baltimore and Ohio.100	14,792,566	semi-an	May '82 5
" " pref.100	5,000,000	semi-an	July '82 3
Washington Br....100	1,650,000	semi-an	Apl. '82 5
Berkshire*.....100	600,000	q'arterly	Apl. '82 1¾
Boston and Albany..100	20,000,000	q'arterly	June'82 2
Bos.&N.Y.AirLine pf.100	2,795,227	q'arterly	June'82 1
Bos., Cl., F.&N.B.pref.100	1,750,100	.....	Apl. '82 3½
Bos., Conc.&Mont.pf*100	800,000	semi-an	May '82 3
Boston and Lowell..500	3,940,000	semi-an	July '82 2
Boston and Maine...100	6,921,274	semi-an	May '82 4
Boston & Providence100	4,000,000	semi-an	May '82 4
Attleborough Br...100	131,700	semi-an	July '82 3½
Bos., Revere B&Lynn100	419,400	semi-an	July '82 3½
Buffalo, N. Y. & Erie*.100	950,000	semi-an	June'82 3
Camden & Atlantic.. 50	377,400	q'arterly	Apl '80 38
" " pref. 50	880,650	q'arterly	Apl '80 3½s
Camden & Burl. Co..100	381,925	semi-an	July '82 3
Canada Southern....100	15,000,000	.....	Feb. '81 2½
Cape May & Millville* 50	447,000	semi-an	June'81 3
Catawissa*..... 50	1,159,500	annual	Oct.'81 $1½
" pref..... 20	2,200,000	semi-an	May '82 3½
" new pref.. 50	1,000,000	semi-an	May '82 3½
Cayuga and Susq.*.. 50	589,110	semi-an	July '81 4½
Cedar Rapids&Mo.R*100	6,850,400	q'arterly	May '82 1½
" " pref.100	769,600	semi-an	Feb. '82 3½
Central of Georgia...100	7,500,000	semi-an	June '82 4
Central of New Jersey100	18,563,200	q'arterly	July '76 2½
Central Ohio*..... 50	2,437,950	semi-an	July '82 3
" pref.. . 50	411,550	semi-an	July '82 3
Central Pacific 100	59,275,500	semi-an	Feb. '82 3
Chemung*.....100	380,000	q'arterly	July '81 1½
Cheshire preferred ..100	2,155,300	semi-an	July '82 1½
Chicago and Alton...100	11,181,741	semi-an	Mar. '82 4
" " pref 100	2,245,400	semi-an	Mar. '82 4
Chi., Burl. & Quincy.100	55,337,455	q'arterly	June'82 2
Chi., Iowa & Nebras*.100	3,916,200	semi-an	July '82 4
Chi., Mil. & St. Paul.100	20,404,261	semi-an	Apl. '82 3½
" " pref.100	14,401,483	semi-an	Apl. '82 3½
Chi. & N. Western...100	14,988,257	semi-an	June'82 3½
" pref.100	21,525,353	q'arterly	June'82 2
Chi., R. I. & Pacific..100	41,960,000	q'arterly	Aug. '82 1¾
Chi. and West Mich .100	6,151,000	semi-an	Feb. '82 2½
Chi., St.P., M.&O.pref.100	10,390,000	q'arterly	July '82 1¾
C., Ind., St. L. & Chi..100	6,000,000	q'arterly	July '82 1½
Cin., Sand. & Clev.pf. 50	429,037	semi-an	May '82 3
Clev. and Mahoning* 50	3,759,200	semi-an	Nov.'81 3½
Clev. and Pittsburg* 50	11,244,336	q'arterly	June'82 1¾
Columbus & Xenia*. 50	1,786,200	q'arterly	June'82 2
Colum. & Hocking Val.100	2,500,200	semi-an	Aug.'81 208
Concord 50	1,500,000	semi-an	May '82 5
Concord and Ports.*..100	350,000	semi-an	July '82 3½
Conn. & Passump. Riv100	2,244,400	semi-an	Feb. '82 3
Connecticut River ..100	2,100,000	semi-an	July '82 4
Cumberland Valley.. 50	1,292,950	q'arterly	July '82 2½
" 1st pref 50	241,900	semi-an	Apl. '82 4
" 2d pref. 50	243,000	semi-an	Apl. '82 4
Danbury & Norwalk. 50	600,000	.....	Apl. '82 1¾
Dayton and Mich.*.. 50	2,402,573	semi-an	Apl. '82 1¾
" " pref. 50	1,211,250	q'arterly	July '82 2
Delaware*..... 25	1,468,940	semi-an	July '82 3
Del. & Bound Brook*100	1,652,000	q'arterly	May '82 1¾
Del., Lack.& Western 50	26,200,000	q'arterly	July '82 2
Denver & Rio Grande.100	29,160,000	q'arterly	Jan. '82 1½
Den., South P. & Pac.100	3,500,000	.....	Aug.'80 4
Detroit, Lans. & Nor.100	1,825,600	semi-an	Aug.'80 2½
" " pref.100	2,508,380	semi-an	Feb. '82 3½
Dubuque&Sioux C'y*100	5,000,000	semi-an	Apl. '82 3
East Pennsylvania*., 50	1,709 550	semi-an	July '82 3
East Mahanoy*..... 50	392,950	semi-an	July '82 3
Eastern (N. H.).....100	492,500	semi-an	June'82 2½
Eel River.....100	3,000,000	q'arterly	June '82 $1
Elmira, Jef.&Canand*100	500,000	annual	Sep. '80 5
Elmira&Williamsp't* 50	500,000	semi-an	May '82 1½
" pref. 50	500,000	semi-an	July '82 3½
Erie and Pitsburg*.. 50	1,998,400	q'arterly	June '82 1¾
Evansville & Terre H.100	100,000	semi-an	Nov.'81 2
Fitchburg.....100	4,500,000	semi-an	July '82 3
F. & P. Marquette pf.100	6,500,000	semi-an	July '82 3
Ft.W. & Jackson pref.100	2,000,000	.....	May '82 2
Georgia. 100	4,200,000	q'arterly	July '82 2½
Granite 100	1,250,000	semi-an	July '82 3
Han. & St. Jo. pref .100	5,083,024	semi-an	Aug. '82 3½
Harrisbg&Lancaster 50	1,182,500	semi-an	Jan. '82 3½
Housatonic pref. ...100	1,180,000	q'arterly	Apl. '82 2
Illinois Central.....100	39,000,000	semi-an	Mar. '82 3½
Ia. Falls & Sioux City*100	4,623,500	q'arterly	June'82 1½
Iowa R. Land Co....100	7,620,000	q'arterly	May '82 1
Jeffersonv. Mad. & Ind100	2,000,000	q'arterly	May '82 1¾
Joliet and Chicago*..100	1,500,000	q'arterly	June'82 1¾
Kan. C., Ft. S. & Gulf...100	4,000,000	.....	Feb. '82 2
" " pref...100	2,750,000	semi-an	Feb. '82 4
Kentucky Central...100	500,000	semi-an	June'81 1
" " pref..100	5,583,500	semi-an	June'83 1
Lake Shore&Mich.So.100	49,466,500	q'arterly	Aug. '82 2
" (guar.)100	533,500	semi-an	Aug. '82 5
Lawrence*..... 50	450,000	q'arterly	July '82 2
Lehigh Valley..... 50	27,496,895	q'arterly	July '82 1½
" pref. 50	106,300	q'arterly	July '82 1½

Marked thus(*)are leased roads.	Stock out-standing.	Divide'd Periods.	Last Dividend Payable.
Little Miami..... 50	4,637)300	q'arterly	June'82 2
Little Rock & Ft. S..100	4,096,135	.....	July'81 108
Little Schuylkill*.. . 50	2,646,100	semi-an.	Jan. '82 3½
Louisville & Nashv...100	19,130,913	semi-an.	Feb. '82 3
Lowell & Andover...100	500,000	semi-an.	Jan. '82 3½
Lykens Valley.....100	600,000	q'rterly.	Oct.' 81 2½
Manchester & Law..100	1,000,000	semi-an.	May '82 5
Manhattan 100	13,000,000	.....	.....
" " 1st pref.100	6,500,000	q'rterly.	July '82 1½
" " 2d pref.100	6,500,000	q'rterly.	July '82 1½
Marietta& Cincinnati 50	1,386,350	.....	.....
" " 1st pref 50	8,105,600	semi-an.	Sep. '66 38
" " 2d pref 50	4,440,000	semi-an.	Sep. '66 38
Marq. Hout. &Ont. pf..100	2,259 026	.....	Feb. '82 4
Massawippi*.....100	400,000	semi-an.	Feb. '82 3
Michigan Central....100	18,738,204	q'rterly.	Aug. '81 1
Middlesex Central...100	280,000	semi-an.	Feb. '82 3
Mill Creek&Minehill* 50	323,000	semi-an.	Jan. '82 5
M. Hill& Schuyl. Hav* 50	4,022,500	semi-an.	July '82 3½
Missouri Pacific.....100	28,169,800	q'rterly.	July '82 1½
Mobile&Montgomery100	3,022,517	semi-an.	Feb. '80 2½
Mont. & Wells River100	800,000	annual	Feb. '80 2
Morris and Essex.... 50	15,000,000	semi-an.	July '82 3½
Mt Carbon&PtCarbon 50	282,350	semi-an.	Jan.. '82 6
Nashua and Lowell..100	800,000	semi-an.	May '82 4
Nashua & Rochester.100	1,305,800	semi-an.	Apl. '82 1½
Nashv. & Decatur...100	1,827,000	semi-an.	June'81 3
Nash., Chat. &St Louis 25	6,670,325	semi-an.	Apl. '82 1½
Naugatuck.....100	2,000,000	semi-an.	Jan. '82 5
Nesquehoning Val'y* 50	1,300,000	semi-an.	Mar.'82 3
N. Castle&Beaver Val* 50	600,000	q'rterly.	Oct. '81 —
New London North'n*100	1,500,000	q'rterly.	July '82 1½
N. Y. Cen. & Hud. R.100	89,428,330	q'rterly.	July '82 2
N. Y. and Harlem....100	7,950,000	q'rterly.	July '82 4
" " pref.100	1,500,000	q'rterly.	July '82 4
" City Line.. —	.....	annual	Apl. '82 3
N.Y., Lake Erie&West.100	77,083,900	.....	.....
" " pref.100	8,156,825	.....	Jan. '82 6
N. Y., N. H. & Hart..100	15,500,000	semi-an.	Jan. '82 5
N. Y., Prov. & Boston100	3,000,000	q'rterly.	May '82 2
Niag. Bridg&Canand*100	1,000,000	semi-an.	July '81 3
North Carolina*.....100	3,000,000	semi-an.	Sep. '81 3
" " pref.100	1,000,000	semi-an.	Sep. '81 3
N. Eastern (S.C.) pref100	86,000	semi-an.	May '81 4
Norfolk & Western pref. 50	15,000,000	q'rterly.	June '82 $1
North Pennsylvania. 50	4,527,150	q'rterly.	May '82 1¾
Northern Central.... 50	6,142,000	semi-an.	July '82 3
Northern N. Hampsh100	3,068,400	semi-an.	June'82 3
Northern N. Jersey*. 100	1,000,000	semi-an.	July '80 2½
Norwich&Worcester*100	2,604,400	semi-an.	July '82 5
Ohio 100	18,500,000	.....	.....
Ohio and Miss. pref..100	4,030,000	semi-an.	Mar.'75 3½
Old Colony.....100	7,333,800	semi-an.	July '82 3½
Oregon R'way&Nav.100	6,000,000	q'rterly.	May '82 2
Oswego & Syracuse..100	1,320,400	semi-an.	Aug.'81 4½
Panama.....100	7,000,000	.....	July '82 6½
Paterson & Hudson*.100	630,000	semi-an.	July '82 4
Paterson & Ramapo.100	248,000	semi-an.	July '82 4
Pember. &Hightst'n*. 50	342,150	semi-an.	Jan. '82 3
Pennsylvania..... 50	77,672,750	semi-an.	May '82 4
Pennsylvania Co..... 50	20,000,000	semi-an.	June'81 2½
Peoria & Bureau Val*100	1,200,000	semi-an.	Feb. '82 4
Philadelphia & Erie*. 50	7,013,700	semi-an.	.....
" " pfd 50	2,400,000	semi-an.	Jan. '75 4
Phil, Ger. &Norrist'n* 50	2,231,900	q'rterly.	June'82 3
Phil. and Reading... 50	32,726,375	q'rterly.	Jan. '76 2½
" " pref. 50	1,551,800	q'rterly.	July '76 3½
Phila. and Trenton...100	1,259,100	q'rterly.	July'82 2½
Phila., Wil. and Balt. 50	11,585,750	semi-an.	July '82 4
Pittsb., Ft. W. & Chi.*100	19,714,285	q'rterly.	July'82 1¾
" Special Imp.100	6,770,900	q'rterly.	July '82 1½
Pittsfield&N. Adams..100	450,000	semi-an.	July '82 2½
Portl., Saco & Portsm100	1,500,000	semi-an.	July '82 3
Providence & Worces.100	2,000,000	semi-an.	July '82 3
Rensselaer&Saratog.*100	7,000,000	semi-an.	July '82 4
Rhode Island& Mass..100	100,000	.....	Jan. '81 3
Richmond& Danv...100	3,866,000	q'rterly.	May '82 2
Richmond & Petersb100	1,009,300	semi-an.	Jan. '81 3
Roch. &Genesee Val.*100	555,200	semi-an.	July '82 3
Rome, Watert. & Ogd..100	5,293,900	semi-an.	July '75 1½
Rutland preferred.. 100	4,000,000	semi-an.	Feb. '82 1
St. L., Alt. & T. Haute.100	2,300,000	.....	.....
" " pref.100	2,468,406	.....	May '82 3
St. L. & S. Fran. 1st pref100	4,500,000	.....	Aug. '82 3½
St. L., I. Mt. & South'n..100	21,459,921	semi-an.	Feb. '74 3
St. P. & Duluth pref.100	4,705,000	q'rterly.	June'82 1¾
St. P., Minn. & Man...100	15,000,000	semi-an.	Aug. '82 3½
Schuylkill Valley*... 50	576,050	semi-an.	Jan. '82 2½
Seaboard & Roanoke.100	1,229,600	semi-an.	May '82 5
Shamokin V.&Pottsv 50	669,450	semi-an.	Feb. '82 3
Shore Line*.....100	1,000,000	semi-an.	July '82 4
Sioux C.&Pacific pref100	169,000	semi-an.	Apl. '82 3½
South Br. (N. J.)*....100	438,300	semi-an.	Jan. '82 3
South Western (Ga.)*100	3,892,300	semi-an.	Dec. '81 3½
Stockbridge&Pitts.*..100	448,700	semi-an.	Oct. '81 1½
Summit Branch*.... 50	4,010,150	semi-an.	Feb. '76 3
Syr., Bingham&N.Y.*100	2,500,000	semi-an.	Feb. '81 2
Terre Haute & Ind...100	1,988,150	semi-an.	Feb. '82 4
Troy and Boston....100	1,609,000	semi-an.	Feb. '80 2
Union Pacific. 100	61,000,000	q'rterly.	July '82 1¾
United Cos of N. J.*.100	20,490,000	q'rterly.	July '82 2½
Utica, Shenango&S V100	4,000,000	semi-an.	Nov.'81 3
Utica and Black Riv.100	1,772,000	semi-an.	Mar.'82 2
Vermont and Mass..100	3,050,000	semi-an.	Apl. '82 3
Wab. St.L.& Pac.pref.100	22,615,100	q'rterly.	Nov.'81 1½

Marked thus(*)are leased roads.	Stock out-standing.	Divide'd Periods.	Last Dividend Payable.
Ware River*.....100	750,000	semi-an.	July '82 3½
Warren (N. J.).....100	1,800,000	semi-an.	Apl. '82 3½
Warwick Valley.....100	340,000	semi-an.	July '82 2½
Westchest&Phil.pref.100	821,300	semi-an.	July '80 2
West Jersey.....100	1,359,750	semi-an.	Apl. '83 38
Wilmingt'n&Weld'n.100	1,456,200	semi-an.	July '82 3
Wil., Col., & Aug 100	960,000	semi-an.	July '82 3
Winchester&Poto'c.*100	180,000	semi-an.	July '82 3
Winchester&Strasb.*100	74,700	semi-an.	July '82 8
Worcester & Nashua. 75	1,789,800	semi-an.	July '82 1½
HORSE-POWER R. R.			
Albany City.....100	200,000	annual	..... '80 5½
Baltimore City.....100	1,000,000	semi-an.	July '82 3
Balt., Cat. &El. Mills..100	....	semi-an.	Jan. '82 2
BleeckerSt. &Ful. F'y.100	900,000	semi-an.	July '81 ¾
Boston&Chelsea pref. 50	110,000	semi-an.	Apl. '82 3
Broadway (Brooklyn)100	250,000	q'arterly	Oct. '81 3
B'way&7th Av, (N.Y.)100	2,100,000	q'arterly	Oct, '81 2
B'klyn&Hunter's Pt.100	400,000	semi-an.	Apl. '79 3
Brooklyn City.....100	2,000,000	q'arterly	Dec. '81 3½
Bushwick (Brooklyn)100	309,000	semi-an.	July '81 2½
Cambridge.....100	908,000	q'arterly	Apl. '82 4½
Cen. Park, N. & E. Riv.100	1,800,000	q'rterly.	July '82 2
Christoph'r&TenthSt100	650,000	semi-an.	Aug. '81 2½
Citizens' (Phil.)..... 50	192,500	q'rterly.	Jan. '82 2½
Citizens' (Pbg.)..... 50	200,000	annual..	....'80 14½
Coney Island&Bklyn100	500,000	semi-an.	Oct. '80 5
Continental (Phil.) .. 50	580,000	semi-an.	July '82 6
D. Dock, E. B'way&Bat100	1,200,000	q'arterly	Nov. '81 4
Eighth Av. (N. Y.)...100	1,000,000	q'rterly.	Oct. '81 3
42d St. & G. St. Ferry100	747,000	semi-an.	Nov. '81 6
Frankf.&Southw (Ph) 50	600,000	q'rterly.	Jan. '82 6
Germantown, (Ph.).. 50	572,800	q'rterly.	July '82 2½
Girard College (Ph.) . 50	500,000	semi-an.	July '71 3
Grand St. & Newton.100	170,091	semi-an.	July '81 2½
Green&Coates St.(Ph) 50	150,000	q'rterly.	July '82 3
Heston, Mantau&F'm 50	299,381	semi-an.	Jan. '75 4
Highland.....100	600,000	semi-an.	July '82 4
Lomb.&SouthSts(Ph) 25	195,000	semi-an.	Oct. '75 4
Lynn and Boston....100	200,000	semi-an.	May '82 4
Malden and Melrose.100	165,000	.....	.....
Metropolitan (Bost.). 50	1,500,000	semi-an.	July '82 4
Middlesex (Boston)..100	650,000	semi-an.	May '82 3½
N.Y., Bay Ridge&Jam100	150,000	..... .	Oct. '78 7
Ninth Av. (N. Y.)....100	797,320	.....	.....
Orange & Newark....100	282,555	.....	.....
People's (Phila.)..... 25	124,744	..... .	Apl. '82 2
Philadelphia City... 50	475,000	semi-an.	Jan. '82 5
Phila. and Darby.... 20	200,000	semi-an.	July '81 3½
Phila. & Grey's Ferry. 50	308,000	semi-an.	Jan. '82 6
Pbg, Alleg. &Manches. 50	300,000	q'rterly.	Oct. '81 3
Ridge Avenue (Ph.).. 50	420,000	semi-an.	Oct. '81 11
Second Avenue (N.Y.)100	1,199,500	semi-an.	July '81 2½
Second&Third St.(Ph) 50	771,076	q'rterly.	Jan. '82 4½
17th &19th sts.(Ph.).. 50	250,000	semi-an.	July '81 3
Sixth Avenue (N. Y.)100	750,000	semi-an.	Oct. '81 5
Somerville (Boston)..100	113,000	semi-an.	May '82 3
South Boston..... 50	600,000	semi-an.	July '82 4
Third Avenue, N. Y..100	2,000,000	q'rterly.	Nov. '81 5
13th and 15th sts., Ph 50	334,529	q'rterly.	Jan. '82 4
23d street, N. Y.....100	600,000	semi-an.	Aug. '81 4
Union, Boston.....100	374,300	semi-an.	Jan. '82 4
Union, Phila..... 50	1,005,000	semi-an.	Jan. '82 7
West Philadelphia... 50	750,000	semi-an.	July '77 10
CANALS.			
Chesapeake and Dela 50	2,078,038	semi-an.	June'75 2
Delaware Division... 50	1,633,350	semi-an.	Feb. '82 $1
Delawa. and Hudson100	20,000,000	q'rterly.	June'82 1¾
Delaware & Raritan*.100	5,847,400	q'rterly.	July '82 2½
Lehigh Coal and Nav 50	11,204,250	semi-an	June'82 2
Monongahela Nav... 50	1,004,500	semi-an.	July '81 $2
Morris, consolidated.100	1,025,000	semi-an.	Feb. '81 2
" preferred....100	1,175,000	semi-an.	Feb. '81 5
Pennsylvania..... 50	4,501,200	.....	.....
Schuyl. Nav., com.*. 50	859,100	annual..	Au. '81 50c.
" " pref... 50	3,200,000	annual..	Aug. '81 $1
MISCELLANEOUS.			
Adams Express.....100	12,000,000	q'rterly.	June'82 2
American Express... 50	18,000,000	semi-an.	July '82 3
Amoskeag Manuf. Co.100	3,000,000	semi-an.	June'81 5
Calumet&HeclaMin'g —	100,000 S.	q'rterly.	May '82 $5
Central Mining Co...100	.....	semi-an.	Feb. '82 2½
Consolidation Coal..100	10,250,000	semi-an.	Jan. '82 2
George's Creek C.&I.100	.....	semi-an.	Jan. '82 3
Maryland Coal.....100	4,400,000	semi-an.	Feb. '76 1½
Mariposa L. &Mining100	10,000,000	..... .	.....
" pref100	5,000,000	..... .	.....
Missouri Val. Land Co100	200,000	semi-an.	July '82 12
National Tube Works100	1,000,000	q'rterly.	July '82 3
Pac. Mail Steamship.100	20,000,000	q'rterly.	Sept.'69 3
Pennsylvania Coal... 50	5,000,000	q'rterly.	May '82 3
Pullman Palace Car...100	10,032,800	q'rterly.	May '82 2
Quicksilver, com....100	5,708.700	..... .	May '82 0.4
" pref....100	4,291,300	..... .	May '82 6
Quincy Mining Co... 25	40,000 shs	semi-an.	Feb. '82 $8
Quincy R. R. Bridge.100	1,750,000	semi-an.	July '82 5
SiouxC.&I.F.L.&L.Co100	500,000	semi-an.	June'82 5
Spring Mt. Coal.....100	1,500,000	semi-an.	June'82 3½
Topeka Equip'nt Co.100	255,500	semi-an.	Apl. '82 5
United States Ex....100	7,000,000	q'rterly.	May '82 1
Wells-Fargo & Co. Ex100	6,250,000	semi-an.	July '82 4
Western Union Tel..100	80,000,000	q'rterly.	July '82 1½

RAILROAD EARNINGS.—MONTHLY.

	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total.
Burl., Cedar Rap. & Northern:													
1880	184,316	165,170	188,325	141,652	149,504	153,378	143,432	160,160	179,804	204,991	189,330	193,419	2,053,484
1881	167,750	124,510	148,551	184,680	165,630	205,912	174,351	209,112	221,801	221,748	203,880	232,812	2,259,037
1882	252,823	225,631	224,107	178,304	199,278	.....	.....	.....	.....	.....	.....	.....	.....
Central Pacific:													
1880	1,200,614	1,070,487	1,373,438	1,356,716	1,778,488	1,724,950	1,840,067	1,973,438	1,964,997	1,120,229	2,199,466	1,905,221	20,508,112
1881	1,602,907	1,454,218	1,709,637	1,872,370	2,091,410	2,159,381	1,859,000	2,059,000	2,293,000	2,514,000	2,267,000	2,110,000	23,947,951
1882	1,876,000	1,702,000	1,987.000	2,052,000	2,353,000	2,239,000	.....	.....	.....	.....	.....	.....	.....
Chesapeake and Ohio:													
1880	202,335	198,681	222,762	221,559	199,443	214,352	238,236	259,110	247,303	211,820	240,795	218,009	2,674,308
1881	162,540	184,389	228,479	227,343	252,235	241,135	225,096	262,858	247,144	237,303	235,585	203,562	2,702,762
1882	210,455	209,708	208,981	267,454	255,939	.....	.....	.....	.....	.....	.....	.....	.....
Chicago and Alton:													
1880	534,054	497,013	626,473	542,961	616,128	617,524	708,906	761,120	767,349	785,199	696,776	574,695	7,718,198
1881	487,890	461,641	529,915	558,190	548,556	616,935	671,466	771,466	768,897	750,359	680,133	635,307	7,553,988
1882	579,447	530,480	584,483	561,787	553,412	.....	.....	.....	.....	.....	.....	.....	.....
Chicago and Northwestern:													
1880	1,154,632	1,131,683	1,361,725	1,294,573	1,875,608	1,671,177	1,699,686	1,767,938	2,020,245	2,105,217	1,855,671	1,477,902	19,416,007
1881	1,240,667	963,208	1,178,795	1,474,612	1,879,006	2,306,640	1,983,031	2,315,164	2,292,676	2,341,097	2,019,037	1,855,476	21,849,209
1882	1,620,336	1,471,945	1,696,568	1,634,819	2,058,133	.....	.....	.....	.....	.....	.....	.....	.....
Chicago, Burlington and Quincy:													
1880	1,432,740	1,411,870	1,732,518	1,489,894	1,909,627	1,682,956	1,773,643	1,834,321	1,862,285	1,934,762	1,837,860	1,552,018	20,454,494
1881	1,307,948	1,034,821	1,418,149	1,574,371	1,679,455	2,083,803	1,888,558	2,173,945	2,262,981	2,031,001	1,816,133	1,905,490	21,324,150
1882	1,658,834	1,457,300	1,566,217	1,530,838	.....	.....	.....	.....	.....	.....	.....	.....	.....
Chicago, Milwaukee and St. Paul:													
1880	764,298	738,749	900,675	871,041	1,134,745	1,037,958	1,026,708	991,297	1,257,677	1,493,620	1,472,037	1,397,308	13,086,119
1881	990,847	682,717	916,989	1,259,946	1,538,491	1,371,000	1,560,000	1,678,000	1,645,000	1,590,000	1,569,000	1,855,000	17,025,462
1882	1,435,000	1,377,000	1,561,000	1,518,000	1,629,000	.....	.....	.....	.....	.....	.....	.....	.....
Chicago, St. Paul, Minneapolis and Omaha:													
1880	193,827	173,078	259,783	259,208	232,146	218,093	236,995	251,013	300,833	342,052	342,894	312,173	3,122,097
1881	257,786	158,594	251,648	261,211	350,124	404,562	392,702	385,586	363,685	382,714	380,733	391,950	3,981,296
1882	307,498	315,100	405,779	356,558	406,420	.....	.....	.....	.....	.....	.....	.....	.....
Cincinnati, Indianapolis, St. Louis and Chicago:													
1880	155,697	172,541	198,220	168,199	186,995	200,332	204,138	233,478	343,627	239,881	209,014	198,254	2,412,185
1881	182,523	171,511	191,005	183,710	191,056	188,256	178,861	229,858	219,977	212,606	194,805	192,623	2,296,916
1882	200,042	186,879	208,066	204,269	199,110	.....	.....	.....	.....	.....	.....	.....	.....
Denver and Rio Grande:													
1880	124,759	126,922	160,883	164,882	193,925	295,455	373,132	400,133	406,583	473,318	408,562	349,196	3,478,007
1881	307,476	317,681	398,493	433,111	514,767	584,230	548,284	606,193	620,643	665,686	566,819	643,417	6,206,812
1882	491,914	412,987	535,055	559,917	614,298	537,462	.....	.....	.....	.....	.....	.....	.....
Hannibal and St. Joseph:													
1880	176,079	166,965	216,061	206,735	191,317	179,396	224,312	238,081	233,448	242,214	207,147	279,635	2,561,391
1881	154,401	122,874	176,356	190,812	172,950	194,949	198,110	215,308	202,567	313,433	201,782	180,376	2,230,966
1882	138,284	154,717	168,798	148,913	154,917	.....	.....	.....	.....	.....	.....	.....	.....
Illinois Central:													
1880	595,212	613,806	613,008	535,732	665,120	681,736	724,095	732,755	806,836	880,211	783,120	673,182	8,304,812
1881	631,281	524,499	557,789	662,493	673,259	803,887	720,004	868,407	828,847	815,238	737 218	763,475	8,586,397
1882	728,173	689,387	695,371	674,603	674,749	.....	.....	.....	.....	.....	.....	.....	.....
Indiana, Bloomington and Western:													
1880	80,498	89,690	116,185	90,374	85,733	106,954	103,438	116,732	110,622	121,343	96,621	104,619	1,233,079
1881	90,283	83,261	192,085	203,677	200,064	96,586	83,764	117,956	195,307	181,674	160,826	156,697	.....
1882	195,824	175,755	206,235	205,934	182,554	.....	.....	.....	.....	.....	.....	.....	.....
Louisville and Nashville:													
1880	674,455	575,035	612,593	563,883	655,014	976,229	772,537	827,088	931,910	1,000,326	953,086	949,184	9,491,346
1881	816,960	805,124	947,959	850,862	828,726	1,227,885	817,135	876,192	951,566	1,002,950	1,065,223	1,122,285	11,326,859
1882	950,065	960,036	1,073,745	950,007	946,435	.....	.....	.....	.....	.....	.....	.....	.....
Mobile and Ohio:													
1880	250,116	204,094	168,301	140,091	129,249	121,855	131,621	140,593	184,246	264,714	251,368	287,373	2,373,621
1881	224,347	216,768	230,916	163,551	145,803	136,517	131,009	159,348	209,044	252,921	252,434	262,025	2,406,437
1882	161,433	158,154	152,651	145,272	137,645	132,572	.....	.....	.....	.....	.....	.....	.....
Nashville, Chattanooga and St. Louis:													
1880	205,633	191,154	169,457	155,466	158,839	144,155	151,594	169,326	167,473	178,266	182,087	175,996	2,049,448
1881	178,143	190,866	207,710	183,525	104,430	154,549	150,430	168,317	179,979	172,121	152,059	173,127	2,075,256
1882	156,994	159,961	161,005	154,155	137,645	.....	.....	.....	.....	.....	.....	.....	.....
New York and New England:													
1880	164,232	149,907	183,845	179,689	183,701	219,891	205,056	249,885	235,642	215,491	210,856	198 108	2,396,302
1881	189,749	173,614	212,019	216,913	217,185	231,518	246,821	280,524	299,573	261,199	242,412	237,729	2,809,255
1882	213,840	217,261	265,222	263,544	283,244	.....	.....	.....	.....	.....	.....	.....	.....
New York, Lake Erie and Western:													
1879	1,147,173	1,207,391	1,356,780	1,372,755	1,350,574	1,230,419	1,273,533	1,450,223	1,492,497	1,713,697	1,515,835	1,398,224	16,509,127
1880	1,296,381	1,252,218	1,644,958	1,643,151	1,592,544	1,661,812	1,580,976	1,606,874	1,786,417	1,899,910	1,799,338	1,726,788	19,149,361
1881	1,443,437	1,425,765	1,847,261	1,709,057	1,776,891	1,794,982	1,787,081	1,772,895	1,734,200	.....	.....	.....	.....
Northern Central:													
1880	334,494	330,860	415,325	386,130	329,788	419,193	450,298	453,923	464,093	512,918	459,054	494,310	5,050,387
1881	386,157	382,657	452,906	487,273	465,588	487,287	440,811	498,008	429,565	449,664	487,160	476,622	5,443,697
1882	407,368	413,551	430,194	435,129	482,667	.....	.....	.....	.....	.....	.....	.....	.....
Northern Pacific:													
1880	81,390	77,259	119,357	185,700	217,613	253,105	241,277	223,500	330,300	358,456	300,822	220,993	2,629,710
1881	116,508	78,803	162,984	216,210	312,705	368,276	404,180	411,624	490,096	565,485	428,903	434,331	4,044,576
1882	239,800	269,000	384,000	438,000	568,332	.....	.....	.....	.....	.....	.....	.....	.....
Philadelphia and Erie:													
1880	224,307	245,372	327,678	334,947	311,470	331,024	308,699	347,532	322,737	367,082	324,966	281,919	3,727,733
1881	224,303	225,501	285,573	293,323	343,792	350,585	291,669	303,849	276,522	292,392	284,078	282,772	3,454,309
1882	252,727	246,246	265,311	277,851	341,415	.....	.....	.....	.....	.....	.....	.....	.....
St. Louis and San Francisco:													
1880	198,091	195,948	193,146	176,164	167,664	173,607	213,297	259,995	280,873	328,194	290,329	226,063	2,698,371
1881	212,435	178,234	262,050	265,298	283,399	260,254	252,333	286,373	279,064	308,569	284,320	287,914	3,160,245
1882	256,784	244,654	274,959	242,806	253,419	240,177	.....	.....	.....	.....	.....	.....	.....
St. Louis, Alton and Terre Haute:													
1880	153,139	163,737	168,994	155,462	147,928	150,207	191,077	216,759	204,295	221,863	188,773	184,503	2,146,741
1881	175,725	166,012	201,137	197,447	172,177	165,896	158,674	189,295	187 299	179,921	162,544	153,852	2,112,801
1882	168,987	149,619	178,145	157,450	162,842	.....	.....	.....	.....	.....	.....	.....	.....
St. Louis, Iron Mountain and Southern:													
1880	555,983	490,195	451,560	408,241	349,053	363,454	432,655	565,869	671,219	688,365	632,052	656,951	6,265,597
1881	570,957	560,791	704,002	548,300	479,075	474,302	533,512	644,386	690,400	719,239	687,280	709 498	7,319,744
1882	516,370	501,127	585,008	581,977	519,120	.....	.....	.....	.....	.....	.....	.....	.....
St. Paul, Minneapolis and Manitoba:													
1880	180,239	137,645	261,798	333,014	281,899	243,407	272,089	232,579	274,188	345,057	300,675	297,641	3,160,231
1881	254,187	159,482	320,962	425,685	382,642	405,322	387,488	414,954	485,736	605,708	508,530	528,262	4,878,960
1882	395,461	418 358	531,004	570,890	858,902	.....	.....	.....	.....	.....	.....	.....	.....
Texas and Pacific:													
1880	245,785	219,165	215,070	174,177	141,083	153,066	195,711	226,073	266,570	303,666	312,184	301,858	2,754,408
1881	281,176	260,781	319,928	295,066	281,782	264,204	320,466	354,082	337,117	578,668	357,724	381,218	3,921,569
1882	310,785	255,644	332,911	359,543	409,228	.....	.....	.....	.....	.....	.....	.....	.....
Union Pacific Railway:													
1880	1,433,636	1,393,992	1,730,509	1,937,220	2,027,269	1,928,528	1,934,215	1,913,035	2,270,179	2,707,860	2,251.148	1,869,335	23,448,445
1881	1,339,799	1,374,740	1,674,860	1,766,894	2,319,238	2,590,969	2,528,826	2,638,659	2,844,357	3,289 350	2,773,608	2,267,004	27,451,831
1882	1,961,088	1,759,863	2,226,832	2,462,004	2,491,590	.....	.....	.....	.....	.....	.....	.....	.....
Wabash, St. Louis and Pacific:													
1880	776,790	759,451	978,629	892,024	948,773	953,468	1,966,742	1,189,478	1,178,950	1,501,203	1,131,787	1,050,816	12,428,113
1881	811,617	818,922	1,121,592	1,023,482	1,144,660	1,308,993	1,131,751	1,542,838	1,490,027	1,396,300	1,399,555	1,328,278	14,461,570
1882	1,229,965	1,134,768	1,315,776	1,378,194	1,204,864	1,149,632	.....	.....	.....	.....	.....	.....	.....

CORRESPONDENCE.

[We pay no attention to communications unless the name and address of the writer are given, though the same will not be published if so requested. We assume no responsibility for statements made by correspondents, and we do not necessarily endorse ideas advanced by them. Under these conditions we think it of value to our readers to devote a liberal space to the free discussion by others—whose opinions may be at variance with our own—of subjects pertinent to our department of journalism.]

The First Locomotive Reminiscence. No. II.

Editor American Railroad Journal:

I notice that quite a controversy has sprung up in regard to the first locomotive, and the first trip by steam in the United States. One writer in your Journal, No. 19, May 20th, says: "The first locomotive placed on any railroad in the United States was put on the road known as the Schenectady and Saratoga Railroad in 1832. It was built by George Stephenson, at New-Castle-upon-Tyne, England, and imported by the Schenectady and Saratoga Railroad Company." This, he says, he has personal knowledge of, as he helped to set up the machine, and afterwards run it from time to time, to and from Saratoga. It would seem from the latter part of his piece that he was correcting some one else in regard to statements made in No. 16, Apr. 29th, but they both agree as to the year 1832 being the date of the first railroad trip by steam. Thurlow Weed is mentioned as being one of the passengers.

The venerable octogenarian who sent you the article no doubt is fully persuaded that he is right, and as far as his knowledge extended, no doubt is, but you will have to remember that those were not the days of telegraphs or even rapid railroad traveling. Many things might transpire a few hundred miles off even, of great importance to the country, and yet be comparatively unknown.

Another writer comes to the fore in No. 21, June 3, and modestly starts out with a slight degree of uncertainty whether the first train was run over the Albany and Schenectady or on a short road near Charleston, S. C., but finally settles down to the fact that it was on the Albany and Schenectady Road, but he puts it a year earlier than Mr. Van Buren, or nearly so, viz: Sept., 1831, but both evidently refer to the same trip. He gives the venerable Mr. Weed as authority, who is quoted in the *Times* as follows:

"It is still a more or less disputed point whether the Albany and Schenectady road or a short road near Charleston, S. C., was the first railroad operated in this country;" but says Mr. Weed, "I am inclined to think that the claim of the South Carolina road has been pretty well disposed of, and that history will decide that the Albany and Schenectady line was the first one completed and operated." Everybody knows the proverbial modesty of the New Yorkers—you are one, yourself, are you not, Mr. Editor?—when speaking of their own State, and therefore, this claim is put so mildly by Mr. Weed.

I have before me one of the most beautiful books ever gotten up by any railroad company in the United States, and I have no doubt I might say in the world. Cover and contents are certainly unsurpassed by anything that has yet been put out as railroad literature. None of your blurred photographs, copied out by half fledged artists, but Nature's most magnificent works transferred to the book by the eye and pencil of the best artists, and then their handiwork is done justice to fully by the best engravers. If you think I am exaggerating get one of these books and judge for yourself. The title of the book is "Picturesque B. & O." I am a full fledged Pennsylvanian, and as such take great pride in the magnificent company of our own State, but I have to confess that in bookmaking they are left behind. But to get back to the text. The work I have spoken of, as far as it is necessary to illustrate their history, is taken from the records of the company, and must therefore be correct, as they do not rely on memory, but have it in writing. It would seem the Baltimore and Ohio have been more particular in recording their early history than the other roads. The book referred to says, "About this period, 1829 and 1830, steam made its first appearance on the Liverpool and Manchester Railway in England, and attracted attention in this country; but there was a difficulty in running an engine on an American road. The English road was nearly straight; the American road was exceedingly crooked. For a season it was believed that this peculiar feature of American railroads would prevent the use of locomotive engines." That this was not the case was first practically demonstrated on the B. & O. road, but, I may as well out with it, this demonstration was first made by a New Yorker. Allow me to quote again from the book referred to. "But their practicability was soon demonstrated by a New Yorker, who was none other than the distinguished Peter Cooper. He was satisfied that steam-engines, if they could be used at all, could be applied on curved roads, and he visited Baltimore to test his faith. He came with an odd looking contrivance which he called a steam-engine, but which a boy of the present generation would hardly think worthy of the name of mechanical toy. The boiler was not as large as that of a range in the kitchen of a modern house. It was about the same diameter, but not more than half as high, and had a smoke-stack which looked like an aggravated oil-can. *This was the first locomotive ever built in America, and drew the first passenger car ever propelled by steam upon any railroad in the world.* The trip was a memorable one, and sufficiently exciting to carry out the anticipations of the most venturesome in the party. When a speed of fifteen miles per hour had been reached, it was deemed the very acme of lightning time, but when it was increased to eighteen miles per hour, then the (railroad) millennium had come, sure enough.

The ride was not without its incidents, one of which was a race with a horse that happened to be near the track. Just as it was nip and tuck between steam and animal power, the band slipped off the fly-wheel; the horse took the lead and won the race. Mr. Cooper who was acting as engineer, in attempting to right matters, severely lacerated one of his hands, and this is probably the first railroad casualty to be recorded in history. The return trip of thirteen miles was made in fifty-seven minutes, and the date, *August* 28, *of the year* 1830, was never afterwards forgotten by the participants in the excursion."

J. H. O.

Railway Accidents in Great Britain.

A return issued this week of the accidents which were reported to the Board of Trade as having occurred upon the railways of the United Kingdom states: During the year 1881 there were 42 persons killed, and 1,161 injured by accidents to trains, rolling-stock, permanent ways, etc., as compared with 51 and 1,023 respectively in the previous year. Of those killed from causes beyond their own control 23 were passengers and 19 servants of companies, those injured 993 were passengers and 168 servants. In the previous year 28 passengers were killed, and 23 servants. Numerous other accidents involving no personal injury were also reported. In addition to the numbers above given, 552 persons (85 of whom were passengers) and 1,132 (867 of whom were passengers) were killed from causes other than those given, including accidents from their own want of caution or misconduct, accidents to persons passing over level crossings, trespassers, and others. During the year also there were 502 servants of companies or contractors reported as having been killed and 2,278 injured, in addition to those included in the first division. The total number of persons killed and injured on railways in the United Kingdom in the course of public traffic during 1881 was 1,096 killed and 4,571 injured, against 1,135 and 3,959 respectively in 1880. But the total number of personal accidents reported to the Board of Trade during the year, by the several railway companies (including accidents which occurred upon their premises, but in which the movement of vehicles used excusively upon railways was not concerned) was 1,149 persons killed and 8,676 injured. The main cause of the accidents last year was, as usual, collisions of trains. Of the 23 passengers killed, 17 lost their lives through collision.—*Herapath's Railway Journal*, *June* 17.

The law prohibiting ticket scalping in Canada, went into effect on the 30th of June.

During the month of June 51,089 immigrants were landed at Castle Garden, against 39,072 in June 1881. In the six months ending June 30th, 278,342 were landed, against 241,802 in the corresponding six months of 1881.

The iron steam collier Tacona, built by Wm. Cramp & Son, Philadelphia, for the Central Pacific Railroad Company, was launched on the 1st inst. She is a companion ship to the San Pedro, now in course of construction, and both will be engaged in the Pacific trade. They are 300 feet long, 42 feet breadth of beam, and 30 feet depth of hold, being supplied with compound surface condensing engines of 2,000 horse power. The Tacona will be ready to sail in about two months. She will run from Tacona, British America, to San Francisco, carrying coal for the Central Pacific Railroad.

American Silver Coins.

THE silver dollar was not coined from 1806 to 1836, and in that year but 1,000 were minted, and none in the two years following. Nor were any coined in 1858. In 1873 the coinage of standard silver dollars was suspended, and the trade dollar alone coined, which again gave place to the current issue of the standard dollar. The dollar of 1804 is the most valuable single coin, having sold recently for $750. There are several varieties of them of the date of 1795; two of 1776, one with the date in larger figures than the other; two of 1737, one with six, and the other with seven stars; three kinds of 1798, one with small eagles and 13 stars (rare), one with small eagles and 15 stars (very rare), and one with a large eagle and broad and close date; of 1799 two kinds, one of five and the other of six stars; of 1802 there are two kinds of equal value. Half dollars have been coined every year since 1793 up to the present time, with the exceptions of the years 1797, 1798, 1799, 1800 and 1815. The 1796 and 1797 pieces were until recently most valuable, but the discovery of an 1853 date with no arrow-point at the sides of the date has made that coin valuable, as but few of them are known; and those not being for sale, there are no quotations. The half dollar of 1838, from the New Orleans mint, having the "O" between the date and bust, brings a high price. The dates of 1796 and 1797 bring upward of $25. Quarter dollars were coined in all years from 1796 to date, with the exceptions of 1798, 1799, 1800, 1801, 1802, 1803, 1808, 1809, 1810, 1811, 1812, 1813, 1814, 1817, 1824, 1826, 1829 and 1830. Those of 1823 are valued at $100 and those of 1827 at $75. Quarters of these dates are the only ones that are worth over $4 or $5.

A New Boiler Cleaner.

A RECENT invention in cleaners for steam boilers consists of a "mud or scum pipe" provided on its upper side, at intervals of about one foot, with horizontally arranged scum-collecting cups of flaring shape, communicating with the pipe. The pipe is journaled at either end in the boiler heads, and is capable of being reciprocated longitudinally in hollow plugs inserted in said boiler-heads, and which construction also admits of lengthwise expansion of the pipe. This pipe and its scum-collecting cups are arranged along the water-line in the boiler, and serve to catch any foreign matter on the surface of the water and convey it out from the boiler, a suitable discharge pipe connecting with the device serving the purpose of drawing such matter off.—*Millstone.*

The Largest Telescope Ever Made.

ALVAN Clark & Sons, Cambridgeport, have in hand the largest telescope ever made, it being a 36-inch object glass, and ordered for the Lick Observatory, California, at a cost of $50,000, without the mounting. The largest one before this, also by the Clarks, was a 30-inch, for the Pulkowa Observatory, Russia. The next below this was a 26-inch glass, for the Government Observatory at Washington. This latter is the largest refracting telescope in the world actually mounted and in use, that for the Pulkowa being near its completion, and that for the Lick just entered upon and to be finished in about two years. For the testing of the Lick instrument the Clarks are constructing a brick tower, supporting an immense iron cylinder, with such gearing as to be easily directed to any point in the heavens. So thoroughly have the astronomical instruments of this firm been tested by scientific observers, that they are now conceded to have no equals and no competitors in their line of business, either in this country or in Europe. Somewhat of satisfaction and even pride may be pardoned both to the State and nation in view of such a fact.—*Boston Journal.*

"Mother Don't Work for Anybody."

A LITTLE boy, on his way to build fires and sweep offices in Boston while the stars were yet in the sky, told the writer: "My mother gets me up, builds the fire and gets my breakfast, and sends me off. Then she gets my father up and gets his breakfast, and sends him off. Then she gives the other children their breakfast and sends them to school; and then she and the baby have their breakfast." "How old is the baby?" I asked, "Oh, she is 'most two, but she can talk and walk as well as any of us." "Are you well paid?" "I get two dollars a week, and my father gets two dollars a day." How much does your mother get?" With a bewildered look, he said: "Mother! Why, she don't work for anybody." I thought you said she worked for all of you." "Oh, yes; for us she does. But there ain't any money into it." This wife of a day laborer represents a large class of hard-working women. The compensations of affection, the love of husband and children, and the nameless and numberless blessings that come with and belong to the family life, can no more make up to a wife the loss of all money value for her service than they would to her husband if the same poverty of position were thrust upon him.

New Route to the Catskills.

THE completion of the Stony Clove and Catskill Mountain Railroad, from Phœnicia on the Ulster and Delaware Railroad to Hunter, through the weird "clove" which presented the only thoroughfare through that mountainous region, brings the heart of the Catskill Mountains within an easy all-rail ride from New York. The route is a romantic one in its entire length, embracing as it does the quiet beauty of the Paramus Valley, the wilder surroundings of the Ramapo Pass, the pastoral scenes of Orange county, and the grandeur of the Catskill region. The route is over the Erie Railway and Wallkill Valley Railroad to Kingston, thence into the mountains by the Ulster and Delaware, and Stony Clove roads. By an arrangement with these other lines the Erie will run a Pullman coach through without change to all points of interest on the Ulster and Delaware road, which embrace Overlook Mountain House, Tremper House, Guigon House, and Grand Hotel, all in the immediate vicinity of the most famous of the Catskill scenery. The special Erie Catskill train will leave New York at 3:30 every Saturday afternoon, and returning leave the Catskills every Monday morning, arriving in New York at 10:55 A. M.

Encouraging a Railroad.

A FEW months ago a farmer living on the line of the Jackson and Fort Wayne road, visited the headquarters of the company to urge the necessity of a new passenger station at a certain crossroad on the line.

"I'm afraid the patronage would not pay the expenses," replied the official.

"I tell you a heap of people would get on and off at them corners," urged the farmer.

"Well, how many of your neighborhood have passed over our road this year?"

"How many? Well, there's the old man Skinner, for one. Then; there's Aunt Deborah Smith, who goes down to Fort Wayne every spring and fall. Then we've got several young men who allers go up to Lansing when there's a circus.

"Any more?" asked the official, as the farmer scratched his head and wriggled around.

"N—o, I don't know as I kin think of any more just now, but if you'll go ahead and put a station there you kin count on a dozen of us sitting around there all the time to make things look like business."

Iron Changed to Steel.

A FRENCHMAN has devised, it is said, a method of converting iron into steel, and at the same time producing illuminating gas. The iron is placed in a retort with charcoal or coke in layers, and is heated to 1,650 degrees Fahrenheit. Fatty matters are then injected, and as soon as decomposition has taken place a jet of dry steam is passed over the incandescent mass. The iron is thus changed into steel, while carborated hydrogen is given off from the retort. —*Millstone.*

THE Philadelphia *Bulletin* says that there is one man on the Spruce and Pine streets route who does not like the reduction in car fares. He now only saves five cents when he walks down in the morning, while formerly he saved six.

THE greatest fortress from a strategical point of view is the famous stronghold of Gibraltar, belonging to Great Britain, situated upon the most southern point of land upon the coasts of Southwestern Spain. It occupies a rocky peninsular, jutting out into the sea, about three miles long and three-quarters of a mile wide. One central rock rises to a height of 1,439 feet above the sea level. Its northern face is almost perpendicular, while its east side is full of tremendous precipices. On the south it terminates in what is called Europa Point. The west side is less steep than the east, and between its base and the sea is a narrow, almost level span, on which the town of Gibraltar is built. The fortress is considered impregnable to military assault. The regular garrison in time of peace numbers about seven thousand men.

THE Kentucky Central Railroad has passed into the control of C. P. Huntington, he having secured 53 per cent of the stock.

Cotton-Seed Oil.

A COMPARATIVELY new industry in this country is the manufacture of oil by the crushing of cotton-seed. The discovery of the seed being able to yield oil of a quality and in quantities desirable for various commercial purposes was made at the beginning of the late war, but, in consequence of that conflict, could not be utilized. Subsequently the manufacture obtained an important place in the products of the country. A combination under the name of the Cotton-seed Crushers' Association cherished the budding industry, and finally developed it till it has now attained very respectable proportions. From the following brief summary the manner and value of the manufacture may be estimated :—

The seed is taken and reginned, producing an article of cotton that sells one or two cents under the regular manufactured article. The seed is then decorticated and the hulls are used for running the engine, the ashes produced making a good fertilizer. The oil is now poured out and refined, its fattening qualities being said to be very great. A large business in former years had been in the exportation of the refined oil—to foreign countries, and especially to Italy. Three years ago 125,000 barrels were exported. In Italy, in fact, it was found to compete so strongly with the native olive oil that about two years ago the Government of that country enacted prohibitory laws in regard to it, which eventually caused a great decline in the quantity introduced into King Humbert's dominions. At home, however, it seems, from published statistics, to have grown in popularity as it varied uses became known. It is used for purposes of illumination, as an adulterant, and also—and more extensively—for cooking. Particularly in the South is it used for the latter purpose. The demand for it has been such that it has sold here for from twenty to twenty-five per cent more than before the Italian duty was put on.

There are about sixty mills in operation, the greater number being in Tennessee, Mississippi, Louisiana and Texas. The seed will yield thirty-five gallons of crude oil per ton, and the oil sells at thirty-five cents per gallon at the mill. The oil is the basis of nitro-glycerine and of various other explosive compounds, one gallon of crude oil returning three and one-half pounds of pure glycerine. Paul Aldige is the president of the association, and J. H. Duggan is the secretary and treasurer.

Siberia Overrun With Mice.

AFTER all, the Czar is not to have it all his own way in Asia. While a dull world has been imagining that the English Government was taking no steps to prevent that consummation, the whole edifice of the Russian Empire is, it appears, on the point of collapse. With an amount of astuteness that does him every credit, Lord Ripon has kept silent on the matter, but the Calcutta *Englishmnn* at last lets the cat—or rather the mice—out of the bag. These are England's allies in the grand work of staying the course of Russian aggression. Afghan help might be treacherous, not to mention its costliness ; Persian aid does not count for much ; the Chinese would probably not appear in the field until a year after the struggle had terminated. As for the Turkomans, what bribe have we to offer those predacious people compared to that blissful looting of India which Russia could dangle before their eyes? An ally had plainly to be looked for in some quarter, and, almost without the looking, this kind friend has already appeared. Our Calcutta contemporary reports that countless myriads of Indian mice have made their way to Southeastern Siberia, plundering granaries and destroying crops wherever they go. On they march, relentless, remorseless, through Fergana, through Semiretchausk, and right up to the shores of Lake Balkasch. The affrighted people know not what to do to stem the devastating deluge, and even the dauntless Russian warriors turn pale when the cry goes forth, "The mice are coming !" Rome was saved by geese ; perhaps history will hereafter relate how the English Empire, after being very nearly lost by human geese, was saved by mice. —*London Globe.*

Minneapolis Flour.

BEN WILDE, the Aurora funny man, has been up in Minnesota, and tells of a conversation he had with a Minneapolis man whom he met on the cars, the subject being, as usual, Minneapolis flour. Ben commenced with: "They make some flour in Minneapolis, do they not?" "No, sir, it makes itself. Minneasota wheat is so full of flour it would be useless to try to keep it shut up in the kernels. It is such vigorous flour it would get out on its own hook if it were not taken out." "I understand," said I, "Minneapolis flour is sold in England cheaper than it is retailed at home. How is that?" "Clear enough, sir; clear enough," replied the healthy looking Minnesotian. "You see, our railroads charge for freighting by the hundredweight. Our flour is so light that the more they put in a car the lighter the load grows. A cargo of Minnesota flour goes through for nothing, and is entitled to a drawback at the other end of the route. As for selling cheaper in England, that is clear enough ; its buoyancy makes it desirable for ships to carry. A shipload of Minneasota flour could not sink." But if it should get wet?" I suggested "The wetter the better. A swamped shipload of our flour would sop up the Atlantic in two hours and let the people walk across as the Children of Israel crossed Lake Minnetonka when the hosts of King Pharo were after them." I have heard it is very life-sustaining," I added in compliment. "Well, I should emphasise !" and he straitened up as if to startle me, but I was beyond that. "Life-sustaining ! Well, I should smile in capital italics ! There is an effort being made by the medical fraternity and the undertakers to get an injunction against its manufacture. It is fairly driving them out of business. And if the Government would require vessels to carry a loaf of Minnesota bread for each passenger, we would hear of no more sea disasters because of inadequate life preservers." "Are you a dealer in flour?" I asked. "Oh! no; I am a clergyman. If I were a dealer in flour I could probably tell you many wonderful things about it." I don't want to meet a Minneapolis miller until I get tired of life.—*The Merchant* (St. Louis).

Iron and Steel Production.

THE United States is the second iron and steel producing country in the world, Great Britain being the first. Last year Great Britain produced 9,382,647 net tons of pig iron —more than twice the production of the United States in that year. But while Great Britain is so far ahead of us in the production of pig iron, we are abreast of her in the production of Bessemer steel. In 1880 we produced more Bessemer steel ingots and rails than Great Britain did, but in 1881, while we produced the most Bessemer steel rails, she produced the most Bessemer steel ingots. Mr. Swank, of the American Iron and Steel Association, says in his report, that "British production of Bessemer steel in 1881 was made by 23 works with eighty-two converters in operation, while that of the United States was made by only 13 works with 30 converters in operation. The average production of each converter in Great Britain, in 1881, was 17,582 gross tons of ingots, while the average production of each converter in the United States in the same year was 45,808 tons." Of the total production of rolled iron, including rails, in the last year 505,182 tons were produced by the rolling-mills of Allegheny county, Pennsylvania, or nearly 20 per cent of the total rolled iron production of the whole country. This does not include the production of steel in Allegheny county.—*Pittsburgh Chronicle.*

ACCORDING to the annual report of the Board of Trade of Cincinnati the total value of goods manufactured in that city during the year is $200,079,867.

THERE are about two millions and a half of people in Egypt, of whom probably two millions are fellahs, or Mahomedan Egyptians, and less than a hundred and fifty thousand are Copts or Christian Egyptians, who in spite of disabilities, enjoy influence entirely out of proportion to their numbers. Then there are about a quarter of a million of Bedaween Arabs, who despise all the Egyptians because they once ruled them. All are despotically governed by about twenty thousand Turks. The immense power of the Turk to rule is proved by the fact that this small army of occupation has held Egypt for three and a half centuries against the Arabs, and against the Mamelukes, a Caucasian race, who were brought to Egypt as slaves of the Arabs, but who were, until the massacre of their leaders by Mohammed Ali even more unmanageable than their former masters. Even the Franks, that is the Europeans, although they must be much more numerous than the Turks, are just now fleeing for their lives before the oppressors of Egypt. The common opinion is that the best thing for Egypt would be to turn these Turks out, but they are somewhat like the Yorkshireman's bull-dog in the railway car. "No dogs allowed here," said the conductor. "Well, thee'd better tak un oot, young mon," said the Yorkshireman.

Statement of the Public Debt of the United States, July 1, 1882.

DEBT BEARING INTEREST.

	Amount Outstanding.	Accrued Interest.
6 per cent loan, 1861-'81, continued at 3½ per ct.	$11,137,050 00	$194,898 37
6 per cent loan 1863-'81 continued at 3½ per ct	47,820,100 00	836,851 75
5 per cent funded loan of 1881	401,503,900 00	2,342,106 08
4½ per cent funded loan of 1891	250,000,000 00	937,500 00
4 per cent funded loan of 1907	738,884,300 00	7,388,843 00
4 per cent refunding certificates	465,050 00	4,650 50
3 per cent navy pension fund	14,000,000 00	210,000 00
Aggregate of debt bearing interest	$1,463,810,400 00	$11,914,849 70
Interest due and unpaid		1,435,158 42

DEBT ON WHICH INTEREST HAS CEASED SINCE MATURITY.

	Amount Outstanding.	Interest due and unpaid
4 to 6 per cent. old debt, 1837.	$57,665 00	$64,174 81
5 per cent. Mexican indemnity stock, 1846	1,104 91	85 74
6 per cent. bonds, 1847-'67.	1,250 00	22 00
6 per cent. bounty land scrip, 1847-'49	3,275 00	213 06
5 per cent. Texas indemnity bonds, 1850-'64	20,000 00	2,945 00
5 per cent. bonds, of 1858-'78	7,000 00	875 00
5 per cent. bonds, of 1860-'71	10,000 00	600 00
6 per cent. 5-20 bonds, 1862, called	370,000 00	8,333 14
6 per cent. 5-20 bonds, June 1864, called	57,450 00	1,055 12
6 per cent, 5-20 bonds, 1863, called	70,750 00	18,635 41
5 per cent. 10-40 bonds, 1864, called	384,700 00	68,889 05
6 per cent. Consol. bonds, 1865, called	382,800 00	13,688 11
6 per cent. Consol. bonds, 1867, called	962,750 00	117,395 38
6 per cent. Consol. bonds, 1868, called	373,500 00	22,465 59
6 per cent. loan, Feb. 8, 1861, matured Dec. 31, 1880	82,000 00	5,070 00
5 per cent. funded loan 1881, called	1,171,600 00	20,695 83
Oregon War Debt, March 2, 1881, matured July 1, 1881.	12,950 00	1,855 50
6 per cent loan of July 17 and Aug. 5, 1861, matured June 30, 1881	679,300 00	20,197 50
6 per cent loan of July 17 and Aug. 5, 1861, continued at 3½ per cent, matured Dec. 24, 1881, and Jan. 29, 1882, called	10,940,400 00	85,109 58
6 per cent. loan of March 3, 1863, matured June 30, 1881.	214,900 00	8,224 50
1-10 to 6 per cent. Treasury notes, prior to 1846	82,525 35	2,668 06
1-10 to 6 per cent. Treasury notes, 1846	6,000 00	206 00
6 per ct. Treasury notes, 1847.	950 00	57 00
3 to 6 per cent. Treasury notes, 1857	1,700 00	99 00
6 per ct. Treasury notes, 1861.	3,000 00	364 50
7 3-10 per cent. 3 years' Treasury notes, 1861	16,300 00	1,104 43
5 per cent. 1 year notes, 1863.	42,065 00	2,115 35
5 per cent. 2 year notes, 1863.	32,900 00	1,642 30
6 per ct. compound interest notes, 1863-64	220,960 00	45,133 87
7 3-10 per cent. 3 years' Treasury notes, 1864-65	138,950 00	20,439 03
6 per cent. certificates of indebtedness, 1862-63	4,000 00	253 48
4 to 6 per cent. temporary loan, 1864	2,960 00	244 19
3 per cent. certificates, called.	5,000 00	394 31
Aggregate of debt on which Interest has ceased since maturity	$16,260,805 26	$535,251 84

DEBT BEARING NO INTEREST.

Demand notes, 1861-62	$59,695 00	
Legal tender notes, 1862-63	346,681,016 00	
Certificates of Deposit	13,320,000 00	
Coin certificates, 1863	5,037,120 00	
Silver certificates, 1878	66,096,720 00	
Unclaimed interest		5,726 51
Fractional currency, 1862, 1863 and 1864 $15,423,181 77		
Less amount estimated as lost or destroyed, act of June, 21, 1879 8,375,934 00		
	7,047,247 77	
Aggregate of debt bearing no interest	$438,241,788 77	$5,726 51

RECAPITULATION.

	Amount Outstanding.	Interest.
Debt bearing interest in coin, viz:		
Bonds at 6 per cent., continued at 3½ per cent.	$58,957,150 00	
Bonds at 5 per cent, continued at 3½ per cent.	401,503,900 00	
Bonds at 4½ per cent	250,000,000 00	
Bonds at 4 per cent.	738,884,300 00	
Refunding certificates	465,050 00	
Navy pension fund, 3 p.c	14,000,000 00	
	$1,463,810,400 00	$13,350,008 12
Debt on which interest has ceased since maturity.	16,260,805 26	535,251 84
Debt bearing no int., viz:		
Old demand and legal-tender notes	$346,740,711 00	
Certificates of deposit	13,320,000 00	
Coin & silver certificates.	71,133,830 00	
Fractional currency	7,047,247 77	
	$438,241,788,77	
Unclaimed interest		5,726 51
	$1,918,312,994 03	$13,890,986 47
Total debt, principal and interest to date, including interest due and unpaid	$1,932,203,980 50	

AMOUNT IN TREASURY.

Interest due and unpaid	$1,435,158 42	
Debt on which interest has ceased	16,260,805 26	
Interest thereon	535,251 84	
Gold and silver certificates	71,133,830 00	
U. S. notes held for redemption of certificates of deposit	13,320,000 00	
Cash balance available July 1, 1882	140,604,474 26	
	$243,289,519 78	
Debt, less am't in Treas'y July 1, 1882	$1,688,914,460 72	
Debt, less am't in Treasury June 1, 18820	1,701,475,157 42	
Decrease of debt during the month	$12,560,696 70	
Decrease of debt since June 30, 1881	$151,684,351 26	

BONDS ISSUED TO THE PACIFIC RAILROAD COMPANIES, INTEREST PAYABLE IN LAWFUL MONEY.

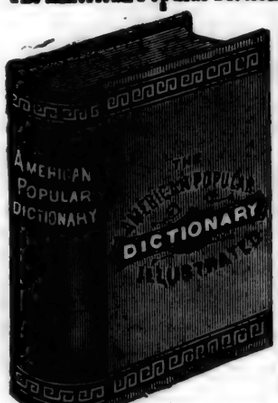
	Amount Outstanding.	Accrued Interest not paid.
Central Pacific bonds, 1862-64	$25,885,120 00	$776,553 60
Kansas Pacific bonds, 1862-64	6,303,000 00	189,090 00
Union Pacific bonds, 1862-64	27,236,512 00	817,095 36
Cent. Branch Union Pacific bonds, 1862-64	1,600,000 00	48,000 00
West'n Pacific Bonds, 1862-64	1,970,560 00	59,116 80
Sioux City & Pacific bonds, 1862-64	1,628,320 00	48,849 60
Totals	$64,623,512 00	$1,938,705 36

Interest paid by the United States, $53,405,977.38; interest repaid by transportation of mails, &c., $15,220,-693.30; interest repaid by cash payments: 5 per cent net earnings, $655,198.87; balance of interest paid by United States, $37,530,085.21.

The foregoing is a correct statement of the public debt, as appears from the books and Treasurer's returns in the Department at the close of business, June 30, 1882.

CHARLES J. FOLGER,
Secretary of the Treasury.

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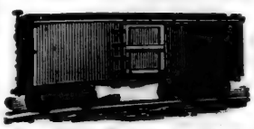
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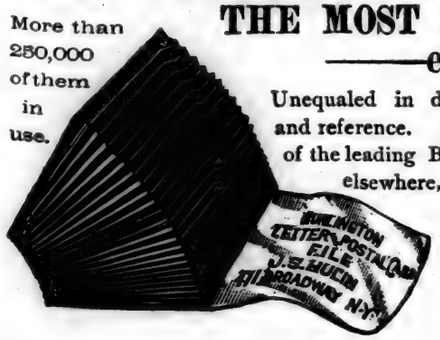
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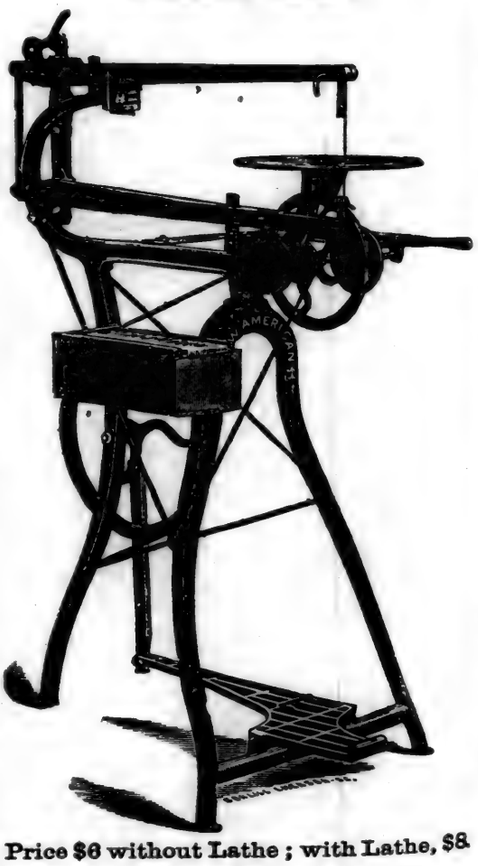
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SECOND QUARTO SERIES.—VOL. XXXVIII., No. 27.] NEW YORK, JULY 15, 1882. [WHOLE No. 2,412.—VOL. LV.

CONSTRUCTION.

THE Mexican Central Railroad is within 35 miles of Chihuahua.

THE New York, Texas and Mexican Railroad has been completed to Victoria, Texas.

THE New York, Chicago and St. Louis Railroad Company has 486.97 miles of track laid.

STEEL rails are being laid on the Cleveland and Marietta Railroad between Kimbolton and Miller's.

THE Galveston, Harrisburg and San Antonio division of the Southern Pacific Railroad has reached a point 345 miles from El Paso.

THE Denver and Rio Grande Railway Company opened its lines for business to Silverton, a distance 495 miles from Denver, on the 12th inst.

THE Colebrookdale Railroad, running from the Pennsylvania Railroad to the Cornwall ore beds, in Lebanon county, has been completed.

THE Texas and St. Louis Railroad will be completed October 1 from Gatesville, Texas, to a connection with the Illinois Central, a distance of 732 miles.

THE Central Iowa Railroad Company has just laid forty miles of rail on the Eastern Division Mississippi extension, which will be in operation by September 1.

TRAINS commenced running on the Georgian Bay and Lake Erie Railway—the extension of the Port Dover Railway—from Wiarton to Chesley on the 12th inst.

GRADING has again commenced on the Phœnixville and Frazer branch of the Pennsylvania Railroad. It is expected that the road will be completed early in the fall.

ANOTHER line of railroad from Detroit to the Ohio river has been opened by the completion of the Cincinnati, Wabash and Michigan Railroad, from Niles southward.

THE Boston, Hoosac Tunnel and Western Railroad Company has opened a branch to Saratoga, N. Y., and ran two through trains between Saratoga and Boston on the 5th inst.

THE last rail on the New Orleans Pacific Railroad connecting New Orleans by the Southern Pacific with San Francisco, was laid on the 12th inst., at a point just beyond Atchafalya River.

THE Brockton extension of the Buffalo, Pittsburgh and Western Railroad was opened to Dunkirk on the 11th inst., and by September 1 it is expected the complete extension will be opened for business.

A SURVEYING party is now engaged in exploring a route for a line to connect the Virginia Midland's Manassas branch ending at Strasburg, Va., with Senator Davis's West Virginia Central and Pittsburgh Railroad.

THE extension of the East Tennessee, Virginia and Georgia Railroad from Atlanta to Macon is completed, and the system is expected to be finished this month by the connection with Rome. The earnings of the road show steady gains.

THE last spike in the Paducah and Memphis division of the Chesapeake, Ohio and Southwestern Railway was driven on the 13th inst., in the neighborhood of the Hatchie River, in Tennessee. Through trains between Louisville and Memphis will be running by the new route next week.

THE submarine cable between Martha's Vineyard and the main land, at Woods' Hole, was successfully laid by the Western Union Telegraph Company on the 12th inst. An electrical connection was made and a through circuit with Boston established, which works very satisfactorily.

THE Sacramento *Record-Union* says that work is progressing rapidly on the railroad extension to Orland, Colusa county. About half a mile of iron is laid daily. It is sixteen miles from Willows to Orland, and it is anticipated that the latter town will be in railroad connection in three or four weeks.

THE cable steamers Retriever and Silvertown have landed the shore ends of the cables on the coast of the Central American States, and were to have left Tehauntepec on the 13th, laying the cable southward to Panama, thus completing telegraphic communication from Valparaiso northward.

THE New York, Pennsylvania and Ohio Railroad is still dumping cinder into Tamarac swamp, between Sharpsville and Clarksville, Mercer county. The work has been in progress for nearly six months, with no other apparent result than the disappearance of the cinder into the bowels of the hole.

ON the 1st of July trains passed over the great bridge at Canton Diablo on the Atlantic and Pacific Railroad. The grading is completed to a point 180 miles west of the bridge, and sufficient steel rails and ties are on the ground to complete the road to the Great Colorado River. Six coal mines have been opened on the line of the road.

IT is stated that the Rochester and Pittsburgh Railroad, consisting of 302 miles, and branches, will be completed by next fall, and that the necessary rolling-stock to equip the same has been already provided for. Friends of the road estimate that after paying all charges, something like a million and a half of dollars should be left to be distributed among stockholders as a dividend.

THE work of construction on the Canada-Atlantic Railway is rapidly progressing, and that portion of the line between Coteau Landing and Ottawa, a distance of 82 miles, will be completed before August 1. The track layers are within a few miles of Ottawa. The route of the line from Valleyfield on this side of the St. Lawrence, opposite Coteau Landing, has finally been decided upon and the locating survey commenced.

THE Montreal, Ottawa and Western Railway Company, the originators of the Quebec, Montreal, Ottawa and Occidental, have decided to seek powers to construct a line from St. Agatha, through the valley of the Red River by Lake Nominique, to tap the Gatineau Railway at La Desert, and the Canada Pacific Railway near Lake Tamiscomique. The company already own a charter for a road from St. Jerome to St. Agatha. Work will be commenced at once.

THE Montreal, Ottawa and Western Railway Company, which built the road from Montreal to Aylmer in 1875, commenced on the 7th inst. the work of continuing the road from St. Jerome to St. Agatha, thence following the valley of the Red River, to tap the Gatineau Railway at Desert, 100 miles from Ottawa, thence in the direction of Lake Temiscamingue, to join the Canadian Pacific Railway. The total length will be about 200 miles.

THE following branch lines of the Missouri Pacific system have been opened: Omaha line from Atchison to Union Pacific Junction, 145 miles; Lexington and Southern division from Catharge to Joplin, 173 miles; St. Louis, Iron Mountain and Southern from Knoeble to Harrisburg, 58 miles; Missouri, Kansas and Texas line from Temple Junction, 38 miles, making an aggregate mileage of leased and operated lines of 5,248 miles.

THE Gulf, Colorado and Santa Fe Railroad is now completed to Fort Worth, Dallas and

Lampasas, and operates 484 miles of road. This is said to be the best built road in the southwest, being thoroughly ballasted with shell, gravel and stone, well equipped iron bridges, with stone abutments, station houses, tanks, etc., all new and substantially built; the company also owns the telegraph system along its line. This road runs through the best agricultural counties of Texas and constitutes the most direct route from the interior of the State to the coast.

THE Chesapeake and Ohio Southwestern Railroad, recently known as the Memphis and Paducah, will complete their bridge over the Hatchie River and five miles of grading near Covington, Ky., shortly, and in a few days will run trains through from Memphis, Tenn., to Newport News, Va., via Dyersburg, Paducah and Cincinnati. This road was built from Memphis to Covington, Ky., (thirty-seven miles), ten years ago, expecting to go right through to Paducah, Ky., and it is only now that these hopes are about to be realized.

PERSONAL.

ROBERT GARRETT has been elected president of the Winchester and Strasburg Railroad Company.

MILTON H. SMITH has been elected first vice-president of the Louisville and Nashville Railroad Company, in the place of Gen. E. P. Alexander, resigned.

ROBERT GRAHAM has been appointed master of transportation on the sections of the Canadian Pacific Railway under construction, west of and including Flat Creek station.

W. I. BROKAW has been appointed master mechanic of the entire construction department, eastern division of the Northern Pacific Railroad, with offices at Forsythe, Montana.

JOSE F. DE NAVARRO has been elected a director of the Manhattan Railway Co., to succeed William R. Garrison, deceased. Resolutions eulogistic of Mr. Garrison were adopted by the board of directors.

AT a meeting of the directors of the North Shore Railroad, at Montreal, on the 11th inst., Mr. Davis was appointed general manager, in succession to Mr. Senecal, resigned, and Mr. Blumhart was elected secretary.

ORGANIZATION.

THE following gentlemen have been elected directors of the New York Loan and Improvement Company: Jose F. Navarro, George J. Forrest, A. M. Billings, A. V. Stout, Arthur Leary, John J. McCook, Fausto Mora, H. F. Dimock and Robert C. Livingston. The only new members of the board are Mr. Dimock, who takes the place of John Baird, now in Europe, and Mr. Livingston, who fills the vacancy caused by the death of William R. Garrison.

THE Delaware and Chesapeake Railway Company has been reorganized by the election of Isaac Hinckley, Samuel M. Fenton, Henry M. Phillips, Edmund Smith, Wistar Jones, John P. Green, Samuel Wetherell, James B. Groome and David J. Cummins as directors; Isaac Hinckley, president, and T. N. Mills, superintendent. All the officials are Philadelphia, Wilmington, and Baltimore and Pennsylvania railroad men. The Pennsylvania Railroad Company took possession on the 8th inst., and is now running the road with new locomotives and new cars.

Commerce of New York.

THE foreign imports at New York in the month of June were :—

	1880.	1881.	1882.
Ent. for cons.....	$17,586,293	$16,711,607	$18,237,342
Do. for warehousing	12,898,188	9,438,021	10,130,068
Free goods.....	9,012,693	10,083,556	9,820,368
Specie and bullion..	1,015,230	314,986	229,813
Total ent. at port....	$40,512,404	$36,548,170	$38,417,591
Withdrawn from warehouse.....	6,877,703	8,227,805	7,874,286

The foreign imports at New York for six months from January 1, were :—

	1880.	1881.	1882.
Ent. for cons.....	$123,571,695	$105,307,106	$130,134,255
Do. warehouse....	66,537,461	46,943,971	53,749,365
Free goods.....	63,891,545	61,163,434	65,106,930
Specie and bullion.	4,015,560	29,734,935	1,950,765
Total ent. at port..	$258,616,261	$243,149,446	$250,941,315
Withdrawn from warehouse	39,757,348	48,096,542	44,753,608

The foreign imports at New York for the fiscal year ending June 30 were :—

	1880.	1881.	1882.
Ent. for con.....	$214,822,744	$206,990,018	$250,216,791
Do. for wareh'g...	101,835,723	92,402,052	91,519,729
Free goods.....	124,827,664	124,198,420	133,241,192
Specie and bull'n.	83,358,731	100,329,471	28,239,063
Total ent. at port.	$524,844,862	$523,919,961	$503,216,775
Withdrawn from warehouse.....	76,126,636	101,008,053	94,070,802

The description of imports at New York for the year ending June 30, were :—

	1880.	1881.	1882.
Dry goods.....	$113,337,907	$108,910,993	$124,522,695
General mdse.....	328,148,224	314,679,497	350,455,017
Sp. and bullion...	83,358,731	100,329,471	28,230,063
Total imports....	$524,844,862	$523,919,961	$503,216,775

Received for Customs at the Port of New York :—

	1880.	1881.	1882.
6 mos. ending Jan. 1.....	$59,271,080 94	$69,593,542 80	$75,083,478 15
In Jan.....	11,960,677 78	10,572,559 15	13,387,515 96
In Feb.....	12,254,602 24	11,217,766 87	13,585,053 25
In March....	14,469,557 65	13,122,964 03	13,999,138 76
In April.....	11,901,071 43	11,678,760 93	11,906,105 45
In May.....	9,752,873 54	11,055,935 39	11,981,893 88
In June.....	10,699,840 52	10,993,452 70	11,428,930 11
Total 12 mos	$130,309,604 10	$138,234,681 87	$151,372,114 76

The exports from New York to foreign ports for the month of June, were :—

	1880.	1881.	1882.
Dom. produce.....	$41,325,315	$29,171,452	$26,583,883
For. free goods.....	388,670	472,281	391,654
Do. dutiable.....	355,768	713,891	437,563
Specie and bullion.	1,014,815	1,049,361	5,815,496
Total exports.....	$43,084,568	$31,406,985	$33,228,596
Do. exclusive of specie.....	42,069,753	30,357,624	27,413,100

The exports from New York to foreign ports for six months from January 1, were :—

	1880.	1881.	1882.
Dom. produce.....	$191,279,384	$177,575,644	$151,559,198
For. free goods....	1,448,803	5,041,894	2,661,828
Do. dutiable....	2,255,290	3,381,973	3,497,285
Specie and bullion	4,720,871	6,352,782	35,911,606
Total exports.....	$199,704,348	$192,352,293	$193,629,827
Do. exclusive of specie.....	194,983,477	185,999,511	157,718,221

The exports from New York to foreign ports for the fiscal year ending June 30, were :—

	1880.	1881.	1882.
Dom. produce....	$386,064,796	$393,252,144	$332,463,298
For. free goods ...	2,161,880	7,152,407	5,969,925
Do. dutiable....	4,517,387	6,434,310	6,421,857
Specie and bullion	8,053,937	11,002,183	42,182,655
Total exports.....	$400,798,000	$417,841,044	$387,037,735
Do. exclusive of specie.....	392,744,063	406,828,861	344,855,080

Railway Postal Cars.

Five new railway post-office cars for the fast mail service on the Baltimore and Ohio Railroad, between Baltimore and St. Louis, are now being completed at the Mount Clare shops. The cars are built by the company upon designs furnished by the Government, and are unique specimens of their kind. The exterior of the cars is white, with ultra-marine blue borders and gold lettering. They are numbered from one to five, and are inscribed on the sides, "Baltimore—Fast Mail — St. Louis," and "United States Post-office." In the interior the cars are finished in ash and cherry, oiled to show the natural grain. The ceilings are white. The forward section is fitted with stalls for mail bags. The center is taken up with a series of eighty inclined shutes for distributing newspapers. The matter for distribution is placed upon a long table in front of the shutes, each of which is numbered and labeled. When distributed it slides through by gravitation and falls into the pouches on the other side. In the rear section there are five hundred boxes of uniform size, arranged in a semi-circle for distributing letters. Each of the cars is lighted by ten polished brass Argand lamps and heated by Baker car-heaters. The carriages and under-gear are painted black and light brown. Loughridge air-brakes are attached to each car. The five will soon be finished, when three more will be commenced for service between Baltimore and Chicago. The white and blue coats of the cars have a very pleasing effect in their new state, but railroad men think the color will not remain so bright after a short season on the road.—*Baltimore Sun.*

Fast Time.

Several passengers on the Philadelphia express on the Central Railroad of New Jersey, leaving Bound Brook at 8.50 A. M., Wednesday, July 12, finding that quick time was being made, took the time for five successive miles, showing the speed to be as follows: 1st mile, 52 seconds; 2d mile, 49 seconds; 3d mile, 47 seconds; 4th mile, 46 seconds; 5th mile, 45 seconds—an average of 47.8 seconds to the mile. William Aten was the engineer, and Henry A. Craig the fireman.. The engine was No. 169, which had already acquired a reputation for speed.

ACCORDING to Mr. S. W. Robinson, the life of railroad plant is not great. New roads with iron rails and wooden structures will need renewals for the most part within ten years. Ties will rot out in from five to eight years. Rails endure according to traffic, and, for light work, will last ten years. Good wooden bridges when new will be dangerous in ten years unless covered, and if there is any intention to cover them the roofing should be completed within two years or the timber will become affected with "dry rot." A wooden bridge nicely covered and painted may appear to be in the best of condition, but really be in the very worst. Joints in the lower chord of such bridges are seen to be pulling out by the locks splitting off.

Operations of the Railroads of the United States for 1881.

Advance sheets of the forthcoming volume of Poor's "Railroad Manual of the United States" have been issued. The year 1881 was one of extraordinary activity in railroad affairs. Within the year 9,358 miles of railroad were built. The greatest mileage for any previous year was 7,379 miles, in 1871. The cost, at $25,000 per mile, of the lines constructed during the year was $233,750,000. In addition, at least $75,000,000 was expended on lines in progress and $100,000,000 in improving their tracks, in building new stations, and in adding to their equipments. The total amount expended in construction during the past year was, in round numbers, $400,000,000. Up to the 1st of June, 1882, 3,677 miles of line were opened, against 1,734 for the same period in 1881. The same rate of increase will not be maintained for the remainder of the year, but the aggregate of new mileage is not likely to be much short of 10,000. It is certain, says the Manual, that for a long time to come a much greater extent of mileage will be constructed annually than was constructed in the past or than will be constructed in the present year. The earnings of all the roads in operation the past year equaled $725,325,119, being an increase over the previous year of $110,000,000—the rate of increase being very nearly 16 per cent. The earnings equaled $13.60 per head of our population. Their net earnings were $276,654,119, an increase of $21,500,009 over those for 1880. Their current expenses were $449,565,071. The amount of interest paid during the year on their funded debt was $128,887,092; the amount paid in dividends was $93,344,200, against $77,115,411 for 1880. The cost of operating our railroads for the year was $449,565,071, or 62 per cent of their gross earnings. The total amount expended in the construction of new lines and in operating and improving the old ones was over $750,000,000—the greater part of this vast sum being paid in wages. The number of persons employed in operating them the past year averaged fully 12 to the mile of operated line, or 1,200,000 in all. The number employed in the construction of our railroads equaled 400,000, increasing the total number of employes to 1,600,000, or about one thirty-second part of our population, estimated at 53,200,000.

The tonnage transported on all the railroads in the country in 1881 cannot have been less than 3,500 tons to the mile, or 350,000,000 tons in the whole. The exact amount cannot be given from the want of returns from a large number of companies. The tonnage transported by the railroads making return to the Legislature of Pennsylvania in 1881, and having a mileage of 19,244 miles, equaled 132,410,302 tons; the average being nearly 7,000 tons to the mile, the average for the whole country may be estimated at one-half the average for that State.

The number of tons transported the past year by the Boston and Albany, 371 miles, was 3,593,923 tons; by the New York Central and Hudson River, 993 miles, 11,591,379 tons; by the New York, Lake Erie and Western, 988 miles, 11,086,823 tons; by the Pennsylvania, 1,173 miles, 18,229,365 tons; by the Philadelphia and Reading, 846 miles, 16,841,807 tons; by the Lake Shore and Michigan Southern, 1,177 miles, 9,164,508 tons; by the Chicago, Burlington and Quincy, 2,771 miles, 6,710,750 tons; and by the Chicago and Northwestern, 2,644 miles, 6,662,112 tons. The total mileage of the above roads was 10,963 miles. Their total tonnage was 83,880,613 tons, the average being about 8,000 tons to the mile.

At an assumed value of $50 per ton, the value of the tonnage moved on all the railroads of the United States the past year, less one-third for duplication, was, say, $12,000,000,000, or more than $200 per head of our whole population.

Thirty years ago the tonnage of all the railroads in the United States did not equal one-half that of the Erie or New York Central railroads at present, nor one-sixteenth that of the total now moved. The value of the tonnage of 1851, at $50 per ton, did not exceed $250,000,000, or only $10 per head of population, against a value of $12,000,000,000, or more than $200 per head, in 1881.

A number of carefully tabulated statements are given to show the good effects of railroads upon the agricultural development of the West in new States and Territories, as well as upon the imports and exports of the entire country. An increase of exports in 10 years is shown to the amount of $447,000,000, of which $330,000,000 is said to have been made up of the products of the Western States, these being almost wholly due to the construction of railroads within them.

Endeavoring to show the "utter groundlessness" of the charges of monopoly made against railroad companies, statistics are given making comparisons between the freight rates of 1881 and those of 30 years ago. The New York Central and Hudson River Railroad's operations are quoted: "In 1855, immediately after its consolidation, this road moved 670,073 tons of freight at a charge of $3,758,320, and at a cost of $1,539,912, the net being $2,215,408. The tons moved one mile equaled 114,827,793; the charge was 3.270 cents; the cost, 1.341 cent; the net, 1.929 cent per ton per mile. In 1881 the same road moved 11,591,379 tons of freight at a charge of $20,736,750, and at a cost of $14,913,213, the net being $5,823,537. The number of tons moved one mile equaled 2,646,814,098; the charge was .780 cent; the cost, .562 cent; the net, .218 cent per ton per mile. The increase in tons moved on this road from 1855 to 1881 was 10,921,306, the rate of increase being, in round numbers, 1,700 per cent. The increase in service performed—tons moved one mile—was 2,531,986,818 tons, the rate of increase equalling 2,200 per cent. The earnings from freight increased at the rate of 480 per cent., such rate equaling only one-fourth that of service performed. The cost of movement per ton per mile was only about one-third that for 1855, while the net per ton per mile equaled only about one-ninth that for 1855. Had the rates charged in 1881 equaled those of 1855 the gross earnings from freight the past year would have been $86,450,817, in the place of $20,736,749, the amount actually received. Had the same net rate been maintained, the total net for 1881 would have been $52,875,036, in place of $5,823,537, the amount actually received. Charges have been reduced to rates that were believed to be impossible a few years ago. In 1872 it cost the New York Central 1.129 cent to move a ton of freight one mile. In 1881 it received only .783 cent for a similar service. In its reduction of charges the Central Railroad only represents the entire system of the country. The New York, Lake Erie and Western Railroad, in 1855, moved 842,055 tons of freight at a charge of 2.424 cents, and at a cost of 1.155 cent per ton per mile. In 1881 it moved 11,086,823 tons at a charge of .805 cent, and at a cost of .529 cent per ton per mile. Had it charged as much per mile in 1881 as it did in 1855, its receipts from freight would have been $47,101,811, in place of $5,473,313, the amount actually received. The Pennsylvania Railroad moved, in 1855, 365,006 tons of freight at a charge of 2.746 cents, and at a cost of 1.662 cent per ton per mile. In 1881 it moved 18,229,365 tons at a charge of .799 cent, and at a cost of .437 cent per ton per mile. Had it charged the same rates in 1881 that it did in 1855 its receipts for the past year would have been $73,195,832, in place of $10,801,089, the amount actually received. The charge in 1881 was .87 cent less than the cost of movement in 1872. The result of reduced charges is seen in the enormous increase of freight and of income—quantity making up for reduced rate of profits."

A SEVEN hundred dollar electrical clock has been placed in the Mason Machine Works at Taunton, Mass., for the better regulation of the watchmen.

ON the 23d of May last there was issued to M. H. Landers, of San Francisco, Cal., a patent on an attachment to railway cars, whether street cars in cities or steam cars traveling over the country at rapid speed, designed to prevent a person getting under the wheels who may have slipped while trying to jump on or off, and any part of his body or limbs having fallen across the track in front of the wheel of a moving car. It is somewhat of a plow-shaped device and envelopes the larger part of the wheel. It is made of stout plates of sheet-iron hung from the axle-boxes with a plow-shaped surface in front of the tread of the wheel. When an obstacle is in the way it falls automatically down to and slides along the surface of the rail, thereby shutting out and casting aside what would otherwise be certain to pass under the wheel of the car. This accomplished, it is raised to its original position above the track (usually about an inch) by means of springs for the purpose, and is ready for the next emergency. It is simple and of few parts. It can be quickly adjusted or removed, and the expense will be quite moderate. It is to be painted and ornamented to correspond with the rest of the car. This novel device has been tested by the inventor on a full sized car, and has, it is asserted, accomplished all that is claimed for it, and is an improvement that railway people in general and the public in particular will be glad to hear of and see in active operation as a preserver of life and limb from railway accidents.

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GROWTH OF AMERICAN RAILROADS.

MR. HENRY V. POOR again presents his annual summing up of the doings and growth of the railroads of the North American Continent, and of the United States in particular, from which it appears that there were at the close of the year 1881 104,813 miles of railroad in operation in this country, of which 9,358 miles had been added during the year, or in round numbers nearly ten per cent increase. It is hardly likely that this ratio of increase can be kept up steadily; but it is quite possible that the current year may see more than 10,000 miles of new road constructed. There are, it is safe to say, more than 20,000 miles in actual progress, and a rough estimate of the amount under survey, or for which the promoters are endeavoring to secure donations, or borrow money, would be fully double the latter figure. In fact the limit of growth of railroads is found in the ability to borrow money for the purpose. A great part of all the money raised for railroad building is done in New York, which is the money market for this country. Canada draws upon London mainly; and Mexico and Central America have hitherto done so; but some American capital is now finding its way there, with a prospect of more and more from both sources.

Is there evidence that railroad expansion is being overdone? Yes;—and no! In places where the rage for building parallel roads for competing purposes (as, for instance, between New York and Buffalo), there may be danger of much money being sunk without immediate returns; the same may perhaps be said of the numerous competing lines between Chicago and the Missouri River points all the way from Omaha to Kansas City. On the other hand, it remains to be discovered on how little traffic a railroad can subsist. There is no considerable instance, in this country at least, of a railroad line which would not pay its current expenses; and only one case occurs where the owners have deliberately taken up the rails and abandoned the franchise—and that was the Mercer and Somerset Railroad in New Jersey, which, being paralleled by the Bound Brook Railroad, became unprofitable to operate by the Pennsylvania Railroad Company. There may have been other causes at work, however. If a railroad will pay the expenses of operation and repairs, there is hope that, with the general improvement of the country, the incoming of population, and the growth of industry, it may after a while pay fixed charges also, and its stock then have a positive value. It must be a very poorly located road, and very poorly managed, that cannot be so run as to pay operating expenses, and there are few or none such in Mr. POOR's list.

Truly enough there are some conspicuous examples of roads that fail to pay expenses and fixed charges for a series of years even without returning anything to the stockholders; but this by no means proves that railroads are too many or too dense. Take the cases of the New York, Erie and Western, the New York, Pennsylvania and Ohio, and the Grand Trunk as examples; the failure may arise from bad, that is to say, wasteful, management; from too great burden of interest or rentals, and from faulty original location. It happens that the bulk of the capital employed in each of these mentioned lines was English; and although that nation prides itself on the superior sagacity and honesty of its corporate management, the experience in American roads is unfortunate, in spots. The much renowned English engineer Brunell built three famous works, the Thames Tunnel, the Great Western Broad-Gauge Railway, and the Great Eastern steamship, each of which were conspicuous elephants on the hands of their shareholders. The Grand Trunk Railway proved another; and we shall be much mistaken if the Canadian Pacific does not fall into the same category.

It is needless now to go over again the history and causes of the Erie and Atlantic and Great Western failures. They betray the weak points of corporate organization; a recklessness with the funds and credit of stockholders which could not happen with private means. This experience is not without its lesson; and the future of railroad management will profit by the mistakes of the past. There is as little danger that we shall have too many railroads as too many telegraphs (both land and submarine), or too many houses or ships. Greater competition will insure greater care and economy, and the public will derive the benefit in better service, if the dividends are not too great. A railroad is a perpetually improving possession.

The present temper of the money market gives no indication of a check at present to railroad-building. The new roads give stimulus to so many other industries that a season of railroad-building is one of great activity and profit to all other branches; and the general result, of course, is to cheapen the cost of production and transportation to the consumers. The exportable crops are mainly assured, and no black clouds, further than the labor disturbances, threaten to interfere with the general prosperity. That part of the national revenues, which in all other countries is devoted to maintaining fleets and armies, is here put into internal improvements of a permanent character, with infinite advantage to the common weal. It would be difficult to contrive any more beneficent, or on the whole more remunerative, investment of the same amount than in our expanding railroad system. As Mr. POOR well says: "Here the railroad takes the place of the common road, and the 40,000 locomotives do the work of more than 4,000,000 horses; and costly as they are to us, are still cheaper than the animal power and harness and stabling demanded in other countries, even if we had the dirt roads made for us gratis."

ELECTRIC lighting from towers is apparently becoming very popular in this country. It is very effective, but it is not without a most serious drawback. In time of riot or any great public excitement it is quite possible, when the sources of light by night are concentrated, for those bent on pillage to cut the wires and pursue their evil deeds, practically with impunity, under cover of the sudden darkness.

New Route from Boston to Saratoga Springs.

YESTERDAY was a notable day in the history of Saratoga Springs, since it marked the opening for regular traffic of a new outlet to the rest of the country independent of the monopoly which the Delaware and Hudson Canal Company have so long enjoyed of the large summer business of Saratoga. The section of railway utilized for the first time yesterday extends from Saratoga Lake some twelve miles to the main line of the Boston, Hoosac Tunnel and Western Railway, where it crosses the Hudson River at Mechanicsville, and in connection with the short line of railway opened between the lake and Saratoga Springs last summer, which completes the line, owes its existence to the fact that it forms one of the connections which the late Gen. Burt planned and executed in connection with the comprehensive scheme which he was developing at the time of his decease.

The Saratoga connection was doubtless the outg owth of the want of an accommodating spirit shown by the management of the Delaware and Hudson Canal Company to General Burt in his efforts to improve the service between the New England States and Saratoga Springs. An example of this want of accommodation was shown no later than last Monday morning, when a train with some twenty-five passengers for Saratoga arrived from the east at Mechanicsville, just as the train of the Delaware and Hudson Company was leaving, and which no inducements could prevail upon to delay a few minutes to receive the eastern passengers, who were forced to wait until the afternoon. Happily there is now open a route extending from North Adams direct to Saratoga Springs under one general management, which offers to nearly all the roads of New England a desirable connection with America's peerless summer resort.

At present there is considerable work being done. Not only upon the portion so recently opened for business, but in the direction of a double track upon the main line of the Boston, Hoosac Tunnel and Western, the Commonwealth's Railroad, and the Fitchburg, large gangs of men, etc., are busily at work. With these improvements completed it is contemplated to reduce the running time between Boston and Saratoga to only six hours, and as the distance but slightly exceeds two hundred miles but little difficulty should be experienced in reducing the time to the figure given.—*Boston Journal, July* 6.

Utilizing Coal Slack.

A SERIES of interesting experiments were made in the presence of a number of coal-dealers of the city in the yard of J. V. Nicolai, yesterday morning, explanatory of an English process for the utilization of slack or small coal. The experiments were given under the supervision of the inventor, Mr. W. H. Cory, of Cardiff, Wales, where the process has been in successful operation since 1873. Thousands upon thousands of tons of coal slack and dust go to waste year after year, and the invention is calculated to stay this waste, and at a cost of manufacture of but fifty cents a ton. The process is as simple as it can be, and consists of mixing the slack or dust coal with fire clay and silicate of soda (for bituminus coal 2 per cent of clay and 3 per cent of silicate), and subjecting the block to a pressure of one ton to the square inch of the block surface. The block thus formed is as hard as ordinary coal, and has all its angles rounded to prevent chipping, the surface being glazed by the manner in which the pressure is delivered, the press manufacturing 240 tons in twenty hours. The blocks require twenty-four hours to become hard and fit for use, as during that time the chemical action takes place, the clay converting the silicate of soda into silicate of alumina, thus turning a soluble into an insoluble, or, in other words, vitrifying the block and causing it to be weather-proof. Yesterday's test was made upon a hand-press, and consequently the pressure was but an iota of what the machine gives. After a cake of the slack had been "turned out" the party adjourned to an adjacent mill and there burned several of the bricks. The tests were watched by the coal men with interest, and it is more than probable that in the near future Cincinnati will have works of the kind.—*Cincinnati Engineer, July* 8.

The Sleeping-Car Companies.

IN a recent conversation in relation to the present status of the sleeping-cars companies, Geo. M. Pullman, president of the Pullman Palace Car Company, is reported to have said:

"There are three such companies in the United States. The Pullman Company has 900 cars, the Wagner Company or Vanderbilt has 250 cars, and the Woodruff Company has about 70. The latter company runs on the Cleveland, Columbus, Cincinnati and Indianapolis Railroad, on the Coney Island route and to certain other points. The Pullman Company was formed in 1867, though I had been operating sleeping-cars as a private matter since 1859. The original proprietors of the Pullman Company were myself, the Chicago, Burlington and Quincy Railroad and the Michigan Central Railroad. I never had any rich men behind me. The Wagner Company was backed by Vanderbilt from the beginning, and is rather a partnership than a corporation. Its stock is not for sale in the public exchanges like that of the Pullman Company. The capital stock of the Wagner Company, with 250 cars, is $5,000,000. When they have any stock trades among themselves they sell the stock for $150, making their cars stand at about $30,000 apiece. While they have built some pretty good cars more recently, I do not suppose their cars would average over $5,000 apiece if brought to a forced sale. The Pullman Company, with four large manufactories, with the town of Pullman, and 900 cars, is capitalized at $12,000,000. It has never missed paying a dividend—paid 12 per cent per annum for seven years, and has paid 8 per cent ever since. We put its cars in at about $13,000 apiece.

"Mr. Vanderbilt has always favored the Wagner Company, which is something of a family matter. With the exception of his own family, the only considerable stockholders in it, I understand, are William L. Scott of Erie, Augustus Schell and the Wagner family.

"We give the railroads the privilege of owning one-quarter, one-half or three-quarters of the Pullman equipment on their road. When I began this company it was after very careful study, and I saw that the sleeping-cars would not be permanent unless they dealt equitably with the railroads and with the public. It is not the mere cars which make the success of such corporations, but the underlying system of their operation being uniform at every point. We have built up a service in men as well as in cars, which it will take many a year of careful method to rival. While we believe that the railroads ought to become owners, at least in part, of the sleeping-cars which run over them, so as to give their stockholders an interest in the profits, we know that the improvement of the car service in comforts, convenience, hotel cars, porters and conductors can best be carried out by such an organization as we now have. The ordinary railroad cars have been improved upon our models; but we have labored to set the model, and have incidentally improved the entire transportation service of the country. I was in southern Italy a few week ago, when I saw the Pullman cars pass me, bound from the Alps to the extreme tip of Italy. With the service we are to put in in the north of France, there is at present a Pullman equipment from the Mediterranean Sea to the Straits of Dover, and thence to Liverpool and Edinburgh, and on this side of the ocean from Halifax in Nova Scotia, to California, Florida and Galveston. Such are the dimensions of a little bantling brought into life in 1867. The Pullman Company have become perhaps the largest builders of railroad cars in general in the world."

Naturalized by His Mother's Marriage.

MR. JUSTICE HARLAN, of the Supreme Court, made recently a decision of some interest to the children of foreign-born parents. John P. Kellar was indicted in the Federal Court at Springfield for having voted, when not entitled to vote, at an election for Representatives in Congress held in 1880 in the township of East Lincoln, Logan county. The facts of the case as they appeared on the trial were these: Kellar's parents were subjects of Prussia, where his father died, in 1865, at which time the son was only 7 years of age. His mother came to the United States, bringing the boy with her, and in 1868 married Michael Gaschka, who was a naturalized citizen of the United States. It was decided that the mother upon marriage with Gaschka became, *ipso facto*, a citizen of the United States as fully as if she had been herself naturalized, and that the son being a minor and dwelling in this country when his mother married became by virtue of her marriage with a naturalized citizen himself a citizen. The contention of the Government was that the son could not vote except by complying with section 2,167 of the Revised Statutes of the United States relating to naturalization. This view was, however, overruled by the Justice upon the ground that that section has no application to the case of a resident foreign-born minor who became a citizen by force of his mother's marriage to a citizen. Kellar was therefore discharged honorably from imprisonment.—*Chicago Herald.*

[From our Special Correspondent.]

OUR ST. LOUIS LETTER.

In which things Political, Social and Otherwise, are briefly referred to.

ST. LOUIS, JULY 8th.—Occasionally, perhaps, it is not amiss, even for the RAILROAD JOURNAL, to step aside from the ordinary record of events and chronicle some of those passing occurrences which mark the happenings of the time and agitate to an unusual extent the minds of the people of a great State. Perhaps there never yet, in the history of Missouri, was a question more close to the hearts of the great majority of our citizens than the movement set on foot here some months since for the suppression of gambling. The press and the pulpit united for once in its overthrow, and so universal was the theme in the columns of the one and the sermons of the other that public opinion grappled with the vice, and the greatest and most learned of our representative men lent their influence and raised their voices for its permanent suppression. It was high time, too, to strangle the monster, for golden were the harvests the festive "fakirs" reaped in this city of churches. Indeed, so successful had this species of "enterprise" become that certain keno houses in St. Louis netted for more than a year past a profit of $1,000 a day each from the victims of their guile, and many an unpretending but happy home was wrecked by the losses sustained in the inglorious pastime of "bucking the tiger." When excitement was at its highest pitch, and when all eyes turned toward our law-makers at the capital for redress, ex-Governor Chas. P. Johnson, our great criminal lawyer, allowed his name to be placed in nomination for the Legislature, was elected, and while that body was in session succeeded in passing a measure for the suppression of gambling, which has since become famous as the "Johnson law." Under that act several hundred indictments were found against our local "sports," who contested the constitutionality of the law before the Supreme Court, and were defeated. Finding themselves effectually cornered the gamblers closed their doors, and when their trials came up a few days since the leaders of the gang (Pate, Manning, and others) all escaped the penitentiary by pleading and suing for mercy. The court sentenced them to six months imprisonment, and the public was satisfied in the vindication of the law. In fact, the city was all exultation at the triumph, but a great change came over the spirit of their gladness when, two days later, the mandate of Governor Crittenden made them all free men again. The indignation created by this act of the Governor defies description and puts the keenest observer to his wits' ends for a tittle of justification. Defiant and insolent, the gamblers preyed upon the community with reckless and unscrupulous persistence. They scorned police interference, they ridiculed the exhortations of the church, they frowned at public opinion. It was only when the last resort failed that they yielded; it was not until the State was out several thousand dollars in legal costs that they acknowledged submission; it was not until all possible means of escape had been tried that they plead guilty. When they had thus harassed the courts, and when they had grown rich by plundering the people—when the law had been timidly asserted and their wrong-doing mildly punished—Governor Crittenden comes forward with his pardon, and upsets the labor of many months, wantonly cheats the jail of its just deserts, and outrages public feeling to such a degree as to make himself the most unpopular and thoroughly despised man in all Missouri to-day. His conduct is the burden of countless newspaper articles—it is the subject of numerous pulpit addresses—it is the all-absorbing topic of the masses.

Poor, weak Crittenden! by one act he blights the aspirations of his life—by one dash of the pen he has buried himself and his hopes in a political grave! The most abused man in Missouri, at this writing, the picture of a seat in the Senate has now forever "gone from his gaze," and it would take a galvanic battery of forty-horse power to wake up a single representative man in the State to speak a word in his praise.

By this time he must certainly have realized the great mistake he has made, but it would seem he is only in the beginning of his trouble; for as there are hundreds of gambling cases yet to be tried, the question that concerns St. Louis now is whether or not, in case of conviction, he will have the grit to issue pardons in the other cases also. If he dare do so there will rise from out Missouri a howl of indignation which will ring all over the land; and if he neglects or declines doing so he must necessarily stultify himself and displease the faction for whose political influence he has already sacrificed so much.

To complicate matters still more, three of the most respected Police Commissioners St. Louis has ever had (Messrs. Cupples, Maxom and Simmons) sent their resignations by special messenger to Jefferson City the day following the Governor's pardon, which they openly declare an "unparalleled outrage on decency and law." Their successors are Messrs. D. Kerwin, F. X. McCabe and J. F. Caruth, and it remains to be seen whether their conduct as commissioners will help the Governor out of the dilemma in which he placed himself or still the denunciations which go forth from a hundred thousand tongues to the disparagement of our chief magistrate.

Keno and faro, however, are for the time-being dead—indeed, the only gambling that flourishes at the present time in our city is that which is clothed in Board of Trade speculations.

Mr. John W. Masse, who has been for some time past General Passenger Agent of the Atlantic and Pacific Railroad Company at Albuquerque, N. M., has been appointed to the same position by the Louisville and Nashville, and Louisville, Evansville and St. Louis Railroad companies, with headquarters in St. Louis. Mr. Masse is well and favorably known in this city, and his appointment gives great satisfaction to all parties having dealings with the roads over which he has control. He formerly occupied a similar position here, and the regret caused by his departure some months since is counterbalanced by the pleasure the public now feel at his return. He is the right man in the right place, and his selection for the post mentioned is certainly a judicious move on the part of the companies he represents.

The Missouri Pacific Railroad opened on the 2d inst. a new line from St. Louis to Omaha, and will hereafter run two trains daily to that city. Simultaneous with this move comes the announcement by the same company of a fast express train from this city to San Francisco—time, four and a-half days. The present time between St. Louis and the Golden Gate is five and a-half days, and trains go via Omaha. The fast train goes via Denver and Cheyenne, thus making a difference in time of 24 hours. Under this arrangement passengers from Chicago can make the trip (by way of St. Louis) to the Pacific seaboard in 12 hours less time than formerly, and at the same time can enjoy the privilege of going by way of Denver. Business people hail this announcement with pleasure, inasmuch as the fast train means fast mails.

Mr. T. E. Cassidy, general freight agent St. Louis and San Francisco Railroad, has just resumed his post after a protracted visit after health at Hot Springs, Ark.

All the roads doing business in St. Louis report an unusually large summer trade.

Messrs. H. C. Townsend and Francis Chandler, general passenger agents of the Wabash and Missouri Pacific railroads, respectively, have been in Chicago for several days past at a meeting of general passenger agents interested in Chicago, Kansas City and St. Louis business.

Mr. W. H. Abrams, land commissioner of the Texas and Pacific Railroad Comp a and Mr. J. P. Herman, of Fort Worth, attorney for the Southwestern Railroad Construction and Improvement Company, have been in the city for the past few days.

Mr. F. A. Wann, assistant general freight agent Chicago and Alton Railroad Company, has been in attendance at Detroit for the past few days at the regular monthly freight line meeting of Eastern roads.

Could the several railroads doing business and centering in East St. Louis not introduce some reform and improvement by which the fatal accidents occurring there almost daily might be prevented?

It is estimated that blackmailing to the extent of $50,000 a year is levied in St. Louis.

There is a great exodus of fashionables from this city to the Northern and Eastern watering places.

The "Fourth" was celebrated in St. Louis with unusual *eclat*.

P. H. T.

BENJAMIN P. CHENEY, of Boston, is the gentleman who offers the statue of Webster for the State House park in Concord, N. H.

THE third wharf built within a year at Newport News by the Chesapeake and Ohio Railroad Company is nearly finished. The Old Dominion Steamship Company will use it, beginning soon a daily line of fast steamers between New York and Newport News. The Old Dominion Land Company, which owns the site of Newport News, has 5,000 acres of land in Newtown proper, and 2,000 acres adjoining. It is pushing improvements on the property, but the demand for dwellings and buildings for business exceeds the supply.

[From our Special Correspondent.]

OUR BOSTON LETTER.

Being a Review of Events.

THE GLOBE COMPANY.

THE above concern, which has been a "concern of sorrow and acquainted with griefs," has fallen into so much more grief that anyone with a large heart (for the stockholders) would not forbear mentioning it. About two or three years ago a company was organized. It was called the Globe Company (presumably because its influence was to extend all over the globe), and it was to rebuild old locomotives so that they would burn smoke, screenings, black dirt, and in fact most anything but coal. Great things were promised; one locomotive was so equipped and was said to have been a success. On this, capital stock was issued, a president, vice-president, general manager, and the usual proportion of high-salaried officers chosen; and the papers were filled with advertisements of what the Globe Company was going to do, and that its stock was going fast, and those few shares which were left might be taken by some persons, prompt to show up, at the nominal price of $10 per share, just to close out, you know. When they had done about $25 or so worth of work for some road, they began to pay 10 per cent dividends per month. Desiring to "keep things moving," it has been said that as fast as grangers furnished money for stock, it was paid out to other grangers in dividends.

The company flourished. For two years it gave annual dinners to the stockholders, at which speeches were made, telling what the concern was going to do and about its great future. At the last one, as some of the voters displayed more curiosity to know what had been done with their money than was consistent with the officers' ideas of politeness, it somewhat abruptly broke up, angry feelings not being conducive to digestion. With large wisdom, a tract of land in Chelsea was selected and works put up at a cost of many thousand dollars; these were to be surmounted by a huge globe, that all the world might know how large its plans were. It has since come out that a clear title to the land has never been obtained.

A while ago numerous suits were brought against it by other concerns for infringement of their patents, as it seems that most all of the Globe Company's ideas on the subject of locomotives were borrowed ones, and very few original. Recriminations and publicity followed, and threats were made against Mr. Binney, the general manager, but he kept a bold front, and intimated that the company would yet change locomotives by the thousand; and the squall (as far as the public knew) blew over until within a few days, when sundry and amusing developments have come out which are worth mentioning. The 10 per cent dividends were stopped when the first trouble came, claims to the extent of $150,000 having been presented.

Now it seems that their former manager, having been frozen out by a recent deal made by a new stockholder, has taken up the sword for the Economic Fuel Company, who feel that they have been damaged $200,000 worth by the use of their patents by the Globe Company. Why they can claim this nobody knows, as the Globe Company never used anyone's patents very much.

Some time ago, a $50,000 mortgage was taken out on the company's new buildings, in the name of Fred. Guild, on consideration that 25,000 shares of the stock should be turned over to him, which was done. The new controlling interest then proceeded to call a meeting and vote to organize a new concern, and to sell the works as they stood to the Chelsea Manufacturing Company, which was done, freezing out the old officers, company and stockholders. Then the attachments began to pour in, and the building is now loaded with them to the extent of some $350,000.

About the 6th or 7th inst., Deputy Sheriff O'Brien called to levy a new attachment of $1,000 and found the building fortified. A voice from within warned him to keep off, saying that armed men guarded the doors, who were assisted by blood-hounds, and that torpedoes and spring guns commanded every entrance, and whoever entered would do so at the peril of resembling a cullender before he got far. Upon this the officer called upon them in the name of the law to open the doors, but as they evidently had not much respect for the law, they did not budge. Thereupon the sheriff, by a series of feints and strategies, succeeded in climbing through a window, there not being men and blood-hounds enough to go round, and served his writ with a whole skin. It is not known whether the deputy sent them an ultimatum or not, but it is sufficient to know that the allied powers of the sheriff and a ladder gained an entrance without bloodshed up to date, although the place was defended as described. It is rumored that hostile movements are being made in the interior, but as communication is broken nothing definite could be obtained. Thus is another great enterprise at a standstill.

Since my last the New York and Boston Inland Railroad has obtained a location to enter the city upon, as far as the West Roxbury station of the Boston and Providence Railroad. Now they want the Boston and Providence people and the Railroad Commissioners to agree to let them use the Providence tracks and terminals the rest of the way.

The Lynn and Boston Horse Railroad carried on the 4th of July 20,000 passengers in the limits of Lynn alone. The Boston and Lowell Railroad, at a place called Milk Row, piled up 21 cars loaded with ice one day last week by reason of a broken axle, stopping travel for several hours. It was said by all who witnessed it to be as "cool" a proceeding as they had ever seen.

A little trouble has arisen over the proposed sale of the Woonsocket division of the New York and New England to the Boston and Albany, to be used in the Newton Circuit Railway, as it is not at present certain that the former road can give a clear title on account of the mortgages upon it.

The reports for the month of June show a falling off of 1,095 loaded freight cars as compared to the number that passed through the Hoosac Tunnel in June of last year.

At the Point of Pines, a harbor resort, 10,000 people gathered on the evening of the 4th. It took 85 trains to handle the passengers who visited this place during the day and evening. The Boston, Revere Beach and Lynn and the Eastern both run there. The Eastern built their loop tracks to this place last season at a cost of a little over $30,000, and counted at the end of it an increased income from its use of $15,000.

The consolidation of the Eastern and Boston and Maine railroads is progressing. The directors of both roads have actually made propositions to each other, but as yet the arrangement is not satisfactory to either. After their consent comes that of the Legislatures of Massachusetts, New Hampshire and Maine to be gotten, which is no small undertaking.

Some of the good people of Boston are doing a work that might well be followed by those of New York and other large cities, viz.: The city is divided into nine districts, and each week through July and August the poor children of a district are given a tree ride to Lake Walden Grove, on the Fitchburg Railroad, and a day in the woods. As policemen are the only objects on earth they have any respect for a squad is detailed each week to go with them. Last week 16 car loads went out, and the cost to the people who sent them was but 34 cents per head, including a lunch. The JOURNAL man saw the train arrive at night, and it is not possible for people to be happier than were these children as they got out of the cars with their arms full of green boughs and flowers. All the train men and passengers in the station dropped everything and went to look at them.

At 10 o'clock on the morning of the 11th the Railroad Commissioners studied the milky way (train), *i. e.*, the transportation of the lacteal fluid on the trains entering the city. The result at time of writing is not public.

Travel on the glorious Fourth: Fitchburg Railroad at Lake Walden, 10,000 people; New York and New England at Highland Lake Grove, 10,000; Boston and Hingham Harbor boats carried 15,000 people.

The Massachusetts Central directors met again on the 8th and considered the idea of changing the present mortgage bonds into preferred stock, and one or two other schemes, but could not come to a decision as to which was the best course to pursue. It has been found to be impossible to raise the $150,000 to keep the road alive and build it to Ware, whence it was hoped to make it at least pay running expenses. As it is now, the time is near at hand when the road must cease running unless something is done quickly.

The New York and New England earned $58,000 more in June of this year than in the same month of last. Its Harlem transfer in the same month brought 511 less cars to it. The Newburgh division, with its enormous coal trade, has done much to increase the earnings.

The Boston and Providence Railroad is about to put an automatic train starter into its passenger depot in this city. The next thing wanted is an automatic conductor and ticket taker.

The amount of brains displayed by the average person when he travels is not usually as heavy as his traveling bags. The other morning the writer was standing in the depot of a road whose connections cover a goodly portion of Vermont. It was near starting time, and the only train in the station had Central Vermont cars, labeled in large letters, attached. Down the platform came a stout individual, loaded down with the customary grip sack, bundle, cane and umbrella. As he got to the side of the cars he began to shout, "Where's the cars for Rutland; I want the cars for Rutland," and thus he kept on, past the train, locomotive and all, and was headed for Somerville, when an official caught him by the shoulder and pointed to the cars he had just passed. At this the stout party turned and seemed to realize for the first time that he had passed a train. When last seen the ends of the cane and umbrella, followed by the official, were vanishing in the car door.

"CURTIS."

BOSTON, JULY 11th, 1882.

The Stock Exchanges and Money Market.

New York Stock Exchange.

Closing Prices for the week ending July 12.

	Th. 6.	F. 7.	Sat. 8.	M. 10.	Tu. 11.	W. 12.
Adams Express	.....	.....	.....	.....	139	140
Albany and Susq.	.....	....	.....	.....	.....	.....
1st mortgage	.....	.....	.....	.....	.....	.....
2d mortgage	.....	.....	.....	.....	.....	.....
American Express	92¾	93	92	93	94	94
Burl., C. R. & Nor.	.....	.....	.....	75	.....	.....
1st mortgage 5s	.....	.....	.....	.....	.....	101½
Canada Southern	51¼	52½	53½	55¼	54	55¼
1st mortgage guar	93	93	93	93	....	93¼
Central of N. Jersey	76½	76⅞	77½	79¼	76¾	77⅝
1st mort. 1890	.....	.....	....	.....	....	....
7s, consol. ass	.....	110	110	.....	.....	110
7s, convertible ass.	108¾	.....	109½	.....	.....	.....
7s, Income	.....	.....	.....	.....	.....	.....
Adjustment	.....	.....	.....	106	.....	.....
Central Pacific	91⅞	93	93¼	94	94	94⅜
6s, gold	.....	116¾	116⅞	117	.....	....
1st M. (San Joaq)	.....	.....	.....	111	110½	.....
1st M. (Cal. & Or.)	.....	.....	.....	.....	.....	.....
Land grant 6s	..	.....	.....	105½	.....	.....
Chesapeake & Ohio	22½	22½	23⅛	23½	24	24
1st pref	.....	31¾	33⅛	33¼	34½	.....
2d pref	23¾	23¾	25	.....	25	.....
1st mort., series B	.....	81	81	82	81½	82½
Chicago and Alton	133	134	135	135	136¼	.....
Preferred	....	.....	.....	.....	.....	.....
1st mortgage	.....	.....	.....	.....	.....	.....
Sinking Fund	.....	.....	114	.....	.....	.....
Chi,, Bur. & Quincy	128	130	129½	131	130	130⅛
7s, Consol. 1903	128½	127	127½	.....	.....	.....
Chi., Mil. & St. Paul	112⅛	112⅛	114¾	115	115¼	118
Preferred	127½	127¾	128⅝	128⅞	129⅜	131
1st mortgage, 8s	.....	.....	.....	.....	.....	.....
2d mort., 7 3-10s	.....	.....	.....	.....	.....	.....
7s, gold	.....	.....	.....	.....	.....	.....
1st M. (La. C. div)	.....	.....	.....	.....	.....	118½
1st M. I. & M. div.)	.....	.....	.....	.....	.....	....
1st M. (I. & D. ext.)	.....	.....	121	121	.....	.....
1st M. (H.&D. div.)	.....	.....	115¾	.....	.....	....
1st M.(C. & M.div.)	.....	.....	.....	.....	.....	.....
Consolidated S. F.	.....	119¾	119½	120	120¼	.....
Chi. & Northwestern	131	131⅜	132	132	131¾	132¼
Preferred	147	146½	147¾	147½	146½	147½
1st mortgage	.....	.....	.....	.....	.....	.....
Sinking Fund 6s	.....	.....	.....	.....	.....	.....
Consolidated 7s	.....	.....	.....	.....	.....	.....
Consol. Gold bo'ds	.....	.....	.....	.....	.....	.....
Do. reg	.....	.....	.....	.....	125	.....
Chi., R. Isl. & Pac.	127¾	128¼	129¼	129¾	130	129¾
6s, 1917, c	..	.....	.....	.....	.....	.....
Clev.,Col.,Cin.&Ind.	.....	73½	75½	76	76	75
1st mortgage	.....	.....	.....	.....	.....	....
Clev. & Pittsburg gr.	.....	.....	.....	.....	.....	.....
7s, Consolidated	.....	..	..	.....	.....	.....
4th mortgage	.....	.....	.....	.....	.....	.....
Col.,Chi.,& Ind. Cent	8¾	9	12¼	12¼	12	12
1st mortgage	.....	.....	.....	.....	120	.....
2d mortgage	.. ..	.....	.....	.....	.....	.....
Del. & Hud Canal.	112¾	112⅝	113⅛	112⅜	112½	112
Reg. 7s, 1891	.....	113	.....	....	114	.....
Reg. 7s, 1884	.....	.....	.....	.....	.....	...
7s, 1894	118	.....	.....	.....	.....	.....
Del.,Lack.& Western	126	126¼	126⅞	127	126⅝	126⅞
2d mortgage 7s	.....	.....	.....	.....	.....	.....
Consol. 1907	.....	.....	.....	127	128	.....
Erie Railway	...	.....	.....	.....	.....	.....
1st mortgage	.....	.....	.....	.....	.....	.....
2d mort. 5s, ext	.....	.....	.....	.....	.....	111
3d mortgage	.....	.....	.....	.....	104½	.....
4th mort. 5s, ext	.....	.....	.....	.....	.....	.....
5th mortgage	.....	.....	.....	.....	.....	.....
7s, Consol. gold	127½	.....	.....	127¼	.....	.....
Great West. 1st mort	.....	.....	.....	....	.....	.....
2d mortgage	100	99½	.....	.....	100	.....
Hannibal & St. Jo.	.....	.....	.....	.....	84	.....
Preferred	82	82	81¼	84	.....	84
8s. Convertible	.....	107½	107	107	....	107⅝
Houston & Tex. Cen	80	80¾	81	81¾	80¾	80¾
1st mortgage	.....	.....	.....	.....	.....	....
2d mortgage	.....	.....	.....	.....	.....	.....
Illinois Central	.....	134	136	136⅞	136¾	137
LakeShore&MichSo	109	109⅛	110⅛	110⅜	110¼	110¾
Consol. 7s	.....	.....	127⅛	.....	.....	.....
Consol. 7s, reg	.....	.....	.....	.....	.....	.....
2d Consolidated	.....	.....	.....	.....	122	123½
Leh. & W. B. con.ass	.....	.. ..	.....	.....	103¼	104
Long Dock bonds	.....	.....	.....	.....	.....	.....
Louisville & Nash.	66¼	67⅛	71⅞	70¾	70¼	70¾
7s, Consolidated	117	117⅛	.....	117¼	.....	117⅛
Manhattan	50¼	.....	49¼	51¼	53	52
1st pref	....	91	.....	.....	91	.....
Met. Elevated	83¾	85	84½	....	.....	84½
1st mortgage	100⅞	100¾	100⅞	.....	100¾	.....
Michigan Central	90	90¾	92	91⅝	92½	92¾
7s, 1902	.....	.....	125¾	.....	125¾	.....
Morris & Essex	.....	124	.....	.....	123¾	121
1st mortgage	.....	136	....	.....	.....	137
2d mortgage	117	.....	.....	.....	.....	.....
7s of 1871	.....	.....	.....	.....	.....	.....
7s, Convertible	..	.....	.....	.....	.....	.....
7s, Consolidated	.....	.....	.....	.....	121	.....
N. Y. Cen. & Hud. R.	131	131½	132⅛	132¾	132⅝	133¼
6s, S. F. 1883	102	...	.....	.....	.....	....
6s, S. F., 1887	...	.....	.....	...	.....	.....
1st mortgage	...	.....	.....	.....	.....	.....
1st mortgage, reg.	.....	.....	.....	.....	.....	...
N. Y. Elevated	.....	.....	.....	.....	.....	.....
1st mortgage	115	115	116	115⅝	. ...	115
N. Y. & Harlem	.....	.....	.....	.....	.....	.....
Preferred	.....	203	.....	.....	.....	205
1st mortgage	.....	.....	.....	.....	.....	.....
1st mortgage, reg	.....	.....	.....	.....	.....	.....
N. Y., Lake Erie & W	36	36½	36¾	37	37¼	38½
Preferred	...	.....	74⅞	75	70¾	76	77½
2d Consolidated	95¼	95	95¼	95⅜	95¼	96¼
New 2d 5s fund	91¾	91½	91⅜	91⅜	....	92
N.Y.,N.Hav'n&Hart	.....	175	178	178	.....	175
North Mo. 1st mort	.....	.....	.....	.....	.....	.....
Northern Pacific	42½	43⅛	43¾	44	43¾	44¾
Preferred	80⅜	81⅛	83⅛	82¾	82⅜	83½
Ohio & Mississippi.	38¼	37¼	37	37	37½	37½
Preferred	....	102½	.....	.....	.....	.....
2d mortgage	...	.....	.....	.....	.....	.....
Consolidated 7s	.....	.....	.....	.....	117⅛	.....
Consol. S. Fund	.....	116½	.....	.....	.....	.....
Pacific Mail S. S. Co	43	43¾	44¾	43⅞	47	47
Pacific R. R. of Mo.	.....	.....	.....	....	.....	.....
1st mortgage	109½	108¼	.....	.....	.....	108¾
2d mortgage	.....	.....	.....	.....	....	.....
Panama	.....	.....	.....	167	.....	.....
Phila. & Reading	57⅞	58⅜	59	58⅞	58	58¼
Pitts,Ft.W.&Chi.gtd	.....	.....	.....	131	.....	.....
1st mortgage	.....	.....	.....	.....	.....	.....
2d mortgage	.....	.....	.....	.....	.....	.....
3d mortgage	.....	.....	.....	.....	.....	.....
Pullman Palace Car	.....	....	126	127	127	127⅞
Quicksil'r Min'g Co	.....	.....	.....	9	.....	.....
Preferred	.....	.....	.....	.....	.....	.....
St. Louis & San Fran	37	.....	37¾	.....	38	38½
Preferred	.....	.....	50	50½	50	50
1st Preferred	92	92	. ...	.....	95	.....
St. L., Alt'n & T. H.	.....	.....	29	29¾	.....	32⅝
Preferred	.....	.....	63	70	68	74
1st mortgage	.....	.....	.....	.....	.....	.....
2d mort. pref	.....	107½	.....	.....	.....	.....
Income bonds	.....	.....	.....	.....	40	.....
St. L., Iron Mt. & S	.....	.....	.....	.....	.....	.....
1st mortgage	117	.....	117	.....	.....	117
2d mortgage	105	.....	.....	.....	.....	.....
Toledo and Wabash.	....	.....	.....	.....	.....	.....
1st mortgage	.. ..	.....	.....	.....	.....	.....
2d mortgage	...	.....	.....	.....	.....	.....
7s, Consolidated	.....	.....	.....	.....	.....	.....
St. Louis Division	.....	.....	.....	.....	.....	.....
Union Pacific	110⅞	111⅞	112⅞	113⅜	113⅛	113¼
1st mortgage	116¾	117	117	.....	.....	117
Land Grant 7s	.....	.....	.....	.....	114¾	.....
Sinking Fund 8s	.....	.....	.....	.....	....	.....
United States Ex	72½	72¾	72	.....	72	.....
Wabash, St. L.& Pac	28¾	30	30¾	32¼	32⅞	34¾
Preferred	51½	52¾	53	54½	55½	58⅞
New mort. 7s	.....	.....	.....	.....	.....	.....
Wells-Fargo Ex	.....	.....	.....	.....	.....	126
Western Pacific b'ds	.....	.....	.....	.....	.....	110
Western Union Tel.	85⅛	86½	87¼	87½	87⅜	87⅛
7s., S.F conv., 1900	.....	115	.....	.....	.....	....
FEDERAL STOCKS :—						
U. S. 4s, 1907, reg	118⅜	118⅜	.....	.....	.....	.....
U. S. 4s, 1907, coup.	118¾	118¾	.....	119⅛	118¾	.....
U. S. 4½s, 1891, reg.	114	.....	.....	.....	.....	.....
U. S. 4½s, 1891, coup	114	.....	.....	.....	.....	114
U. S. 5s, cont'd at 3½	...	.....	.....	.....	100¾	.....
U. S. 6s cont'd at 3½	.....	...	.....	.....	.....	.....
Dt. of Col. 3-65s, reg	.....	.....	.....	.....	.....	.....
Dt. of Col.3-65s,coup	.....	.....	.....	.....	.....	... .

Boston Stock Exchange.

Closing Prices for the Week Ending July 12.

	Th. 6.	F. 7.	Sat.8.	M. 10.	Tu. 11.	W. 12.
Atch.,Top.&San.Fe.	88¼	88⅝	89¾	90⅝	91¼	93
1st mortgage	.....	119	.....	.....	120	.....
Land Grant 7s	.....	.....	115	.....	.....	.....
Boston & Albany	165⅛	166	.....	165⅛	165⅛	165¾	165¾
Boston and Lowell	102¼	.....	.....	102¼	.....	.....
Boston & Maine	148½	148	.....	148½	147¾	.....
Boston& Providence	.....	158½	.....	.....	.....	.....
Bos'n,Hart.& Erie7s	.....	.....	52	52½	52½	.....
Burl.& Mo.R.L.G.7s	.....	.....	.....	.....	.....	.....
Burl.& Mo.R.in Neb	.....	.....	.....	.....	.....	.....
6s, exempt	.....	112¼	.....	.....	.....	.....
4s	.....	.....	.....	.....	.....	.....
Chi.,Burl. & Quincy	128	129	129¾	130½	131	130¼
Cin.,Sand&Clev($50)	.....	27	27½	26	27⅞	.....
Concord ($50)	....	.....	.....	.....	.....	.....
Connecticut River	.....	.....	....	.....	.....	.....
Eastern	44	43½	43½	43½	43	43
New 4½ Bonds	109⅝	109⅝	109⅝	109⅝	109⅝	.....
Fitchburg	.....	128	128	.....	126½	.....
N.Y. & New England	.....	.....	49¾	51½	51	51
7s	116½	116½	116¾	116½	116¾	116½
Northern N. H.	109	.....	.....	.....	.....	.....
Norwich&Worcester	.....	.....	.....	.....	.....	.....
Ogden & Lake Cham	.....	.....	.....	.....	.....	.....
Old Colony	131½	.....	132	.....	.....	132
Ph.,Wil.&Balt.($50)	.....	.....	.....	.....	.....	.....
Portl'd,Saco & Ports	....	.....	.....	.....	.....	.....
Pueblo & Ark Val 7s	114¼	.....	.....	. ...	114	111½
Pullman Palace Car	.....	125½	125½	126	.....	128
Union Pacific	111⅛	112	113	113⅝	.....	113¾
6s	116¼	.....	117	.....	.....	.....
Land Grant 7s	...	....	113	113¼	....	.....
Sinking Fund 8s	.....	.....	119¾	119¾	.....	119½
Vermont & Mass	.....	.....	.....	.....	.....	.....
Worcester & Nashua	.....	.....	.....	.....	.....	.....
Cambridge (Horse)	.....	....	.....	.....	.....	.....
Metropolitan(Horse)	.....	.....	.....	.....	.....	.....
Middlesex (Horse)	.....	.....	.....	.....	.....	.....
Cal.&Hecla Min'gCo	249	249	249	248	248	.....
Quincy	57¼	59½	60½	61¼	61¼	62

Philadelphia Stock Exchange.

Closing Prices for the Week Ending July 11.

	W. 5.	Th. 6.	F. 7.	Sat. 8.	M. 10.	Tu 11
Allegh'y Val. 7 3-10s	121¼x	.....	121½	.....	.....	121½
7s, Income	.....	.....	.....	.....	.....	.....
Buff., Pitts & West.	16¼	16½	17¼	17¼	17½	17⅛
Camd'n & Am. 6s, '83	.....	.....	.....	.....	.....	.....
6s, 1889	....	.....	.....	.....	.....	.....
Mort. 6s, 1889	.....	.....	113	.....	.....	112½	.....
Camden & Atlantic	.....	.....	.....	.....	.....	.....
Preferred	....	.....	.....	45	.....	.....	....
1st mortgage	.....	.....	.....	.....	.....	.....
2d mortgage	.....	.....	.....	.....	.....	.....
Catawissa	.....	24¼	.....	.....	.....	24¼	.....
Preferred	....	.....	54	.....	.....	.....
2d pref	.....	52	.....	.....	.....	53
7s, new	.....	.....	.....	.....	.....	.....
Del. & Bound Brook	.....	.....	.....	.....	.....	.....
7s	.....	.....	.....	.....	.....	.....
Elmira&Williamsp't	.....	.....	.....	.....	.....	.....
Preferred	.....	.....	.....	.....	.....	.....
Hunt. & B. Top Mt.	.....	.....	.....	14½	14¾	15
Preferred	....	.....	.....	26¾	.....	26½
2d mortgage	.....	.....	.....	.....	.....	.....
Lehigh Navigation	40	40	40⅜	41	40¾	41¼
6s, 1884	102⅞	.....	103⅛	.....	103¼	.....
Gold Loan	.....	.....	.....	.....	.....	112
Railroad Loan	.....	.....	.....	.....	.....	.....
Conv. Gold Loan.	... .	.....	.....	.....	. ...	.....
Consol. Mort, 7s	.....	.....	.....	.....	.....	.....
Lehigh Valley	60	60½	60¾	60¾	60⅝	60¾
1st mort. 6s, coup	.....	.....	.....	.....	.....	.....
1st mort. 6s, reg.	120½	.....	.....	.....	.....	.....
2d mort. 7s	.....	.....	.....	.....	.....	.....
Consol mort. 6s	.....	.....	121	.....	.....	.....
Consol.mtg.6s,reg	.....	.....	.....	.....	.....	.....
Little Schuylkill	...	.....	.....	.....	.....	.....
Minehill&Sch.Hav'n	.....	.....	.....	.....	.....	....
North Pennsylvania	65	65	.....	.....	65	65
1st mortgage 6s	.....	105	.....	.....	.....	.....
2d mortgage 7s	.....	.....	.....	.....	.....	.....
Genl. mtg.7s,coup	.....	.....	.....	.....	.....	.....
Genl. mtg. 7s, reg	.....	.....	.....	121	122	.....
Northern Central	.....	.....	47	47	.....	48
5s	.....	.....	.....	.....	.....	.....
Northern Pacific	41¼	41⅞	43	43¾	44	43⅞
Preferred	79	80¼	81¾	81	82¾	82⅝
Pennsylvania R. R.	58¾	59¾	59⅝	59¾	59⅞	59⅝
1st mortgage	.....	.....	.....	.....	.....	.....
Gen'l mort	.....	.....	.....	.....	.....	.....
Gen'l mort reg	.....	.....	.....	125	.....	.....
Consol. mort. 6s	.....	.....	117	.....	.....	.....
Consol. mort. reg	.....	.....	.....	.....	.....	...
Pa. State 5s, new	.....	.....	.....	.....	.....	.....
do 4s, new	.....	.....	.....	116	.....	116¼
do 3½s, 1912	.....	.....	.....	.....	.....	.....
Phila. & Reading	28½	28¾	29½	29¾	28½	29¼
1st mortgage 6s	.....	.....	.....	.....	.....	.....
7s of 1893	.....	.....	.....	.....	.....	.....
7s, new convert	.....	.....	78½	78½	78½	.....
Consol. mort. 7s	.....	.....	123	.....	.....	123¾
Consol. mort. reg	.....	.....	.....	.....	.....	.....
Gen'l mort. 6s	95⅞x	95⅝	95½	96	96¼	96½
Def. Income bonds	.....	.....	.....	.....	.....	.....
Philadelphia & Erie	.....	....	15½	15½	15½	15½
1st mortgage 5s	.....	.....	.....	.....	...	104
2d mortgage 7s	....	.....	....	.....	.....	114
Pittsb.,Cin.&St.L.7s	.....	.....	97	.....	.....	.....
Pitts.,Tit.&Buff. 7s,	.....	.....	.....	.....	.....	.....
Schuylkill Navi't'n.	. ..	.. ..	.....	.....	.....	.....
Preferred	.....	... .	.....	.....	.....	.....
6s, 1895	.....	.....	....	.....	.....	.....
6s, 1882	.....	.....	.....	.....	.....	.....
United Co. of N. J.	185	186¼	186½	188	188	188
Hestonville, (Horse)	.....	.....	.....	.....	.....	....
Chestnut&Wal.(do)	.....	.....	.....	.....	.....	....

Baltimore Stock Exchange.

Closing Prices for the Week Ending July 11.

	W.5.	Th.6.	F. 7.	Sat.8.	M.10.	Tu.12.
Baltimore & Ohio..	.....	195¼	195¼	.....	.....	.....
6s, 1885.....	.....	.....	.....	.....	107	....
Central Ohio ($50)..	...	.....	.....	.....	.....	.....
1st mortgage.....	.....	.....	....	.....	.....	.....
Marietta & Cincin'ti	.....	.....	.....	.....	.....	.....
1st mortgage, 7s..	.....	.....	.....	.....	.....	....
2d mortgage, 7s..	.....	.....	100½	.....	102⅛	.....
3d mortgage, 8s..	.....	.....	47	47	.....	47⅞
Northern Cen. ($50)	.....	.....	.....	.....	.....	56¾
2d mort., 6s 1885..	.....	.....	.....	.....	.....	.....
3d mort., 6s, 1900..	.....	.....	.....	.....	.....	.....
6s, 1900, gold.....	116	.....	.....	.....	.....	.....
6s, 1904, gold.....	.....	.....	.....	.....	.....	.....
Pitts.& Connellsv.7s	.....	....	....	....	....	.....
Virginia 6s, Consol.	57¼	57	57	. ...	58	68½
Consol. coupons..	57	58	.....	58	.....	60
10 40 bonds.....	42½	42½	.....	.....	43	43¼
Def'd Certificates.	.....	.....	.....	.....	.....	.....
Western Maryland..	17	17	17	.....	.....	.....
1st M.,end.by Balt	.....	.....	.....	....	.....	.....
2d M. do .	.....	.....	.....	.....	.....	....
3d M., do .	.....	.....	.....	.....	.....	.....
1st M.,unendors'd	.....	.....	.....	.....	.....	.....
2d M.,end.WashCo	.....	.....	.....	.....	.....	.....
2d M., preferred..	.....	.....	.....	.....	.....	.....
City Passenger R R.	....	.....	.....	.....	.....	....

London Stock Exchange.

	Closing Prices — June 30.		June 23.	
Baltimore & Ohio 5s, 1927.....	105	107	105	107
Central of N. J,, $100 shares....	93	98	93	98
Do. consol. mort.....	110	112	110	112
Do. Income Bonds.....	88	92	93	97
Det.,G'd Haven & Mil. Equip bds.	115	117	115	117
Do.Con.M.5p.c.,till'83aft'r6p.c	112	114	112	114
Illinois Central $100 shares.....	136	137	137	139
Lehigh Valley Cons. mortgage..	115	119	115	119
Louisville & Nashville mort 6s.	98	100	98	100
Do. capital stock $100 shares.	68	70	66	68
N. Y. Cent. & Hud. R. mt. bds..	132	135	132	135
Do. $100 shares.....	133	135	134	136
Do mort. bonds (stg.).....	124	126	124	126
N.Y.,Lake Erie & West.,$100 shs	36½	37	36⅛	37
Do. 6 p. c. pref. $100 shares ..	74	76	74	76
Do. 1st Con. Mort. bds (Erie) .	128	130	128	130
Do. do. Funded Coupon bds.	124	126	124	126
Do. 2d Consol Mort. bonds...	96	97	95	96
Do. do. Funded Coupon bds..	92	94	91	93
N.Y.,Pa.& Ohio 1st mort. bonds.	43	45	43	45
Do. Prior Lien bds (sterling)..	103	108	103	108
Pennsylvania, $50 shares.....	59¼	60	59	59⅛
General Mortgage.....	124	127	122	126
Philadelphia & Reading $50 shs	29¾	30¼	30¾	31¼
General Consol Mortgage.....	116	118	116	118
Do. Improvement Mortgage..	103	105	103	105
Do.Gen.Mtg.'74,ex-def'd coup.	99	101	100	102
St. L. Bridge 1st mort. gold b'd.	125	127	125	127
Do. 1st pref. stock.....	95	98	95	98
Union Pacific 1st. mtg	117	119	115	117
Wabash, St. L. & P. $100 shs.....	28	30	28	30
Do. $100 pref. shares.....	51	52	51½	52½
Do. gen. mort. bonds.....	79	81	79	81

AMERICAN RAILROAD JOURNAL.

Financial and Commercial Review.

THURSDAY EVENING, July 13, 1882.

THE quotation for call loans during the day on stocks was 2½@3 per cent, and on United States bonds 2@2½ per cent.

The posted rates for prime bankers' sterling were 4.86 and 4.89. The actual rates were 4.85@¼ and 4.88@½, with cable transfers 4.89@¼, and prime commercial 4.83¼@¾. The actual rates for Continental bills are as follows; Francs, 5.19⅜@5.18¾ and 5.15⅝@5.15, Marks, 94⅛ and 95¼@¾, and Guilders, 40 and 40⅜.

The Secretary of the Treasury issued on the 10th inst. the 115th call for the redemption of bonds. It is for $16,000,000 of the 6 per cent registered bonds continued at 3½ per cent from July 1, 1881. The principal and accrued interest will be paid at the Treasury Department in Washington on and after September 13, and the interest will cease on that day. The following is a description of the bonds: $50, Nos. 801 to 900, both inclusive; $100, Nos. 5,501 to 6,500, both inclusive; $500, Nos, 3,601 to 4,150, both inclusive; $1,000, Nos. 19,001 to 21,000, both inclusive; $5,000, Nos. 6,401 to 6,900, both inclusive; $10,000, Nos, 12,501 to 14,650, both inclusive.

The earnings of the Central Pacific Railroad Company for the first half of the year were at the rate exceeding 9 per cent per annum. The best business comes in the last half of the year, indicating earnings of fully 10 per cent for 1882. The proceeds of land sales for the half year were about $250,000. These proceeds are devoted to retiring land grant bonds, $420,000 of which were taken up last year. The remainder of the $1,500,000 7 per cent convertible bonds were retired last year out of the sinking fund.

The stockholders of the Cincinnati and Baltimore Railroad Company have ratified the sale of stock to the Baltimore and Ohio Railroad made by the trustees. The stock will be delivered August 1. This gives the control of the road to the Baltimore and Ohio.

The statement that the reserve fund of the Baltimore and Ohio Railroad Company would be pledged to raise funds for the construction of two Atlantic cables, is explicitly contradicted by President Garrett, who states that "The Baltimore and Ohio European Cable Company will use a cash capital in the construction of its lines."

In consequence of the troubles in Egypt the Pacific Mail Steamship Company has advanced its freight rates on its China and Australian line 33 per cent. It is claimed that already considerable business has been diverted from the Suez Canal to the Pacific Mail Steamship Company. The Central and Union Pacific Railroad Company also expect to benefit by the Egyptian troubles.

The Bank of Montreal has given notice that it will receive proposals for the sale to them of Canadian Pacific Railway first mortgage sinking fund five per cent land grant gold bonds, and will pay for them out of the proceeds of cash sales of lands pledged to the bank, and now available for that purpose to the extent of $150,000. Bonds to the amount of $760,000 received in payment for lands have been cancelled by the trustees.

The Western Union Telegraph Company has taken the lines and business of the Direct and French Cable Companies and established a general cable office near the Stock Exchange in this city, from whence it is intended to operate all the cables. In this arrangement the Direct and French companies lose their individuality so far as the land lines are concerned, but retain their cable stations.

The total internal revenue receipts for the fiscal year ended June 30, 1882, as figured up at the internal revenue bureau, aggregate $146,265,492—an increase of $11,265,492 over the receipts for the last fiscal year. These figures will be subject to some modification when the complete returns come in, but the difference will not be material.

The wheat crop of California is estimated at 50,000,000 bushels. Arrangements have been made to carry a large portion of this grain to Gulf ports by rail, instead of shipping by sailing-vessels as heretofore. This will add materially to the earnings of the Central Pacific Railroad Company.

The annual interest on the public debt is now about $1.08 for every inhabitant. In 1875 it was more than twice this, being $2.20 per capita, and in 1865 it was as high as $4.29 per capita, or $150,977,697, to be paid by 55,469,000 people.

The earnings of fifty-two roads for the month of June, as reported by the *Commercial and Financial Chronicle*, amounted to $22,145,606, against $22,345,051 in 1881. This showing, after making due allowance for increased mileage, is more favorable than generally anticipated, in view of the well-known fact that the movement of grain during the month was very light and that the traffic of the roads during June 1881, was unprecedentedly large. The earnings of forty-nine roads from January 1 to June 30 are given at $135,468,367, an increase of $16,430,595 as compared with those for the first half of 1881.

The following quotations of sales of railway and other securities, for the week, are in addition to those given elsewhere in our columns:

New York.—Atchison, Topeka and Santa Fe 93; Atchison, Colorado and Pacific 1st, 90; Boston and New York Air Line pref., 78¾; Boston, Hartford and Erie 1st, 52; Chicago, St. Paul, Minneapolis and Omaha, 46; do. pref., 105¾; do. consol., 104; Cincinnati, Sandusky and Cleveland, 55½; Cedar Falls and Minn., 20½; Chicago, St. Louis and New Orleans, 79; do. 5s, 102⅝; Chesapeake and Ohio cur. int., 51; do. 1st, Series A, 102; Chicago, Milwaukee and St. Paul, Southern Minn. div. 1st, 107; do. Chicago and Pacific West div. 1st, 91¾; Central Iowa 1st, 114; Col., Chi. and Ind. Cent. inc., 48; Chicago and Northwestern S. F. 5s, 100¾; Cairo and Fulton 1st, 106; Chicago, Burlington and Quincy 8s, 101½; Danbury and Norwalk, 64; Denver and Rio Grande, 58½; do. 1st, 113¾; do. consol., 102; Dubuque and Sioux City, 85; Denver, South Park and Pacific 1st, 101¾; East Tennessee, Virginia and Georgia, 11¼; do. pref., 19½; do. inc., 47¾; Elizabethtown, Lexington and Big Sandy 6s, 94; Evansville and Terre Haute 1st, 96; Fort Worth and Denver, 1st, 97⅝; Green Bay, Winona and St. Paul, 11; Gulf, Colorado and Santa Fe 1st, 105¾; Houston and Texas Central 1st, Western div., 106; Indiana, Bloomington and Western, 42¾; do. Eastern div., 1st, 94; Indianapolis, Decatur and Springfield 1st, 103; International and Gt. Northern 1st, 106¾; do. coup. 6s, 89; Jefferson 1st, 105; Kansas Pacific 1st consol., 103¾; do. 6s, Denver div. ass., 109¾; Keokuk and Des Moines, 18; Louisville, New Albany and Chicago, 57¾, do. 1st, 100¼; Long Island, 59; do. consol. 5s, 97½; Louisiana and Missouri River, 16¾; Lake Erie and Western, 33¾; do. inc. 53; do. Sandusky div. inc., 50; Louisville and Nashville gen'l mort. 6s, 96; do. N. O. and M. div. 1st, 93; Lafayette, Bloomington and Muncie 1st, 100; Manhattan Beach, 25⅝; Minn. and St. Louis, 29¼; do. pref., 67; do. 1st, 116; Mobile and Ohio, 20¾; do. 1st mort., 109; do. 1st deben., 75; Missouri, Kansas and Texas, 37¾; do. gen'l mort. 6s, 85¾; do. consol. 7s, 109; do. 2d, 66; Missouri Pacific, 98¾; do. 1st consol., 100½; do. 3d; 109½; Milwaukee, Lake Shore and Western, 50; do. 1st, 101; Memphis and Charleston, 53; Marietta and Cincinnati 2d pref. 5½, Michigan Southern S. F., 108; New Orleans Pacific 1st, 88; Nashville, Chattanooga and St. Louis, 60½; do. 1st, 113¾; New York, Chicago and St. Louis, 12¼; do. pref., 30⅛; do. 1st, 85¾; New York, Ontario and Western, 27; Norfolk and Western pref., 53⅜; do. gen'l mort. 101¼: New York City and Northern gen'l mort., 53½; Northern Pacific 1st, 101¾; Ohio Central, 16⅞; do. inc., 35; do. 1st, 95; Ohio Southern, 15; do. 1st, 83; Oregon Transportation, 74⅛; Oregon Short Line 6s, 104; Oregon Railway and Nav., 141½; do. 1st, 106½; Peoria, Decatur and Evansville, 34¾; do. 1st., 108½; do. inc., 75; Rochester and Pittsburgh, 33¾; do. 1st, 103½; do. inc., 47¼: Richmond and Alleghany, 25; do. 1st, 84; Richmond and Danville, 101; do. deben., 68½; do. 6s, 99; Richmond, Danville and West Point, 55½; St. Louis, Alton and Terre Haute div. bonds, 40; Southern Pacific of California 1st,, 105⅝; South Carolina 1st, 98; South Pacific of Missouri 1st, 105; St. Paul and Duluth pref., 86; St. Paul, Minneapolis and Manitoba, 135; do. 2d, 113; St.Louis, Iron Mountain and Southern 5s, 80⅞; Syracuse, Binghamton and New York 1st, 123½; St. Louis and San Francisco 2d, Class B, 89; St. Paul and Sioux City 1st, 111; St. Louis, Kansas City and Northern, Omaha div. 1st, 106¾; do. R. E. 7s, 103½; Texas and Pacific, 48¾; do. inc. Land Grants, 66; do. Rio Grande div. 1st, 86⅝; Toledo, Delphos and Burlington inc., 20½; Utah Southern ext. 1st, 95; do. gen'l mort. 7s, 105; Wabash, St. Louis and Pacific, gen'l mort. 6s, 82; do. Iowa div. 1st, 90; do. Chicago div, 1st, 80; do. Cairo div., 70; Winona and St. Peter 1st, 106; Georgia 7s, new, 105½; Louisiana 7s, consol, 71½; Tennessee 6s, 59; Am. Dist. Tel., 47; Canton Company, 45½; Colorado Coal and Iron, 46½; do. 1st, 90⅜; Cameron Coal, 37; New Central Coal, 17; Homestake Mining, 18; Standard, 18½.

Boston.—Atlantic and Pacific 6s, 98; do. blocks, 110; do. inc., 26; Atchison, Topeka and Santa Fe plain 5s, 87; do. 6s, 1911, S. F., 102½; Boston Land, 7¾; Boston Water Co., 4½; Burlington and Missouri River in Neb., 6s, non-exempt, 103½; Connotten Valley, 7½; Chicago, Burlington and Quincy 4s, old, 86¼; do. 7s, 126¾; do. 5s, 1901, 101; do. Denver extension 4s, 84⅞; California Southern 6s, 80; Chicago and West Michigan, 66; Chicago, Milwaukee and St. Paul, Dubuque div. 6s, 104; Fort Scott, Springfield and Memphis, 100; Flint and Pere Marquette, 23½; do. pref., 93½; Fort Scott Branch 7s, 110; Iowa Falls and Sioux City, 89½; Kansas City, Lawrence and Southern 5s, 105; Kansas City, St. Joseph and Council Bluffs 7s, 114¾; Kansas City, Fort Scott and Gulf pref., 125; Lousiana and Missouri River, 16½; do, pref., 26; Little Rock and Fort Smith, 52; Mexican Central, 25¾; do. 7s, 86⅜; do inc., 26; do. blocks No. 2, 110 do. No. 3, 105⅜; Massachusetts Central, 4⅞; do. 6s, 40; Marquette, Houghton and Ontonagon, 72½; do. pref., 120; Maine Central, 73½; New Mexico and Southern Pacific 7s, 113¾; New York and New England 6s, 104⅜; Oregon Short Line subscriptions, 117; do. 6s, 102; Ogdensburg and Lake Champlain consol. 6s, 94; Portsmouth, Gt. Falls and Conway, 89¾; Rutland, 3½; do. pref., 25; do. 6s, 100; Sonora 7s, 105; Summit Branch, 11¾; Southern Kansas and Western 7s, 109½; Toledo, Delphos and Burlington 6s, 24; do. Southeast div. inc., 18; do. Dayton div. inc., 17½; Toledo, Cincinnati and

St. Louis, 7¼; do. 6s, 66½; do. inc., 17½; Wisconsin Central, 17½; do. pref., 30; do. 7s, 2d series, 45; Wisconsin Valley 7s, 113¾; Atlantic Mining Co., 14½; Franklin, 13¼; National, 1⅝; Osceola, 31¾; Pewabic, 9½; Silver Islet, 18.

Baltimore.—Atlantic Coal, 1.15; Atlanta and Charlotte inc., 85; Baltimore City 6s, 1890, 117¾; do. 6s, 1902, 130½; do. 6s, 1886, 108½; do. 5s, 1916, 124½; Columbia and Greenville 1st, 101⅞; Maryand State 6s, 1885, 108; do. Defense 6s, 105¾; Marietta and Cincinnati 1st Trust certificates, 128½; do. 2d do. 102, do. 3d, do., 56¾; Northern Central 5s, 96½; Ohio and Mississippi, Springfield div. 1st, 116½; Richmond and Danville gold bonds, 99¼; Sutro Tunnel, 0.41; Virginia tax coupon, 59; Virginia 10-40s coupons, 66; Virginia Peelers, 31; Virginia Midland 2d mort., 109¼; do. 5th mort., 95. The latest quotations are: Atlanta and Charlotte 1st, 107¾@109; Baltimore and Ohio, 193@196¼; do. 6s, 1885, —@107; Baltimore City 6s, 1886, 108½@—; do. 6s, 1890, 117¼@117½; do. 5s, 1902, 130@—; do. 5s, 1916, 124½@125; Columbia and Greenville 1st, 101¾@102; Marietta and Cincinnati 1st, 127@129; do. 2d, 101⅞@102; do. 3d, 56⅞@56⅞; Norfolk Water 8s, 131@—; Northern Central, 47½@47⅞; do. 6s, 1900, 116@—; do. 6s, 1900, gold,—@116½; do. 6s, 1904, gold, 114½@—; do. 5s, 1926, 97@99; Norfolk and Western pref., 51@—; Ohio and Mississippi, Springfield div. 1st, 116½@117; Pittsburg and Connellsville 7s, 120½@121½; Richmond and Danville, 100½@103; Union Canal 6s, ind. by Canton Co., 115@117; Virginia Midland 5th mort., 95@95¼: do. inc., 63@70; Virginia consols, 58@58½; do. 10-40s, 43¼@43½; Wilmington and Weldon 7s, 112@—; Western Maryland 2d mort., guar. by Washington county, 115@—.

Philadelphia.—American Steamship Company, 23½; Buffalo, Pittsburgh and Western, 26; Central Transportation, 33; Elmira and Williamsport 5s, 100¼; Nesquehoning Valley, 54; Norfolk and Western pref., 53; New Orleans Pacific 6s, 88; Pennsylvania Canal 6s, 90; Pennsylvania Company 4⅛s, 96; Philadelphia and Reading scrip, 101½; do. deben. 6s, 60; Philadelphia, Wilmington and Baltimore 4s, 94⅛; Philadelphia City 4s, 1904, 112½; do. 6s, 1900, 131; Philadelphia and Trenton, 186; Sunbury, Hazleton and Wilkesbarre 2d, 25; Schuylkill Nav. 6s, 1907, 92; Texas and Pacific 1st, 107½; do. consol. mort. 6s, 96; Union and Titusville 7s, 93; West Jersey Railroad, 46. The latest quotations are: City 6s, 108@120; do. free of tax, 127@133; do. 4s, new, 108@113; Pennsylvania State 5s, new loan, 118⅛@119¼; do. 4s, old, 108@112; do. 4s, new, 115@116; Philadelphia and Reading Railroad, 29⅛@29⅜; do. consol. mort. 7s, reg. 124@125; do. gen'l mort. 6s, coupon, 95½@96½; do. 7s, 1893, 118½@119⅛; do. new conv., 78@80; United New Jersey R. R. and Canal, 187@188; Buffalo, Pittsburg and Western, 17¼@17⅜; Pittsburgh, Titusville and Buffalo 7s, 97@98; Camden and Amboy mort. 6s, 1889, 112½@113; Pennsylvania R. R., 59⅝@59¾; do. general mort. 6s, coupon, 123@124; do. reg., 122@124; do. consol. mort. 6s, reg., 118@120; Little Schuylkill R. R., 56@58; Schuylkill Navigation, pref., 13@14; do. 6s, 1882, 91@93; Elmira and Williamsport pref., 58@60; do. 5s, 100@101; Lehigh Coal and Navigation, 41⅛@41¼; do. 6s, 1884, 103@103½; do. R. R. loan, 116@116½; do. Gold Loan, 111½@112½; do. consol. 7s, 116@116½; Northern Pacific, 43⅝@43¾; do. pref., 82⅞@82¾; North Pennsylvania, 64½@65½; do. 6s, 105@108; do. 7s, 118@119; do. 7s, General mort. reg., 122@123; Philadelphia and Erie, 15@16; do. 7s, 113½@114½; do. 5s, 103½@104½; Minehill, 62½@63¼; Catawissa 24@25; do. pref., 54@54½; do. new pref., 52½@53⅜; do. 7s, 1900, 120@—; Lehigh Valley, 60@60¼; do. 6s, coupon, 120@122; do. reg., 120@121; do. 7s, 133@135; do. consol. mort. 121@121½; Fifth and Sixth streets (horse), 152@160; Second and Third, 109@112; Thirteenth and Fifteenth, 65@75; Spruce and Pine, 40@45; Green and Coates, 80@90; Chestnut and Walnut, 90@93; Germantown, 70@70¼; Union, 110@115; West Philadelphia, 105@115; People's 15@15¾; Continental, 100@102.

WILLIAM H. VANDERBILT, Cornelius Vanderbilt, William K. Vanderbilt, Frederick W. Vanderbilt, Augustus Schell, Abraham B. Baylis, J. B. Dutcher, Robert J. Nivin, Joseph Harker, Chauncey M. Depew, William H. Leonard, Samuel F. Barger and J. E. Burrill have been elected directors of the Spuyten Duyvil and Fort Morris Railroad.

The Coal Trade.

THE leading coal-carrying companies make the following reports of their tonnage for the week ending July 1st, and for the year to that date, compared with their respective amounts carried to the same time last year:—

	Week.	1882.	1881.
Reading Railroad	205,010	4,332,815	4,141,712
Schuylkill Canal	9,164	155,180	197,183
Lehigh Valley	141,930	3,386,969	3,085,584
Delaware, Lackawanna and Western	107,431	2,014,921	1,960,376
Shamokin	29,383	493,182	507,573
Central R. R. of New Jersey	111,306	1,981,263	1,960,232
United R. R. of New Jersey	42,411	809,611	743,883
Pennsylvania Coal	38,377	581,205	585,862
Delaware and Hudson Canal	84,171	1,538,120	1,656,297
Huntingdon and Broad Top Mountain	6,076	219,962	236,554
Penn. and New York	30,570	818,625	798,997
Clearfield, Pa	22,845	1,467,000	1,182,802

The total tonnage of anthracite coal from all the regions for the week ending July 1st, as reported by the several carrying companies, amounted to 696,567 tons, against 655,631 tons in the corresponding week last year, an increase of 40,936 tons. The total amount of anthracite mined for the year is 12,781,927 tons, against 12,529,212 tons for the same period last year, an increase of 252,715 tons. The quantity of bituminous coal sent to market for the week amounted to 34,743 tons, against 58,976 tons in the corresponding week last year, a decrease of 24,233 tons. The total amount of bituminous mined for the year is 1,792,019 tons, against 1,503,485 tons for the corresponding period last year, an increase of 288,534 tons. The total tonnage of all kinds of coal for the week is 731,310 tons, against 714,607 tons in corresponding week last year, an increase of 16,703 tons, and the total tonnage for the coal year is 14,573,946 tons, against 14,032,697 tons to same date last year, an increase of 541,249 tons. The quantity of coal and coke carried over the Pennsylvania Railroad for the week ending June 24 was 225,165 tons, of which 179,188 tons were coal and 45,977 tons coke. The total tonnage for the year thus far has been 5,340,723 tons, of which 3,878,727 tons were coal and 1,461,966 tons coke. These figures embrace all the coal and coke carried over the road, east and west. The shipments of bituminous coal from the mines of the Cumberland coal region for the week ended July 1 were 9,503 tons and for the year to that date 530,261 tons, a decrease of 420,495 tons as compared with the corresponding period of last year. The shipments were: To the Baltimore and Ohio Railroad—For the week, 8,545 tons; year, 441,245 tons; decrease as compared with 1881, 224,826 tons. Chesapeake and Ohio Canal—Week, 958 tons; year, 10,340 tons; decrease as compared with 1881, 164,064 tons. Pennsylvania Railroad—Week, none; year, 74,842 tons; decrease as compared with 1881, 35,201 tons. The Reading Railroad shipment for last week, ending July 8, was about 136,400 tons, of which 44,800 tons were sent to and 52,000 tons shipped from Port Richmond, and 8,300 tons sent to and 10,100 shipped from Elizabethport.—*Philadelphia Ledger, July* 10.

Delaware Foundry.

THE Delaware Foundry Company has sold its entire plant, comprising the large foundry building and lot on Front street, extending nearly the entire square from Washington to Jefferson street, to the Harlan & Hollingsworth Company. The terms of the sale are not made public, but the latter company took possession and began operating the works on the first of the present month. The business will be continued under the supervision of William H. Fairlamb, former secretary and treasurer of the Delaware Foundry Company. It is the intention of the Harlan & Hollingsworth Company to enlarge the Delaware Foundry, supply new machinery and increase its capacity considerably. This foundry was established in 1849 by Stotsenburg & Son, and in 1879 was incorporated as the Stotsenburg Foundry Company. The Delaware Foundry Company was organized in 1881, with A. L. Henderer, president, the late Samuel G. Tazewell, vice-president, and William H. Fairlamb, secretary and treasurer.—*Wilmington (Del.) Every Evening.*

THE *Hagerstown* (Md.) *Globe* says the citizens of Hancock have subscribed $21,000 toward building a bridge across the Potomac, and that the Baltimore and Ohio Railroad Company has consented to make up the deficiency.

Spreading of rails under high temperature is a source of danger the magnitude of which travelers know little. When the ends of the rails are too close, as they are very apt to be when laid by the usual rule of thumb way in cold weather, they are certain to press against each other and bulge out the track into a sort of double wave line in summer. Spikes will not cure the difficuly. Indeed, the less strain placed upon spikes the better for everybody. Here is the remedy for spreading which one now forever silent was about to put into practical shape and patent, but which may be here given free: No track for a railroad should be laid without a constant consultation of the thermometer and the application of gauges properly regulated for temperature. That is the general idea, the force of which will be seen at once by every railroad engineer. Inventors may find in this hint something valuable. A reliance on spikes against spreading might be shown to be nonsense by a little boy who had received his first lesson in "expansion" of bodies. The absence of spikes, though, may show that the rails had spread and that the inspection was negligent.

THE Indianapolis *Journal* says that a new question among railroad men has sprung up regarding the most profitable and economical length for rails on the track. Up to ten years ago a rail sixteen feet in length was in general use; then the more prominent lines began laying a thirty-two foot length rail. Now several roads are introducing a rail sixty feet in length, and as soon as the new mill at Chicago is fairly in operation, rails one hundred and twenty feet in length are to be manufactured, and tested on one of the northwestern lines. This mill will be the only one in the country so constructed that a one hundred and twenty-foot rail can be turned out. The argument in favor of long rails is the fact that the chief wear on the rail is at the joints, which become battered usually long before the body of the rail is much worn. Then it is further argued that the wheels under the cars will wear a third longer on a 120-foot rail, they being more worn in pounding the ends of the rails than in the actual turning of the wheels. It will be noticed, further, that with the lengthening of the rail a heavier rail is taking the place of a lighter one, but a few first-class roads now laying a rail lighter than sixty pounds to the yard. Champions of the long rails favor a rail that will weigh seventy to eighty pounds to the yard. They claim that with a rail one hundred and twenty feet in length, weighing eighty pounds to the yard, a track will last a quarter of a century, with slight repairs in the way of new cross ties. One objection will be, however, its great weight, which will make it difficult to handle, unless it is done by a derrick car.

RAILROAD AND CANAL DIVIDEND STATEMENT.

Showing the amount of Stock Outstanding, the Dividend Periods and the date of last Dividend.

Marked thus(*)are leased roads.	Stock outstanding.	Divide'd Periods.	Last Dividend Payable.
Albany and Susq*...100	2,500,000	semi-an	July '82 2
Ashuelot.....100	210,000	q'arterly	Oct. '81 3½
Atch., Top. and S. Fe100	54,000,000	q'arterly	Aug. '82 1½
Atlanta and W. Point100	1,232 200	semi-an	Jan. '82 6
Atlantic and St. Law*100	5,840,000	semi-an	Mar. '82 3
Augusta and Savan'h100	1,022,900	semi-an	June'81 3½
Avon, Geneseo&MtM*100	225,000	semi-an	July '81 3
Baltimore and Ohio.100	14,792,566	semi-an	May '82 5
" " pref.100	5,000,000	semi-an	July '82 3
Washington Br....100	1,650,000	semi-an	Apl. '82 5
Berkshire*.....100	600,000	q'arterly	Apl. '82 1¾
Boston and Albany..100	20,000,000	q'arterly	June'82 2
Bos.&N.Y.AirLine pf.100	2,795,227	q'arterly	June'82 1
Bos., Cl., F.&N.B.pref.100	1,750,100	.....	Apl. '82 3½
Bos., Conc.&Mont.pf*100	800,000	semi-an	May '82 3
Boston and Lowell..500	3,940,000	semi-an	July '82 2
Boston and Maine...100	6,921,274	semi-an	May '82 4
Boston & Providence100	4,000,000	semi-an	May '82 4
Attleborough Br...100	131,700	semi-an	July '82 3½
Bos., Revere B&Lynn100	419,400	semi-an	July '82 3½
Buffalo, N. Y. & Erie*.100	950,000	semi-an	June'82 3
Camden & Atlantic.. 50	377,400	q'arterly	Apl '80 38
" " pref. 50	880,650	q'arterly	Apl '80 3⅛8
Camden & Burl. Co..100	381,925	semi-an	July '82 3
Canada Southern....100	15,000,000	.....	Feb. '81 2½
Cape May & Millville* 50	447,000	semi-an	June'81 3
Catawissa*..... 50	1,159,500	annual	Oct.'81 $1½
" pref..... 20	2,200,000	semi-an	May '82 3½
" new pref.. 50	1,000,000	semi-an	May '82 3½
Cayuga and Susq.*.. 50	589,110	semi-an	July '81 4½
Cedar Rapids&Mo.R*100	6,850,400	q'arterly	May '82 1½
" " pref.100	769,600	semi-an	Feb. '82 3½
Central of Georgia....100	7,500,000	semi-an	June '82 4
Central of New Jersey100	18,563,200	q'arterly	July '76 2½
Central Ohio*..... 50	2,437,950	semi-an	July '82 3
" pref.. 50	411,550	semi-an	July '82 3
Central Pacific 100	59,275,500	semi-an	Feb. '82 3
Chemung*.....100	380,000	q'arterly	July '81 1½
Cheshire preferred ..100	2,155,300	semi-an	July '82 1½
Chicago and Alton...100	11,181,741	semi-an	Mar. '82 4
" pref 100	2,245,400	semi-an	Mar. '82 4
Chi., Burl. & Quincy.100	55,337,455	q'arterly	June'82 2
Chi., Iowa & Nebras*.100	3,916,200	semi-an	July '82 4
Chi., Mil. & St. Paul.100	20,404,261	semi-an	Apl. '82 3½
" " pref 100	14,401,483	semi-an	Apl. '82 3½
Chi. & N. Western...100	14,988,257	semi-an	June'82 3½
" pref.100	21,525,353	q'arterly	June'82 2
Chi., R. I. & Pacific..100	41,960,000	q'arterly	Aug. '82 1½
Chi. and West Mich .100	6,151,000	semi-an	Feb. '82 2½
Chi., St.P., M.&O.pref.100	10,390,000	q'arterly	July '82 1½
C., Ind., St. L. & Chi..100	6,000,000	q'arterly	July '82 1½
Cin., Sand. & Clev.pf. 50	429,037	semi-an	May '82 3
Clev. and Mahoning* 50	3,759,200	semi-an	Nov. '81 3½
Clev. and Pittsburg* 50	11,244,336	q'arterly	June'82 1½
Columbus & Xenia*. 50	1,786,200	q'arterly	June'82 2
Colum. & Hocking Val.100	2,500,200	semi-an	Aug. '81 208
Concord 50	1,500,000	semi-an	May '82 5
Concord and Ports.*.100	350,000	semi-an	July '82 3½
Conn. & Passump. Riv100	2,244,400	semi-an	Feb. '82 3
Connecticut River ..100	2,100,000	semi-an	July '82 4
Cumberland Valley.. 50	1,292,950	q'arterly	July '82 2½
" 1st pref 50	241,900	semi-an	Apl. '82 4
" 2d pref. 50	243,000	semi-an	Apl. '82 4
Danbury & Norwalk. 50	600,000	.....	Apl. '82 1½
Dayton and Mich.*.. 50	2,402,573	semi-an	Apl. '82 1½
" " pref. 50	1,211,250	q'arterly	July '82 2
Delaware*..... 25	1,468,940	semi-an	July '82 3
Del. & Bound Brook*100	1,652,000	q'arterly	May '82 1½
Del., Lack. & Western 50	26,200,000	q'arterly	July '82 2
Denver & Rio Grande.100	29,160,000	q'arterly	Jan. '82 1½
Den., South P. & Pac.100	3,500,000	.....	Aug. '80 4
Detroit, Lans. & Nor.100	1,825,600	semi-an	Aug. '80 2½
" " pref.100	2,503,380	semi-an	Feb. '82 3½
Dubuque&Sioux C'y*100	5,000,000	semi-an	Apl. '82 3
East Pennsylvania*., 50	1,709 550	semi-an	July '82 3
East Mahanoy*..... 50	392,950	semi-an	July '82 3
Eastern (N. H.)..... 100	492,500	semi-an	Dane'82 2½
Eel River..... 100	3,000,000	q'arterly	June '82 $1
Elmira, Jef. & Canand*100	500,000	annual	Sep. '80 5
Elmira&Williamsp't* 50	500,000	semi-an	May '82 1½
" " pref. 50	500,000	semi-an	July '82 3½
Erie and Pitsburg*.. 50	1,998,400	q'arterly	June '82 1½
Evansville & Terre H.100	100,000	semi-an	Nov.'81 2
Fitchburg..... 100	4,500,000	semi-an	July '82 3
F. & P. Marquette pf.100	6,500,000	semi-an	July '82 3
Ft.W. & Jackson pref.100	2,000,000	.....	May '82 2
Georgia. 100	4,200,000	q'arterly	July '82 2½
Granite 100	1,250,000	semi-an	July '82 3
Han. & St. Jo. pref .100	5,083,024	semi-an	Aug. '82 3½
Harrisbg&Lancaster 50	1,182,500	semi-an	July '82 3½
Housatonic pref. ...100	1,180,000	q'arterly	July '82 2
Illinois Central..... 100	39,000,000	semi-an	Mar. '82 3½
Ia. Falls & Sioux City*100	4,623,500	q'arterly	June'82 1½
Iowa R. Land Co....100	7,620,000	q'arterly	May '82 1
Jeffersonv. Mad. & Ind100	2,000,000	q'arterly	May '82 1½
Joliet and Chicago*..100	1,500,000	q'arterly	June'82 1½
Kan. C., Ft. S. & Gulf...100	4,000,000	.....	Feb. '82 2
" " pref...100	2,750,000	semi-an	Feb. '82 4
Kentucky Central...100	500,000	semi-an	June'81 1
" " pref..100	5,583,500	semi-an	June'83 1
Lake Shore&Mich.So.100	49,466,500	q'arterly	Aug. '82 2
" (guar.)100	533,500	semi-an	Aug. '82 5
Lawrence*..... 50	450,000	q'arterly	July '82 2
Lehigh Valley..... 50	27,496,895	q'arterly	July '82 1½
" " pref. 50	106,300	q'arterly	July '82 1½
Little Miami..... 50	4,637)300	q'arterly	June'82 2
Little Rock & Ft. S..100	4,096,135	.....	July' 81 108
Little Schuylkill*.. . 50	2,646,100	semi-an.	July '82 3½
Louisville & Nashv...100	19,130,913	semi-an.	Feb. '82 3
Lowell & Andover...100	500,000	semi-an.	Jan. '82 3½
Lykens Valley 100	600,000	q'rterly.	Oct,' 81 2½
Manchester & Law...100	1,000,000	semi-an.	May '82 5
Manhattan 100	13,000,000	.....	.....
" " 1st pref.100	6,500,000	q'rterly.	July '82 1½
" " 2d pref.100	6,500,000	q'rterly.	July '82 1½
Marietta& Cincinnati 50	1,386,350	.....	.....
" " 1st pref 50	8,105,600	semi-an.	Sep. '66 38
" " 2d pref 50	4,440,000	semi-an.	Sep. '66 38
Marq.Hout.&Ont.pf...100	2,259 026	.....	Feb. '82 4
Massawippi*.....100	400,000	semi-an.	Feb. '82 3
Michigan Central....100	18,738,204	q'rterly.	Aug. '81 1
Middlesex Central...100	280,000	semi-an.	Feb. '82 3
Mill Creek&Minehill* 50	323,000	semi-an.	Jan. '82 5
M. Hill& Schuyl. Hav* 50	4,022,500	semi-an.	July '82 3½
Missouri Pacific.....100	28,169,800	q'rterly.	July '82 1½
Mobile&Montgomery100	3,022,517	semi-an.	Feb. '80 2½
Mont. & Wells River100	800,000	annual	Feb. '80 2
Morris and Essex.... 50	15,000,000	semi-an.	July '82 3½
Mt Carbon&PtCarbon 50	282,350	semi-an.	Jan.. '82 6
Nashua and Lowell..100	800,000	semi-an.	May '82 4
Nashua & Rochester.100	1,305,800	semi-an.	Apl. '82 1½
Nashv. & Decatur...100	1,827,000	semi-an.	June'81 3
Nash., Chat. & St Louis 25	6,670,325	semi-an.	Apl. '82 1½
Naugatuck.....100	2,000,000	semi-an.	Jan. '82 5
Nesquehoning Val'y* 50	1,300,000	semi-an.	Mar. '82 3
N. Castle&Beaver Val* 50	600,000	q'rterly.	Oct. '81 —
New London North'n*100	1,500,000	q'rterly.	July '82 1½
N. Y. Cen. & Hud. R.100	89,428,330	q'rterly.	July '82 2
N. Y. and Harlem....100	7,950,000	q'rterly.	July '82 4
" " pref.100	1,500,000	q'rterly.	July '82 4
" City Line.. —	.....	annual	Apl. '82 3
N.Y., Lake Erie&West.100	77,083,900	.....	.....
" " pref.100	8,156,825	.....	Jan. '82 6
N. Y., N. H. & Hart...100	15,500,000	semi-an.	Jan. '82 5
N. Y., Prov. & Boston100	3,000,000	q'rterly.	May '82 2
Niag. Bridg&Canand*100	1,000,000	semi-an.	July '81 3
North Carolina*.....100	3,000,000	semi-an.	Sep. '81 3
" " pref.100	1,000,000	semi-an.	Sep. '81 3
N. Eastern (S.C.) pref100	86,000	semi-an.	May '81 4
Norfolk & Western pref.	15,000,000	q'rterly.	June '82 $1
North Pennsylvania. 50	4,527,150	q'rterly.	May '82 1½
Northern Central.... 50	6,142,000	semi-an.	July '82 3
Northern N. Hampsh100	3,068,400	semi-an.	June'82 3
Northern N. Jersey*.100	1,000,000	semi-an.	July '80 2½
Norwich&Worcester*100	2,604,400	semi-an.	July '82 5
Ohio 100	18,500,000	.....	.....
Ohio and Miss. pref..100	4,030,000	semi-an.	Mar.'75 3½
Old Colony.....100	7,333,800	semi-an.	July '82 3½
Oregon R'way&Nav.100	6,000,000	q'rterly.	May '82 2
Oswego & Syracuse...100	1,320,400	semi-an.	Aug.'81 4½
Panama..... 100	7,000,000	.....	July '82 6½
Paterson & Hudson*.100	630,000	semi-an.	July '82 4
Paterson & Ramapo.100	248,000	semi-an.	July '82 4
Pember.&Hightst'n*. 50	342,150	semi-an.	Jan. '82 3
Pennsylvania..... 50	77,672,750	semi-an.	May '82 4
Pennsylvania Co..... 50	20,000,000	semi-an.	June'81 2½
Peoria & Bureau Val*100	1,200,000	semi-an.	Feb. '82 4
Philadelphia & Erie*. 50	7,013,700	semi-an.	.....
" " pfd 50	2,400,000	semi-an.	Jan. '75 4
Phil, Ger. & Norrist'n* 50	2,231,900	q'rterly.	June'82 3
Phil. and Reading... 50	32,726,375	q'rterly.	Jan. '76 2½
" " pref. 50	1,551,800	q'rterly.	July '76 3½
Phila. and Trenton..100	1,259,100	q'rterly.	July'82 2½
Phila., Wil. and Balt. 50	11,585,750	semi-an.	July '82 4
Pittsb., Ft. W. & Chi.*100	19,714,285	q'rterly.	July'82 1½
" Special Imp.100	6,770,900	q'rterly.	July'82 1½
Pittsfield&N.Adams..100	450,000	semi-an.	July '82 2½
Portl., Saco & Portsm100	1,500,000	semi-an.	July '82 3
Providence & Worces.100	2,000,000	semi-an.	July '82 3
Rensselaer&Saratog.*100	7,000,000	semi-an.	July '82 4
Rhode Island& Mass.100	100,000	.....	Jan. '81 3
Richmond& Danv....100	3,866,000	q'rterly.	May '82 2
Richmond & Petersb100	1,009,300	semi-an.	Jan. '81 3
Roch. & Genesee Val.*100	555,200	semi-an.	July '82 3
Rome, Watert. & Ogd..100	5,293,900	semi-an.	July '75 1½
Rutland preferred.. 100	4,000,000	semi-an.	Feb. '82 1
St. L., Alt. & T. Haute. 100	2,300,000	.....	.....
" " pref.100	2,468,406	.....	May '82 3
St. L. & S. Fran. 1st pref100	4,500,000	.....	Aug. '82 3½
St. L., I. Mt. & South'n..100	21,459,921	semi-an.	Feb. '74 3
St. P. & Duluth pref.100	4,705,000	q'rterly.	June'82 1½
St. P., Minn. & Man..100	15,000,000	semi-an.	Aug. '82 3½
Schuylkill Valley*... 50	576,050	semi-an.	Jan. '82 2½
Seaboard & Roanoke.100	1,229,600	semi-an.	May '82 5
Shamokin V.&Pottsv 50	669,450	semi-an.	Feb. '82 3
Shore Line*.....100	1,000,000	semi-an.	July '82 4
Sioux C.&Pacific pref100	169,000	semi-an.	Apl. '82 3½
South Br. (N. J.)*....100	438,300	semi-an.	Jan. '82 3
South Western (Ga.)*100	3,892,300	semi-an.	Dec. '81 3½
Stockbridge&Pitts.*. 100	448,700	semi-an.	Oct. '81 1½
Summit Branch*.... 50	4,010,150	semi-an.	Feb. '76 3
Syr., Bingham&N.Y.*100	2,500,000	semi-an.	Feb. '81 2
Terre Haute & Ind...100	1,988,150	semi-an.	Feb. '82 4
Troy and Boston....100	1,609,000	semi-an.	Feb. '80 2
Union Pacific. 100	61,000,000	q'rterly.	July '82 1½
United Cos of N. J.*.100	20,490,000	q'rterly.	July '82 2½
Utica, Shenango&S V100	4,000,000	semi-an.	Nov. '81 3
Utica and Black Riv.100	1,772,000	semi-an.	Mar. '82 2
Vermont and Mass..100	3,050,000	semi-an.	Apl. '82 3
Wab. St.L. & Pac. pref.100	22,615,100	q'rterly.	Nov.'81 1½
Ware River*.....100	750,000	semi-an.	July '82 3½
Warren (N. J.).....100	1,800,000	semi-an.	Apl. '82 3½
Warwick Valley.....100	340,000	semi-an.	July '82 2½
Westchest&Phil.pref100	821,300	semi-an.	July '80 2
West Jersey.....100	1,359,750	semi-an.	Apl. '83 38
Wilmingt'n&Weld'n.100	1,456,200	semi-an.	July '82 3
Wil., Col., & Aug 100	960,000	semi-an.	July '82 3
Winchester&Poto'c.*100	180,000	semi-an.	July '82 3
Winchester&Strasb.*100	74,700	semi-an.	July '82 3
Worcester & Nashua. 75	1,789,800	semi-an.	July '82 1½
HORSE-POWER R. R.			
Albany City.....100	200,000	annual	.... '80 5½
Baltimore City..... 25	1,000,000	semi-an.	July '82 3
Balt., Cat. & El. Mills..100	....	semi-an.	July '82 2
BleeckerSt. &Ful.F'y.100	900,000	semi-an.	July '81 ¾
Boston&Chelsea pref. 50	110,000	semi-an.	Apl. '82 3
Broadway (Brooklyn)100	250,000	q'arterly	Oct. '81 3
B'way&7th Av, (N.Y.)100	2,100,000	q'arterly	Oct, '81 2
B'klyn&Hunter's Pt.100	400,000	semi-an.	Apl. '79 3
Brooklyn City.....100	2,000,000	q'arterly	Dec.'81 3½
Bushwick (Brooklyn)100	309,000	semi-an.	July '81 2½
Cambridge.....100	908,000	q'arterly	Apl. '82 4½
Cen. Park, N. & E. Riv.100	1,800,000	q'rterly.	July '82 2
Christoph'r&TenthSt100	650,000	semi-an.	Aug. '81 2½
Citizens' (Phil.)..... 50	192,500	q'rterly.	Jan. '82 2½
Citizens' (Pbg.)..... 50	200,000	annual..	....'80 14½
Coney Island&Bklyn100	500,000	semi-an.	Oct. '80 5
Continental (Phil.) .. 50	580,000	semi-an.	July '82 6
D. Dock, E. B'way&Bat100	1,200,000	q'arterly	Nov. '81 4
Eighth Av. (N. Y.)...100	1,000,000	q'rterly.	Oct. '81 3
42d St. & G. St. Ferry100	747,000	semi-an.	Nov.'81 6
Frankf. &Southw (Ph) 50	600,000	q'rterly.	Jan. '82 6
Germantown, (Ph.).. 50	572,800	q'rterly.	July '82 2¾
Girard College (Ph.) . 50	500,000	semi-an.	July '71 3
Grand St. & Newton..100	170,091	semi-an.	July '81 2½
Green&Coates St.(Ph) 50	150,000	q'rterly.	July '82 3
Heston, Mantau&F'm 50	299,381	semi-an.	Jan. '75 4
Highland.....100	600,000	semi-an.	July '82 4
Lomb.&SouthSts(Ph) 25	195,000	semi-an.	Oct. '75 4
Lynn and Boston....100	200,000	semi-an.	May '82 4
Malden and Melrose.100	165,000	.....	.....
Metropolitan (Bost.).. 50	1,500,000	semi-an.	July '82 4
Middlesex (Boston)..100	650,000	semi-an.	May '82 3½
N.Y., Bay Ridge&Jam100	150,000	.....	Oct. '78 7
Ninth Av. (N. Y.)....100	797,320	.....	.....
Orange &Newark....100	282,555	.....	.....
People's (Phila.)..... 25	124,744	.....	Apl. '82 2
Philadelphia City... 50	475,000	semi-an.	July '82 4
Phila. and Darby.... 20	200,000	semi-an.	July '81 3½
Phila. &Grey's Ferry. 50	308,000	semi-an.	Jan. '82 6
Pbg, Alleg. & Manches. 50	300,000	q'rterly.	Oct. '81 3
Ridge Avenue (Ph.).. 50	420,000	semi-an.	Oct. '81 11
Second Avenue (N.Y.)100	1,199,500	semi-an.	July '81 2½
Second&ThirdSt.(Ph) 50	771,076	q'rterly.	Jan. '82 4½
17th &19th sts (Ph.).. 50	250,000	semi-an.	July '81 3
Sixth Avenue (N. Y.)100	750,000	semi-an.	Oct. '81 5
Somerville (Boston).100	113,000	semi-an.	May '82 3
South Boston..... 50	600,000	semi-an.	July '82 4
Third Avenue, N. Y..100	2,000,000	q'rterly.	Nov.'81 5
13th and 15th sts., Ph 50	334,529	q'rterly.	Jan. '82 4
23d street, N. Y.....100	600,000	semi-an.	Aug.'81 4
Union, Boston.....100	374,300	semi-an.	Jan. '82 4
Union, Phila..... 50	1,005,000	semi-an.	Jan. '82 7
West Philadelphia... 50	750,000	semi-an.	July '77 10
CANALS.			
Chesapeake and Dela 50	2,078,038	semi-an.	June'75 2
Delaware Division... 50	1,633,350	semi-an.	Feb. '82 $1
Delawa. and Hudson100	20,000,000	q'rterly.	June'82 1½
Delaware & Raritan*.100	5,847,400	q'rterly.	July '82 2½
Lehigh Coal and Nav 50	11,204,250	semi-an.	June'82 2
Monongahela Nav... 50	1,004,500	semi-an.	July '81 $2
Morris, consolidated.100	1,025,000	semi-an.	Feb. '81 2
" preferred....100	1,175,000	semi-an.	Feb. '81 5
Pennsylvania..... 50	4,501,200	.....	.....
Schuyl. Nav., com.*. 50	859,100	annual..	Au. '81 50c.
" " pref... 50	3,200,000	annual..	Aug. '81 $1
MISCELLANEOUS.			
Adams Express.....100	12,000,000	q'rterly.	June'82 2
American Express... 50	18,000,000	semi-an.	July '82 3
Amoskeag Manuf. Co.100	3,000,000	semi-an.	June'81 5
Calumet&HeclaMin'g —	100,000 S.	q'rterly.	May '82 $5
Central Mining Co...100	.....	semi-an.	Feb. '82 2½
Consolidation Coal..100	10,250,000	semi-an.	Jan. '82 2
George's Creek C.&I.100	.....	semi-an.	Jan. '82 3
Maryland Coal.....100	4,400,000	semi-an.	Feb. '76 1½
Mariposa L. &Mining100	10,000,000	.....	.....
" pref100	5,000,000	.....	.....
Missouri Val. Land Co100	200,000	semi-an.	July '82 12
National Tube Works100	1,000,000	q'rterly.	July '82 3
Pac. Mail Steamship.100	20,000,000	q'rterly.	Sept.'69 3
Pennsylvania Coal... 50	5,000,000	q'rterly.	May '82 3
Pullman Palace Car..100	10,032,800	q'rterly.	May '82 2
Quicksilver, com....100	5,708.700	.....	May '82 0.4
" pref....100	4,291,300	.....	May '82 6
Quincy Mining Co... 25	40,000 shs	semi-an.	Feb. '82 $8
Quincy R. R. Bridge.100	1,750,000	semi-an.	July '82 5
SiouxC.&I.F.L.&L.Co100	500,000	semi-an.	June'82 5
Spring Mt. Coal.....100	1,500,000	semi-an.	June'82 3½
Topeka Equip'nt Co.100	255,500	semi-an.	Apl. '82 5
United States Ex....100	7,000,000	q'rterly.	May '82 1
Wells-Fargo & Co. Ex100	6,250,000	semi-an.	July '82 4
Western Union Tel..100	80,000,000	q'rterly.	July '82 1½

RAILROAD EARNINGS.—MONTHLY.

	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total.
Burl., Cedar Rap. & Northern:													
1880	184,316	165,170	188,325	141,652	149,504	153,378	143,432	160,160	179,804	204,991	189,330	193,419	2,053,484
1881	167,750	124,510	148,551	184,680	165,630	205,912	174,351	209,112	221,801	221,748	203,880	232,812	2,259,037
1882	252,823	225,631	224,107	178,304	199,278	211,257	.....	.....	.....	.....	.....	.....	.....
Central Pacific:													
1880	1,200,614	1,070,487	1,373,438	1,356,716	1,778,488	1,724,950	1,840,067	1,973,438	1,964,997	1,120,229	2,199,466	1,905,221	20,508,112
1881	1,602,907	1,454,218	1,709,637	1,872,370	2,091,410	2,159,381	1,859,000	2,059,000	2,293,000	2,514,000	2,267,000	2,110,000	23,947,951
1882	1,876,000	1,702,000	1,987.000	2,052,000	2,353,000	2,239,000	.....	.....	.....	.....	.....	.....	.....
Chesapeake and Ohio:													
1880	202,335	198,681	222,762	221,559	199,443	214,352	238,236	259,110	247,303	211,820	240,795	218,009	2,674,308
1881	162,540	184,389	228,479	227,343	252,235	241,135	225,096	262,858	247,144	237,303	235,585	203,562	2,702,762
1882	210,455	209,708	208,981	267,454	255,939	.....	.....	.....	.....	.....	.....	.....	.....
Chicago and Alton:													
1880	534,054	497,013	626,473	542,961	616,128	617,524	708,906	761,120	767,349	785,199	696,776	574,695	7,718,198
1881	487,890	461,641	529,915	558,190	548,556	616,935	671,466	771,466	768,897	750,359	680,133	635,307	7,553,988
1882	579,447	530,480	584,483	561,787	553,412	.....	.....	.....	.....	.....	.....	.....	.....
Chicago and Northwestern:													
1880	1,154,632	1,131,683	1,361,725	1,294,573	1,875,608	1,671,177	1,699,686	1,767,938	2,020,245	2,105,217	1,855,671	1,477,902	19,416,007
1881	1,240,667	963,208	1,178,795	1,474,612	1,879,006	2,306,640	1,983,031	2,315,164	2,292,676	2,341,097	2,019,037	1,855,476	21,849,209
1882	1,620,336	1,471,945	1,696,568	1,634,819	2,058,133	2,022,100	.....	.....	.....	.....	.....	.....	.....
Chicago, Burlington and Quincy:													
1880	1,432,740	1,411,870	1,732,518	1,489,894	1,909,627	1,682,956	1,773,643	1,834,321	1,862,285	1,934,762	1,837,860	1,552,018	20,454,494
1881	1,307,948	1,034,821	1,418,149	1,574,371	1,679,455	2,083,803	1,888,558	2,173,945	2,262,981	2,031,001	1,816,133	1,905,490	21,324,150
1882	1,658,834	1,457,300	1,566,217	1,530,838	.....	.....	.....	.....	.....	.....	.....	.....	.....
Chicago, Milwaukee and St. Paul:													
1880	764,298	738,749	900,675	871,041	1,134,745	1,037,958	1,026,708	991,297	1,257,677	1,493,620	1,472,037	1,397,308	13,086,119
1881	990,847	682,717	916,989	1,259,946	1,538,491	1,729,811	1,560,000	1,678,000	1,645,000	1,590,000	1,569,000	1,855,000	17,025,462
1882	1,435,000	1,377,000	1,561,000	1,518,000	1,629,000	1,620,000	.....	.....	.....	.....	.....	.....	.....
Chicago, St. Paul, Minneapolis and Omaha:													
1880	193,827	173,078	259,783	259,208	232,146	218,093	236,995	251,013	300,833	342,052	342,894	312,173	3,122,097
1881	257,786	158,594	251,648	261,211	350,124	404,562	392,702	385,586	363,685	382,714	380,733	391,950	3,981,296
1882	307,498	315,100	405,779	356,558	406,420	.....	.....	.....	.....	.....	.....	.....	.....
Cincinnati, Indianapolis, St. Louis and Chicago:													
1880	155,697	172,541	198,220	168,199	186,995	200,332	204,138	233,478	343,627	239,881	209,014	198,254	2,412,185
1881	182,523	171,511	191,005	183,710	191,056	188,256	178,861	229,858	219,977	212,606	194,805	192,623	2,296,916
1882	200,042	186,879	208,066	204,269	199,110	.....	.....	.....	.....	.....	.....	.....	.....
Denver and Rio Grande:													
1880	124,759	126,922	160,883	164,882	193,925	295,455	373,132	400,133	406,583	473,318	408,562	349,196	3,478,007
1881	307,476	317,681	398,493	433,111	514,767	584,230	548,284	606,193	620,643	665,686	566,819	643,417	6,206,812
1882	491,914	412,987	535,055	559,917	614,298	537,462	.....	.....	.....	.....	.....	.....	.....
Hannibal and St. Joseph:													
1880	176,079	166,965	216,061	206,735	191,317	179,396	224,312	238,081	233,448	242,214	207,147	279,635	2,561,391
1881	154,401	122,874	176,356	190,812	172,950	194,949	198,110	215,308	202,567	313,433	201,782	180,376	2,230,966
1882	138,284	154,717	168,798	148,913	154,917	.....	.....	.....	.....	.....	.....	.....	.....
Illinois Central:													
1880	595,212	613,806	613,008	535,732	665,120	681,736	724,095	732,755	806,836	880,211	783,120	673,182	8,304,812
1881	631,281	524,499	557,789	662,493	673,259	803,887	720,004	868,407	828,847	815,238	737 218	763.475	8,586,397
1882	728,173	689,387	695,371	674,603	674,749	.....	.....	.....	.....	.....	.....	.....	.....
Indiana, Bloomington and Western:													
1880	80,498	89,690	116,185	90,374	85,733	106,954	103,438	116,732	110,622	121,343	96,621	104,619	1,233,079
1881	90,283	83,261	192,085	203,677	200,064	96,586	83,764	117,956	195,307	181,674	160,826	156,697	.....
1882	195,824	175,755	206,235	205,934	182,554	.....	.....	.....	.....	.....	.....	.....	.....
Louisville and Nashville:													
1880	674,455	575,035	612,593	563,883	655,014	976,229	772,537	827,088	931,910	1,000,326	953,086	949,184	9,491,346
1881	816,960	805,124	947,959	850,862	828,726	1,227,885	817,135	876,192	951,566	1,002,950	1,065,223	1,122,285	11,326,859
1882	950,065	960,036	1,073,745	950,007	946,435	.....	.....	.....	.....	.....	.....	.....	.....
Mobile and Ohio:													
1880	250,116	204,094	168,301	140,091	129,249	121,855	131,621	140,593	184,246	264,714	251,368	287,373	2,373,621
1881	224,347	216,768	230,916	163,551	145,803	136,517	131,009	159,348	209,044	252,921	252,434	262,025	2,406,437
1882	161,433	158,154	152,651	145,272	137,645	132,572	.....	.....	.....	.....	.....	.....	.....
Nashville, Chattanooga and St. Louis:													
1880	205,633	191,154	169,457	155,466	158,839	144,155	151,594	169,326	167,473	178,266	182,087	175,996	2,049,448
1881	178,143	190,866	207,710	183,525	104,430	154,549	150,430	168,317	179,979	172,121	152,059	173,127	2,075,256
1882	156,994	159,961	161,005	154,155	137,645	.....	.....	.....	.....	.....	.....	.....	.....
New York and New England:													
1880	164,232	149,907	183,845	179,689	183,701	219,891	205,056	249,885	235,642	215,491	210,856	198 108	2,396,302
1881	189,749	173,614	212,019	216,913	217,185	231,518	246,821	280,524	299,573	261,199	242,412	237,729	2,809,255
1882	213,840	217,261	265,222	263,544	283,244	290,000	.....	.....	.....	.....	.....	.....	.....
New York, Lake Erie and Western:													
1879	1,147,173	1,207,391	1,356,780	1,372,755	1,350,574	1,230,419	1,273,533	1,450,223	1,492,497	1,713,697	1,515,835	1,398,224	16,509,127
1880	1,296,381	1,252,218	1,644,958	1,643,151	1,592,544	1,661,812	1,580,976	1,606,874	1,786,417	1,899,910	1,799,338	1,726,788	19,149,361
1881	1,443,437	1,425,765	1,847,261	1,709,057	1,776,891	1,794,982	1,787,081	1,772,895	1,734,200	.....	.....	.....	.....
Northern Central:													
1880	334,494	330,860	415,325	386,130	329,788	419,193	450,298	453,923	464,093	512,918	459,054	494,310	5,050,387
1881	386,157	382,657	452,906	487,273	465,588	487,287	440,811	498,008	429,565	449,664	487,160	476,622	5,443,697
1882	407,368	413,551	430,194	435,129	482,607	.....	.....	.....	.....	.....	.....	.....	.....
Northern Pacific:													
1880	81,390	77,259	119,357	185,700	217,613	253,105	241,277	223,500	330,300	358,456	300,822	220,993	2,629,710
1881	116,508	78,803	162,984	216,210	312,705	412,024	404,180	411,624	490,096	565,485	428,903	434,331	4,044,576
1882	239,800	269,000	384,000	438,000	568,332	631,342	.....	.....	.....	.....	.....	.....	.....
Philadelphia and Erie:													
1880	224,307	245,372	327,678	334,947	311,470	331,024	308,699	347,532	322,737	367,082	324,966	281,919	3,727,733
1881	224,303	225,501	285,573	293,323	343,792	350,585	291,669	303,849	276,522	292,392	284,078	282,772	3,454,309
1882	252,727	246,246	265,311	277,851	341,415	.....	.....	.....	.....	.....	.....	.....	.....
St. Louis and San Francisco:													
1880	198,091	195,948	193,146	176,164	167,664	173,607	213,297	259,995	280,873	328,194	290,329	226,063	2,698,371
1881	212,435	178,234	262,050	265,298	283,399	260,254	252,333	286,373	279,064	308,569	284,320	287,914	3,160,245
1882	256,784	244,654	274,959	242,866	253,419	240,177	.....	.....	.....	.....	.....	.....	.....
St. Louis, Alton and Terre Haute:													
1880	153,139	163,737	168,994	155,462	147,928	150,207	191,077	216,759	204,295	221,863	188,773	184,503	2,146,741
1881	175,725	166,012	201,137	197,447	172,177	165,896	158,674	189,295	187 299	179,921	162,544	153,852	2,112,801
1882	168,987	149,619	178,145	157,450	162,842	.....	.....	.....	.....	.....	.....	.....	.....
St. Louis, Iron Mountain and Southern:													
1880	555.983	490,195	451,560	408,241	349,053	363,454	432,655	565,869	671,219	688,365	632,052	656,951	6,265,597
1881	570,957	560,791	704,002	548,300	479,075	474,302	533,512	644,386	690,400	719,239	687,280	709 498	7,319,744
1882	516,370	501,127	585,008	581,977	519,120	.....	.....	.....	.....	.....	.....	.....	.....
St. Paul, Minneapolis and Manitoba:													
1880	180,239	137,645	261,798	333,014	281,899	243,407	272,089	232,579	274,188	345,057	300,675	297,641	3,160,231
1881	254,187	159,482	320,962	425,685	382,642	405,322	387,488	414,954	485,736	605,708	508,530	528,262	4,878,960
1882	395,461	418 358	531,004	570,890	858,902	856,417	.....	.....	.....	.....	.....	.....	.....
Texas and Pacific:													
1880	245,785	219,165	215,070	174,177	141,083	153,066	195,711	226,073	266,570	303,666	312,184	301,858	2,754,408
1881	281,176	260,781	319,928	295,066	281,782	264,204	320,466	354,082	337,117	578,668	357,724	381,218	3,921,569
1882	310,785	255,644	332,911	359,543	409,228	.....	.....	.....	.....	.....	.....	.....	.....
Union Pacific Railway:													
1880	1,433,636	1,393,992	1,730,509	1,937,220	2,027,269	1,928,528	1,934,215	1,913.035	2,270,179	2,707,860	2,251.148	1,869,335	23,448,445
1881	1,339,799	1,374,740	1,674,860	1,766,894	2,319,238	2,590,969	2,528,826	2,638,659	2,844,357	3,289 350	2,773,608	2,267,004	27,451,831
1882	1,961,088	1,759,863	2,226,832	2,462,004	2,491,590	.....	.....	.....	.....	.....	.....	.....	.....
Wabash, St. Louis and Pacific:													
1880	776,790	759,451	978,629	892,024	948,773	953,468	1,966,742	1,189,478	1,178,950	1,501,203	1,131,787	1,050,816	12,428,112
1881	811,617	818,922	1,121,592	1,023,482	1,144,660	1,308,993	1,131,751	1,542,838	1,490,027	1,396,300	1,399,555	1,328,278	14,461,570
1882	1,229,965	1,134,768	1,315,776	1,378,194	1,204,864	1,149,632	.....	.....	.....	.....	.....	.....	.....

CORRESPONDENCE.

[We pay no attention to communications unless the name and address of the writer are given, though the same will not be published if so requested. We assume no responsibility for statements made by correspondents, and we do not necessarily endorse ideas advanced by them. Under these conditions we think it of value to our readers to devote a liberal space to the free discussion by others—whose opinions may be at variance with our own—of subjects pertinent to our department of journalism.]

The First Lomomotive.

Editor AMERICAN RAILROAD JOURNAL:

There seems to be at the present time an active inquiry into the history of the first locomotive run upon railroads in this country. I have been engaged in interests connected with railroading in this country for many years, and have collected a great amount of statistical information connected with their early history. The difficulty in ascertaining to a certainty which of four roads is really entitled to the credit of using the first locomotive arises principally from the fact that this then new discovery of the steam motor upon land was developed and applied by several companies almost simultaneously in this country.

There is no question that the first one hundred miles of continuous road was constructed by the South Carolina Railroad Company; but they were not the first to use steam locomotives. The honor of introducing into use the first locomotive for railroads in this country belongs to our fellow-citizen, the late Horatio Allen. Mr. Allen was in his day eminently an engineer, probably one of the most accomplished in America, and in after life connected with the Novelty Iron Works of this city.

Mr. Allen received his collegiate education at old Columbia, graduated about 1822, and commenced his professional life in, say, 1824, as a civil engineer. Within one year from the above date he was engaged upon the Delaware and Hudson Canal as assistant engineer. He, however, did not remain long in that position; he resigned, and went to Europe, attracted thither by the reports of the wonderful achievements of George Stephenson in England. It was during this visit to England that he was engaged to take charge of the contracts for iron to be used in the construction of the Delaware Canal and also to superintend the construction, transportation and putting up of a locomotive for the use of the Delaware and Hudson Canal. Mr. Allen returned in 1829, bringing with him the first locomotive ever put upon a railroad in this country. The locomotive was called "The Stourbridge Lion." It was built for and used by the Delaware and Hudson Canal Company upon a road built by that company for the conveyance of coal in connection with the canal.

This road was built in 1828, from their coal mines to Honesdale, Pa. The locomotive referred to came on in the ship "John Jay," and at about the beginning of July, 1829, it was taken to Rondout, N. Y., thence to Carbondale, Penn., and put upon the road.

This we know beyond a question to be the first locomotive ever used in America. Further than being the first locomotive for use upon railroads ever brought to or made in this country, there was little credit attached to it. The machine proved too heavy for use upon the road, and after a few trips was abandoned, placed under cover and offered for sale.

F.

Color Blindness.

Editor AMERICAN RAILROAD JOURNAL:

I read with great interest Dr. Herrick's article on "Railroad Sanitary Service" in your issue of June 24th. While cordially agreeing with him in the main, I have a few words to add by way of commentary upon some of the conclusions which might be deduced from his remarks in regard to the class of cases coming under the above heading.

It would appear that he favors adding to the duties of the ordinary railroad surgeon, that of examining the employes for color-blindness and other visual defects, and it is just here where I think a word in the interest of said employes is in order. The locomotive engineers of the United States, whom these investigations particularly affect, are as a class noble specimens of humanity—courageous, quick of eye and nerve, ready for any emergency, the very knight-errants of the nineteenth century.

To me there always appeared to be something heroic in this otherwise prosaic age, in the spectacle of one of these men standing calmly at the throttle of his engine, peering into the murkiness of a stormy night and "letting her go" at forty miles an hour into the blackness ahead without a thought of fear, literally holding the lives of the train load of drowsy passengers behind and his own to boot in the firm grasp of his hand. The chivalry of more than one of these brave fellows, who have boldly ridden "into the jaws of Death, into the mouth of Hell," rather than desert their post is embalmed in song and story. We must be extremely careful to do no injustice to any member of such a generally worthy body of men. The necessity for proper legal restrictions as to the employment in responsible positions of men unfortunately incapacitated by reason of organic defects must of course be admitted, but it will not do to ignore the popular view of the matter. Every possible safeguard must be adopted to render such investigation as little obnoxious as possible, and to insure their causing the minimum amount of hardship. That there are two sides to the question, and that a fierce controversy has been and in fact is still raging between the champions of either side, is well known to those who are familiar with the subject. The Massachusetts Railroad Commissioners in their report about a year ago, speak as follows: "It is a noteworthy fact that the law as to the examination of railroad employes for color-blindness enacted in Connecticut, on the execution of the law proved to be so unpopular that both political parties felt obliged to promise in their platform its speedy and essential modification."

Petitions were gotten up and presented to the legislature to do away with the law, and the agitation even proceeded so far that a hearing was obtained with that object in view.

The popular aspect of the case is so well presented by no less a man than Wm. S. Huntington, of the Chesapeake & Ohio Railroad, in the May number of *The National Car Builder*, that I cannot do better than transcribe it *verbatim* for the benefit of those who may not have had the opportunity of reading it.

COLOR-BLINDNESS, SCIENCE AND NONSENSE.

"Most railroad men are familiar with the rules and regulations that are being adopted with respect to color-blindness of railroad employes.

"Examinations have disclosed the fact that a great many of these employes have defective vision, which it is claimed renders them unfit for service, and as a measure of safety they are discharged. Everything that contributes to the safety of the traveling public should receive the earnest attention of railroad officials and of the legislative authorities; but there is room for much injustice to the employes in the enforcement of some of the laws that have recently been enacted on this subject. It is expected, of course, that great care will be exercised in the selection of men to fill responsible positions, but there is a possibility that too much mere professional science may be brought to bear upon the matter.

"A few years since the good people of Massachusetts were horrified to learn that many of the locomotive engineers on the roads of that State were color-blind, and scientific experts were at once employed to detect the men who were afflicted with the dangerous infirmity.

"One of the men who was examined had stood at the throttle of a passenger engine for sixteen years, during which time the trains he had run carried millions of people without an accident, and he was familiarly called 'Old Reliable.' He perfectly understood the meaning of all the colored targets and semaphores by day and the different colored lights by night. He was always detailed to run trains requiring extra skill and care, and thousands who had come to know him felt safe when he was on the engine. But on an evil day a man of science came along with a basket of worsted yarn of a hundred colors more or less, and 'Old Reliable,' having never been employed in a hosiery establishment, failed to match the different shades as a trained expert would do it, and the shocking discovery was then and there made that millions of passengers had in all those years miraculously escaped death at the hands of the engineer who could not match worsteds; and he was thereupon summarily 'worsted' and ousted.

"A shudder ran through New England at the appalling discovery that there were a score or more of railroad operatives in their very midst who were not experts in discriminating delicate shades of color. The dangers to which the traveling community had been exposed were none the less real because they had been escaped. But in future there is nothing to fear. All these men, whose defective vision through years of faithful service had brought never a one to grief, have been removed and their places filled by others, who are at least competent to run haberdashery shops, whatever may be their accomplishments in the handling of locomotives. This, I submit, is a gross injustice to a most worthy class of men, and it is to be hoped that such doings will not gain a

permanent foothold in our railroad practice.

"In a recent examination of a large number of railroad operatives it was discovered that two brakemen, who had been in service eighteen years, could neither read nor write, and they were immediately discharged. They had the misfortune to be illiterate, and had their places been filled with a couple of college professors a great many people would probably have breathed easier.

"Years ago, a New England village blacksmith lost one of his eyes through some mishap. Not liking his trade, he found employployment as a locomotive fireman, and in a few months he was engineer of a construction train. In a few months more he was running freight and was finally promoted to the throttle of a fast passenger engine.

"This was thirty years ago, and he is now running passenger trains through the valleys and along mountain sides, and there is no safer man than he. The truth of the matter is, he has *no* eye for anything but his own business. His visual defect has not yet been discovered by the authorities, but when it is discovered he will probably give place to some man whose 'luck' in handling trains is not a whit better, and, it may be, not as good.

"In saying this much, it must not be inferred that as a rule it is safe to employ men in such capacities who labor under physical or mental disability, but I do say, and say it with emphasis, that to discharge men for some trivial defect, fancied or real, who have served for years in the most satisfactory manner is the sheerest nonsense, absurdity and injustice. It may be argued that illiteracy, the loss of an eye, or inability to match worsteds are not trivial defects; but it is a fact, nevertheless, that hundreds of competent and trustworthy men, who are deficient in some of these points are dismissed from employment as often as the man of science happens around with his basket of colored yarns.

"Science is certainly a good thing in its way, and so is consistency, which is not infrequently called a jewel. It is a well-known fact that the loss or permanent injury of one organ or limb of the body increases the strength of the remaining ones. The loss of one eye gives additional power to the other, total blindness renders the hearing more acute, and it is the same with respect to legs and arms. The consciousness of any particular defect reinforces all the other faculties of mind and body by way of compensation.

"There is a freight brakeman on one of the roads running from Chicago who is as deaf as a post, but his efficiency in his vocation is such that he would not be exchanged for any other man in the land. Nothing escapes his vision. He always moves at the right time and in the right direction, is always on hand when wanted, the first to discover anything wrong, and is always the main dependence in an emergency. But science will find him some day, and a musical director will probably fill his place—on the pay-roll.

"Reliability derived from experience is the prime qualification for positions of responsibility on railroads. To weed out such men and cast them aside at the bidding of scientific theorists is certainly neither politic nor safe.

"If color-blindness is as dangerous in railway practice as these theorists say it is, it is not to their credit that they have suffered all these thirty years to elapse before warning people of their danger."

Undoubtedly much of this state of feeling exhibited in Mr. Huntington's article, who cannot be accused of being anything but a cool, dispassionate man, is due to the injustice wrought by the operation of the Massachusetts regulations, which recommend that such examinations may be conducted by the superintendent or some other official of the railroad.

The result was as might have been expected, that men not at all color-blind were declared to be so, and vice versa. It is here where I would differ somewhat from the view apparently advanced by Dr. Herrick. I doubt the fitness of the ordinary railroad surgeon to conduct such an examination, and would not prescribe that as one of his duties.

Doubtless if his emoluments were such as to make it an object to fit himself by a special course of instruction, or if the railroad companies would provide such a course, this objection would not obtain; but those familiar with the operation of present systems of railroad surgical supervision know how little can be expected in these ways.

Dr. B. Joy Jeffries, of Boston, the leading authority on the subject in this country, insists strongly that only experts thoroughly conversant with color-blindness can do full justice to the employes. In the course of some remarks enforcing this view he used the following language:

"In Europe railroad officials were first directed to make these investigations, and utterly failed in finding who were and who were not color-blind, or had defective vision. Then the tests were put in the hands of the railroad surgeons, *and they failed in like manner, till they were thoroughly instructed by the only really competent experts, namely, ophthalmic surgeons, familiar with such examinations and able to understand and discriminate.*"

In another place he quotes the following letter from Professor Donders, of Utrecht, Holland, the first living authority as to what constitutes normal vision, and chief of the inspection and control of color-blindness and visual power in that country, forwarded through his assistant, Dr. Boudin, one of the ophthalmic surgeons appointed to test employes:

UTRECHT, DECEMBER 15, 1879.

Herewith you will find the statement of Professor Donbers, who always argued, as you have seen in the earlier communications, that the examination should be fulfilled by men who are *ophthalmic surgeons* or *physicians able to examine the eyes.*

I believe that the simple statement of Professor Donbers will be quite sufficient for your purpose.

With compliments of Professor Donbers, yours, very respectfully,

BOUDIN.

I most willingly testify that it is my full conviction that *only medical experts, ophthalmic surgeons, should be employed in testing color perception and acuteness of vision.*

PROF. DONBERS.

UTRECHT, DECEMBER 15, 1879.

Professor Hohngren, of Upsala, Sweden, the first to introduce the well-known and now universally adopted worsted tests, originator of the present movement for the control of color-blindness, and chief of said control in Sweden, speaks as follows:

"Medical education is here *absolutely necessary.* My method is practically so simple that it would seem as if it would be successful in the hands of *any physician.* In my experience, however, *this has never been the case.* Time has ever shown that quite competent ophthalmic surgeons have misunderstood it and applied it improperly. In Sweden the railroad surgeons have been *practically* and *specially instructed* 'de visu' *by me,* and we have had every reason to be satisfied with this.

"There are many cases which *no* railroad official can detect or decide, *and not even the ordinary railroad surgeon* can be sure of. I therefore hold what I have emphasized in my book, that the authorities *must employ* a man having the *highest special knowledge,* who shall be at the head of the control, * * * as *thorough knowledge* of the *whole subject* is a necessary requisite for testing the employes."

These extracts are sufficient to show that only those specially adapted by education and experience are competent to decide such cases, and certainly such is not the position of the ordinary railroad surgeon. Neither is it to be expected that the railroad companies will provide special courses of instruction for their surgeons, as they have done in Europe, until the day comes of which I have spoken in a previous article, when a surgical department will be an integral part of every railroad system.

I do not wish to be understood as controverting any of Dr. Herrick's positions, but rather as taking one of his suggestions which is liable to be construed as I have done, as a text for the discussion, in one of its bearings, of a subject which is at present agitating the railroad world so deeply.

W. C. 'S.

MARENGO, IOWA, JULY 9, 1882.

Ramapo Wheel Foundry and Iron Works.

WE had an opportunity on Monday, to visit the Ramapo Wheel and Foundry Company's works, and the Ramapo Iron Works, at Ramapo, N. Y., a thriving town most pleasantly situated among mountains, and bordering on Ramapo Lake, which, with the Ramapo River, supplies abundant water-power.

The Ramapo Wheel and Foundry Company is making large numbers of chilled wheels, the Congdon Brake Shoes and the Raoul Journal Boxes. Great care is taken in the selection of materials, and in the various processes of manufacture, and as a natural result the company's products have a high reputation in this and other countries. Many wheels for locomotives and passenger cars have been exported to Spain, Mexico, Canada, Cuba, Brazil and the west coast of South America, while a large number are in use in this country. This company was the first to manufacture forty-two inch wheels for passenger service, and a considerable number are now in use with good results. Of the thirty-three inch wheels one was removed from a Pullman Palace car which had run more than 236,000 miles, and many of them have exceeded 100,000 and 150,000 miles.

By a very thorough manner of keeping the accounts relative to material and manufacture, and the record of subsequent service rendered, Mr. W. W. Snow—who is the superintendent and manager—is able to trace the causes of excellence, or any defects which may appear. The Salisbury and Richmond irons, which possess great excellence, are exclusively used here, and careful observation and long practice have enabled the management to make such mixtures of the products of the different furnaces as conduce to the greatest durability and reliability of the wheels manufactured here. The Company have so much confidence in the superior endurance of the forty-two inch wheel over the thirty-three, that, taking mileage as a basis for figures, they sell the forty-two inch wheel at a much lower price than the thirty-three inch.

THE CONGDON IMPROVED CAR BRAKE SHOES

are also manufactured here in very large numbers, and they have been adopted by more than seventy-five railroad companies, and the Pullman Palace Car Company, and the demand is constantly increasing. The improvement consists in the incorporation of a number of pieces of wrought iron in the body of the cast-iron shoe, so arranged that they appear on the wearing surface of the shoe, and the resistance to wear and the life and service of the wheel are thereby greatly increased. In fact it is claimed that every Congdon Shoe of average weight effects a saving of a dollar to the consumer, and that it will outwear four ordinary cast-iron shoes; and as brake shoes are the part of a car which must most frequently be repaired and replaced, the improvement is considered a most important one by all who have tested it, as is shown in the constant demand.

This company also manufacture the Raoul Journal Box, for which they control a right for part of the country, the rest being in the hands of the Columbus Iron Works, of Columbus, Ga. This box is designed to provide an end-stop for the axle, and thereby dispense with the shoulder and collar, and at the same time not obstruct the process of packing the box. The journal may be made any desired length and diameter. The life of the axle is doubled; the expense of brasses and lubricants enormously reduced; end wear of brasses and hot boxes obviated. It is now in successful operation on trucks of engines, tenders, passenger and freight cars.

THE RAMAPO IRON WORKS,

which are located a short distance from the Ramapo Wheel and Foundry Company's works, are under the superintendence of Mr. F. W. Snow, a son of Mr. W. W. Snow. The buildings consist of two substantial brick structures, one 160x60 feet, and the other 160x50 feet, which have been constructed since last August. The smaller building is used as a foundry, and the other down-stairs as a machine shop and a blacksmith shop, while up-stairs we found a light, commodious office, pattern-room, draughting-room and engineer's office. All the machinery is of the most approved modern pattern, adapted to the manufacture of the Tracey Safety Switch, Safety Switch Stands and Stub Switch Stands, keyed, riveted and bolted frogs; reversible and interchangeable double and single railroad crossings, time-tables, and articles of general railroad equipment. It is a rule here never to heat steel rails in making switches and frog points, and all are planed cold. The motive power is furnished by an 80-horse power Corliss engine. The Tracey Safety Switch and Switch Stand have already been adopted by some thirty different roads, so that orders have come in so fast that it will take several months to fill those already received. The stand is so arranged that it can be used in connection with the old split switches, so that they become safety switches, while it is claimed that with the Tracey Switch and Stand absolute safety is assured, as the switch is a combination of the advantages of a practically unbroken rail on the main line, with a uniform elevation of the rails; and an arrangement which secures all the benefits of a spring movement of the rails without a spring in direct connection, while the stand *cannot be locked unless the switch is fully open or fully closed.* The switch and stand were invented and patented by Mr. Dwight Tracey, of Ridgewood, N. J., from whom the Ramapo Iron Works secured exclusive rights. The claim in the specification which forms part of the patent relating to the switch is as follows:—

1. The combination, in a switch, of a movable switch-rail forming one rail of the turn-out, a stationary frog-rail forming a portion of the opposite side of the main track, and a laterally yielding outer frog-rail and a guard rail placed upon opposite sides of said stationary frog-rail, and connected positively together, so as to move simultaneously.

2. The combination, in a switch, of a movable switch-rail forming one rail of the turn-out, an outer frog-rail constructed and secured so as to form a laterally yielding spring, and forming the other rail of the turn-out, and a continuation of the main rail, a stationary frog-rail upon the inner side of said outer frog-rail, and a guard-rail connected with said outer frog-rail.

3. The combination, in a switch, of a movable switch-rail forming one rail of the turn-out, a stationary frog-rail forming a portion of the opposite side of the main track, and an outer frog-rail and a guard-rail arranged on opposite sides of said stationary frog-rail, both constructed and secured *so as to form laterally yielding springs*, and connected positively together, so as to move simultaneously.

4. The combination, in a switch, of a laterally yielding outer frog-rail forming one rail of the turn-out and one rail of the main line, and a continuation of the main line adjacent to said turn-out rail, which is deeper than said outer frog rail, and over the flange of which said outer frog-rail may be moved.

5. The combination, with a fixed rail-point, of wing-rails rigidly secured to the sleepers at their ends, suitably spaced and secured together at their middle parts, and adapted to be sprung either way, so that one of said wing-rails shall be immediately adjacent to said rail-points.

For the switch stand it is claimed that it is designed to obviate the dangers which arise in the use of safety switches when an obstruction gets between the switch rails and main rails, so that while the switch tender can completely turn the handle and lock the switch, the switch is not properly placed, and is only partially set. The Tracey Switch offers a "combination, with a switch-moving rod to be positively connected with a switch, of a switch-stand of novel construction, *which cannot be locked unless the switch is fully open or fully closed, and which permits the whole moving-rod to be moved longitudinally when the switch is opened by a passing train.*"

Another feature of the invention "relates to switch-stands for both safety and stub switches in which the switch-moving rod is actuated by a moving crank upon the end of a spandle in the switch-stand;" and another object "is to relieve the spandle and crank from all strain to which they are commonly subjected by the thrust upon the moving-rod when the switch is locked and a train is passing."

The following is a portion of the claim contained in the specification of the patent:

1. The combination of a switch-moving rod and a switch-stand provided with interlocking lugs or catches, having inclined engaging-faces, and one of which is adapted to yield to enable the lug or catch upon the rod to pass the lug or catch upon the stand.

2. The combination of a switch-moving rod and a switch-stand provided with interlocking lugs or catches, having inclined engaging-faces, and one of which is adapted to yield to enable the lug or catch upon the rod to pass the lug or catch upon the stand, and a spring for maintaining said lugs or catches in engagement with each other.

3. The combination of a switch-moving rod and a switch-stand provided with interlocking lugs or catches, having inclined engaging-faces, a spindle adapted to yield longitudinally, a crank upon said spindle for actuating said moving-rod, and a spring for returning said spindle and crank.

* * * * * * *

5. The combination of a switch-moving rod and a switch-stand provided with interlocking lugs or catches, a spindle, a slotted crank, and a crank-pin fixed to the said rod and fitting the slot in said crank, whereby provision is afforded for moving the rod laterally to disengage the lug or catch from the lugs or catches upon said stand, and for moving it longitudinally for shifting the switch.

6. The combination of a switch-moving rod and a switch-stand provided with interlocking lugs or catches, a spindle, and slotted crank, a crank-pin fixed to said moving-rod and fitting said slotted crank, and a locking pot projecting on the side of said rod for precluding lateral movement thereof.

7. The combination, with a switch-moving rod and a switch-stand provided with interlocking lugs or catches, a spindle, and a slotted crank for operating said rod, and a locking-bolt projecting on the side of said rod and precluding lateral movement thereof, of a handle adapted to be moved horizontally to turn said spindle, and raised or lowered to actuate said locking-bolt.

Both the switch and stand are giving great satisfaction, and are highly commended.

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Statement of the Public Debt of the United States, July 1, 1882.

DEBT BEARING INTEREST.

	Amount Outstanding.	Accrued Interest.
6 per cent loan, 1861-'81, continued at 3½ per ct.	$11,137,050 00	$194,898 37
6 per cent loan 1863-'81 continued at 3½ per ct	47,820,100 00	836,851 75
5 per cent funded loan of 1881	401,503,900 00	2,342,106 08
4½ per cent funded loan of 1891	250,000,000 00	937,500 00
4 per cent funded loan of 1907	738,884,300 00	7,388,843 00
4 per cent refunding certificates	465,050 00	4,650 50
3 per cent navy pension fund	14,000,000 00	210,000 00
Aggregate of debt bearing interest	$1,463,810,400 00	$11,914,849 70
Interest due and unpaid		1,435,158 42

DEBT ON WHICH INTEREST HAS CEASED SINCE MATURITY.

	Amount Outstanding.	Interest due and unpaid
4 to 6 per cent. old debt, 1837.	$57,665 00	$64,174 81
5 per cent. Mexican indemnity stock, 1846	1,104 91	85 74
6 per cent. bonds, 1847-'67	1,250 00	22 00
6 per cent. bounty land scrip, 1847-'49	3,275 00	213 06
5 per cent. Texas indemnity bonds, 1850-'64	20,000 00	2,945 00
5 per cent. bonds, of 1858-'78	7,000 00	875 00
5 per cent. bonds, of 1860-'71	10,000 00	600 00
6 per cent. 5-20 bonds, 1862, called	370,000 00	8,333 14
6 per cent. 5-20 bonds, June 1864, called	57,450 00	1,055 12
6 per cent, 5-20 bonds, 1863, called	70,750 00	18,635 41
5 per cent. 10-40 bonds, 1864, called	384,700 00	68,889 05
6 per cent. Consol. bonds, 1865, called	382,800 00	13,688 11
6 per cent. Consol. bonds, 1867, called	962,750 00	117,395 38
6 per cent. Consol. bonds, 1868, called	373,500 00	22,465 59
6 per cent. loan, Feb. 8, 1861, matured Dec. 31, 1880	82,000 00	5,070 00
5 per cent. funded loan 1881, called	1,171,600 00	20,695 83
Oregon War Debt, March 2, 1881, matured July 1, 1881.	12,950 00	1,855 50
6 per cent loan of July 17 and Aug. 5, 1861, matured June 30, 1881	679,300 00	20,197 50
6 per cent loan of July 17 and Aug. 5, 1861, continued at 3½ per cent, matured Dec. 24, 1881, and Jan. 29, 1882, called	10,940,400 00	85,109 58
6 per cent. loan of March 3, 1863, matured June 30, 1881.	214,900 00	8,224 50
1-10 to 6 per cent. Treasury notes, prior to 1846	82,525 35	2,668 06
1-10 to 6 per cent. Treasury notes, 1846	6,000 00	206 00
6 per ct. Treasury notes, 1847.	950 00	57 00
3 to 6 per cent. Treasury notes, 1857	1,700 00	99 00
6 per ct. Treasury notes, 1861.	3,000 00	364 50
7 3-10 per cent. 3 years' Treasury notes, 1861	16,300 00	1,104 43
5 per cent. 1 year notes, 1863	42,065 00	2,115 35
5 per cent. 2 year notes, 1863.	32,900 00	1,642 30
6 per ct. compound interest notes, 1863-64	220,960 00	45,133 87
7 3-10 per cent. 3 years' Treasury notes, 1864-65	138,950 00	20,439 03
6 per cent. certificates of indebtedness, 1862-63	4,000 00	253 48
4 to 6 per cent. temporary loan, 1864	2,960 00	244 19
3 per cent. certificates, called.	5,000 00	394 31
Aggregate of debt on which Interest has ceased since maturity	$16,260,805 26	$535,251 84

DEBT BEARING NO INTEREST.

Demand notes, 1861-62	$59,695 00	
Legal tender notes, 1862-63	346,681,016 00	
Certificates of Deposit	13,320,000 00	
Coin certificates, 1863	5,037,120 00	
Silver certificates, 1878	66,096,720 00	
Unclaimed interest		5,726 51
Fractional currency, 1862, 1863 and 1864 $15,423,181 77		
Less amount estimated as lost or destroyed, act of June, 21, 1879 8,375,934 00		
	7,047,247 77	
Aggregate of debt bearing no interest	$438,241,788 77	$5,726 51

RECAPITULATION.

	Amount Outstanding.	Interest.
Debt bearing interest in coin, viz:		
Bonds at 6 per cent., continued at 3½ per cent.	$58,957,150 00	
Bonds at 5 per cent, continued at 3½ per cent.	401,503,900 00	
Bonds at 4½ per cent	250,000,000 00	
Bonds at 4 per cent.	738,884,300 00	
Refunding certificates	465,050 00	
Navy pension fund, 3 p.c	14,000,000 00	
	$1,463,810,400 00	$13,350,008 12
Debt on which interest has ceased since maturity.	16,260,805 26	535,251 84
Debt bearing no int., viz:		
Old demand and legal-tender notes	$346,740,711 00	
Certificates of deposit	13,320,000 00	
Coin & silver certificates.	71,133,830 00	
Fractional currency	7,047,247 77	
	$438,241,788,77	
Unclaimed interest		5,726 51
	$1,918,312,994 03	$13,890,986 47
Total debt, principal and interest to date, including interest due and unpaid	$1,932,203,980 50	

AMOUNT IN TREASURY.

Interest due and unpaid	$1,435,158 42
Debt on which interest has ceased	16,260,805 26
Interest thereon	535,251 84
Gold and silver certificates	71,133,830 00
U. S. notes held for redemption of certificates of deposit	13,320,000 00
Cash balance available July 1, 1882	140,604,474 26
	$243,289,519 78
Debt, less am't in Treas'y July 1, 1882	$1,688,914,460 72
Debt, less am't in Treasury June 1, 18820	1,701,475,157 42
Decrease of debt during the month	$12,560,696 70
Decrease of debt since June 30, 1881	$151,684,351 26

BONDS ISSUED TO THE PACIFIC RAILROAD COMPANIES, INTEREST PAYABLE IN LAWFUL MONEY.

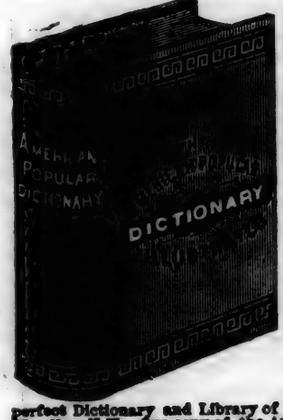
	Amount Outstanding.	Accrued Interest not paid.
Central Pacific bonds, 1862-64	$25,885,120 00	$776,553 60
Kansas Pacific bonds, 1862-64	6,303,000 00	189,090 00
Union Pacific bonds, 1862-64	27,236,512 00	817,095 36
Cent. Branch Union Pacific bonds, 1862-64	1,600,000 00	48,000 00
West'n Pacific Bonds, 1862-64	1,970,560 00	59,116 80
Sioux City & Pacific bonds, 1862-64	1,628,320 00	48,849 60
Totals	$64,623,512 00	$1,938,705 36

Interest paid by the United States, $53,405,977.38; interest repaid by transportation of mails, &c., $15,220,-693.30; interest repaid by cash payments: 5 per cent net earnings, $655,198.87; balance of interest paid by United States, $37,530,085.21.

The foregoing is a correct statement of the public debt, as appears from the books and Treasurer's returns in the Department at the close of business, June 30, 1882.

CHARLES J. FOLGER,
Secretary of the Treasury.

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OFFICE CENTRAL PACIFIC RAILROAD COMPANY,
SAN FRANCISCO, July 12, 1882.

THREE DOLLARS PER SHARE WILL BE PAID ON presentation of Dividend Warrant No. 14 on and after August 1, at this office, or at the office of the Company, 23 Broad Street, New York. Transfer books wil be closed from 2.15 P. M. July 15, to 10 A. M. August by order of the Board of Directors.

E. H. MILLER, JR., Secretary.

THE LAKE SHORE AND MICHIGAN SOUTHERN RAILWAY CO.

TREASURER'S OFFICE, GRAND CENTRAL DEPOT,
NEW YORK, June 27, 1882.

The Board of Directors of this company have this day declared a QUARTERLY DIVIDEND of TWO PER CENT upon its capital stock, payable on Tuesday, the first day of August next, at this office.

The transfer-books will be closed at 3 o'clock P. M. on MONDAY the THIRD DAY of JULY next, and will be re-opened on the morning of Friday, the fourth day of August next.

E. L. WORCESTER, Treasurer.

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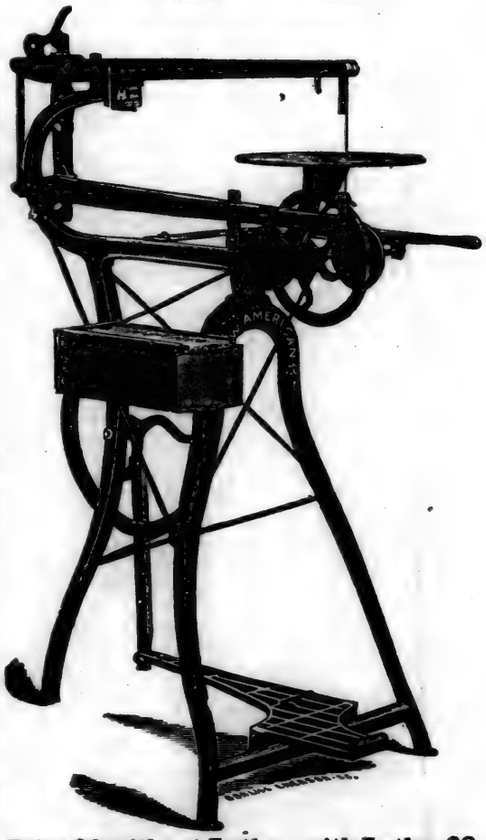
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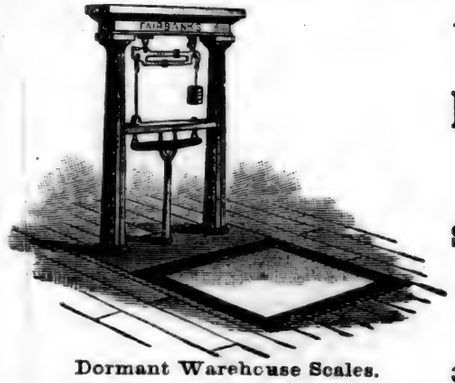
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Steam Navigation, Commerce, Finance, Banking, Machinery, Mining, Manufactures.

SECOND QUARTO SERIES.—VOL. XXXVIII., No. 28.] NEW YORK, JULY 22, 1882. [WHOLE No. 2,413.—VOL. LV.

CONSTRUCTION.

THE St. Louis and Texas Narrow-Gauge Railroad was completed on the 16th inst., to the Mississippi River at Bird's Point.

THE main line of the Canadian Pacific Railway was completed to Broad View, 125 miles west of Brandon, on the 17th inst.

THE Pennsylvania and Martin's Creek Railroad, extending from Bangor to Martin's Creek, Penn., will be completed this year.

THE Central Iowa Railroad Company has just laid 40 miles of rail on the Eastern Division Mississippi Extension, which will be in operation by Sept 1.

The Oregon Trans-Continental Company has nearly completed about two hundred miles of branch roads, and expects this year to build some four hundred miles.

THE Scioto Valley Railroad Company have decided to extend the line from Columbus, Ohio, to Fort Wayne, Ind., increasing its length from 150 miles to 300 miles.

ALL the heavy work of the Atlantic and Pacific Railroad in Arizona is reported completed, and the road is graded to within fifty miles of the Great Colorado River. Track-laying proceeds at the rates of 1¾ miles per day.

THE Mount MacGregor Railroad, a narrow-gauge road, about two miles in length, extending from Saratoga, N. Y., to Mount Morris, was formally opened on the 17th inst. The grades on this road in some places exceed 400 feet to the mile. The celebration was held on the mountain top.

The Cumberland (Md.) *News* says that the Hampshire and Baltimore Coal Company are engaged in making a track to connect with the George's Creek and Cumberland Railroad at Midland, and will hereafter ship by that road from their mine at that point.

THE Annapolis (Md.) *Republican* says that the construction of the Curtis' Creek line by the Baltimore and Ohio Railroad Company is regarded by some as a movement that will eventually result in connecting Annapolis with Curtis' Creek by way of the Severn, opposite the Naval Academy, a distance of about fifteen miles.

THE contractors are pushing the grading of the Northern Pacific Railroad to the utmost. The bore of the Big Horn is completed. It is 1,150 feet long, and was the most serious obstacle between Glendive and the Rocky Mountain division. Grading to Benson Landing, 340 miles from Glendive, is also finished. Thirty-six hundred men and 2,200 mules are employed in the completion of the work.

ANOTHER set of surveys for the new line of the Baltimore and Ohio Railroad, between Wilmington and Philadelphia, has just been finished along a route from Cherry Island Flats to Chester, where it is proposed to use the old line of the Philadelphia, Wilmington and Baltimore, now leased by the Reading Company, for freight transportation. It is said that two tracks will be constructed—one on each side of the present freight road—so as to evade the penalty of $100,000 for using it as a passenger road.

IT is said that an arrangement has been effected between the Baltimore and Ohio, and the Pittsburgh, Wheeling and Kentucky Railroad companies, that will permit of the immediate extension of the latter road to Benwood, West Virginia. The agreement is simply a slight modification of a former ordinance passed by the Wheeling council in this behalf, locating the track of the Pittsburgh, Wheeling and Kentucky road fifteen feet farther west of the Baltimore and Ohio Railroad—or forty feet instead of twenty-five.

INCORPORATION.

THE Gulf, Colorado and Santa Fe Railway Company has filed in Austin, Tex., an amendment to its charter providing for the purchase of the Chicago and Texas and Mexico Railway, also providing for extending a branch line from Cleburne to Dallas, Greenville, Paris and through Lamar county to the Red River.

THE United States Rolling-Stock Company has organized another company to work in conjunction with it, to be known as "The United States Car Trust Company." It is the design of the company to build cars for railroads on a long-time credit basis. The capital stock of the new organization is $1,000,000.

ARTICLES of association of the Kankakee Valley Railroad Company were filed with the Secretary of State of Indiana, on the 15th inst. The capital stock of the new company is $1,600,000. The road will be eighty miles long, and will run through St. Joseph, La Porte, Starke, Porter, Jasper, Lake and Newton counties, in that State.

ARTICLES of association of the Fontaine Locomotive Company were filed at Detroit, Mich., on the 3d inst. The capital stock of the company is $1,000,000, in 40,000 shares of $25 each, of which $60,000 is paid in—consisting of two Fontaine locomotives, already manufactured, valued at $30,000, and patent rights for the United States, Canada, England, Germany, France and Belgium, covering designs for constructing locomotives, etc., valued at $570,000.

A CHARTER was filed with the Secretary of State, at Topeka, Kansas, on the 10th inst., for the Kansas and Nebraska Railway; capital stock, $1,000,000; place of business, Fort Scott, Kansas. The proposed route is from Fort Scott northwesterly through the counties of Bourbon, Allen, Lynn, Anderson, Coffee, and Osage to Topeka; thence through the counties of Shawnee, Jackson, Pottawatomie, and Nemaha to Lincoln, Nebraska, a total distance of 280 miles.

ARTICLES of incorporation have been filed with the County Clerk of San Joaquin county, Cal., of the Stockton and Mount Diablo Railroad Company, organized to build a road from Stockton to Mount Diablo, in as nearly a direct line as possible, across Roberts and Union islands. The directors are A. C. Paulsell, J. L. Beecher, J. R. W. Hitchcock, George H. Castle, I. R. Wilbur, J. W. Ferris, L. M. Morse, J. M. Garwood, D. Harrison, S. Dunham and J. U. Castle. Each director has paid in the sum of $4,000, being 10 per cent of the capita stock.

THE Governor of Pennsylvania has issued charters to the following narrow-gauge railway companies: The Addison and Northern Pennsylvania Railway Company, which, under its articles of incorporation, is authorized to buildl a road 30 miles long, extending from Steuben county, New York, through Tioga county, Pennsylvania, to Pine Creek. The Pine Creek and Tioga Railroad Company, which proposes the construction of a road 36 miles in length, from Pike Mills, Potter county, down the valley of Pine Creek to Babb's Mills, Tioga county. The capital stock of each company is $250,000.

THE Adirondack Company, which was incorporated October 24, 1863, and recently sold under foreclosure, has been reincorporated under the title of "The Adirondack Railway Company," by William Stephens, William W. Durant, Edward C. James, Charles Tuttle, Warren Beman, Thomas C. Durant, George T. M. Davis, Silas Seymour and Walter F. Shibley. The capital stock is $4,000,000 in

shares of $100 each, and none of such shares shall be preferred, but all shall be common stock, entitling the shareholders to equal rights. The duration of the corporation is to be for 100 years. Nearly 63 miles of road are already in operation, extending from Saratoga to North Ford, N. Y., and it is now proposed to extend it through Warren, Hamilton, St. Lawrence and Franklin counties, to the St. Lawrence River at Ogdensburg, a distance of 185 miles.

Four new railroad companies have been chartered by the State Department at Harrisburg, Penn., viz: The State Line, Brookland and Pine Creek Railroad Company, 12 miles long, narrow-gauge, located in Potter county; Goodrich H. Bush, of Massachusetts, president; capital, $120,000. The Pike Mills and Kettle Creek Railroad Company, running from Pike Mills, Potter county, to Westport, Clarion county, 40 miles, narrow-gauge; C. H. Bushell, of New Haven, president; capital, $250,000. The Sinnemahoning and Pine Creek Railroad Company, running along the west branch of Pine Creek to source of the Sinnemahoning in Potter county; D. D. Warren, of Springfield, Mass., president; capital, $200,000. The Garfield and Cherry Grove Railroad, running from a point on the Philadelphia and Erie, near Sheffield, Warren county, to Garfield, 15 miles; Goodrich H. Bush, of Westfield, Mass., president; capital, $200,000.

The Farmville and Staunton River Railroad Company was incorporated by the last Legisture of Virginia. The charter calls for a narrow-gauge railroad from Farmville through Prince Edward and Charlotte counties, to Brook Neal, on Staunton River, in Campbell county. The road will pass by Hampden-Sidney College, Union Theological Seminary, Smithville, or Charlotte Court House. It will be about 40 miles long and opens up convenient traffic with some of the best tobacco country in the State. The company has recently been formed with Maj. A. R. Venable, president; R. C. McKinney, secretary, and the following board of directors: Col. J. P. Fitzgerald, Dr. J. L. White, W. G. Dunnington, C. M. Walker, B. S. Hooper, of Farmville; Dr. Joseph B. Eggleston, Hampden-Sidney, and W. R. Green, J. W. Eggleston, M. M. Martin, J. D. Davis, Charlotte. Farmville has almost unanimously voted a subscription of $50,000 and Charlotte is asked to vote $70,000, and about $5,000 has been subscribed by private parties.

Charters have been granted by the State Department at Harrisburg, Penn., to the Bradford and Tiona Railroad Company, the Garfield and Tionesta Railroad Company, and the Tionesta and Clarion Railroad Company. The Bradford and Tiona Railroad is to run from a point on the Olean, Bradford and Warren Railroad between Marshburg and Anderson, in McKean county, thence to Tiona (connecting with the Garfield and Cherry Grove Railroad on the line of the Philadelphia and Erie Railroad, authorized to be constructed under a recent charter). The gauge shall not exceed three feet, and the length is placed at 12 miles. The capital stock is $300,000, and the number of shares 3,000. The following is a list of the directors: Alonzo J. Wilcox, president; Arthur F. Allen, Richard E. Whitely and Nathan Bushnell, Bradford, Pa.; William Dent, Brookland, Pa.; Asahel N. Cole, Wellsville, N. Y.; C. S. Bushnell, New Haven, Conn.; Alfred D. Tingle, New York; Daniel D. Winter, Springfield, Mass. The Garfield and Tionesta Railroad, narrow-gauge, is to commence at or near Garfield, Cherry Grove Township, Warren county, and to run to Tionesta village, at the confluence of Tionesta creek and Allegheny River, Forest county. It is to be 28 miles long, and the capital stock is put at $300,000. The directors are as follows: Ashael N. Cole, president, Wellsville, N. Y.; Alonzo J. Wilcox, Arthur F. Allen, Richard E. Whitely and Nathan Bushnell, Bradford, Pa.; William Dent, Brookland, Pa.; Roswell P. Crofts, Holyoke, Mass.; Goodrich H. Bush, Westfield, Mass.; Alfred D. Tingle, New York. The Tionesta and Clarion Railroad is to be run from Eagle Rock, on the Buffalo, Pittsburgh and Western Railroad, to Fairmont, in Clarion county, a distance of fifty miles. The proposed course is through portions of Clarion, Forest and Venango counties. The capital stock is $1,000,000, divided into 20,000 shares. The principal office is to be in Philadelphia. Following is a list of directors: John W. Jones, president; George F. Tyler, E. A. Rollins, B. K. Jamison, C. H. Clark, H. M. Sill and Joseph R. Trimble, Philadelphia, Pa.; Archer N. Martin, Summit, N. J.; H. A. V. Post and Charles Pomeroy, New York.

ORGANIZATION.

At the annual meeting of the stockholders of the Wilmington (Del.) City Railway Company, held on the 11th inst., the following gentlemen were re-elected directors: James Bradford, William Canby, John H. Adams, Washington Jones, John Jones, Joshua T. Heald and Eli Garrett.

The new board of directors of the Nevada and Oregon Railroad Company organized at Reno, Nevada, on the 17th inst., by the election of the following officers: D. W. Balch, of Nevada, president; F. F. Fowler, of New York, vice-president; A. H. Manning, of Nevada, treasurer; George A. King, of Nevada, secretary.

At the recent annual meeting of the stockholders of the Portsmouth, Great Falls and Conway Railroad Company in Portsmouth, N. H., E. B. Phillips, S. C. Lawrence, W. P. Phillips, G. E. B. Jackson and John Cumnock were chosen directors. The time of the annual meeting was changed to the first Monday in June.

The directors of the Cincinnati and Eastern Railroad Company, recently elected, are: W. R. McGill, W. J. Marshall, O. H. Hardin, Wm. Mansfield, J. P. Duckwall, J. W. Henley, N. R. Thomson, F. M. Smith, J. M. Neely, M. Jamieson, G. H. Wilber, N. W. Evans,. The officers are: W. R. McGill, president; Wm. Mansfield, secretary; G. W. Wilber, superintendent; M. Jamieson, treasurer.

At the annual meeting of stockholders of the Winchester and Strasburg Railroad Company, held in Baltimore on the 5th inst., Robert Garrett was elected president in place of John King, Jr., resigned, and Thomas Whittridge, Hugh Sisson, J. A. Sherrard, George A. Hupp and John Gregg were elected directors for the ensuing year. The Winchester and Strasburg Railway Company is one of the leased lines of the Baltimore and Ohio.

At the annual meeting of the Northern, Northwestern and Sault Ste. Marie Railway Company, held in Toronto, Canada, on the 4th inst., the following board of directors was re-elected: Adam Brown, Wm. Ince, N. Barnhart, W. B. Scarth, A. R. Baswell, Hon. A. Morris, John Fisken, A. McInnis, Wm. Hendrie, Dalton McCarthy, W. E. O'Brien and J. Proctor. At a subsequent meeting of the directors Adam Brown was elected president, and Wm. Ince, vice-president.

The officers of the New Meriden and Cromwell Railroad Company recently elected are as follows: President, H. C. Wilcox; vice-president, Charles Parker; Secretary, Charles L. Rockwell; treasurer, A. Chamberlain; auditor, O. B. Arnold. Executive Committee, H. C. Wilcox, D. W. Parker, N. L. Bradley, Samuel Dodd and George W. Lyon. The capital stock of the company is $300,000, all taken and 10 per cent paid in. The work of building the road will be pushed forward as speedily as possible.

The directors of the Kankakee Valley Railroad Company, recently organized at La Porte, Ind., are: Clem Studebaker, J. M. Studebaker, Judge Stanfield and A. S. Baker, of South Bend; Gen. Gleason, W. B. Biddle, E. H. Scott and M. N. Nye, of La Porte; W. E. Renney, of Valparaiso, Thomas J. Wood, of Crown Point, Gen. G. W. Cass, W. F. Singleton and E. Lamphere, of Chicago. The object of that company is to construct a railroad from South Bend to Momence, Ill., along the Kankakee River; capital stock, 1,000,000.

The Oil Exchange, which was organized in Philadelphia over a month ago, was formally opened on the 19th inst. It has a membership of 100. The directors are: S. S. Wenzell, Samuel W. Powell, Malcom Lloyd, H. L. Davis, John Gill, Jr., A. H. Logan, Edward C. Street, H. C. King, John S. Davis, Samuel Q. Brown, John Large and R. D. Allen. The officers are: President, W. H. Smith; vice-president, W. N. Viquers; second vice-president, Junius R. Clark; treasurer, John H. Waugh; secretary, Alfred Newhouse. The rooms of the Exchange are at 222 Walnut street.

At a meeting of the stockholders of the National Railway Signal Company, held at its office in Nashua on the 13th inst., the following persons were elected directors for the ensuing year: Cyrus S. Haldeman, Elisha S. Converse, O. M. Shepard, J. Henry Read, O. M. Wentworth, Arthur P. Wilson, John B. Johnson, George W. Barnes, and John L. Ambrose. Subsequently Cyrus S. Haldeman was elected president; Elisha S. Converse, vice-president; Joseph B. Parker, clerk, and A. P. Wilson, secretary and treasurer. The business management will be in the hands of the president, with a local office in Boston.

The New York Iron and Metal Exchange was

formally opened on the 11th inst., and on the 12th commenced the regular transaction of business. The officers are: Edward P. White, president; Maurice B. Flynn, vice-president; T. Delafield, treasurer, and Edward J. Shriver, secretary. The board of managers consists of William W. Snow, Carl Mayer, B. B. Leman, Henry A. Rogers, J. P. Robinson, Jr., Alston Gerry, John D. Fraser, Edward Hill, H. B. Moore, George V. Tompkins, A. G. A. Harnickell, and J. H. Whitney. The rooms of the Exchange are at the corner of Pearl street and Burling slip. There are to be two daily "calls" of pig iron, old rails and scrap iron, crop ends, tin, copper, lead and spelter. These articles will be bought and sold for future delivery, the same as cotton and wheat.

CONSOLIDATION.

THE text of the agreement between the Great Western Grand Trunk Railway companies is published. It provides that it shall go into effect August 12, 1882; that the name of the consolidated company shall be "the Grand Trunk Railway of Canada;" that there shall be fourteen directors for the united company; that the first directors of the united company shall be Sir Henry Whatley Tyler, M. P., Sir Charles Lawrence Young, baronet; Lord Claud John Hamilton, M. P.; Robert Young, Robert Gillespie, Wiiliam Unyau Heygate, James Charles, the Right Hon. David Robert Plunket, M. P., the Hon. James Ferrier, Viscount Bury, Henry Doughty Browne, Colonel Edward Chaplin, John Marnham and Major Alexander George Dickens; that all the officers and servants of the Trunk Company and the Western Company shall after the date of the union become the servants of the united company at the salaries or wages and upon the terms at and upon which they were previous employed by the Trunk Company or the Western Company as the case may be.

Anthracite Coal Tonnage.

THE following is an official statement of the anthracite coal tonnage for the month of June, 1882, compared with the same month in 1881:—

	June. 1882.	June. 1881.
Reading Railroad	586,466	586,012
Lehigh Valley Railroad	560,865	484,404
Central Railroad of New Jersey	404,483	360,040
Delaware, Lackawanna and Western	428,457	368,352
Delaware and Hudson Canal	270,600	239,899
Pennsylvania Railroad	220,830	210,249
Pennsylvania Coal Co.	132,830	127,132
New York, Lake Erie and Western Railroad	21,155	42,148
Total	2,625,039	2,418,238

The following is the statement for the year 1882, compared with the year 1881:—

	1882.	1881.
Reading Railroad	2,906,674	2,925,086
Lehigh Valley Railroad	2,619,692	2,498,403
Central Railroad of New Jersey	1,888,373	1,831,409
Delaware, Lackawanna and Western	2,019,258	1,948,484
Delaware and Hudson Canal	1,365,371	1,416,288
Pennsylvania Railroad	1,056,799	1,033,924
Pennsylvania Coal	604,879	591,578
New York, Lake Erie and Western Railroad	106,803	222,007
Total	12,567,851	12,467,496

The stock of coal on hand at tide-water shipping points, June 30, 1882, was 583,986 tons; on May 31, 1882, 611,441 tons—decrease 27,505 tons.

The following statement shows the amount of anthracite coal distributed to Western United States points and the Dominion of Canada in 1881, representing shipments by lake and rail from Buffalo, Erie, Salamanca, Dunkirk, Pittsburgh, Baltimore and Lake Ontario points; also showing general distribution of entire production of anthracite coal in 1881. The following data has been compiled mainly from official sources, and represents as nearly as practicable—with present facilities for obtaining correct information—the actual tonnage as stated for year 1881:

To Western United States points:

	Gross Tons.
By lake from Buffalo	839,645
By rail from Buffalo and the bridges	616,044
By lake from Erie	85,030
By rail from Erie	166,258
By rail from Pittsburgh, Baltimore, Salamanca, &c.	309,191
From Lake Ontario ports through the Welland Canal	63,146
	2,079,134
To Canadian points:	
By lake and rail	694,428
Total to Canada and the West	2,773,562

General distribution of anthracite coal in year 1881, in tons of 2,240 pounds:

Competitive—including tonnage passing out of Capes of Delaware: to New York harbor: to points on the Hudson River, Long Island Sound and Atlantic coast, north of Port Judith	12,169,030
Western—Including tonnage to United States points west of Buffalo and the Detroit River, Erie, Pittsburgh and Baltimore	2,079,134
Canadian—Including all tonnage by lake and rail to points in Dominion of Canada	694,428
Southern—Estimated tonnage to all points in Delaware, Maryland and the territory bounded by the Ohio and Mississippi River on the north and west and the Gulf of Mexico on the south	800,000
Pacific Coast	15,000
Local—Embracing all coal consumed in Pennsylvania, New York and New Jersey	12,742,424
Total products in 1881	28,500,016

Lehigh and Hudson River Railroad.

THE gap on the Lehigh and Hudson River Railroad between Franklin Furnace and Andover, has been completed, and a train of cars passed over the entire length of the road from Greycourt, on the New York, Lake Erie and Western Railroad, to Belvidere, on the Belvidere division of the Pennsylvania Railroad, on the 14th inst. Thus the long-talked-of route from Pennsylvania to the New England States is established. From Belvidere the route runs northwest through Warren and Sussex counties, crossing the Delaware, Lackawanna and Western Railway near Bridgeville and the Sussex Railroad at Andover. At Franklin Furnace it crosses again the Sussex Railroad and the New Jersey Midland, and passes through the Warwick Valley to Greycourt, there forming a connection with the Newburg branch of the New York, Lake Erie and Western Railroad. At Newburg the cars are ferried over the Hudson River to the New England Railroad. To what extent the Pennsylvania Railroad Company will feed the new line is not known to the public; but the officers of the Lehigh and Hudson River Railroad Company claim that their road will have all the business it can carry from the Pennsylvania corporation. The rolling-stock of the new road is ready. The passenger coaches are very handsome and comfortable. Four postal cars have been built and furnished with every modern convenience for handling the mails. Local postal agents say they are the most complete they have ever seen. In a few days regular trains will be running over the route, and arrangements will be completed for through travel without change of cars.

Curiosities of the Patent Office.

SOME of the applications made for patents are very amusing; but however funny the idea, if it is only original with the applicant the patent can be secured. The rights of the American inventor are sacred, and no commissioner of patents dares infringe upon them. It will be sad news to many a prudent housewife to learn that every time she pricks a hole in an egg with a pin she is violating the patent of an American inventor; but such is the case. Years ago an inventive genius devoted himself to discovering a method to prevent eggs from cracking during the process of boiling. He solved the problem by picking a pin hole in one end of the egg, through which the air in the shell was allowed to escape, and this pin-hole he duly patented according to law. Precisely how he manages to collect his royalty is a mystery, but the fact remains that he has a legal claim for royalty on every pin-hole made in an egg before boiling.

An application has recently been made through Munn & Co. for the patent of a machine to prevent young orphan chickens from being lonely. This is an invention which should, and probably will, commend itself to Mr. Bergh. The inventor claims that hundreds of chickens hatched out in the artificial incubators become lonely because they miss the "cluck! cluck!" of the mother hen, which is the lullaby of all well regulated chickens hatched in the natural way, and many are killed by this loneliness. He has arranged a system of clock work which produces a noise somewhat similar to that of the hen, which he proposes to attach to the incubator, and on this machine the patent is asked.

A patent has issued on a clog for fowls, designed to prevent them from scratching in gardens. It consists of a wire in the shape of a hairpin, sharp at the points. This is attached to the feet of fowl in such a way that when it attempts to scratch the points enter the ground and prevent the claws from reaching it. Hens have ever been the subject of much patient thought on the part of inventors. A nest designed to deceive them into laying more than the one egg daily, which every respectable bird contributes to the farmer's larder, has been devised and patented. It has a false bottom, through which the egg drops as soon as laid, and the patient hen, feeling that she has failed in her duty, proceeds to lay another and another until her treasury becomes exhausted or she discovers the deception. A beehive has been patented, the doors of which are attached to the hen-roost in such a manner that when the fowls go to roost they close the hive and thus secure the inmates against the ravages of the bee moth, and at daylight, when the hens leave the roost, the hive doors are opened and the bees set at liberty.

Even the faithful horse has been made the subject of optical delusions by the inventors. A patent has been secured for what is known as a horse fence. It consists simply of a wire frame placed over the head of the horse so that when he approaches a fence with the landable desire of jumping it he sees the wires above his head, mistakes them for part of the fence, and concludes that it is too high for him to leap. These are some of the curiosities of the Patent Office. The reader who desires to investigate the subject further is respectfully referred to that highly interesting collection of literature known as the "Patent Office Reports."—*Detroit Price Current.*

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THE SUEZ CANAL AND AMERICAN COMMERCE.

IT is well understood that the English Government has two objects in its forcible intervention in Egypt: the desire to protect its Egyptian bondholders, and a feeling that it cannot afford to leave the Suez Canal to any but a subservient local government. The latter is the more worthy motive of the two, for it is a legacy derived from former times, when the maritime nations of Europe were running races of conquest and colonization. The recent collision has, however, come about through the claims of the bondholders, and is a much less defensible proceeding. The money borrowed by the former rulers of Egypt was in good part spent, not on works of public utility and permanent improvement, but on luxurious palaces, yachts, harems, theatres, and the like; in a word, in aping the vices of other European courts, which have more resources to draw from. The bondholders could not but have known this when they loaned the money—or at least they had more than the ordinary warning of lenders. It is one of the assumptions of monarchy that the subject people are bound to pay the debts incurred by their sovereign rulers, whether incurred for personal gratification or national purposes; but international law does not sanction the use of force by one nation, to enable its subjects to collect money debts from another. This is, however, in part, what England is doing; and it does not change much the true nature of the action to say that the English Board of Control would ultimately have lightened the burden of taxation to the Egyptian serf of the soil. ARABI BEY is a rebel against an established government; but it is some mitigation of his offense that, like WASHINGTON, he is in arms to deliver his country from the oppressive load of taxation imposed by foreigners to pay debts incurred at ruinous rates for extravagances. He probably would not do any better if he had sway, but for the moment his attitude is patriotic.

England, besides, holds by her proprietory purchase, the majority interest in the Suez Canal; and it is to secure the uninterrupted use of it that she seeks to maintain the corrupt and feeble government of TEWFIK against the wish of the people. It ought not to be a difficult task to place the forty-mile strip of territory occupied by the canal under some military protection (say that of France and England, or still better that of Italy), and leave the Turks and Egyptians to themselves; but the etiquette of European diplomacy is such an intricate, and at the same time absurd, complication, that many difficulties are liable to arise both before and after it is done. The thing now attempted is to set up a governor in Egypt who will protect the canal. This requires the consent of Turkey, and altogether the future of the canal is pregnant with possibilities. The Suez Canal and the Dardandelles passage ought to be taken out of the control of the Mahometans, as much so as the Straits of Gibraltar, but fierce and fanatical wars may come before it is achieved.

The fate of the Suez Canal throws an additional importance upon the canals and railroads across the American isthmus. The French company which has undertaken to construct the canal at Panama commenced operations by purchasing the control of the railroad at that point. The work of actual excavation of the canal makes slow progress compared with the preliminary flourish of trumpets; and as the same parties have control of the Suez water course, which pays ten per cent dividends, and the Panama Railroad which earns twenty-five per cent dividends, there is no great loss, but some profit to follow, if the latter canal is not brought into use for the next fifty years.

The only competition presented to these two isthmus routes, aside from the original navigation round capes Horn or Good Hope—routes which are not available for steamships, on account of the great supply of fuel to be taken on board—is that offered by the American Pacific railroads.

The Australian Mail now takes this route, via New York and San Francisco, the Pacific Mail Company working a branch of their steamers from the latter port to Australia. The business to and from Hindoostan could probably be better done by sea round the African cape; but that of Australia, China and Japan, and some of the Dutch East India islands, could be done more readily across the American isthmus, or by our Pacific railroads.

The overland roads across North America are multiplying. A second route—the Southern Pacific—having connections to the northern tier of lines, and also with the Gulf Navigation and Southern roads, via New Orleans, has been opened. A third—the Northern Pacific—is approaching completion. A fourth, across the Mexican State of Sonora, is to be opened within the year; and not the least of these projected roads in importance is that begun across the Mexican Isthmus of Tehuantepec, on which considerable work has been done, and which could be finished in a few months. The latest information is to the effect that the Mexican government is making an official inspection of this work with a view to assuming the entire ownership as a national military highway. It

is, as located, 150 miles from the Gulf port to the Pacific terminus, and this can probably be shortened to 140 miles. Inasmuch as the summit of the level is less than 950 feet, and once on wheels 140 miles is not much more than 57, this is a most formidable rival to the Panama Railroad and Canal, as it lies in a more genial climate, and among a more civilized people.

The projected ship railroad of Capt. Eads, and the Nicaragua Canal need hardly be mentioned in this connection, as they are far from completion; and the actual construction of the Tehuantepec line will make their chances still more remote.

The British have begun an overland road on their Honduras settlement, which, in connection with the American enterprises in Gautemala and Salvador, having the advantage of a fine capacious harbor at La Union in the Fonseca Gulf, is more likely to do an inter-oceanic business than either of the last named. The Suez route is not likely to be long interrupted; while it is, fresh attention will be turned to all these American routes, and if Suez is never disturbed some of the American routes indicated above are sure to enter into competition with it. At least one of them should be under the protection of our Government.

Curiosities of Ocean Cables.

Of the total 97,200 miles of cable in the world, some 36,420 are owned and worked by the Eastern Telegraph Company and its affiliated companies, the Eastern Extension Telegraph Company and the South African Telegraph Company. The Eastern Telegraph Company is perhaps the most enterprising of cable corporations, and makes a very fine display at the Crystal Palace, London. Cable operations have been, says *Nature*, of great assistance to the geographer, and the soundings taken in order to ascertain the nature of the sea bottom, where a cable route is projected, have enriched our charts quite as much as special voyages. There is, however, another way in which these operations could be made subservient to the cause of natural science; but it is a way which has not been sufficiently taken advantage of. Besides the specimens of stones, mud and sand which the sounding-lead brings up from the deep, the cable itself, when hauled up for repairs, after a period of submergence, is frequently swarming with the live inhabitants of the sea floor—crabs, corals, snails, mollusks and fifty other species—as well as overgrown with the weeds and mosses of the bottom.

Many an unknown species has passed over the drums unnoted to rot and fester in the general mess within the cable tanks. We venture to predict a rare harvest to the first naturalist who will accompany a repairing ship and provide himself with means to bottle up the specimens which cling to the cable as it is pulled up from the sea.

Some idea of these trophies may be gathered from the stall of the Eastern Telegraph Company, where a few of them are preserved. Two of these are a very fine gray sea snake, caught on the Saigon cable in a depth of thirty fathoms, and a black and white brindled snake, taken from the Batavian cable in twenty-five fathoms. Twisting around ropes seems to a habit of this creature, for the writer remembers seeing one scale up a ship's side out of the River Amazon, by the "painter" hanging in the water.

A good example of a feather star is also shown; these animals being frequently found grasping the cable by their tentacles. A handsome specimen of the blanket sponge picked up in the Bay of Biscay, is also exhibited. But the most interesting object of all is a short piece of cable so beautifully incrusted with shells, serpulæ and corals as to be quite invisible. It was picked up and cut out in this condition from one of the Singapore cables. The rapid growth of these corals is surprising, and some valuable information on this head might be gained if the electricians of repairing ships in these eastern waters would only make some simple observations. Curiously enough, so long as the outermost layer of oakum and tar keeps entire, very few shells collect upon the cable, but when the iron wires are laid bare the incrustation speedily begins, perhaps because a better foothold is afforded.

A deadly enemy to the cable, in the shape of a large boring worm, exists in these Indian seas, and several of them are shown by the company. The worm is flesh colored and slender, of a length from 1½ inches to 2½ inches. The head is provided with two cutting tools, of a curving shape, and it speedily eats its way through the hemp of the sheathing to the gutta percha of the core, into which it bores an oblong hole.

A full account of this particular worm, with anatomical illustrations, is given in the *Journal of the Royal Microscopical Society* for October, 1881, by Dr. Charles Stewart, secretary of the Society. The bore holes, after passing through the oakum of the inner sheathing, either pursue a tortuous course along the surface of the gutta percha core or go right into the copper wire," thereby causing a "dead earth" fault. Dr. Stewart classes the worm as one of the Eunicidæ, but proposes for it the generic name of *Lithognatha worslei*, because of its possessing a pair of calcareous mandibles or cutting jaws, and after Captain Worsley, the commander of the repairing ship which picked up the worm-eaten cable. The pair of calcareous jaws, in addition to three pairs of chitinous ones, is the most remarkable feature about the animal, and the white plates which form them make the creature look as if it were in the act of swallowing a tiny bivalve shell.

The best protection hitherto formed against it is to cover the core with a ribbon of sheet brass, laid on without a lap. First the gutta percha is covered with cloth, then the brass is overlaid. Canvas is then put over the brass, and the hemp and iron wires over all. A close layer of iron wires is not sufficient protection, for the worm can sometimes wriggle in between wires where they are not close enough; and, moreover, the rapid decay of iron wires in tropical seas is certain to leave the core a prey to these pests in a few years.

The Eastern Extension Telegraph Company also exhibits some interesting samples of stones picked up from the sea bottom; for example, limestone blocks and shells bored by the bivalve *Saxicava rugosa*, the worn Sabella, and the sponge *Hymeniacidon celata*; wood honeycombed by the teredo, a red stone pitted by the bivalve shell (pholas), and a ferruginous flaky stone brought up from the bottom between Penang and Singapore. Most interesting, however, of these inanimate waifs is a flat piece of black flinty rock hollowed into cup-like pits by the sucking feet of the sea hedgehog. The pits are excavated as lairs for the animal, and some of them are nearly three inches in diameter by one inch deep. To make the rocky bed softer to the feel, the hedgehog has lined it with a calcareous enamel, probably secreted by its body, much in the same way as the pearl oyster coats its shell.

In the earlier days of submarine telegraphy, Sir William Thomson declared the life of a cable to be practically inviolable; and Robert Stephenson, on the other hand, was of opinion that no cable would last out ten years. The latter view has proved the more correct, for the average life of a cable hitherto has been about eleven years. Thanks to the improved means of repairing them, however, the outbreak of faults does not mean the loss of a cable, for these flaws can be cut out in water, however deep, and the cable put to rights again. Indeed, every cable company expects a recurrence of faults, and provides a fully equipped repairing ship always on the spot.—*Scientific American.*

The *California Architect* says that black walnut can now be manufactured very cheaply. One part of walnut peel extract is mixed with six parts of water, and the wood is coated with the solution. When the material is about half dry a solution of bichromate of potash with water is rubbed on it, and then your walnut is ready. Furniture dealers have been known to make excellent walnut from very poor pine, but the difference was slightly perceptible; however, this method is said to defy detection.

The great iron steamboat Pilgrim, recently constructed at John Roach's ship-yard for the Old Colony Steamboat Company, is 400 feet long over all; width of beam, moulded, 60 feet; beam over yards, 88½ feet; depth of hold, 17½ feet, and tonnage, 3,600. There are two complete iron hulls, with eighty-four water-tight compartments; thirteen iron longitudinals and fourteen water-tight floors. The engine is the largest ever built, having a cylinder of 110 inches by 14 feet stroke, and will exert 4,500 horse-power at a pressure of fifty pounds. The shaft is the largest ever forged, being 28½ inches at the greatest diameter and 26½ at the least, 40 feet long, and weighs 81,000 pounds. The wheels are 45 feet in diameter and 13 feet face. There are twelve boilers, and the vessel is expected to run twenty miles per hour. She has three decks, 300 state rooms, and will accommodate 600 first-class passengers. The vessel when completed will be worth $1,000,000, of which $700,000 is the estimated value of the material in its crude state, the increase in value being labor.

From our Special Correspondent.]

OUR ST. LOUIS LETTER.

The intelligence of the completion of the Denver and Rio Grande as far as Silverton has given great satisfaction, not only to the people of the sections immediately interested, but to the public in general. This road is rapidly attaining immense proportions, and its management must certainly feel proud of their labors in the way of catering to the wants of commercial and traveling men. Each quarterly statement published by the company shows up better than its predecessor, and the constantly increasing income of the line is a source of congratulation to those who transact business with it, as well as those who are fortunate enough to own stock in it. It is fast growing in popularity, and its officers seem to be all thorough railroad men. Mr. Harry White is the local agent here, and is certainly the "right man in the right place."

The Union Pacific has added one more link to its grand chain of railroads in the opening of its Denver and South Park division as far as Pitkin, by way of the great and attractive Alpine tunnel. Mr. Aglar, its popular representative here, is jubilant over this the latest acquisition of the road, and expects great results from the same.

The indignation against Gov. Crittenden, for his recent pardon of the convicted gamblers of this city, gathers fresh strength daily, and there is considerable talk now on the question of his impeachment by the next Legislature. Whatever is the outcome of the squabble, one thing, at least, is tolerably certain, and that is —Democracy in Missouri has gained nothing and lost much by reason of the Governor's action.

The general freight agent of the Vandalia line, Mr. H. W. Hibbard, reports business steadily improving, and predicts a great boom in the way of traffic in the next few weeks. There is some little stir created here by the recent movements of Mr. Hibbard. It seems that the Vandalia people have become dissatisfied with their per cent in the live stock pool out of East St. Louis. Accordingly, Mr. Hibbard voiced that dissatisfaction before Commissioner Fink, asking an increase, and the result is, the Commissioner has called a meeting of all parties concerned, to be held in New York, July 26, to adjust the matter. A red-hot time is expected, as competing lines will naturally fight against such an increase. Whether or not the opposition will avail remains to be seen, as the Vandalia has unquestionably the shortest route, in connection with the Pennsylvania, to the Pittsburgh and Jersey City markets, and it is the favorite line with shippers to those places as a consequence. In fact, it is stated that it is the only road which can take live-stock out of St. Louis sold on Monday's market, and land them in Jersey City in time for Friday's market.

There is much surprise here regarding the statement made by certain Eastern papers charging conductors of Western trains with being vulgar, discourteous, etc. There never was a more unfounded charge, and there cannot be found, as a general rule, a more gentlemanly body of men than those thus slandered.

Once more there are rumors regarding a fast mail train. It is now stated that the postal authorities, since the failure to secure a fast mail by Chicago routes west and by the Wabash, are now negotiating with a view to its establishment over the Panhandle, from New York to Cincinnati, over the Ohio and Mississippi to St. Louis, thence over the new line of the Missouri Pacific to Omaha, there to connect through to San Francisco over the Union Pacific. The carrying out of this plan would necessitate the abandonment of the proposed fast mail service over the Lake Shore road from New York to Chicago.

Murmurings and complaints reach this city all the way from Parsons, Kan. It seems that general manager Talmage, of the Missouri Pacific, issued an order compelling all employes of passenger trains on his roads to don a new style of uniform. In addition to this order, the name of an eastern firm, from whom same could be produced at $28 per suit, was suggested, and now there is a big kick all along the line—the men claiming that they could purchase of local dealers better uniforms at $12 a suit than they are forced to pay double for to an eastern house. It is also claimed that the goods they are thus forced to buy were made up specially for and rejected by the Pennsylvania and Reading railroads.

I spent an hour to-day in a rather novel pastime—canvassing the opinions of railroad officials as to the most popular and accomplished railroad man in the west. The unanimity with which all parties spoken to hit upon Capt. R. S. Hayes, of St. Louis, was remarkable. Mr. Hayes is second vice-president of the Iron Mountain, and all the Gould connections (embracing a number of leased and other lines), and his popularity stands out in grand contrast to the feeling entertained towards other prominent magnates. In fact, employes and officers regard him not only with profound respect, but almost with womanly affection. He avoids all display—is never a moment absent from his post—and, although filling the most arduous, responsible, and important position of any railroad man in the west, always finds a spare moment to be "at home," to the humblest attache, as well as to the most exalted caller. Dignified, courteous, and impartial to all, he is the ideal of railroaders ; and of the thousands who hold positions under him, I do not think there is a solitary individual ever speaks of him except in praise.

Mr. J. F. Barrett has been appointed to the division freight agency (at Sedalia, Mo.) of the Missouri Pacific, vice Mr. L. Pearson, resigned. Mr. H. A. Johnson has been promoted to Mr. Barrett's position.

The attorney for the Etna Insurance Company obtained a judgment a few days since in the United States Court at Springfield, Ill., for $60,000 against Johnson county, Ill., on railroad bonds.

The Chesapeake, Ohio and Southwestern Railroad, between Memphis, Tenn., and Paducah, Ky., was opened a few days since, and the event was made memorable by a grand celebration. Speeches were made by Hon. Chas. Reed, Mayor of Paducah ; D. P. Hadden, Col. H. D. McHenry, Q. Q. Quigley, Barney Hughes, Judge J. R. Morgan and Calvin Vance. The line was formerly known as the Mississippi River Railroad, then as the Memphis, Paducah and Gulf, afterward as the Memphis, Paducah and Northern, and now forms a portion of the Chesapeake and Ohio combination.

We are enjoying October weather in St. Louis, but yet the cool wave is not so pronounced here as in Chicago, where the overcoat has been substituted for the duster, and the busy housewife employs her spare moments in ferreting out and fitting together the lost joints of the stove-pipe, in view of the approach of Jack Frost. P. H. T.

St. Louis, July 17, 1882.

[From our Special Correspondent.]

OUR CINCINNATI LETTER.

An adjourned meeting of the directory of the Cincinnati and Eastern Railway Company was held a few days since at the Albany building. Hon. N. W. Evans, of Portsmouth, was in attendance, and took the oath of office. General Agent Henley presented a report from the committee at Felicity, who are endeavoring to secure the extension of the Ohio River branch of the Cincinnati and Eastern to that point. It appears that the free right of way had been obtained for a distance of six miles, and that the remaining portion of Mount Pleasant would be secured when the survey was finished. The subscriptions also have been considerably augmented. Messrs. Henry, McGill, Wilber and Mansfield were appointed Executive Committee of the Board.

A circular call has been issued by the Cincinnati, Hamilton and Dayton for a meeting of its stockholders, to be held in the office of the company, at 10 A. M., on the 16th prox., to vote on the proposition to issue $1,000,000 worth of six per cent preferred stock, the proceeds of which issue are to be used in "betterments" of the road. It is feared by many of the common stockholders that such an issue would exercise an injurious effect upon their stock, though those advocating the proposition are of opinion that such would not result; on the contrary, they aver that the new issue could be placed on the market at a premium, and that the money thus secured would be used in obtaining new terminal advantages, proper equipment and new rolling-stock for the road, thereby increasing the general business of the road, so that in such event the common stock would be benefitted instead of deteriorated.

A conference meeting of the officers, stockholders and capitalists interested in the Cincinnati and Ohio River Railroad was recently held in the company's office in the Sinton Building. Among those in attendance were General Warner, August Goodman, General T. Ewing, Orland Smith, E. Blaine, J. McNeil, Theo. Cook, D. Sinton and J. R. Mills. The meeting, though an informal one, was of much interest to those concerned. The work on this road will in all probability commence at an early date, and engineers are already locating the line of road.

On the 13th inst. a meeting of baggage agents was held at the Grand Hotel. Among those in attendance were J. B. Browning, of Louisville, representing the Louisville, Nashville and

Great Southern; J. P. Cox, of the Cincinnati, Hamilton and Dayton; W. I. Robinson, of the Ohio and Mississippi, and J. Heglin, of the Marietta and Cincinnati. The last-named gentleman presided and Mr. Robinson acted as secretary. The action of the express companies in carrying baggage to New York was discussed at length. It seems that $2 per hundred for this class of matter to New York is the price charged by the express companies, while the railway rate for "excess baggage" is $3.25 per hundred. The baggage men during the day visited the offices of the express companies, but no one being found who could treat with them on the matter, it was impossible to take immediate action. The convention of the general baggage agents will meet in Cleveland on the 9th prox., when the matter will then be again brought up, and it is probable that unless the present rates are raised by the express companies, the railroad charges will be reduced in proportion. It was resolved that after August 1st all baggage left unclaimed for longer than twenty-four hours after its arrival at destination, should be charged ten cents per day for storage.

On the 14th inst., in the United States Court, a restraining order was granted by Judge Baxter against the Cincinnati, Indianapolis, St. Louis and Chicago Railroad in the suit brought by W. G. McCoy, of the Cincinnati stock-yards. The decision upon which the order was issued was given a short time since at Knoxville, and is as follows: "This cause came on to be heard upon the motion of the complainant for a temporary restraining order, as prayed in the bill, and the Court finds that said motion ought to be granted, and grants the same. It is therefore ordered by the Court that the defendant Railroad Company shall so long as said company shall continue to deliver stock to the United Railroads Stock-Yards, until the further order of the Court, desist from making any discrimination between the complainant's yards and those of the United Railroads Stock-Yards Company, and shall receive all stock consigned, or which the shippers shall desire to consign to said complainant's yards, and transport and deliver the same upon the same terms and in the same manner that stock is received and transported and delivered unto the United Railroad Stock-Yards Company, upon giving bonds in the sum of $20,000." Messrs. J. J. Faran and J. Ryan were accepted as sureties upon the bond of Mr. McCoy for $20,000.

A large meeting of citizens has been held at Wooster, Ohio, in consequence of a published call of the incorporators of the Killbuck Valley Railroad. Dr. J. D. Robinson was constituted president of the meeting and Mr. H. U. Clemens acted as secretary. Some appropriate speeches were delivered by General A. Wiley, A. S. McClure and other gentlemen. The proposition is to construct a railway from Wooster to Burbank, a distance of some fifteen miles, and to connect at the latter point with the New York, Pennsylvania and Ohio. The cost of the undertaking, it was estimated, will be in the neighborhood of $50,000. Subscription-books were opened, and $30,000 were subscribed in a short time. The residue of the required sum will doubtless be raised ere long. Throughout the entire distance of the route the right of way has been given. The probabilities are that work will be commenced at an early date.

The large draw of the Wheeling and Lake Erie across the Maumee River was placed in position on the 15th inst., and was found to work properly. This is stated to be one of the most important steps in completing and opening the Western end of the road. The length of the structure is three hundred and forty-three feet, and its weight, together with that of its equipments, is in excess of three hundred tons. The entire length of the bridge is three thousand feet, and the cost of it will be over half a million dollars.

There has been lately quite a boom in all the stock of the grain-carrying roads, except the Cincinnati, New Orleans and Texas Pacific. Recently it was offered at 88, but could be bought for less.

A.

Condition of Blast Furnaces in the United States.

THE *Iron Age* quarterly statement of the condition of the blast furnaces of the United States on July 1st, 1882, is published in its issue of the 15th inst. The following statistics of the whole country will be found interesting :—

CONDITION OF FURNACES JULY 1, 1882.

	In blast.	Out of blast.
Charcoal	151	126
Anthracite	164	72
Bituminous	119	109
Total	434	307

This is a decided change since the first of April. At that date the condition was as follows :

	In blast.	Out of blast.
Charcoal	132	146
Anthracite	175	61
Bituminous	150	74
Total	457	281

In charcoal furnaces there has been an increase of 19, but this has no significance, as these blow in or out according to the season. When stocks of ore and coal are exhausted they go out and mine more. In anthracite furnaces there has been a decline of 11 stacks, and of bituminous 31, a most marked change, for which there is but one explanation—the strike. This change is more marked by a comparison with the condition one year ago, which was as follows :—

CONDITION OF FURNACES JULY 1, 1881.

	In blast.	Out of blast.
Charcoal	137	125
Anthracite	146	90
Bituminous	144	77
Total	437	292

For the last six years the relative condition of the furnaces on July 1, was as follows :—

FURNACES IN BAST JULY 1.

	1877.	1878.	1879.	1880.	1881.	1882.
Charcoal	87	64	81	131	147	151
Anthracite	87	95	101	167	146	164
Bituminous	85	89	95	115	144	119
Total	259	248	277	413	437	434

FURNACES OUT OF BLAST, JULY 1.

	1877.	1878.	1879.	1880.	1881.	1882.
Charcoal	181	202	176	136	125	126
Anthracite	139	130	125	68	90	72
Bituminous	123	128	107	109	77	109
Total	443	460	408	313	202	307

The capacity per week of the charcoal furnaces in blast is placed at 15,875 tons ; out of blast, 9,621, total, 25,496. Anthracite, capacity in blast, 36,715 ; out of blast, 14,485 ; total, 51,200 tons. Bituminous, or coke, capacity in blast, 40,431 ; out of blast, 33,120 ; total, 73,551.

	In blast.	Out of blast.
Charcoal	15,875	9,621
Anthracite	36,715	14,485
Bituminous	40,431	33,120
Total	93,021	57,326
Total weekly capacity		150,347

The statement of capacity per week is somewhat in excess of what the regular working of the furnace will show—stoppages, slow working and various other causes, which will readily occur to those interested.

Illinois Central Railroad.

DURING the month of June, 1882, the traffic on the lines operated by this Company was (estimated):—

In Illinois	$520,810 00
In Iowa (leased lines)	142,936 00
Total	$663,746 00

The traffic for the same month in 1881, on the same mileage, was (actual):—

In Illinois	$629,279 69
In Iowa (leased lines)	174,607 32
Total	$803,887 01

During June, 1882, the land sales were 808.59 acres for $5,047.20, and the cash collected on land contracts was $6,489.75.

L. A. CATLIN, *Secretary.*

The Cause of the War.

THE father of the present Khedive or Viceroy was a man of unbounded extravagance, and could give points to Tweed, Robeson or a Brooklyn Bridge Commission and beat them in the art of expenditure. He succeeded in saddling Egypt with a load of debt greater than the Pyramids, and with mortgages and promissory notes more numerous than the sands of the Nile. Whenever he wanted money, and that was incessantly, he borrowed right and left, regardless of the terms of the bond. He was as careless as Wilkins Micawber about his notes. The greater proportion of these interesting little documents, to which usurious interest was attached, are held by the nobility of England. When the Egyptians, tired of their too expensive ruler, kicked him out and put his son in his place, the noble English creditors and their French confreres contrived to get hold of the management of the Egyptian finances to secure the payment of their claims. Arabi Bey, representing the native political element of the country, naturally rebelled against the summary disposal of the wealth and resources of the land. So England sent a fleet and bombarded Alexandria for the purpose of restoring the power of collecting the revenues of Egypt to the English and French officials empowered to receive it.—*Evening Telegram.*

THE newly completed hydrogen-burning locomotive which has been employed in the freight business of the New York, Lake Erie and Western Railroad for some time past, was put on the passenger service of the same company on the 11th inst., between this city and Paterson, with the most satisfactory results. The use of this steam fuel, it is said, has reduced the cost of railway motive power to a fraction of what it has heretofore been.

The Stock Exchanges and Money Market.

New York Stock Exchange.

Closing Prices for the week ending July 19.

	Th.13.	F.14.	Sat.15.	M.17.	Tu. 18.	W.19.
Adams Express	130⅞	.....	.....	.....	.....	140
Albany and Susq	.....	.....	.....	.....	.....	.....
1st mortgage	.....	.....	.....	.....	.....	.....
2d mortgage	.....	.....	.....	.....	.....	.....
American Express	93⅞	94¼	94	94½	94¼	.....
Burl., C. R. & Nor	.....	76	80½	.....	.....	.....
1st mortgage 5s	.....	101½	.....	.....	.....	.....
Canada Southern	56¼	56½	58⅜	59¼	60½	62
1st mortgage guar	.....	.....	.....	93	93	93¼
Central of N. Jersey	77½	77	78½	77⅞	79⅜	80¾
1st mort. 1890	.....	.....	.....	.....	118¼	118⅜
7s, consol. ass	.....	.....	.....	.....	.....	.....
7s, convertible ass.	110½	.....	109¾	.....	109¾	.....
7s, Income	.....	.....	.....	.....	90	92½
Adjustment	106½	106½	.....	.....	.....	.....
Central Pacific	94⅞	95⅜	93¼	93¼	93½	93
6s, gold	.....	.....	116⅞	.....	117	117
1st M. (San Joaq)	.....	.....	.....	.....	.....	.....
1st M. (Cal. & Or.)	.....	.....	.....	.....	.....	.....
Land grant 6s	.....	.....	.....	.....	.....	.....
Chesapeake & Ohio	24¼	24⅜	24⅝	25¾	25⅛	25¾
1st pref	.....	34½	35	36¾	38	37
2d pref	26½	.....	26½	27½	27¾	27½
1st mort., series B	82½	82½	.....	83⅛	83½	84
Chicago and Alton	.....	136¼	138½	138¾	140	140
Preferred	.....	.....	.....	.....	.....	.....
1st mortgage	.....	.....	.....	.....	.....	.....
Sinking Fund	.....	.....	.....	.....	.....	.....
Chi., Bur. & Quincy	130¾	130	132½	133¼	134⅜	134¼
7s, Consol. 1903	.....	128½	.....	128½	126	.....
Chi., Mil. & St. Paul	117⅜	119⅛	119⅜	119¾	119¾	119
Preferred	131⅛	133⅞	133¾	134	133⅝	133½
1st mortgage, 8s	.....	.....	.....	.....	134	.....
2d mort., 7 3-10s	.....	.....	.....	.....	.....	.....
7s, gold	.....	.....	.....	.....	.....	.....
1st M. (La. C. div)	.....	.....	118½	.....	.....	.....
1st M. I. & M. div.)	.....	.....	.....	.....	.....	.....
1st. M. (I. & D. ext.)	.....	121	.....	.....	.....	.....
1st M. (H.&D. div.)	.....	115¾	.....	.....	115¾	.....
1st M.(C. & M.div.)	.....	.....	.....	.....	.....	.....
Consolidated S. F.	.....	121	.....	.....	.....	.....
Chi. & Northwestern	133⅜	133⅜	134	133¾	134	134⅜
Preferred	148½	148½	148½	148¼	148⅜	.....
1st mortgage	.....	.....	.....	.....	.....	.....
Sinking Fund 6s	.....	.....	.....	.....	.....	110½
Consolidated 7s	.....	.....	.....	.....	.....	.....
Consol. Gold bo'ds	126⅞	.....	.....	.....	127	127
Do. reg	.....	.....	.....	.....	.....	.....
Chi., R. Isl. & Pac.	130	130	132⅜	132⅝	133⅛	134⅛
6s, 1917, C	.....	.....	.....	.....	.....	.....
Clev.,Col.,Cin.&Ind.	78	82¾	85	86¼	84⅞	86
1st mortgage	.....	.....	.....	.....	.....	.....
Clev. & Pittsburg gr.	139	.....	139	.....	.....	.....
7s, Consolidated	.....	.....	.....	.....	.....	.....
4th mortgage	.....	.....	.....	.....	.....	.....
Col.,Chi.,& Ind. Cent	12⅝	13	13½	14	14⅞	16⅛
1st mortgage	.....	.....	.....	.....	.....	.....
2d mortgage	.....	.....	.....	.....	.....	.....
Del. & Hud Canal.	111¾	112½	113¼	113⅜	113⅞	114¾
Reg. 7s, 1891	.....	.....	115½	.....	.....	.....
Reg. 7s, 1884	.....	.....	.....	.....	.....	105½
7s, 1894	.....	.....	.....	.....	.....	.....
Del.,Lack.& Western	126¾	127½	128½	128¾	130¾	132
2d mortgage 7s	.....	.....	.....	.....	.....	.....
Consol. 1907	.....	.....	128	.....	.....	.....
Erie Railway	.....	.....	.....	.....	.....	.....
1st mortgage	.....	.....	.....	.....	.....	.....
2d mort. 5s, ext.	.....	111	.....	.....	.....	.....
3d mortgage	104½	.....	.....	.....	.....	104⅞
4th mort. 5s, ext.	.....	.....	.....	.....	.....	.....
5th mortgage	.....	.....	.....	.....	.....	.....
7s, Consol. gold	.....	127	.....	.....	.....	128
Great West. 1st mort	.....	.....	.....	.....	.....	109
2d mortgage	.....	100	.....	.....	.....	.....
Hannibal & St. Jo	.....	.....	.....	.....	.....	.....
Preferred	85	86	89	89¾	89¾	89¾
8s, Convertible	.....	107½	.....	108⅛	.....	.....
Houston & Tex. Cen	81¾	81	82	82	.....	.....
1st mortgage	.....	.....	.....	.....	109	109
2d mortgage	.....	.....	.....	.....	.....	.....
Illinois Central	137	137¼	138¼	138	139	138¼
LakeShore&MichSo	111¾	112⅝	112⅞	113	112⅞	114⅜
Consol. 7s	.....	.....	.....	.....	.....	.....
Consol. 7s, reg	.....	.....	.....	.....	.....	.....
2d Consolidated	.....	.....	.....	.....	.....	.....
Leh. & W. B. con.ass	104	105¼	.....	.....	.....	.....
Long Dock bonds	.....	.....	.....	.....	.....	.....
Louisville & Nash.	70¼	71¼	73⅞	73	72¼	70½
7s, Consolidated	.....	.....	117⅞	.....	.....	117
Manhattan	52¾	52⅝	52¾	53	53	52
1st pref	.....	.....	.....	.....	.....	.....
Met. Elevated	.....	.....	.....	85	.....	.....
1st mortgage	.....	100⅛	100⅝	100¼	100	99⅛
Michigan Central	93	94⅜	95¼	95¼	96	97⅜
7s, 1902	.....	.....	.....	.....	.....	.....
Morris & Essex	.....	.....	121	.....	122⅜	123
1st mortgage	.....	.....	.....	.....	.....	.....
2d mortgage	.....	.....	.....	.....	.....	.....
7s of 1871	.....	.....	.....	.....	.....	.....
7s, Convertible	.....	.....	.....	.....	.....	.....
7s, Consolidated	.....	.....	.....	.....	.....	.....
N.Y. Cen. & Hud. R.	133¾	134½	134⅞	134⅞	135⅛	133⅛
6s, S. F. 1883	.....	102	.....	102	.....	.....
6s, S. F., 1887	.....	.....	.....	.....	.....	.....
1st mortgage	.....	.....	.....	.....	.....	.....
1st mortgage, reg	.....	.....	.....	.....	.....	131
N. Y. Elevated	.....	.....	.....	.....	.....	.....
1st mortgage	115	.....	.....	.....	115¼	115¼
N. Y. & Harlem	.....	.....	.....	.....	.....	.....
Preferred	.....	.....	201	.....	.....	.....
1st mortgage	.....	.....	.....	.....	.....	.....
1st mortgage, reg	.....	.....	.....	.....	.....	.....
N. Y., Lake Erie & W	39⅜	39⅝	40¼	40½	40⅜	40⅜
Preferred	79	78½	79⅜	.....	78¼	80
2d Consolidated	97½	96¼	97⅜	90¾	97¾	97
New 2d 5s fund	93⅛	.....	.....	93½	93¾	.....
N.Y.,N.Hav'n&Hart	.....	.....	.....	.....	.....	.....
North Mo. 1st mort	.....	.....	.....	.....	.....	.....
Northern Pacific	45	46⅛	46⅜	48¼	48⅛	48
Preferred	84¾	85⅞	87⅛	88⅜	89¼	88⅜
Ohio & Mississippi	37¾	37⅞	37¾	39½	40⅞	39½
Preferred	103	.....	.....	105	.....	105
2d mortgage	.....	.....	.....	.....	.....	.....
Consolidated 7s	.....	.....	.....	117	.....	.....
Consol. S. Fund	.....	.....	.....	.....	.....	.....
Pacific Mail S. S. Co	46⅞	46⅜	47	46¾	47	46⅜
Pacific R. R. of Mo.	.....	.....	.....	.....	.....	.....
1st mortgage	109	.....	.....	.....	.....	.....
2d mortgage	.....	.....	.....	.....	.....	.....
Panama	.....	.....	.....	.....	.....	.....
Phila. & Reading	58⅜	58⅜	60¼	60¼	61	61¾
Pitts,Ft.W.&Chi.gtd	.....	130	130	.....	.....	.....
1st mortgage	.....	.....	.....	.....	.....	.....
2d mortgage	.....	.....	.....	.....	.....	.....
3d mortgage	.....	.....	.....	.....	.....	.....
Pullman Palace Car	.....	.....	128¼	128¾	.....	129¾
Quicksil'r Min'g Co	.....	.....	.....	9¾	9¾	9¾
Preferred	45¼	.....	.....	.....	46	.....
St. Louis & San Fran	39	39	38¼	40½	42	42⅞
Preferred	51¼	.....	52	54⅜	57½	58
1st Preferred	97	.....	95⅜	98½	98	94⅛x
St. L., Alt'n & T. H.	31½	30¾	.....	32½	34¾	34
Preferred	74½	70	.....	.....	72	71
1st mortgage	.....	.....	.....	.....	.....	.....
2d mort. pref	.....	.....	.....	.....	.....	.....
Income bonds	.....	.....	.....	.....	.....	.....
St. L., Iron Mt. & S	.....	.....	.....	.....	.....	.....
1st mortgage	.....	.....	.....	.....	.....	.....
2d mortgage	.....	.....	.....	.....	107	106⅜
Toledo and Wabash	.....	.....	.....	.....	.....	.....
1st mortgage	.....	.....	.....	.....	.....	.....
2d mortgage	.....	.....	.....	.....	.....	.....
7s, Consolidated	.....	99⅛	.....	.....	.....	.....
St. Louis Division	.....	.....	104	105	.....	.....
Union Pacific	114½	116⅛	116⅞	116⅜	116¾	117⅛
1st mortgage	.....	.....	117	.....	.....	117¼
Land Grant 7s	115	.....	.....	.....	.....	.....
Sinking Fund 8s	.....	.....	.....	120½	122	.....
United States Ex	72¾	.....	73	.....	.....	.....
Wabash, St. L. & Pac	33⅜	34¼	35⅛	35⅛	35⅜	37
Preferred	57⅜	58¼	56¼	63⅜	63	64
New mort. 7s	.....	.....	.....	.....	.....	.....
Wells-Fargo Ex	126	.....	126	.....	126¼	.....
Western Pacific b'ds	111	112	.....	.....	.....	.....
Western Union Tel.	88⅛	88½	88⅝	88½	88¾	89⅛
7s, S.F conv., 1900	.....	116½	.....	117	.....	.....
FEDERAL STOCKS :—						
U. S. 4s, 1907, reg	.....	.....	118⅞	119	119¼	119⅞
U. S. 4s, 1907, coup	118⅝	.....	.....	119	.....	.....
U. S. 4½s, reg	.....	.....	.....	.....	.....	.....
U. S. 4½s, 1891, coup	.....	.....	.....	.....	114¼	.....
U. S. 5s, cont'd at 3½	.....	101⅜	.....	.....	102½	.....
U. S. 6s cont'd at 3½	.....	.....	.....	.....	.....	.....
Dt. of Col. 3-65s, reg	.....	.....	.....	.....	.....	.....
Dt. of Col.3-65s,coup	.....	.....	.....	.....	.....	.....

Boston Stock Exchange.

Closing Prices for the Week Ending July 19.

	Th.13.	F.14.	Sat.15.	M.17.	Tu.18.	W. 19.
Atch.,Top.&San.Fe.	93⅜	93¼	93¾	93¾	93¾	94
1st mortgage	.....	120	.....	120	.....	.....
Land Grant 7s	.....	.....	.....	115	.....	.....
Boston & Albany	165½	.....	165½	166	165¾	165¼
Boston and Lowell	.....	.....	102½	.....	102¾	.....
Boston & Maine	.....	148¾	.....	.....	148	.....
Boston& Providence	.....	.....	.....	160	.....	.....
Bos'n,Hart.& Erie7s	52¾	52¾	53⅛	57	57¾	58
Burl.& Mo.R.L.G.7s	.....	.....	.....	.....	.....	.....
Burl.& Mo.R.in Neb	.....	.....	.....	.....	.....	.....
6s, exempt	.....	.....	112	112	.....	.....
4s	83⅛	.....	.....	.....	.....	.....
Chi.,Burl. & Quincy	130¼	130	130	133	134⅛	134¼
Cin.,Sand&Clev($50)	28½	28¼	29⅛	.....	29¼	29
Concord ($50)	.....	.....	.....	.....	97½	.....
Connecticut River	.....	.....	.....	.....	.....	.....
Eastern	44¼	43½	44⅛	46	47½	48¾
New 4½ Bonds	109¼	109⅜	.....	109⅞	109⅞	109⅞
Fitchburg	126½	.....	.....	.....	.....	.....
N.Y. & New England	51¾	.....	.....	57	57½	58
7s	.....	116¼	.....	.....	117	117
Northern N. H.	109	.....	.....	109	.....	108½
Norwich&Worcester	.....	.....	.....	.....	.....	.....
Ogden & Lake Cham	.....	.....	.....	.....	.....	.....
Old Colony	.....	132	.....	132	132	132
Ph.,Wil.&Balt.($50)	.....	.....	.....	62	.....	.....
Portl'd,Saco & Ports	.....	.....	.....	.....	115	.....
Pueblo & Ark Val 7s	.....	114½	.....	.....	115	115½
Pullman Palace Car	.....	.....	.....	.....	.....	129
Union Pacific	114½	115	116½	117	117½	117¼
6s	.....	.....	117	117¼	.....	.....
Land Grant 7s	.....	113½	113¼	.....	.....	.....
Sinking Fund 8s	.....	.....	.....	119¾	.....	119½
Vermont & Mass	.....	.....	.....	.....	.....	.....
Worcester & Nashua	.....	.....	.....	.....	.....	.....
Cambridge (Horse)	.....	.....	.....	.....	.....	.....
Metropolitan(Horse)	.....	.....	.....	.....	75	.....
Middlesex (Horse)	.....	.....	.....	.....	.....	.....
Cal.&Hecla Min'gCo	248	.....	243½	243x	243	.....
Quincy	64½	64	64¼	64½	64¾	65

Philadelphia Stock Exchange.

Closing Prices for the Week Ending July 18.

	W.12.	Th.13.	F.14.	Sat.15.	M.17.	Tu 18.
Allegh'y Val. 7 3-10s	.....	.....	.....	.....	.....	.....
7s, Income	50	.....	.....	.....	.....	.....
Buff., Pitts & West.	18⅝	18¼	18⅞	18¾	19¼	19¼
Camd'n & Am. 6s, '83	.....	.....	.....	.....	.....	.....
6s, 1889	.....	.....	.....	.....	.....	.....
Mort. 6s, 1889	.....	112½	.....	113	.....	.....
Camden & Atlantic	.....	.....	.....	.....	.....	.....
Preferred	.....	.....	.....	.....	.....	.....
1st mortgage	.....	.....	.....	.....	.....	.....
2d mortgage	.....	.....	.....	.....	.....	.....
Catawissa	24½	24¾	.....	25	.....	.....
Preferred	.....	.....	.....	55	55	.....
2d pref	53⅛	.....	.....	.....	.....	.....
7s, new	.....	.....	.....	.....	.....	.....
Del. & Bound Brook	.....	.....	.....	.....	.....	.....
7s	.....	.....	.....	.....	.....	.....
Elmira&Williamsp't	.....	.....	.....	.....	.....	.....
Preferred	.....	.....	.....	.....	.....	.....
Hunt. & B. Top Mt.	.....	15¾	15¾	15½	15½	15½
Preferred	.....	28	28½	.....	.....	28
2d mortgage	.....	.....	.....	.....	.....	.....
Lehigh Navigation	.....	42¼	42¼	42⅝	42⅝	42⅜
6s, 1884	.....	103¼	.....	103½	103¼	103¼
Gold Loan	112	.....	111½	.....	.....	.....
Railroad Loan	116½	.....	.....	116½	.....	.....
Conv. Gold Loan	.....	.....	.....	.....	.....	.....
Consol. Mort, 7s	.....	.....	.....	.....	.....	.....
Lehigh Valley	60¾	60¾	60⅝	61	61⅛	.....
1st mort. 6s, coup	.....	121½	.....	.....	.....	123
1st mort. 6s, reg	.....	.....	.....	.....	.....	123
2d mort. 7s	.....	.....	.....	.....	134	.....
Consol mort. 6s	.....	.....	121	.....	.....	.....
Consol.mtg.6s,reg	.....	.....	.....	.....	.....	121
Little Schuylkill	56¼	.....	57	.....	.....	56¼
Minehill&Sch.Hav'n	.....	.....	61½	.....	.....	.....
North Pennsylvania	65	65	.....	.....	.....	.....
1st mortgage 6s	.....	.....	.....	.....	.....	.....
2d mortgage 7s	.....	121	.....	.....	.....	124
Genl. mtg.7s,coup	.....	.....	.....	.....	.....	.....
Genl. mtg. 7s, reg	121½	.....	.....	.....	.....	.....
Northern Central	.....	48¼	48½	48⅜	49¾	.....
5s	.....	.....	.....	.....	.....	.....
Northern Pacific	44⅜	45⅜	45⅛	46⅜	48	48⅛
Preferred	83½	84⅞	86	87½	88	89½
Pennsylvania R. R.	60	60¾	60¾	61⅜	62⅛	62¾
1st mortgage	.....	.....	.....	.....	.....	.....
Gen'l mort	.....	.....	.....	.....	.....	.....
Gen'l mort reg	125	.....	.....	.....	.....	125
Consol. mort. 6s	118	.....	.....	119	.....	119
Consol. mort. reg	.....	.....	.....	.....	.....	.....
Pa. State 5s, new	.....	.....	.....	.....	116½	.....
do 4s, new	116	.....	.....	.....	.....	.....
do 3½s, 1912	.....	.....	.....	.....	.....	.....
Phila. & Reading	29¼	29¼	29⅛	30¼	30¼	30½
1st mortgage 6s	.....	.....	.....	.....	.....	121
7s of 1893	.....	.....	.....	.....	.....	.....
7s, new convert	78¾	.....	.....	78	.....	78
Consol. mort. 7s	123¾	123¾	123¾	123¾	.....	123¾
Consol. mort. reg	.....	.....	.....	.....	.....	.....
Gen'l mort. 6s	96½	96¾	96¾	96¾	96¼	96½
Def.Income bonds	.....	.....	.....	.....	.....	.....
Philadelphia & Erie	.....	16¼	16¼	18	18½	.....
1st mortgage 5s	.....	105	.....	.....	.....	.....
2d mortgage 7s	.....	.....	.....	.....	.....	.....
Pittsb.,Cin.&St.L.7s	.....	.....	96	.....	.....	.....
Pitts.,Tit.&Buff. 7s,	.....	.....	.....	.....	.....	.....
Schuylkill Navi't'n.	.....	.....	.....	.....	.....	.....
Preferred	.....	13¾	.....	13¾	.....	14
6s, 1895	.....	.....	.....	.....	.....	.....
6s, 1882	.....	.....	.....	.....	.....	.....
United Co. of N. J.	188	188	188	188	188	188
Hestonville, (Horse)	.....	.....	.....	.....	16½	16⅛
Chestnut&Wal.(do)	.....	.....	.....	.....	.....	.....

Baltimore Stock Exchange.

Closing Prices for the Week Ending July 18.

	W. 12.	Th. 13.	F. 14.	Sat. 15.	M. 17.	Tu. 18.
Baltimore & Ohio..	.....	195¼	195¼	.....	.....	.....
6s, 1885.....	.....	. . .	.....	.....	.....	....
Central Ohio ($50)..	...	.....	.....	.....	.....	.....
1st mortgage.....	.....	.....	.....	.....	.....	.....
Marietta & Cincin'ti	.....	.....	.....	.....	.....	.....
1st mortgage, 7s..	.....	.....	.....	.....	.....	....
2d mortgage, 7s..	.....	.....	.....	.....	.....	.....
3d mortgage, 8s..	.....	.....	.....	.....	.....	.....
Northern Cen. ($50)	.....	56¼	.....	.....	.....	.....
2d mort., 6s 1885..	.....	.....	.....	.....	.....	.....
3d mort., 6s, 1900.	.....	.....	....	.....	.....	.....
6s, 1900, gold.....	.....	115	.....	.....	.....	.....
6s, 1904, gold.....	.....	115	.....	.....	.....	.....
Pitts. & Connellsv. 7s	.....	....	....	.....	.....	.....
Virginia 6s, Consol.	58	60⅜	57⅛	58	58	58
Consol. coupons..	60⅜	60¼	60	61	60⅛	60¼
10 40 bonds.....	43	40	43	.....	.....	43¾
Def'd Certificates.	.....	.....	.....	.....	.....	.....
Western Maryland..	.....	.....	.....	.....	.....	.....
1st M., end. by Balt	.....	.....	.....	....	.....	.....
2d M. do .	.....	.....	.....	.....	.....	....
3d M., do .	.....	.....	.....	.....	.....	.....
1st M., unendors'd	.....	.....	.....	.....	.....	.....
2d M., end. WashCo	.....	.....	.....	.....	.....	.....
2d M., preferred..	.....	.....	.....	.....	.....	105½
City Passenger R R.	....	.....	.....	.....	.....	....

London Stock Exchange.

	Closing Prices — June 30.		July 7.	
Baltimore & Ohio 5s, 1927.....	105	107	105	107
Central of N. J,, $100 shares....	93	98	93	98
Do. consol. mort.....	110	112	110	112
Do. Income Bonds.....	88	92	88	92
Central Pacific of Cal., $100 shs.	93	94	94	95
Do. 1st mort. 6s, 1895-'98.....	115	117	117	119
Det., G'd Haven & Mil. Equip bds.	115	117	115	117
Do. Con. M. 5p.c., till '83 aft'r 6p.c.	112	114	112	114
Illinois Central $100 shares.....	136	137	136⅛	137½
Do. S. F. 5s, 1903.....	106	108	106	108
Lehigh Valley Cons. mortgage..	115	119	115	119
Louisville & Nashville mort 6s.	98	100	98	100
Do. capital stock $100 shares.	68	70	67	69
N. Y. Cent. & Hud. R. mt. bds..	132	135	132	135
Do. $100 shares.....	133	135	134	135
Do mort. bonds (stg.).....	124	126	121	123
N. Y., Lake Erie & West., $100 shs	36⅛	37	36⅜	37⅛
Do. 6 p. c. pref. $100 shares..	74	76	74	76
Do. 1st Con. Mort. bds (Erie) .	128	130	128	130
Do. do. Funded Coupon bds.	124	126	124	126
Do. 2d Consol Mort. bonds...	96	97	96⅛	97⅛
Do. do. Funded Coupon bds..	92	94	92	94
N. Y., Pa. & Ohio 1st mort. bonds.	43	45	43	44
Do. Prior Lien bds (sterling)..	103	108	103	108
Pennsylvania, $50 shares.....	59⅛	60	60⅛	61
General Mortgage.....	124	127	121	124
Phil. and Erie Gen. mort. 6s, 1920.	119	121	117	119
Philadelphia & Reading $50 shs	29⅜	30⅛	29⅛	29⅜
General Consol Mortgage.....	116	118	116	118
Do. Improvement Mortgage..	103	105	103	105
Do. Gen. Mtg. '74, ex-dof'd coup.	99	101	97	98
St. L. Bridge 1st mort. gold b'd.	125	127	125	127
Do. 1st pref. stock.....	95	98	95	98
S. P'fic of Cal., 1st mort. 6s, 1905-6.	107	109	107	109
Union Pacific 1st. mtg	117	119	117	119
Wabash, St. L. & P. $100 shs.....	28	30	29	31
Do. $100 pref. shares.....	51½	52½	52⅛	53⅛
Do. gen. mort. bonds.....	79	81	80	82

AMERICAN RAILROAD JOURNAL.

Financial and Commercial Review.

THURSDAY EVENING, July 20, 1882.

The rates during the day for call loans were 2½@3 per cent. Time loans were 3 to 5 per cent. Prime mercantile paper ranged from 4 to 5½ per cent.

The posted rates for prime bankers' sterling were 4.86 and 4.89. The actual rates were 4.85@¼ and 4.88@½, with cable transfers 4.89@½, and prime commercial bills 4.83½@4.84. The actual rates for Continental bills are as follows; Francs, 5.18¾ and 5.15, Marks, 94⅝@¾, and 95¾@½, and Guilders, 40⅛ and 40⅜.

The New York, Lake Erie and Western Railroad Company has made an arrangement with Messrs. Drexel, Morgan & Co. to extend, at 4½ per cent, for forty years from their maturity, the third mortgage bonds of the New York and Erie Railroad Company, which mature on the 1st of March, 1883. The present holders of the bonds have the option to extend their bonds without cost by depositing the same with Messrs. Drexel, Morgan & Co. for that purpose prior to December 31, 1882. The total outstanding issue is $4,852,000. This is a similar negotiation to those previously made by the same company for the extension of the second and fourth mortgages of the New York and Erie Railroad Company, which were extended at 5 per cent, and are now selling at 111 and 108 respectively.

A recent circular of Messrs. John A. Hambleton & Co., of Baltimore, Md., referring to the reorganization of the Marietta and Cincinnati Railroad Company, says that of the $13,000,000 bonds of that company, only about $800,000 have not been deposited in the Trust Company, and the few bonds still out are being reduced by small amounts which are coming in. Over two-thirds of the stock of the Marietta and Cincinnati Railroad Company has been deposited and the assessment paid. The scheme of reorganization gives universal satisfaction, and it is unprecedented that such large amounts of bonds and stock should have been deposited in so short a time. Under the plan of reorganization the first mortgage bonds are to be funded, principal and accrued interest, into new fifty-year bonds, guaranteed principal and interest by the Baltimore and Ohio Railroad Company, and bearing interest at 4½ per cent per annum. Up to November 1, 1881, there was about 30 per cent of accrued interest on Marietta and Cincinnati first mortgage bonds, making the principal and accrued interest 130 per cent, for which the holders of a Marietta and Cincinnati first mortgage bond will receive the new 4½ per cent bonds. At present Marietta and Cincinnati firsts, carrying all back interest, are selling at about 128. If the new 4½ per cent bonds do not sell for more than 100, there is a clear profit of 5 per cent in buying Marietta and Cincinnati firsts at present figures, as at 4½ per cent from November 1, 1881, to date, there has accrued 6 per cent on the new bonds, which will be dated November 1, 1881. Up to November 1, 1881, there had accrued 31½ per cent of interest on Marietta and Cincinnati second mortgage bonds, making a total fundable value of 131½ per cent. Of this amount 120 per cent will be funded into new second mortgage 5 per cent bonds and 11½ per cent into new third mortgage bonds bearing interest at 3 per cent for ten years and 4 per cent thereafter. If the new 5 per cent bonds sell at 90 and the thirds at 40, it would be equivalent to about 112 for the present second mortgage bonds, which are now selling at 101. Up to November 1, 1881, there had accrued about 40 per cent in back interest on Marietta and Cincinnati third mortgage bonds, making a total fundable value of 140 per cent. Of this amount 66 per cent is to be funded into new third mortgage bonds—3 per cent for 10 years and 4 per cent for 40 years—and the balance, 74 per cent, into 5 per cent income bonds. If the new third mortgage bonds and incomes sell at 45, which we consider low prices for them, the present third mortgage bonds are worth 63.

The Chief of the Bureau of Statistics at Washington reports that the total values of the exports of domestic provisions, tallow and dairy products, during the month of June, 1882, were $7,767,186; during the month of June, 1881, $9,601,723. Six months ended June 30, 1882, $50,723,402; six months ended June 30, 1881, $71,165,337. The total values of exports of provisions and tallow for eight months ended June 30, 1882, $65,489,328; for eight months ended 30, 1881, $88,283,933. Dairy products for two months ended June 30, 1882, $2,280,384; for two months ended June 30, 1881, $3,835,984.

The following is the 11th section of the Bank Charter Extension bill which relates to the refunding of the 3⅛s into 3 per cents.

"That the Secretary of the Treasury is hereby authorized to receive at the Treasury any bonds of the United States bearing 3⅛ per cent interest, and to issue in exchange therefor an equal amount of registered bonds of the United States of the denominations of $50, $100, $500, $1,000, and $10,000 of such form as he may prescribe, bearing interest at the rate of 3 per cent per annum, payable quarterly, at the Treasury of the United States. Such bonds shall be exempt from all taxation by or under State authority, and be payable at the pleasure of the United States; provided, that the bonds herein authorized shall not be called in and paid so long as any bonds of the United States heretofore issued, bearing a higher rate of interest than 3 per cent, and which shall be redeemable at the pleasure of the United States, shall be outstanding and uncalled. The last of the said bonds originally issued under this act, and their substitutes, shall be first called in, and this order of payment shall be followed."

We give on another page the circular of the Secretary of the Treasury to the holders of extended 3⅛ per cent bonds, advising of the means to be employed in exchanging the same for 3 per cent bonds. The amount of the 3⅛ per cent bonds not called for redemption is about $416,500,000, of which $401,500,000 are extended 5s. About half of these bonds are held by the national banks, which will probably hasten to exchange for the 3 per cents.

Considerable comment has been made over the above section of the Bank Charter Extension bill providing for the issue of 3 per cent bonds, because of their exemption from "all taxation by or under State authority" only. Heretofore such bonds have been specifically exempt from taxation of every character, national, State or municipal. Any objection to the bill in its present shape, however, does not hold good, as the taxation referred to is amply provided for in Section 3,701 of the Revised Statutes, which is as follows; "All stocks, bonds, Treasury notes and other obligations of the United States shall be exempt from taxation by or under State or municipal, or local authority."

The Chief of the Bureau of Statistics reports that the total value of the exports of domestic breadstuffs during the month of June, 1882, were $9,247,466; do. 1881, $20,605,678. Six months ended June 30, 1882, $64,833,581; do. 1881, $111,980,917. Twelve months ended June 30, 1882, $176,977,496; do. 1881, $265,561,091.

A dispatch from Tallahassee, Florida, says that $665,000 have been paid by Sir Edward J. Reed, in addition to the Pensacola and Georgia Railroad bonds he holds for credit on the judgment. The trustees will pay at the office of the State treasurer all first mortgage bonds and coupons of the Pensacola and Georgia Railroad Company not in litigation.

In 1865 the total interest-bearing debt of the United States was computed at $2,381,530,295, bearing an aggregate annual interest of $150,977,698. At the close of the fiscal year ending June 30, 1882, the total debt bearing interest was $1,463,810,400, with an annual interest charge of $57,360,110. The actual reduction of this debt during the period mentioned was $917,719,895; the practical reduction, however, when the present interest charge is considered, is very much greater.

The Supreme Court of Vermont, through the First Associate Justice, has filed its mandate in the railroad case of James R. Langdon and others vs. the Vermont and Canada Railroad Company and others. The decree of the Court of Chancery is reversed and the case is remanded to that Court, with directions to cause the accounts of the managers of the trust property, from the time the trust was created by the decree of the Court in 1861 until the present time, to be settled and all equitable offsets ascertained and applied; also, that the managers in possession of the property be required to file and settle their accounts at frequent stated times, so that the condition of the trust may be readily ascertained at any given time.

The stockholders of the Scioto Valley Railroad Company, at their meeting in Columbus, Ohio, on the 14th inst., authorized an increase in the capital stock from $5,000,000 to $10,000,000; they also voted to create a new mortgage on the property of $7,500,000, which is termed the general consolidation mortgage, the design being to take up existing mortgages and make this the only mortgage on the property. It was further agreed to extend the line from Columbus, Ohio, to Fort Wayne, Indiana, increasing its length from 150 to 300 miles.

It being conceded that the Tennessee funding bill of May last is the final basis of settlement of the State debt, steps are being taken to list the new bonds at the Stock Exchange. These are given for 60 per cent principal and interest of the old bonds. They bear interest at 3 per cent for two years, 4 per cent for two years, 5 per cent for two years, and 6 per cent thereafter.

The Treasurer of the Province of Quebec is asking for tenders for a 5 per cent loan of $1,500,000. The debentures are in amounts of $500 each and have thirty years to run. Tenders will be received till the 22d inst., but none below par will be accepted. Payments will be received by instalments.

The arrangement recently made by the Baltimore and Ohio Railroad Company to purchase 11,250 shares of the "minority stock" of the Cincinnati and Baltimore Railroad Company removes the last obstacle to the reorganization of the Marietta and Cincinnati Railroad Company. The price paid is $55 per share of the par value of $50 each, making the monetary amount of the transaction $618,750. The purchase is to be consummated on the 1st of August. The Cincinnati and Baltimore Railroad extends from the north rail of the Cincinnati, Hamilton and Dayton Railroad, near its Millcreek crossing, to the

south end of the Marietta and Cincinnati Bridge at Ludlow Junction, a distance of about six miles. The Marietta and Cincinnati, when being built, exhausted its credit and means when it reached Millcreek, at Ludlow Junction, and the Cincinnati and Baltimore was built as a means of giving it access to the city.

From the quarterly report of the Treasurer of the State of Pennsylvania it appears that during the three months ending June 30, 1882, $669,567.32 were paid in liquidation of the State debt and interest. The deposits in the various banks of the State on account of the sinking fund amounted on the 1st instant to $2,671,597.94. The entire debt at that time was $20,934,483.28, of which but $560,000 bears interest at the rate of six per cent, the remainder having been funded at a lower rate.

The receiver of the Ohio and Mississippi Railroad reports the receipts for the month of June at $512,068.64, and the expenditures at $268,613.66, leaving a balance in cash July 1, 1882, of $243,454.98. The disbursements were for: vouchers prior to November 18, 1876, $308.05; vouchers subsequent to November 17, 1878, $131,736.54; pay-rolls, $136,174.20; arrearages, $394.47; total, as above, $268,613.66.

At a meeting of the directors of the Louisville and Nashville Railroad Company, held in this city on the 18th inst., an official statement of the company's business for the fiscal year ending June 30, 1882, was presented. This statement placed the gross earnings for the year at $11,953,825, and operating expenses at $7,414,067, leaving the net earnings from traffic, $4,539,758. Other income is placed at $252,598, making a total of $4,792,356. The fixed charges for the year were $3,744,540, and taxes amounted to $309,660, making a total of $4,054,200, which taken from the income account leaves a surplus of $738,156. From this amount the dividend of $543,900, declared February 10, 1882, and the possible loss of $110,000 on the Georgia Railroad lease, are deducted, leaving a balance to be carried forward to the account of the ensuing year of $84,256.

The Secretary of the Treasury has decided to affirm the assessment of duty at 2¼ cents a pound on the axle forgings imported at Toledo, Ohio, which question has been under consideration for the last three months. This decision is against the importer, who claimed that the article was not a finished axle, but was dutiable only as rolled or hammered iron.

The following quotation of sales of railway and other securities, for the week, are in addition to those given elsewhere in our columns.

New York.—Atchison, Topeka and Santa Fe, 93⅛; Atlantic and Pacific 1st, 99; Boston and New YorkAir Line pref., 78½; Boston, Hartford and Erie 1st, 58; Buffalo, New York and Erie 1st, 1916, 130; Cedar Falls and Minn., 23; Chicago, St. Paul, Minneapolis and Omaha, 47; do. pref., 108; do. consol., 104¾; Columbia and Greenville pref., 71¾; do. 1st, 71; Central Iowa, 27; do. 1st, 114; Cincinnati, Sandusky and Cleveland, 58; Chicago, St. Louis and New Orleans, 82½; do. 5s, 102½; Col., Chi. and Ind. Cent. inc., 50; Chesapeake and Ohio cur. int., 53; do. pur. money fund, 108; Chicago, Milwaukee and St. Paul 2d, 105; do. Chicago and Lake Superior div. 1st, 94¾; do. Chicago and Pacific West div. 1st, 92¾; do. Mineral Point div. 1st, 91½; Chicago and Northwestern S. F. 5s, 101¼; Cairo and Fulton 1st, 106¾; Dubuque and Sioux City, 87½; Denver and Rio Grande, 62¾; do. 1st, 113⅜; do. consol., 102; Denver, South Park and Pacific 1st, 101¾; Evansville and Terre Haute 1st, 96; East Tenn., Va. and Ga., 12⅜; do. 1st, 113; do. pref., 20; do. inc., 48; do. 5s, 75; Elizabethtown, Lexington and Big Sandy 6s, 94½; Green Bay, Winona and St. Paul, 12⅞; do. inc., 21; Gulf, Colorado and Santa Fe 1st, 106¾; Galveston, Harrisburg and San Antonio 1st, 104½; Hudson River 2d S. F., 106½; Indiana, Bloomington and Western, 43¾; do. inc., 60; do. 1st, 90; do. Eastern div., 1st, 94¾; International and Gt. Northern 1st, 106½; do. coup. 6s, 89½; Indianapolis, Decatur and Springfield 1st, 103; Kansas Pacific 6s, Denver div. ass., 110; 6s, 1896, 110; do. 1st consol., 104; Keokuk and Des Moines, 19; do. 1st, 106; Lehigh and Wilkesbarre inc., 83; Louisiana and Missouri River, 19; Lake Erie and Western, 38¾; do. inc. 60; do. Sandusky div. inc., 52; Long Island, 57½; do. consol. 5s, 97¾; Louisville, New Albany and Chicago, 60; do. 1st, 105½; Lafayette, Bloomington and Muncie 1st, 101; do. inc., 57; Louisville and Nashville, Cecelian Branch 1st, 106½; do. gen'l mort. 6s, 65¾; Manhattan Beach, 22; Minn. and St. Louis, 34; do. pref., 70¾; do. 1st, 115½; Mobile and Ohio, 22; do. 1st deben., 76; do. 2d deben., 40; do. 1st mort., 108; Missouri, Kansas and Texas, 39; do. gen'l mort. 6s, 87; do. consol. 7s, 110; do. 2d, 69½; Missouri Pacific, 104; do. 1st consol., 101¼; do. 3d, 110½; Memphis and Charleston, 58; Milwaukee, Lake Shore and Western, 53¾; do. 1st,100; Marietta and Cincinnati 2d pref. 9, Metropolitan Elevated 2d, 90; Michigan Central 5s, 104; New York, Chicago and St. Louis, 15¾; do. pref.; 33½; do. 1st, 88¼; Nashville, Chattanooga and St. Louis, 62½; New York, Ontario and Western, 29; Norfolk and Western, 19; do. pref., 54⅜; do. gen'l mort. 101¾; Northern Pacific 1st, 103⅛; New Orleans Pacific 1st, 87½; New York City and Northern gen'l mort., 55; Ohio Central, 17¼; do. inc., 38; Ohio Southern, 15⅝; do. 1st, 83; do. inc., 30; Oregon Railway and Nav., 147; do. 1st, 107; Oregon Transportation, 83⅛; Peoria, Decatur and Evansville, 38½; do. 1st, 110; Rome, Watertown and Ogdensburg inc., 45; do. extended 5s, 83; Rochester and Pittsburgh inc., 45; do. 1st, 104½; Richmond and Alleghany, 26; do. 1st, 87; Richmond and Danville, 105; do deben., 73; do. 1st, 99½; Richmond, Danville and West Point, 57; St. Louis, Kansas City and Northern, R. E. 7s, 106½; South Pacific of Missouri 1st, 104½; South Carolina 1st, 99; do. 2d; 84½; do. inc., 49½; St. Paul and Duluth, 34; do. pref., 89; St. Paul, Minneapolis and Manitoba, 143; do. 2d, 113; St.Louis, Iron Mountain and Southern 5s, 82¾; do. Cairo, Ark. and Texas 1st, 105⅝; do. Ark. Branch 1st, 107½; Southern Pacific of California 1st,, 105⅝; St. Louis and San Francisco 2d, Class B, 90; Toledo, Peoria and Western 1st, 110; Texas Central 1st, 107; Toledo, Delphos and Burlington inc., 23; Texas and St. Louis, 25; Texas and Pacific, 49¾; do. inc. Land Grant, 70¼; do. Rio Grande div. 1st. 88⅞; Virginia Midland, 45⅝; do. inc., 67; Wabash, St. Louis and Pacific, gen'l mort. 6s, 86; ; do. Chicago div, 1st, 81¾; Arkansas 7s, Central R. R. issue, 24½; Alabama, Class A. 79¾; Missouri 6s, 1882-83, 100; do. 6s, 1888, 108; do. H. and St. J. issue, 1886, 107½; American District Telegraph, 50; New York and Texas Land, 45¾; Sutro Tunnel, ¾; Colorado Coal and Iron, 49½; do. 6s, 90½; Consolidation Coal, 33; Cameron Coal, 36¾; Maryland Coal, 17; Homestake Mining, 18⅛; Ontario, 36; Standard, 17¼.

Boston.—Atchison, Topeka and Santa Fe plain 5s, 88; Atlantic and Pacific blocks, 111½; do. inc., 30; do. 6s, 97¼, Boston, Clinton, Fitchburg and New Bedford, 64; Boston Land, 8¼; Burlington and Missouri River in Neb. 6s, non-exempt, 104¼; Boston Water Power, 4¼; Central of Iowa, 28; Connatton Valley, 8½; California Southern 6s, 84; do. 5s, 80½; Chicago, Milwaukee and St. Paul, Wisconsin Valley div. 1st, 100½; do. Dubuque div. 1st, 104; Chicago and West Michigan, 69; Connecticut and Passumpsic Rivers pref., 92; Chicago, Burlington and Quincy 4s, 86¼; do. 4s, Denver ext., 85¼; Connecticut River R. R. pref., 167¼; Detroit, Lansing and Northern 7s, 117½; Flint and Pere Marquette. 25; do. pref., 95; Iowa Falls and Sioux City, 92; Kansas City, Fort Scott and Gulf, 77; do. 7s, 112½; Kansas City, St. Joseph and Council Bluffs 7s, 115½; Kansas City, Lawrence and Southern 5s, 105; Little Rock and Fort Smith, 56, Louisiana and Mirsouri River, 18; do. pref., 35; Mexican Central, 30; do. 7s, 87¾; do. blocks No, 2, 123¼;do. No. 3, 110; do. inc., 32¼; Marquette, Houghton and Ontonagon, 75¾; do. pref., 122½; Massachusetts Central, 3¼; do. 6s, 39; Michigan Central, 95⅞; New Mexico and Southern Pacific 7s, 115; New York and New England 6s, 105⅜; Northern Pacific 6s, 102⅝; Oregon Short Line 6s, 102½; do. subscriptions, 118; Portsmouth, Gt. Falls and Conway, 34¼; Rutland pref.. 24¾; do. 6s, 100; Sonoro 7s, 107; Summit Branch, 13¼; Southern Kansas and Western 7s, 109; Toledo, Delphos and Burlington 6s, 66½; do. inc., 22⅞; do. Southeast div. inc., 20; Toledo, Cincinnati and St. Louis, 8⅝; do. 6s, 70; do. Dayton div. inc., 19; Wisconsin Central, 19; do. pref.. 30; Allonez Mining Co.. 2½; Atlantic, 16¼; Brunswick Antimory, 12; Franklin, 14⅛; Huron, 1¾; Harshaw, 2; Napa Consolidated Quicksilver, 5⅛; Osceola, 32; Penabic, 12; Silver Islet, 15; Sullivan, 1⅛.

Philadelphia.—Buffalo, Pittsburgh and Western, 27¾; Cincinnati 7.30s, J. and J., 130; do. M. and N., 131½; Central Transportation, 34; Connecting Railroad 6s, 119; Morris Canal Boat Loan 7s, 105; New Orleans Pacific 6s, 88; Philadelphia. Germantown and Norristown, 111½; Philadelphia and Reading Railroad scrip, 100; do. def. inc., 29; do. deben. 6s, 60 ; Philadelphia City 4s, 1883, 101; do. 6s, 1904, 131½; do. 1889, 130; Philadelphia and Reading Coal and Iron mort. 7s, 80; Pittsburgh Avenue 7s, 1885, 107¼; Pennsylvania oonsol. 5s, 106; Pennsylvania Company 4½s, 96½; Philadelphia and Trenton, 187; Philadelphia, Wilmington and Baltimore 4s, 95; Pennsylvania Canal 6s, 90; Schuylkill Nav. 6s, 1907, 92; St. Paul and Duluth pref., 85¾; Texas and Pacific 1st, 107½; do. consol. mort. 6s, 96; Union and Titusville 7s, 93; West Jersey, 46. Western Pennsylvania 6s, 105; do. Pittsburg Branch, 104. The latest quotations are: City 6s, 108@120; do. free of tax, 127@133; do. 4s, new, 108@113; Pennsylvania State 5s, new loan, 118½@119½; do. 4s, old, 108@112; do. 4s, new, 115@116; Philadelphia and Reading Railroad, 30⅜@30½; do. consol. mort. 7s, reg. 124@125; do. gen'l mort. 6s, coupon, 96@97; do. 7s, 1893, 118½@119½; do. new conv., 77½@78½;United NewJersey R.R.and Canal,187½@188½; Buffalo, Pittsburg and Western, 19⅝@19½; Pittsburgh, Titusville and Buffalo 7s, 95@97; Camden and Amboy mort. 6s, 1889, 112½@113½; Pennsylvania R. R., 62¾@62½; do. general mort. 6s, coupon, 124@125; do. reg., 124¾@125¼; do. consol. mort. 6s, reg., 118@120; Little Schuylkill R. R., 56@56½; Schuylkill Navigation, pref., 13¾@14¼ ; do. 6s, 1882, 91@93 ; Elmira and Williamsport pref., 58@60; do. 5s, 100@101; Lehigh Coal and Navigation, 42¼@42½; do. 6s, 1884, 103@103½; do. R. R. loan, 116@117; do. Gold Loan, 111@112; do. consol. 7s, 116¼@117; Northern Pacific, 48@48⅛; do. pref., 89@89½; North Pennsylvania, 64½@65½; do. 6s, 105@107; do. 7s, 123@126; do. 7s, General mort. reg., 122½@123; Philadelphia and Erie, 18@19; do. 7s, 114@115; do. 5s, 104@105; Minehill, 61@62; Catawissa 24@25; do. pref., 55@55½; do. new pref., 53@54; do. 7s, 1900, 120@—; Lehigh Valley, 61⅝@62; do.6s, coupon, 122½@123¼; do. reg., 122¼@123½; do. 7s, 133⅜@134½; do. consol.mort. 120½@121½; Fifth and Sixth streets (horse), 150@160; Second and Third, 109@112; Thirteenth and Fifteenth, 65@75; Spruce and Pine, 40@45; Green and Coates, 80@90; Chestnut and Walnut, 75@93; Germantown, 69@70; Union, 110@115; West Philadelphia, 105@115; People's 15@15¼; Continental, 100@102.

Baltimore.—Atlanta and Charlotte, 7s; do. 1st, 109¼; Atlantic Coal, 1.20; Baltimore City 6s, 1890, 117¼; do. do. 6s, 1886, 109; do. 6s, 1884, 103¼; do. 6s, 1893, 121; do. 5s, 1916, 125; Baltimore and Ohio 2d pref., 120, Canton Co. 6s, 102½; Columbia and Greenville 1st, 102¼; do. 2d, 85½; Charlotte, Columbia and Augusta. 40; George's Creek Coal, 91½; Marietta and Cincinnati 1st Trust certificates, 127; do. 2d do. 101½; do. 3d, do., 56¼, Maryand Defense 6s, 105; Ohio and Mississippi, Springfield div. 1st, 117½; Parkersburg Branch, 10; Richmond and Danville deben., 68⅝; Sutro Tunnel, 0.42; Virginia Peelers coupons, 39; do. 10-40s coupons, 65½; Virginia Midland, new, 40; do. pref.. 100; do 2d mort., 109¾; do. 4th mort., 52; do. 5th mort., 95½. Wilmingmington,Columbia and Augusta, 108⅝. The latest quotations are: Atlanta and Charlotte 73⅞@75; do. 1st, 109¼@109⅜; Baltimore and Ohio, —@197; do. 2d pref., 120@—; do. 6s, 1885, 106⅛@107; Baltimore City 6s, 1890, 117@118; do. 6s, 1886, 109@110; do. 6s, 1902, —@132; do. 5s, 1916, 125@—; Columbia and Greenville 1st, 102⅜@102½; do. 2d, 85¼@85¾; Canton Co. 6s. 102¼@102¾; Marietta and Cincinnati 1st mort., 127@128½; do. 2d, 101⅜@101⅝; do. 3d, 56½@56¾; Norfolk Water 8s, 132@135; Northern Central, 49@49⅛; do. 6s, 1900, gold, 115@116; do. 6s, 1904, gold, 115@—; do. 5s, 1926, 99@97; Ohio and Mississippi, Springfield div. 1st, 117¼@117⅞; Pittsburg and Connellsville 7s, 120¾@121½; Richmond and Alleghany, 24½@26¼; Virginia Midland old, 80@85; do. 5th mort., 95⅛@95¾: Virginia consols, 57⅛@58; do. consol. coupons, 60¼@60½; Virginia 10-40s, 43@43¼; do. 10-40 coupons, 66@—; Western Maryland 1st, unindorsed, 111⅛@—; do. 2d pref., 106@106¼.

THE most remarkable whirlpool is the maelstrom, off the northwest coast of Norway and southwest of Moskenæsol, the most southerly of the Lofoden Isles. It was once supposed to be unfathomable, but the depth has been shown not to exceed twenty fathoms. The whirlpool is navigable under ordinary circumstances; but when the wind is northwest it often attains great fury and becomes extremely dangerous. Under strong gales the maelstrom has been shown by official statistics to run at the rate of twenty-six miles an hour.

RAILROAD AND CANAL DIVIDEND STATEMENT.

Showing the amount of Stock Outstanding, the Dividend Periods and the date of last Dividend.

Marked thus(*)are leased roads.	Stock out-standing.	Divide'd Periods.	Last Dividend Payable.
Albany and Susq*....100	2,500,000	semi-an	July '82 2
Ashuelot.....100	210,000	q'arterly	Oct. '81 3½
Atch., Top. and S. Fe100	54,000,000	q'arterly	Aug. '82 1½
Atlanta and W. Point100	1,232 200	semi-an	Jan. '82 6
Atlantic and St. Law*100	5,840,000	semi-an	Mar. '82 3
Augusta and Savan'h100	1,022,900	semi-an	June'81 3½
Avon,Genesco&MtM*100	225,000	semi-an	July '81 3
Baltimore and Ohio. 100	14,792,566	semi-an	May '82 5
" " pref.100	5,000,000	semi-an	July '82 3
Washington Br....100	1,650,000	semi-an	Apl. '82 5
Berkshire*..... 100	600,000	q'arterly	Apl. '82 1¾
Boston and Albany..100	20,000,000	q'arterly	June'82 2
Bos.&N.Y.AirLine pf.100	2,795,227	q'arterly	June'82 1
Bos.,Cl.,F.&N.B.pref.100	1,750,100	.....	Apl. '82 3½
Bos.,Conc.&Mont.pf*100	800,000	semi-an	May '82 3
Boston and Lowell..500	3,940,000	semi-an	July '82 2
Boston and Maine...100	6,921,274	semi-an	May '82 4
Boston & Providence100	4,000,000	semi-an	May '82 4
Attleborough Br...100	131,700	semi-an	July '82 3½
Bos.,Revere B &Lynn100	419,400	semi-an	July '82 3½
Buffalo,N. Y. & Erie*.100	950,000	semi-an	June'82 3
Camden & Atlantic.. 50	377,400	q'arterly	Apl '80 3s
" " pref. 50	880,650	q'arterly	Apl '80 3½s
Camden & Burl. Co...100	381,925	semi-an	July '82 3
Canada Southern.....100	15,000,000	.....	Feb. '81 2½
Cape May &Millville* 50	447,000	semi-an	June'81 3
Catawissa*..... 50	1,159,500	annual	Oct.'81 $1½
" pref..... 20	2,200,000	semi-an	May '82 3½
" new pref.. 50	1,000,000	semi-an	May '82 3½
Cayuga and Susq.*.. 50	589,110	semi-an	July '81 4½
Cedar Rapids&Mo.R*100	6,850,400	q'arterly	May '82 1½
" " pref.100	769,600	semi-an	Feb. '82 3½
Central of Georgia...100	7,500,000	semi-an	June '82 4
Central of New Jersey100	18,563,200	q'arterly	July '76 2½
Central Ohio*..... 50	2,437,950	semi-an	July '82 3
" pref.. . 50	411,550	semi-an	July '82 3
Central Pacific 100	59,275,500	semi-an	Aug. '82 3
Chemung*..... 100	380,000	q'arterly	July '81 1½
Cheshire preferred ..100	2,155,300	semi-an	July '82 1½
Chicago and Alton...100	11,181,741	semi-an	Mar. '82 4
" " pref 100	2,245,400	semi-an	Mar. '82 4
Chi., Burl. & Quincy.100	55,337,455	q'arterly	June'82 2
Chi., Iowa & Nebras*.100	3,916,200	semi-an	July '82 4
Chi., Mil. & St. Paul.100	20,404,261	semi-an	Apl. '82 3½
" " pref 100	14,401,483	semi-an	Apl. '82 3½
Chi. & N. Western...100	14,988,257	semi-an	June'82 3½
" pref.100	21,525,353	q'arterly	June'82 2
Chi., R. I. & Pacific..100	41,960,000	q'arterly	Aug. '82 1¾
Chi. and West Mich .100	6,151,000	semi-an	Feb. '82 2½
Chi.,St.P.,M.&O.pref.100	10,390,000	q'arterly	July '82 1¾
C., Ind., St. L. & Chi..100	6,000,000	q'arterly	July '82 1½
Cin., Sand. & Clev.pf. 50	429,037	semi-an	May '82 3
Clev. and Mahoning* 50	3,759,200	semi-an	Nov.'81 3½
Clev. and Pittsburg* 50	11,244,336	q'arterly	June'82 1¾
Columbus & Xenia*. 50	1,786,200	q'arterly	June'82 2
Colum.&HockingVal.100	2,500,200	semi-an	Aug.'81 208
Concord 50	1,500,000	semi-an	May '82 5
Concord and Ports.*.100	350,000	semi-an	July '82 3½
Conn.& Passump.Riv100	2,244,400	semi-an	Feb. '82 3
Connecticut River ..100	2,100,000	semi-an	July '82 4
Cumberland Valley.. 50	1,292,950	q'arterly	July '82 2½
" 1st pref 50	241,900	semi-an	Apl. '82 4
" 2d pref. 50	243,000	semi-an	Apl. '82 4
Danbury & Norwalk. 50	600,000	.....	Apl. '82 1½
Dayton and Mich.*.. 50	2,402,573	semi-an	Apl. '82 1¾
" " pref. 50	1,211,250	q'arterly	July '82 2
Delaware*..... 25	1,468,940	semi-an	July '82 3
Del. & Bound Brook*100	1,652,000	q'arterly	May '82 1¾
Del., Lack.& Western 50	26,200,000	q'arterly	July '82 2
Denver & Rio Grande.100	29,160,000	q'arterly	Jan. '82 1½
Den.,South P. & Pac.100	3,500,000	.....	Aug.'80 4
Detroit, Lans. & Nor.100	1,825,600	semi-an	Aug.'80 2½
" " pref.100	2,503,380	semi-an	Feb. '82 3½
Dubuque&Sioux C'y*100	5,000,000	semi-an	Apl. '82 3
East Pennsylvania*., 50	1,709 550	semi-an	July '82 3
East Mahanoy*..... 50	392,950	semi-an	July '82 3
Eastern (N. H.).....100	492,500	semi-an	June'82 2½
Eel River.....100	3,000,000	q'arterly	June '82 $1
Elmira.Jef.&Canand*100	500,000	annual	Sep. '80 5
Elmira&Williamsp't* 50	500,000	semi-an	May '82 1½
" " pref. 50	500,000	semi-an	July '82 3½
Erie and Pitsburg*.. 50	1,998,400	q'arterly	June '82 1¾
Evansville & Terre H.100	100,000	semi-an	Nov.'81 2
Fitchburg.....100	4,500,000	semi-an	July '82 3
F. & P. Marquette pf.100	6,500,000	semi-an	July '82 3
Ft.W. & Jackson pref.100	2,000,000	.....	May '82 2
Georgia. ... .100	4,200,000	q'arterly	July '82 2½
Granite 100	1,250,000	semi-an	July '82 3
Han. & St. Jo. pref .100	5,083,024	semi-an	Aug. '82 3½
Harrisbg&Lancaster 50	1,182,500	semi-an	July '82 3½
Housatonic pref. ...100	1,180,000	q'arterly	July '82 2
Illinois Central.....100	39,000,000	semi-an	Mar. '82 3½
Ia.Falls & Sioux City*100	4,623,500	q'arterly	June'82 1¾
Iowa R. Land Co....100	7,620,000	q'arterly	May '82 1
Jeffersonv. Mad.&Ind100	2,000,000	q'arterly	May '82 1¾
Joliet and Chicago*..100	1,500,000	q'arterly	June'82 1¾
Kan.C.,Ft.S.&Gulf...100	4,000,000	.....	Feb. '82 2
" " pref...100	2,750,000	semi-an	Feb. '82 4
Kentucky Central...100	500,000	semi-an	June'81 1
" " pref..100	5,583,500	semi-an	June'83 1
Lake Shore&Mich.So.100	49,466,500	q'arterly	Aug. '82 2
" (guar.)100	533,500	semi-an	Aug. '82 5
Lawrence*..... 50	450,000	q'arterly	July '82 2
Lehigh Valley..... 50	27,496,895	q'arterly	July '82 1½
" " pref. 50	106,300	q'arterly	July '82 1½

Marked thus(*)are leased roads.	Stock out-standing.	Divide'd Periods.	Last Dividend Payable.
Little Miami..... 50	4,637)300	q'arterly	June'82 2
Little Rock & Ft. S..100	4,096,135	.....	July' 81 108
Little Schuylkill*... 50	2,646,100	semi-an.	July '82 3½
Louisville & Nashv..100	19,130,913	semi-an.	Feb. '82 3
Lowell & Andover...100	500,000	semi-an.	Jan. '82 3½
Lykens Valley.....100	600,000	q'rterly.	Oct,' 81 2½
Manchester & Law..100	1,000,000	semi-an.	May '82 5
Manhattan 100	13,000,000	.....	.....
" " 1st pref.100	6,500,000	q'rterly.	July '82 1½
" " 2d pref.100	6,500,000	q'rterly.	July '82 1½
Marietta& Cincinnati 50	1,386,350	.....	.....
" " 1st pref 50	8,105,600	semi-an.	Sep. '66 3s
" " 2d pref 50	4,440,000	semi-an.	Sep. '66 3s
Marq.Hout.&Ont.pf..100	2,259 026	.....	Feb. '82 4
Massawippi*.....100	400,000	semi-an.	Feb. '82 3
Michigan Central....100	18,738,204	q'rterly.	Aug. '81 1
Middlesex Central...100	280,000	semi-an.	Feb. '82 3
Mill Creek&Minehill* 50	323,000	semi-an.	July '82 5
M.Hill& Schuyl.Hav* 50	4,022,500	semi-an.	July '82 3½
Missouri Pacific.....100	28,169,800	q'rterly.	July '82 1½
Mobile&Montgomery100	3,022,517	semi-an.	Feb. '80 2½
Mont. & Wells River100	800,000	annual	Feb. '80 2
Morris and Essex.... 50	15,000,000	semi-an.	July '82 3½
Mt Carbon&PtCarbon 50	282,350	semi-an.	Jan.. '82 6
Nashua and Lowell..100	800,000	semi-an.	July '82 4
Nashua & Rochester.100	1,305,800	semi-an.	Apl. '82 1½
Nashv. & Decatur...100	1,827,000	semi-an.	June'81 3
Nash.,Chat.&StLouis 25	6,670,325	semi-an.	Apl. '82 1½
Naugatuck.....100	2,000,000	semi-an.	Jan. '82 5
Nesquehoning Val'y* 50	1,300,000	semi-an.	Mar.'82 3
N.Castle&Beaver Val* 50	600,000	q'rterly.	Oct. '81 —
NewLondonNorth'n*100	1,500,000	q'rterly.	July '82 1½
N. Y. Cen. & Hud. R.100	89,428,330	q'rterly.	July '82 2
N. Y. and Harlem....100	7,950,000	q'rterly.	July '82 4
" " pref.100	1,500,000	q'rterly.	July '82 4
" City Line.. —	.....	annual	Apl. '82 3
N.Y.,LakeErie&West.100	77,083,900	.....	.....
" " pref.100	8,156,825	.....	Jan. '82 6
N. Y., N. H. & Hart..100	15,500,000	semi-an.	Jan. '82 5
N. Y., Prov. & Boston100	3,000,000	q'rterly.	May '82 2
Niag.Bridg&Canand*100	1,000,000	semi-an.	July '82 3
North Carolina*.....100	3,000,000	semi-an.	Sep. '81 3
" " pref.100	1,000,000	semi-an.	Sep. '81 3
N. Eastern (S.C.) pref100	86,000	semi-an.	May '81 4
Norfolk & Western pref.	15,000,000	q'rterly.	June '82 $1
North Pennsylvania. 50	4,527,150	q'rterly.	May '82 1¾
Northern Central.... 50	6,142,000	semi-an.	July '82 3
Northern N. Hampsh100	3,068,400	semi-an.	June'82 3
Northern N. Jersey*.100	1,000,000	semi-an.	July '80 2½
Norwich&Worcester*100	2,604,400	semi-an.	July '82 5
Ohio 100	18,500,000	.....	.....
Ohio and Miss. pref..100	4,030,000	semi-an.	Mar.'75 3½
Old Colony.....100	7,333,800	semi-an.	July '82 3½
Oregon R'way&Nav.100	6,000,000	q'rterly.	May '82 2
Oswego & Syracuse..100	1,320,400	semi-an.	Aug.'81 4½
Panama..... 100	7,000,000	.....	July '82 6½
Paterson & Hudson*.100	630,000	semi-an.	July '82 4
Paterson & Ramapo.100	248,000	semi-an.	July '82 4
Pember.&Hightst'n*. 50	342,150	semi-an.	Jan. '82 3
Pennsylvania..... 50	77,672,750	semi-an.	May '82 4
Pennsylvania Co..... 50	20,000,000	semi-an.	June'81 2½
Peoria & Bureau Val*100	1,200,000	semi-an.	Feb. '82 4
Philadelphia & Erie*. 50	7,013,700	semi-an.	.....
" " pfd 50	2,400,000	semi-an.	Jan. '75 4
Phil,Ger. &Norrist'n* 50	2,231,900	q'rterly.	June'82 3
Phil. and Reading... 50	32,726,375	q'rterly.	Jan. '76 2½
" " pref. 50	1,551,800	q'rterly.	July '76 3½
Phila. and Trenton...100	1,259,100	q'rterly.	July'82 2½
Phila., Wil. and Balt. 50	11,585,750	semi-an.	July '82 4
Pittsb.,Ft. W. & Chi.*100	19,714,285	q'rterly.	July'82 1¾
" Special Imp.100	6,770,900	q'rterly.	July '82 1¾
Pittsfield&N.Adams..100	450,000	semi-an.	July '82 2½
Portl., Saco & Portsm100	1,500,000	semi-an.	July '82 3
Providence &Worces.100	2,000,000	semi-an.	July '82 3
Rensselaer&Saratog.*100	7,000,000	semi-an.	July '82 4
Rhode Island& Mass.100	100,000	.....	Jan. '81 3
Richmond& Danv...100	3,866,000	q'rterly.	May '82 2
Richmond & Petersb100	1,009,300	semi-an.	Jan. '81 3
Roch.&Genesee Val.*100	555,200	semi-an.	July '82 3
Rome,Watert.& Ogd.100	5,293,900	semi-an.	July '75 1½
Rutland preferred.. 100	4,000,000	semi-an.	Feb. '82 1
St.L.,Alt. & T.Haute.100	2,300,000	.....	.....
" " pref.100	2,468,406	.....	May '82 3
St.L.&S.Fran.1st pref100	4,500,000	.....	Aug. '82 3½
St.L.,I.Mt.&South'n.100	21,459,921	semi-an.	Feb. '74 3
St. P. & Duluth pref.100	4,705,000	q'rterly.	June'82 1¾
St. P., Minn. & Man..100	15,000,000	semi-an.	Aug. '82 3½
Schuylkill Valley*... 50	576,050	semi-an.	July '82 2½
Seaboard & Roanoke.100	1,229,600	semi-an.	May '82 5
Shamokin V.&Pottsv 50	669,450	semi-an.	Feb.'82 3
Shore Line*.....100	1,000,000	semi-an.	July '82 4
Sioux C.&Pacific pref100	169,000	semi-an.	Apl. '82 3½
South Br. (N. J.)*....100	438,300	semi-an.	Jan. '82 3
South Western (Ga.)*100	3,892,300	semi-an.	Dec. '81 3½
Stockbridge&Pitts.*..100	448,700	semi-an.	Oct. '81 1½
Summit Branch*.... 50	4,010,150	semi-an.	Feb. '76 3
Syr.,Bingham&N.Y.*100	2,500,000	semi-an.	Feb. '81 2
Terre Haute & Ind....100	1,988,150	semi-an.	Feb. '82 4
Troy and Boston....100	1,609,000	semi-an.	Feb. '80 2
Union Pacific. 100	61,000,000	q'rterly.	July '82 1¾
United Cos of N. J.*.100	20,490,000	q'rterly.	July '82 2½
Utica, Shenango&S V100	4,000,000	semi-an.	Nov. '81 3
Utica and Black Riv.100	1,772,000	semi-an.	Mar. '82 2
Vermont and Mass..100	3,050,000	semi-an.	Apl. '82 3
Wab. St.L.& Pac.pref.100	22,615,100	q'rterly.	Nov.'81 1½

Markedthus(*)are leased roads.	Stock out-standing.	Divide'd Periods.	Last Dividen d Payable.
Ware River*.....100	750,000	semi-an.	July '82 3½
Warren (N. J.).....100	1,800,000	semi-an.	Apl. '82 3½
Warwick Valley.....100	340,000	semi-an.	July '82 2½
Westchest&Phil.pref100	821,300	semi-an.	July '80 2
West Jersey.....100	1,359,750	semi-an.	Apl. '83 3s
Wilmingt'n&Weld'n.100	1,456,200	semi-an.	July '82 3
Wil., Col., & Aug 100	960,000	semi-an.	July '82 3
Winchester&Poto'c.*100	180,000	semi-an.	July '82 3
Winchester&Strasb.*100	74,700	semi-an.	July '82 3
Worcester & Nashua. 75	1,789,800	semi-an.	July '82 1½
HORSE-POWER R. R.			
Albany City.....100	200,000	annual	..... '80 5½
Baltimore City..... 25	1,000,000	semi-an.	July '82 3
Balt.,Cat.&El. Mills..100	....	semi-an.	July '82 2
BleeckerSt.&Ful.F'y.100	900,000	semi-an.	July '81 3
Boston&Chelsea pref. 50	110,000	semi-an.	Apl. '82 3
Broadway (Brooklyn)100	250,000	q'arterly	Oct. '81 3
B'way&7th Av.(N.Y.)100	2,100,000	q'arterly	Oct, '81 2
B'klyn&Hunter's Pt.100	400,000	semi-an.	Apl. '79 3
Brooklyn City.....100	2,000,000	q'arterly	Dec.'81 3½
Bushwick (Brooklyn)100	309,000	semi-an.	July '81 2½
Cambridge.....100	908,000	q'arterly	Apl. '82 4½
Cen.Park,N.& E.Riv.100	1,800,000	q'rterly.	July '82 2
Christoph'r&TenthSt100	650,000	semi-an.	Aug. '81 2½
Citizens' (Phil.)..... 50	192,500	q'rterly.	Jan. '82 2½
Citizens' (Pbg.)..... 50	200,000	annual..	....'80 14½
Coney Island&Bklyn100	500,000	semi-an.	Oct. '80 5
Continental (Phil.) .. 50	580,000	semi-an.	July '82 6
D.Dock,E.B'way&Bat100	1,200,000	q'arterly	Nov. '81 4
Eighth Av. (N. Y.)....100	1,000,000	q'rterly.	Oct. '81 3
42d St. & G. St. Ferry100	747,000	semi-an.	Nov. '81 6
Frankf.&Southw (Ph) 50	600,000	q'rterly.	Jan. '82 6
Germantown, (Ph.).. 50	572,800	q'rterly.	July '82 2½
Girard College (Ph.) . 50	500,000	semi-an.	July '71 3
Grand St. & Newton.100	170,091	semi-an.	July '81 2½
Green&Coates St.(Ph) 50	150,000	q'rterly.	July '82 3
Heston,Mantau&F'm 50	299,381	semi-an.	Jan. '75 4
Highland.....100	600,000	semi-an.	July '82 4
Lomb.&SouthSts(Ph) 25	195,000	semi-an.	Oct. '75 4
Lynn and Boston....100	200,000	semi-an.	May '82 4
Malden and Melrose.100	165,000	.....	.....
Metropolitan (Bost.). 50	1,500,000	semi-an.	July '82 4
Middlesex (Boston)..100	650,000	semi-an.	May '82 3½
N.Y.,Bay Ridge&Jam100	150,000	..... .	Oct. '78 7
Ninth Av. (N. Y.)....100	797,320	.....	.....
Orange &Newark.....100	282,555	.....	.....
People's (Phila.) pref. 25	124,744	.....	July '82 2
Philadelphia City... 50	475,000	semi-an.	July '82 4
Phila. and Darby.... 20	200,000	semi-an.	July '81 3½
Phila.&Grey's Ferry. 50	308,000	semi-an.	Jan. '82 6
Pbg,Alleg.&Manches. 50	300,000	q'rterly.	Oct. '81 3
Ridge Avenue (Ph.).. 50	420,000	semi-an.	Oct. '81 11
Second Avenue (N.Y.)100	1,199,500	semi-an.	July '81 2½
Second&ThirdSt.(Ph) 50	771,076	q'rterly.	Jan. '82 4½
17th &19th sts (Ph.).. 50	250,000	semi-an.	July '81 3
Sixth Avenue (N. Y.)100	750,000	semi-an.	Oct. '81 5
Somerville (Boston).100	113,000	semi-an.	May '82 3
South Boston..... 50	600,000	semi-an.	July '82 4
Third Avenue, N. Y..100	2,000,000	q'rterly.	Nov.'81 5
13th and 15th sts.,Ph 50	334,529	q'rterly.	Jan. '82 4
23d street, N. Y.....100	600,000	semi-an.	Aug.'81 4
Union, Boston.....100	374,300	semi-an.	Jan. '82 4
Union, Phila..... 50	1,005,000	semi-an.	Jan. '82 7
West Philadelphia... 50	750,000	semi-an.	July '77 10
CANALS.			
Chesapeake and Dela 50	2,078,038	semi-an.	June'75 2
Delaware Division... 50	1,633,350	semi-an.	Feb. '82 $1
Delawa. and Hudson100	20,000,000	q'rterly.	June'82 1¾
Delaware & Raritan*.100	5,847,400	q'rterly.	July '82 2½
Lehigh Coal and Nav 50	11,204,250	semi-an.	June'82 2
Monongahela Nav... 50	1,004,500	semi-an.	July '81 $2
Morris, consolidated.100	1,025,000	semi-an.	Feb. '81 2
" preferred....100	1,175,000	semi-an.	Feb. '81 5
Pennsylvania..... 50	4,501,200	.....	.....
Schuyl. Nav., com.*. 50	859,100	annual..	Au. '81 50c.
" " pref... 50	3,200,000	annual..	Aug. '81 $1
MISCELLANEOUS.			
Adams Express.....100	12,000,000	q'rterly.	June'82 2
American Express... 50	18,000,000	semi-an.	July '82 3
Amoskeag Manuf.Co.100	3,000,000	semi-an.	June'81 5
Calumet&HeclaMin'g —	100,000 S.	q'rterly.	Aug. '82 $5
Central Mining Co...100	.....	semi-an.	Feb. '82 2½
Consolidation Coal..100	10,250,000	semi-an.	Jan. '82 2
George's Creek C.&I.100	.....	semi-an.	Jan. '82 3
Maryland Coal.....100	4,400,000	semi-an.	Feb. '76 1½
Mariposa L. &Mining100	10,000,000	..... .	.....
" pref100	5,000,000	.....	.....
Missouri Val.LandCo100	200,000	semi-an.	July '82 12
National Tube Works100	1,000,000	q'rterly.	July '82 3
Pac. Mail Steamship.100	20,000,000	q'rterly.	Sept.'69 3
Pennsylvania Coal... 50	5,000,000	q'rterly.	May '82 3
Pullman Palace Car..100	10,032,800	q'rterly.	May '82 2
Quicksilver, com....100	5,708,700	..... .	May '82 0.4
" pref....100	4,291,300	..... .	May '82 6
Quincy Mining Co... 25	40,000 shs	semi-an.	Feb. '82 $8
Quincy R. R. Bridge.100	1,750,000	semi-an.	July '82 5
SiouxC.&I.F.L.&L.Co100	500,000	semi-an.	June'82 5
Spring Mt. Coal.....100	1,500,000	semi-an.	June'82 3½
Topeka Equip'nt Co.100	255,500	semi-an.	Apl. '82 5
United States Ex....100	7,000,000	q'rterly.	May '82 1
Wells-Fargo & Co. Ex100	6,250,000	semi-an.	July '82 4
Western Union Tel..100	80,000,000	q'rterly.	July '82 1½

RAILROAD EARNINGS.—MONTHLY.

	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total.
Burl., Cedar Rap. & Northern:													
1880	184,316	165,170	188,325	141,652	149,504	153,378	143,432	160,160	179,804	204,991	189,330	193,419	2,053,484
1881	167,750	124,510	148,551	184,680	165,630	205,912	174,351	209,112	221,801	221,748	203,880	232,812	2,259,037
1882	252,823	225,631	224,107	178,304	199,278	211,257	.....	.....	.....	.....	.....	.....	.....
Central Pacific:													
1880	1,200,614	1,070,487	1,373,438	1,356,716	1,778,488	1,724,950	1,840,067	1,973,438	1,964,997	1,120,229	2,199,466	1,905,221	20,508,112
1881	1,602,907	1,454,218	1,709,637	1,872,370	2,091,410	2,159,381	1,859,000	2,059,000	2,293,000	2,514,000	2,267,000	2,110,000	23,947,951
1882	1,876,000	1,702,000	1,987,000	2,052,000	2,353,000	2,239,000	.....	.....	.....	.....	.....	.....	.....
Chesapeake and Ohio:													
1880	202,335	198,681	222,762	221,559	199,443	214,352	238,236	259,110	247,303	211,820	240,795	218,009	2,674,308
1881	162,540	184,389	228,479	227,343	252,235	241,135	225,096	262,858	247,144	237,303	235,585	203,562	2,708,762
1882	210,455	209,708	208,981	267,454	255,939	260,753	.....	.....	.....	.....	.....	.....	.....
Chicago and Alton:													
1880	534,054	497,013	626,473	542,961	616,128	617,524	708,906	761,120	767,349	785,199	696,776	574,695	7,718,198
1881	487,890	461,641	529,915	558,190	548,556	635,860	671,466	771,466	768,897	750,359	680,133	635,307	7,553,988
1882	570,447	530,480	584,483	561,787	553,412	613,886	.....	.....	.....	.....	.....	.....	.....
Chicago and Northwestern:													
1880	1,154,632	1,131,683	1,361,725	1,294,573	1,875,608	1,671,177	1,699,686	1,767,938	2,020,245	2,105,217	1,855,671	1,477,902	19,416,007
1881	1,240,667	963,208	1,178,795	1,474,612	1,879,006	2,306,640	1,983,031	2,315,164	2,292,676	2,341,097	2,019,037	1,855,476	21,849,209
1882	1,620,336	1,471,945	1,696,568	1,634,819	2,058,133	2,022,100	.....	.....	.....	.....	.....	.....	.....
Chicago, Burlington and Quincy:													
1880	1,432,740	1,411,870	1,732,518	1,489,894	1,909,627	1,682,956	1,773,643	1,834,321	1,862,285	1,934,762	1,837,860	1,552,018	20,454,494
1881	1,307,948	1,034,821	1,418,149	1,574,371	1,679,455	2,083,803	1,888,558	2,173,945	2,262,981	2,031,001	1,816,133	1,905,490	21,324,150
1882	1,658,834	1,457,300	1,566,217	1,530,838	.....	.....	.....	.....	.....	.....	.....	.....	.....
Chicago, Milwaukee and St. Paul:													
1880	764,298	738,749	900,675	871,041	1,134,745	1,037,958	1,026,708	991,297	1,257,677	1,493,620	1,472,037	1,397,308	13,086,119
1881	990,847	682,717	916,989	1,259,946	1,538,491	1,729,811	1,560,000	1,678,000	1,645,000	1,590,000	1,569,000	1,855,000	17,025,462
1882	1,435,000	1,377,000	1,561,000	1,518,000	1,629,000	1,620,000	.....	.....	.....	.....	.....	.....	.....
Chicago, St. Paul, Minneapolis and Omaha:													
1880	193,827	173,078	259,783	259,208	232,146	218,093	236,995	251,013	300,833	342,052	342,894	312,173	3,122,097
1881	257,786	158,594	251,648	261,211	350,124	404,562	392,702	385,586	363,685	382,714	380,733	391,950	3,981,296
1882	307,498	315,100	405,779	356,558	406,420	363,109	.....	.....	.....	.....	.....	.....	.....
Cincinnati, Indianapolis, St. Louis and Chicago:													
1880	155,697	172,541	198,220	168,199	186,995	200,332	204,138	233,478	343,627	239,881	209,014	198,254	2,412,185
1881	182,523	171,511	191,005	183,710	191,096	188,256	178,861	229,858	219,977	212,606	194,805	192,623	2,296,916
1882	200,042	186,879	208,066	204,269	199,110	.....	.....	.....	.....	.....	.....	.....	.....
Denver and Rio Grande:													
1880	124,759	126,922	160,883	164,882	193,925	295,455	373,132	400,133	406,583	473,318	408,562	349,196	3,478,007
1881	307,476	317,681	398,493	433,111	514,767	584,230	548,284	606,193	620,643	665,686	566,819	643,417	6,206,812
1882	491,914	412,987	535,055	559,917	614,298	537,462	.....	.....	.....	.....	.....	.....	.....
Hannibal and St. Joseph:													
1880	176,079	166,965	216,061	196,735	191,317	179,396	224,312	238,081	233,448	242,214	207,147	279,635	2,561,391
1881	154,401	122,874	176,356	190,812	172,950	190,740	198,110	215,308	202,567	313,433	201,782	180,376	2,230,966
1882	138,284	154,717	168,798	148,913	154,917	155,030	.....	.....	.....	.....	.....	.....	.....
Illinois Central:													
1880	595,212	613,806	613,008	535,732	665,120	681,736	724,095	732,755	806,836	880,211	783,120	673,182	8,304,812
1881	631,281	524,499	557,789	662,493	673,259	803,887	720,004	868,407	828,847	815,238	737 218	763,475	8,586,397
1882	728,173	689,387	695,371	674,603	674,749	663,746	.....	.....	.....	.....	.....	.....	.....
Indiana, Bloomington and Western:													
1880	80,498	89,690	116,185	90,374	85,733	106,954	103,438	116,732	110,622	121,343	96,621	104,619	1,233,079
1881	90,283	83,261	192,085	203,677	200,064	199,846	83,764	117,956	195,307	181,674	160,826	156,697	.....
1882	195,824	175,755	206,235	205,934	182,554	186,133	.....	.....	.....	.....	.....	.....	.....
Louisville and Nashville:													
1880	674,455	575,035	612,593	563,883	655,014	976,229	772,537	827,088	931,910	1,000,326	953,086	949,184	9,491,346
1881	816,960	805,124	947,959	850,862	828,726	1,227,885	817,135	876,192	951,566	1,002,950	1,065,223	1,122,285	11,326,859
1882	950,065	960,036	1,073,745	950,007	946,435	1,187,385	.....	.....	.....	.....	.....	.....	.....
Mobile and Ohio:													
1880	250,116	204,094	168,301	140,091	129,249	121,855	131,621	140,593	184,246	264,714	251,368	287,373	2,373,621
1881	224,347	216,768	230,916	163,551	145,803	136,517	131,009	159,348	209,044	252,921	252,434	262,025	2,406,437
1882	161,433	158,154	152,651	145,272	137,645	132,572	.....	.....	.....	.....	.....	.....	.....
Nashville, Chattanooga and St. Louis:													
1880	205,633	191,154	169,457	155,466	158,839	144,155	151,594	169,326	167,473	178,266	182,087	175,996	2,049,448
1881	178,143	190,866	207,710	183,525	104,430	154,549	150,430	168,317	179,979	172,121	152,059	173,127	2,075,256
1882	156,994	159,961	161,005	154,155	137,645	.....	.....	.....	.....	.....	.....	.....	.....
New York and New England:													
1880	164,232	149,907	183,845	179,689	183,701	219,891	205,056	249,885	235,642	215,491	210,856	198 108	2,396,302
1881	189,749	173,614	212,019	216,913	217,185	231,518	246,821	280,524	299,573	261,199	242,412	237,729	2,809,255
1882	213,840	217,261	265,222	263,544	283,244	290,000	.....	.....	.....	.....	.....	.....	.....
New York, Lake Erie and Western:													
1879	1,147,173	1,207,391	1,356,780	1,372,755	1,350,574	1,230,419	1,273,533	1,450,223	1,492,497	1,713,697	1,515,835	1,398,224	16,509,127
1880	1,296,381	1,252,218	1,644,958	1,643,151	1,592,544	1,661,812	1,580,976	1,606,874	1,786,417	1,899,910	1,799,338	1,726,788	19,149,361
1881	1,443,437	1,425,765	1,847,261	1,709,057	1,776,891	1,794,982	1,787,081	1,772,895	1,734,200	.....	.....	.....	.....
Northern Central:													
1880	334,494	330,860	415,325	386,130	329,788	419,193	450,298	453,923	464,093	512,918	459,054	494,310	5,050,387
1881	386,157	382,657	452,906	487,273	465,588	487,287	440,811	498,008	429,565	449,664	487,160	476,622	5,443,697
1882	407,368	413,551	430,194	435,129	482,607	.....	.....	.....	.....	.....	.....	.....	.....
Northern Pacific:													
1880	81,390	77,259	119,357	185,700	217,613	253,105	241,277	223,500	330,300	358,456	300,822	220,993	2,629,710
1881	116,508	78,803	162,984	216,210	312,705	412,024	404,180	411,624	490,096	565,485	428,903	434,331	4,044,576
1882	239,800	269,000	384,000	438,000	568,332	631,342	.....	.....	.....	.....	.....	.....	.....
Philadelphia and Erie:													
1880	224,307	245,372	327,678	334,947	311,470	331,024	308,699	347,532	322,737	367,082	324,966	281,919	3,727,733
1881	224,303	225,501	285,573	293,323	343,792	350,585	291,669	303,849	276,522	292,392	284,078	282,772	3,454,309
1882	252,727	246,246	265,311	277,851	341,415	.....	.....	.....	.....	.....	.....	.....	.....
St. Louis and San Francisco:													
1880	198,091	195,948	193,146	176,164	167,664	173,607	213,297	259,995	280,873	328,194	290,329	226,063	2,698,371
1881	212,435	178,234	262,050	265,298	283,399	260,254	252,333	286,373	279,064	308,569	284,320	287,914	3,160,245
1882	256,784	244,654	274,959	242,806	253,419	240,177	.....	.....	.....	.....	.....	.....	.....
St. Louis, Alton and Terre Haute:													
1880	153,139	163,737	168,994	155,462	147,928	150,207	191,077	216,759	204,295	221,863	188,773	184,503	2,146,741
1881	175,725	166,012	201,137	197,447	172,177	165,896	158,674	189,295	187 299	179,921	162,544	153,852	2,112,801
1882	168,987	149,619	178,145	157,450	162,842	142,742	.....	.....	.....	.....	.....	.....	.....
St. Louis, Iron Mountain and Southern:													
1880	555,983	490,195	451,560	408,241	349,053	363,454	432,655	565,869	671,219	688,365	632,052	656,951	6,265,597
1881	570,957	560,791	704,002	548,300	479,075	474,302	533,512	644,386	690,400	719,239	687,280	709 498	7,319,744
1882	516,370	501,127	585,008	581,977	519,120	529,700	.....	.....	.....	.....	.....	.....	.....
St. Paul, Minneapolis and Manitoba:													
1880	180,239	137,645	261,798	333,014	281,899	243,407	272,089	232,579	274,188	345,057	300,675	297,641	3,160,231
1881	254,187	159,482	320,962	425,685	382,642	405,322	387,488	414,954	485,736	605,708	508,530	528,262	4,878,960
1882	395,461	418,358	531,004	570,890	858,902	856,417	.....	.....	.....	.....	.....	.....	.....
Texas and Pacific:													
1880	245,785	219,165	215,070	174,177	141,083	153,066	195,711	226,073	266,570	303,666	312,184	301,858	2,754,408
1881	281,176	260,781	319,928	295,066	281,782	285,405	320,466	354,082	337,117	578,668	357,724	381,218	3,921,569
1882	310,785	255,644	332,911	359,543	409,228	384,713	.....	.....	.....	.....	.....	.....	.....
Union Pacific Railway:													
1880	1,433,636	1,393,992	1,730,509	1,937,220	2,027,269	1,928,528	1,934,215	1,913.035	2,270,179	2,707,860	2,251.148	1,869,335	23,448,445
1881	1,339,799	1,374,740	1,674,860	1,766,894	2,319,238	2,590,969	2,528,826	2,638,659	2,844,357	3,289 350	2,773,608	2,267,004	27,451,831
1882	1,961,088	1,759,863	2,226,832	2,462,004	2,491,590	.....	.....	.....	.....	.....	.....	.....	.....
Wabash, St. Louis and Pacific:													
1880	776,790	759,451	978,629	892,024	948,773	953,468	1,966,742	1,189,478	1,178,950	1,501,203	1,131,787	1,050,816	12,428,112
1881	811,617	818,922	1,121,592	1,023,482	1,144,660	1,308,093	1,131,751	1,542,838	1,490,027	1,396,300	1,399,555	1,328,278	14,461,57[illegible]
1882	1,229,965	1,134,768	1,315,776	1,378,194	1,204,864	1,149,632	.....	.....	.....	.....	.....	.....	.....

CORRESPONDENCE.

[We pay no attention to communications unless the name and address of the writer are given, though the same will not be published if so requested. We assume no responsibility for statements made by correspondents, and we do not necessarily endorse ideas advanced by them. Under these conditions we think it of value to our readers to devote a liberal space to the free discussion by others—whose opinions may be at variance with our own—of subjects pertinent to our department of journalism.]

Early Railroads and Locomotives.

Editor American Railroad Journal:

My short article on early railroads and locomotives, as published in the American Railroad Journal in May, has had the effect to scare up quite a large number of claimants for the honor of priority of both locomotives and drivers.

Among the most persistent of them is the *Honesdale Citizen* of September 29th, 1881, which claims that Horatio Allen imported an engine from England in 1829, which was put upon the Delaware and Hudson Railroad (I think; as I have not the paper before me I may be mistaken in the name of the road). I shall not attempt to deny any portion of the statement therein made, but only say, that from that statement the whole concern was a miserable failure.

The first trip of the "Stourbridge Lion" (the name of the engine) was its last; it was run a few miles by Mr. Allen, out and back to Honesdale, gave one roar, and gave up the ghost. Another amusing instance appeared in the *N. Y. Herald* a short time since, to wit, "In 1832 a locomotive engine, the largest so far made, was built under the auspices of Governor DeWitt Clinton and named after him. It was used on the Mohawk and Hudson road." Governor DeWitt Clinton died February, 1828; that gives a quietus to that history. The Hon. Thurlow Weed gives his account of the first trip over the Mohawk and Hudson road in 1831, in company with a number of other distinguished gentlemen of that day, several of whom I knew personally; all which, save one point, is very correct; and that one mistake can be satisfactorily explained; he mistook the popping of champagne corks for the puffing of a locomotive.

For I know that for two or three years after the completion of the Mohawk and Hudson road it was operated by horse-power alone. I know I am not mistaken, for I was there and engaged in working from day to day for the Schenectady end of the road, and *know* there was not a locomotive on that road at that time. If necessary, I can take up several other claimants for priority, and dispose of them as easily as the foregoing, but do not wish to occupy too much space in your interesting paper and will close by reiterating: *That the first locomotive successfully run upon any railroad in the United States was the "Stephenson" engine on the Schenectady and Saratoga road, in the year* 1831 *or* 1832, I am not positive which, and which I assisted in setting up, repairing, and running from time to time.

There were a number of engines built about that time, all of which were failures. The first improvements made upon the aforesaid Stephenson engine originated at the Baldwin Works, Philadelphia.

It was a prevalent opinion in the early days of the enterprise that railroads could only be used for rapid transit in the conveyance of passengers; that they could not be used for the conveyance of freight, as the canals and other navigable water courses were beyond competition for that purpose. What a huge mistake!

J. V. B.

Clarksville, Ga., July 8, 1881.

Railroad Medical and Sanitary Service.

No. II.

Editor American Railroad Journal:

In my last communication I spoke of the importance of examining certain classes of railroad employes, for the purpose of discovering such physical defects as might disqualify them for being entrusted with the safety of lives and property *in transitu*. It is generally agreed that such examinations are best made by medical men, if made at all; but the management of the Pennsylvania Railroad, on the advice of their examiner-in-chief, adopted the plan of carrying out the details by the superintendents or other non-medical officers, under rules framed by the medical expert. Doubtful cases, of course, must be referred to the expert. It appears, however, that the examinations are limited to defects of vision and hearing, leaving out of account the condition of the heart and lungs, the existence of aneurism and epilepsy, liability to apoplexy, etc. Tests for these latter should certainly not be left to laymen; an early stage of cataract, not yet seriously interfering with vision, would only be discovered by a careful medical inspection; while the temporary obstruction of the external auditory canal by accumulation of ear-wax, or of the eustachian tubes by a recent catarrh, might occasion a deafness which would lead to total rejection by a layman. The subject of syphilitic eye affections also would suffer similar injustice at the hands of a non-medical examiner.

I am not informed whether the Pennsylvania Railroad Company has a surgical and medical service, and presume it has none; otherwise it is clear that its medical staff would be called on to conduct the examinations. The importance of the curative branch of service is much more generally appreciated by railroad managers and adopted in some shape by a number of the largest and most enterprising companies. Where this already exists, the examination feature could be carried out without material increase of the medical staff or of expense. The experience of the Central Pacific, the Baltimore and Ohio and the Atlantic and Pacific railroads, shows the practicability of sustaining the system upon an assessment on all classes of employes, as was long ago proved in the merchant marine of the United States, which has a staff of medical officers second to none in the world in attainments and efficiency.

Railroad companies could not select their medical men by competitive examination, as is the case in the Army, the Navy, and the Marine Hospital Service; but it is clear that able and enterprising young practitioners would readily accept their service for the moderate compensation afforded by the assessment, supplemented by the presumed advantage of being known as the company's surgeons and facilities for extending their private practice along the line.

In such a system, the first and indispensable need for success would be the selection of a suitable man for head of the department, since he should be charged with the choice of the local medical men, with the arrangement of the details of the service, in conjunction with the general management, with their superintendence in full and their execution in part; for the general manager or superintendent should no more undertake to supervise this service than to oversee the workshops. A medical and sanitary superintendent must not be chosen by competitive examination, for administrative qualities can not be discovered in that way; still less should the choice be governed by connection in blood or marriage. Naturally, and in reality, professional eminence seems to determine, more than any other consideration, the choice of a railroad medical superintendent; and professors in medical colleges, in instances to my knowledge, hold these positions. The name of a prominent medical teacher may in itself give some *e'clat* to such a service, and it may rightly be supposed that a man who has achieved distinction in one branch of his profession is capable of great success in another; but this is conditional upon giving his time and energies to the work.

In this country physicians not in public service live by private practice, or aspire to do so. Those who have other occupations, even professors in medical schools, actually, if not avowedly, subordinate everything else to private practice. Salaried hospital surgeons are generally allowed to take private practice, and are sure to avail themselves of every such opportunity.

The local medical men of a railroad cannot be supported by this service, and must continue to practice as usual; but I hold that the chief medical officer should give his whole time to the company, as well as the general manager and the superintendent. Not only must he be in readiness to go to any point on the line at the shortest notice for relief duty, but his sanitary functions will require him to travel back and forth about as constantly as the superintendent. It would be as improper for such an officer to engage in private practice as for the master mechanic to take outside jobs of work.

S. S. H.

New Orleans, July 16, 1882.

London Life: Railway Salute:—Station master, to suspicious looking lady (aged) who had just entered a premiere class compartment, "Are you first-class, ma'am?" Aged lady—"Yes, thank you; how are you, sir?"

Canada now has a law to squelch the ticket scalper, and, according to reports, it is a success; at any rate, it is said a great many of that industrious fraternity are leaving the Land of Lorne for the free States. Chicago catches most of them.

Railroads in Mexico.

In the progress and prosperity of any country there are several important factors. Chief amongst these may be reckoned natural resources, population, education, and means of transportation. With the first of these Mexico is richly endowed. It is doubtful if any equal area on the face of the globe possesses larger deposits of the precious metals, or has already produced more of them. Her coast lands for the most part are exceedingly fertile, producing in abundance the best growths of the tropics, but they have an unhealthy climate and can never be developed by the labor of white men.

The interior may be described as a vast table land, elevated from 5,000 to 9,000 feet above the sea, and possessing a climate favorable, wherever water is found, to all the crops of the temperate zone. Much of it, however, is arid and sandy, and in the north particularly, water is scarce. Between these two great natural divisions lie what the Spaniards called the temperate lands, where frost and excessive heat are unknown, and where everything that is grown from New York to Florida will thrive and yield abundantly.

These temperate lands, consisting of terraces or benches separated by steep slopes and deep valleys, and situated as they are for the most part in a comparatively narrow belt, are alike a bar to the existence of navigable streams and the easy construction of good roads connecting the interior with the coast. Partly from this cause and partly from the unprogressive character of the population or the disturbed state of the country, the pack-saddle and the primitive wagon have hitherto been the only means of transportation. This vast territory of 760,000 square miles, with a population estimated at ten millions, equals in extent our States east of Mississippi and south of Michigan, while its population hardly exceeds that of New York and Pennsylvania. Two-thirds of the population are of pure Indian blood, the remaining third being either of Spanish descent or of mixed races.

Now it is evident that any rapid progress in Mexico must come through colonization by some higher and more progressive race, or by the introduction of capital in large amounts to develop her natural resources by the aid of the native races, who are generally peaceable and industrious. Yet, in a land with the climate of Mexico, where the wants and desires of the natives are so limited, it will be contrary to all experience elsewhere if they should become a hard-working people from the mere desire of accumulation. Under no circumstances could much improvement be looked for without improved means of transportation, of which the Government was well aware, as is shown by the many liberal subsidies it has granted to various railroad enterprises.

Let us now look at the principal lines in course of construction, or for which the required funds have been subscribed. First and most important of these is the Mexican Central, whose main line extends northward from the city of Mexico, by Queretaro, Guanajuatol and Leon, to Zacatecas, and thence through the States of Durango and Chihuahua to E. Paso, where it connects with the Atchison, Topeka and Santa Fe Railroad, and other lines. It has also an interoceanic line from Tampico, on the Gulf of Mexico, to San Blas, on the Pacific, passing through San Luis Potosi, Lagos (on the main line), and Guadalajara.

Next in extent is the Mexican National (narrow gauge), whose so-called interoceanic line extends from the city of Mexico, by Toluca, Maravatio, Morelia, Zamora, and Colima, to Manzanillo, on the Pacific. Its international line leaves its interoceanic line near Maravatio, and crossing the line of the Central, extends northward by San Luis Potosi, Saltillo, and Monterey, to Laredo on the Rio Grande, where it will connect with the Texas system of railroads, and perhaps with the southern extension of the Denver and Rio Grande (narrow gauge). In the northwest is the Sonora Railway, extending through the State of that name, from the port of Guaymas, on the Gulf of California, by Hermosillo, Ures and Arispe, into Arizona and New Mexico, to a connection with the Southern Pacific, and Atchison, Topeka and Santa Fe railroads. On the northwest coast is also the Sinaloa and Durango Railway, to connect Altata, the port of Culiacan, with Durango, or some point near it, on the Mexican Central. The Tehauntepec Railroad is far to the south, crossing the isthmus of that name by a short and favorable route, through a fertile and, strange to say, healthy country, swept by the fresh breezes of the trade-winds. It is destined apparently to be a route of great importance, effecting as it does a saving of 1,150 miles between New York and San Francisco, as compared with the Panama route. It is also the route proposed by Captain Eads for a ship railway.

All capital invested in these railroads, as well as all material imported for their construction, operation and repair, is exempt from taxes or imposts for a long term of years.

Among the other projects should be mentioned the concession for a railroad from the coal-fields on the Yaqui River, in Sonora, to the port of El Morrito, on the Gulf of California, a distance of about 120 miles. The existence of the valuable coal-fields has been known for some time. The coal is said to be anthracite, and to be found in two veins, the upper about nine feet thick, the lower about seven. They are both near the surface, and have been traced over a considerable area. These, and the great iron mountain near the city of Durango, which is a solid mass of rich ore seven-eighths of a mile long, 360 yards wide, and 210 yards in height, may prove sources of greater wealth than the richest silver mines.

The Mexican Southern Railroad is an enterprise incorporated under the laws of New York by some of the most prominent men of the two republics. It starts with the modest "capital of not less than ten millions of dollars, which may be increased from time to time as may be deemed necessary by the directors and a majority of the stockholders." Its purpose is to operate in Mexico railways and telegraph lines, also to build elevators and to construct or purchase and navigate steam and sailing vessels as may be proper in connection with the company's business in Mexico. This seems a sufficiently comprehensive scheme to satisfy the most ambitious mind.

The Mexican Central also intends to build a branch from their main line in Durango to Laredo, on the Rio Grande. As this would be a much shorter route from the city of Mexico to all points east of the Mississippi than that by El Paso, and also compete with the more direct route of the National, it is sure to be built at an early day.

The distance from New York to the city of Mexico by the Texas route will be about 2,700 miles, or 600 miles less than to San Francisco —a fact worth remembering when thinking of our relations with Mexico. Several shorter railroads are in progress, and the number of miles of railroad already built is about 700.

To those accustomed to the rapid progress of our Western States it might appear that the opening up by railroads of a great productive region, already possessing a considerable population, must result in the rapid development of a large and profitable business. But it is not a parallel case.

The country to be opened up is old, and its population widely different from the energetic and enterprising races to whom that rapid progress is due. We are told of the vast resources and extent of Mexico, the business that must spring up, the favors granted by Government to projected railroads, and people point to the great capitalists whose names head the subscription lists, and whose fortunes are largely due to successful railroad management.

But before we speculate too much on what railroads may do for Mexico, let us glance at the experience and results of a railroad 354 miles long, including branches, connecting the capital and the principal port of the republic, which has been in operation for seventeen years. This is the Mexican Railway, built by English capital, and serving with its main line or branches some of the largest and busiest cities of the republic. Here is a railroad apparently so situated as to monopolize a large traffic, and receiving enormous rates for freight, varying from twenty-two cents per ton per mile on imported merchandise to three and three-quarter cents on exports, with an average rate of fourteen and a half cents. It has also an annual subsidy of $560,000 a year, which is paid with more or less regularity. Its business has been improving lately, but it has a heavy capital account of $107,000 per mile, and it was not till 1880 that even with those high rates anything was earned on the common stock, on which, for the first half of that year, the magnificent dividend of one-quarter of one per cent was declared. After so many years for development, let us see what its business amounted to. Fifteen cars per day would have carried all the freight it shipped from Vera Cruz to the interior, while from the great city of Mexico there was barely freight enough shipped to fill three cars per day. This is reckoning a car-load at ten tons, and not including Sundays. Yet in spite of this, and with high operating expenses, its net earnings for the first half of 1880 were at the large rate of $5,710 per mile per annum. This profit is clearly due to its high rates and annual subsidy, and not to any large business. Does this

look promising for the rapid growth of traffic in Mexico? On the other hand, the new lines will open up large tracts, rich in the products of the soil and of the mines, hitherto practically isolated, and new sources of business may be developed.

Now let us look at the largest and most important of these, the Mexican Central Railway. Its main line is about eleven hundred miles long, the northern half of which traverses an arid and thinly peopled region, and its rates are limited to 8.7, 5.8, and 3.6 cents per ton per mile for first, second and third class freight. The third-class rate is only a little less than on the English line, but the first-class is less than half that obtained by the English line on its most profitable freight, namely, imported merchandise; and in reckoning net profits we must not forget the ten per cent or more discount on Mexican silver. We do not know what estimates have been made of the business of the Mexican Central, but it would seem as if the experiences of the English line should not be overlooked, and that a cheap line with low capital account was the first condition to success.

From the great natural resources of the country, the healthful and pleasant climate of the interior, and the many opportunities for the profitable investment of capital in mining, agriculture and commerce, Mexico seems to present great attractions to the citizens of the United States. They should remember, however, that there are important differences between the two countries. In the first place, so long as heavy and almost prohibitive duties remain in force on almost everything except the products of the mines, the development of her other resources must be mainly limited by the demands of home consumption. Were it not for these restrictive duties, with cheap land and labor, and light internal taxes, cotton, coffee, sugar, rice, tobacco, fine wools, paper stock, hemp, indigo and many other articles of value, could be produced at so low a cost that Mexico would enter the markets of the world as a great producer of the most valuable articles of commerce. Increase of wealth and population would soon follow, and where agriculture thrives and wealth increases, manufactures soon follow.

In commerce with Mexico, what has given England, and particularly Germany, a great advantage over us is the practice of their great houses of having resident partners, who become familiar with the language, the customs and the wants of the natives. These men order out goods suited to the country, and, indeed, often order their manufacture to suit some particular market. The long credits, running six, twelve or even eighteen months, are better suited to English and German ideas than to our notions of quicker returns.

That the present rapid construction of railroads will cause increased demands for labor, and the disbursement of vast sums in a short time, as well as an era of more or less speculation and inflation, must be evident to every one. While rolling-stock, rails, and the larger bridges will be imported, the amount paid out in Mexico for labor and supplies can not fall short of $5,000 per mile; and as construction will be carried on from both ends at once of several of these roads, the number of miles annually constructed will be very large. No doubt many other lines will be in progress long before those already enumerated are completed.—*Harper's Monthly.*

Praise of Iron.

Mr. Joseph Wharton, of Philadelphia, a former vice-president of the American Iron and Steel Association, made a free translation as follows from the German poet Arndt, in his "Lob des Eisens," that is "Praise of Iron."

It sets the plow upon the lea,
The earth for man to conquer.
It guides the ship upon the sea;
It holds her safe at anchor.
It builds strongholds and pleasant homes,
It fills the house with art;
And, as a magic wand, it comes
To turn the lightning's dart.

And, again, translating from Arndt's poem "Vaterlandslied," the same gentleman obtains patriotic inspiration as follows:—

The God whose will made iron grow
Willed no man to be slave;
Therefore the gleaming lance and sword
To man's right hand He gave.

Railways and the Public.

Taking an average calculated for the whole country, a railway passenger, when he pays $1 for his fare contributes 15 cents of that amount to the stockholders, 20 cents to the bondholders and 65 cents towards paying the cost of operating the roads, the latter being distributed, directly or indirectly, chiefly for wages to working people. These are the figures for all the roads in the country, taking the aggregates for dividends, interest payments and operating expenses. Of course, on some roads the whole of the dollar goes to the working mechanics, laborers, conductors, engineers and other employes, the stockholders getting nothing. The dollar, or a large part of it is, moreover, quickly returned to the shopkeepers of the country, for there are over a million and a half of railroad employes withdrawn from productive labor, whose wages pass regularly into the hands of the farmers and manufacturers who supply them with the necessaries of life. There are a good many different ways of looking at railroads and railroad corporations, and this is one of the ways in which they appear to be not quite so black as they are usually painted.—*Philadelphia Ledger.*

A Perpetual Motion Clock.

Mr. Dardenne's self-winding perpetual clock may now be considered to have had a fair trial. A specimen clock was fixed at the Gare du Nord Terminus, Brussels, last September, all due precautions being taken to avoid tampering with it by affixing the government seal. After six months' trial it was found in perfect time with the Observatory clock, and had not varied in the slightest degree during that time. The clock is wound by a small anemometer or windmill, which is placed in a ventilation pipe, chimney, or any place where a tolerably constant current of air can be relied on. This windmill is, by a reversed train of multiplying wheels, continually drawing over a wheel an endless chain, in one loop of which the clock weight is supported. As the loop hangs between the clock and the winding-machine, the weight is continually drawing through the clock the slack chain drawn up by the wind motor, and thus a constant motion is maintained. A ratchet wheel prevents the motor from turning the wrong way, and, by a simple arrangement, whenever the weight is wound right up to the top, the motion is checked by a friction brake automatically applied to the anemometer by the raised weight lifting a lever. When the weight is thus raised to the top, the clock has a sufficient store of energy to go for twenty-four hours, so that it is not by any means dependent on a regular current of air. As this clock receives such a liberal supply of winding, it does not require so long a train of wheels as an ordinary clock. The works of the clock are only connected with the winding arrangement by means of the loop of chain, so that no injurious matters can reach the former from the chimney.

Exchange of Bonds.

The Secretary of the United States Treasury at Washington issued on the 13th inst. a circular addressed to all holders of 3½ per cent "continued bonds," in which, after quoting the 11th section of the Bank Charter Act, approved on the 12th instant (authorizing the issue of 3 per cent bonds in exchange for the 3½s), he says:

Under the provision of this law the Department will be prepared to receive, on and after the first day of August next, at 10 o'clock, A. M., until further notice, any of the bonds issued under the act of March 3, 1863, and 5 per centum bonds issued under the acts of July 14, 1870, and January 20, 1871, continued, as stated above, to bear interest at 3½ per cent per annum, which have not been called for payment by a call therefor, issued prior to the date hereof; and as early as practicable thereafter will issue in exchange therefor a like amount of United States registered bonds, bearing interest at the rate of 3 per centum per annum, as provided by the act approved July 12, 1882.

To effect the exchange the bonds should be surrendered to the Secretary of the Treasury, in accordance with the terms of the circular. They will then be accepted for that purpose in the order of the surrender of them to him, and new bonds, bearing interest at the rate of 3 per centum per annum, will be issued in the same order in lieu thereof.

A letter of transmittal should accompany each package of bonds for exchange, setting forth the purpose for which they are forwarded, and giving the address to which the new bonds and checks for the interest thereon shall be sent.

When the bonds are already in the custody of this department, or any officer thereof, or are transmitted otherwise than with a letter, a letter advising of the proposed surrender should be sent, complying with the requisites for a letter of transmittal, and with such other requisites as the case demands under the regulations prescribed by this circular.

The surrender may be made by mail or express, and not otherwise, beginning on the first day of August next, at 10 o'clock A. M. If made

by mail, the postmaster should stamp, or otherwise mark upon the envelope containing the bonds, or the letter advising of their surrender, the day, hour and minute at which they were received by him. If made by express, the express agent should in like manner stamp or mark the envelope.

Bonds held by the Treasurer of the United States in trust for a National bank may be surrendered by letter addressed to the Secretary of the Treasury, accompanied by the Treasurer's receipts representing the bonds, together with a resolution of the board of directors of the bank, authorizing the Treasurer to assign the bonds.

The priority of surrender will in all cases be determined by the time of receipt stamped or marked on the envelope as above required, except that where two or more envelopes have the same time stamped or marked thereon the first opened at the Department shall have priority.

A transmission of bonds, or letter of advice as to them, will not be recognized as a surrender under these regulations unless there is a sufficient compliance with the requirements of this circular, especially as to assignments and authority to assign.

Interest on the bonds surrendered will cease on the first day of August next, and the new bonds will bear interest from that date.

The envelopes should be addressed to the "Secretary of the Treasury, Division of Loans, etc., Washington, D. C.," and marked "Bonds for exchange into three per cents." The bonds should be assigned to the "Secretary of the Treasury for exchange into three per centum bonds." Where a new bond is desired in the name of anyone but the payee of the old bond, the old bond should be assigned to the "Secretary of the Treasury for exchange into a three per cent bond in the name of" (here insert the name of the person in whose favor the bond is to be issued.

The Department will pay no expense of transportation on bonds received under the provisions of this circular, but the bonds returned will be sent by prepaid registered mail, unless the owners otherwise direct.

The requisite blanks, to be used by National banks and other corporations and institutions to enable them to effect the said exchange of bonds, may be obtained upon application at this office.

CHARLES J. FOLGER,
Secretary of the Treasury.

Anthracite Product of 1882.

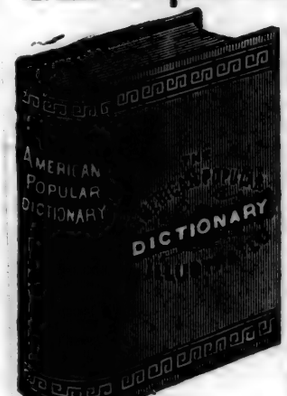
THE Philadelphia *Ledger* says it is now fairly manifest that, large as the anthracite product in 1882 will be, it is not likely to exceed the current demand, and, large as the product will be, it is not probable that it will exceed the year's estimate of thirty millions of tons! This is an immense pile of coal. But the part of all the coal of the world produced in the United States in 1881 was only 63,500,000 out of 205,468,000 tons. As showing the coal increase of the world's production annually, we may mention that the world's product in 1869 was but 104,070,683 tons, from which amount it increased in the ten years following 1869, 100,338,917 tons. The increased demand for manufactured iron has materially increased the consumption of coal, and it is stated that during the period from 1869 to 1880, while the production of cast iron increased 61 per cent, the output of coal shows an advance of only 50 per cent. This marked disparity in the ratios of increase is due to the introduction of improved methods of manufacture tending to promote economy in the consumption of fuel. Statistics compiled by the president of the British Iron and Steel Institute show that in 1871 three tons of coal were consumed in the production of one of iron, while in 1880 only two and one-fifth tons were required. It is also estimated that one-third of the coal produced in England in 1871 was used in the manufacture of iron.

THE Magnificent Harbor of Sydney, N. S. W.--Port Jackson—is proposed to be bridged, for the use of a railway or tramway. The offer comes from a large iron firm in England, who guarantee that large ships will not be interfered with.

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Two passenger trains on the New York Central and Hudson River Railroad collided about half a mile below Tarrytown on the 6th inst. while passing each other on different tracks. The windows of the cars were smashed; the sides of the cars almost wrecked. Four men were injured, none seriously. It is stated that it has been found that at the point where the trains met the tracks are so near together that two trains cannot pass each other without colliding. It appears that never before in the history of the road have two trains met at this exact spot.

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OFFICE CENTRAL PACIFIC RAILROAD COMPANY,
SAN FRANCISCO, July 12, 1882.

THREE DOLLARS PER SHARE WILL BE PAID ON presentation of Dividend Warrant No. 14 on and after August 1, at this office, or at the office of the Company, 23 Broad Street, New York. Transfer books will be closed from 2.15 P. M. July 15, to 10 A. M. August 3, by order of the Board of Directors.

E. H. MILLER, JR., Secretary.

THE LAKE SHORE AND MICHIGAN SOUTHERN RAILWAY CO.
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NEW YORK, June 27, 1882.

The Board of Directors of this company have this day declared a QUARTERLY DIVIDEND of TWO PER CENT upon its capital stock, payable on Tuesday, the first day of August next, at this office.

The transfer-books will be closed at 3 o'clock P. M. on MONDAY the THIRD DAY of JULY next, and will be re-opened on the morning of Friday, the fourth day of August next.

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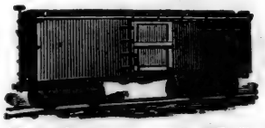
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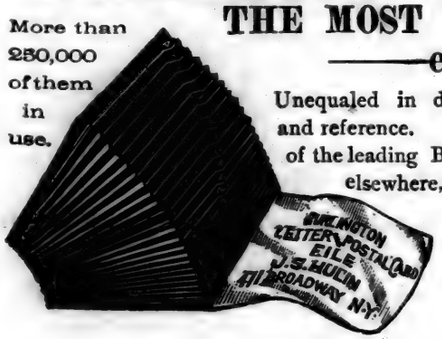
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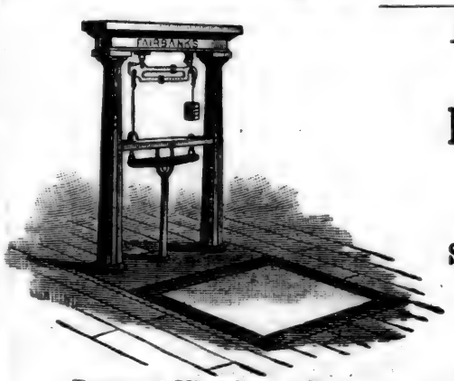
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SECOND QUARTO SERIES.—VOL. XXXVIII., NO. 29.] NEW YORK, JULY 29, 1882. [WHOLE NO. 2,414.—VOL. LV.

CONSTRUCTION.

STREET cars have just been introduced in Tokio, Japan, with great success.

THE work of grading the railroad from Bridgton to Hiram, Me., was commenced last week, and is being actively pushed.

THE Atlantic and Northwestern Railroad Company has acquired the right of way to span the river St. Lawrence above the Lachine Rapids.

A RAILROAD bridge costing about $34,000 is to be built at Lamberton street, New Haven, the expense being shared by the city and railroad company.

THE Crowley's Ridge branch of the St. Louis, Iron Mountain and Southern Railroad was completed to Forest City on the 25th inst. This branch runs from Knobel, on the main line, to Forest City, Ark., a distance of 97 miles.

THE Cincinnati, Van Wert and Michigan Railroad is now in operation from Paulding, the county seat of Paulding county, through Van Wert to Shane's Crossing, in Mercer county—some thirty-two miles. It is expected that the track will be laid to Greenville this fall.

IT seems to be settled that the South Pennsylvania Railroad from the Connellsville region to Chambersburg will be completed. The tunnels are to be put under contract in thirty days, and shortly after that the grading will be commenced. It is thought that the road will be in full operation by this time next year.

THE Boston *Journal* notices the return to that city of W. P. Granger, from the island of Santo Domingo, where he has been engaged in surveying for a railroad between the city of Santo Domingo and the Port of Azua, a distance of 100 miles. The concession for this proposed railroad is held by New York and Boston capitalists.

WORK on the railroad from Swedesboro' to Woodstown, N. J., is going forward rapidly. All the bridges have been built, except the one over the pond near Woodstown. The piles for that are being driven, and the work will soon be completed. The grading is finished, and on some portions the rails are being put in place.

IT is now stated officially that the Pittsburgh Southern Railroad is to be extended from its present terminus to Morgantown, W. Va., over the route on which some grading was done last year before it was abandoned. A large amount of rails and other material, now piled up at Pittsburgh, will be used in building the new line, and in straightening and relocating parts of the old one.

THE Fort Worth and Denver City Railway is now completed to Henrietta, Clay county, Tex., ninety-six miles from Fort Worth, and opened for traffic from that point. It is intimated that the road will be extended forthwith to the Canadian River, and reach there in time to meet the Denver and New Orleans Railway, and form a great trunk line from the Rocky Mountains to the Gulf tide water.

THE idea of the purchase of the charter and franchises of the Philadelphia and Chester County Railroad by the Baltimore and Ohio Railroad Company has been abandoned. It is expected, however, that the road will be pushed forward to completion, and that a new section of country will be opened up. The route, instead of passing through Delaware, will run through Oxford to Baltimore, crossing the Susquehanna in Cecil county.

THE Somerset *Democrat* says it recently received official assurances that the South Pennsylvania road would be built; that the company would have the tunnels in Somerset county under contract in about thirty days, and the work of grading all along the line would be commenced shortly afterward; that they fully expected to have cars running through the country by this time next year, as everything was in readiness to go right ahead with completing the road after the work of grading began.

TRACK-LAYING on the Northern Pacific has reached a distance of 186 miles west of Glendive, in Montana. The road is graded for 130 miles beyond, and track is going down at the rate of 1½ miles per day. On the Pacific side the road is completed to Cabinet Landing, on the Clark's Fork River, 283 miles from Wallula, at which point connection is made by the railway of the Oregon Railway and Navigation Company with Portland. The grading force on the Clark's Fork division has been increased to 6,000 men, and their work is driven. The Missouri division, from the mouth of the Little Blackfoot, in Western Montana, to and through the Flathead Indian reservation, is under rapid construction.

FROM a circular recently issued concerning the Rochester and Pittsburgh Railroad we learn that the company is now constructing an extension from Salamanca, N. Y., to Punxsutawney, Pa., a distance of 124 miles. It will connect at Du Bois, 98 miles from Salamanca, with the Allegheny Valley Railroad, thereby securing a direct line to Pittsburgh. It will also build extensions from Ashford to Buffalo, 45 miles, and from Rochester to Charlotte, on Lake Ontario. It is officially reported at Rochester that the company will have 302 miles, including branches, in operation next fall. The new line is to have a rolling-stock of 20 consolidated 44-ton locomotives, 1,400 20-ton coal cars, 100 box cars, 100 flat cars and 6 passenger cars.

INCORPORATION.

THE State Department at Harrisburg, Penn., has chartered the McCalmont Storage Company, of Warren, with a capital stock of $60,000. J. H. Tack and J. E. Tack, of Philadelphia, are among the directors.

HON. JOHN S. BARBOUR, of Alexandria, Va., has subscribed, on the part of himself and other incorporators, $25,000, the remainder of the amount required for the incorporation of the Alexandria Manufacturing, Mining and Warehouse Company.

THE prospectus has been issued of the European, American, Canadian and Asiatic Cable Company. The capital is £1,500,000. The company proposes to work at a ninepence-a-word rate. The prospectus provides for the establishment of necessary land and water communications for connecting points in Canada with New York City on the one side, and for laying the company's cable from Canada to Europe on the other.

ARTICLES of incorporation of the Blue River Railroad Company have been filed with the Secretary of State of Kansas. The road is to run from Manhattan, Riley county, in a northerly course along the Blue River, through the counties of Riley, Pottawatomie and Marshall, a distance of about sixty miles; capital stock, $1,000,000. The business of the company will be transacted at Atchison, and the directors are F. D. Mills, J. H. Beeson, Henry Low, Frank Schweerdt, John McPherson, L. R. Elliott and E. B. Purcell.

THE Atchison and Southwestern Railroad Company, with headquarters at Atchison, Kansas, has filed its charter in the office of the Secretary of State. The capital stock is $2,000,000. The directors are: J. P. Brown, J. H. Beeson, C. C. Burnes, J. P. Pomeroy, Henry Low, F. D. Mills, E. R. Purcell and

Philip Kepin. This road is to run from Atchison in a southwesterly direction, through the counties of Atchison, Jackson, Pottawatomie and Riley, to some point on the Kansas River, a distance of about 100 miles.

ORGANIZATION.

At the meeting in Atlanta, Ga., on the 25th inst. of the stockholders of the Atlanta and West Point Railroad Company. L. P. Grant was elected president; Cecil Gabbett, general manager; and D. Wappler, secretary and treasurer.

The officers of the Pennsylvania and Martin's Creek Railroad Company, elected on the 18th inst., are: John Brown, president; Thomas L. McKeen, vice-president; George C. Moon, secretary, and William Hackett, Jr., treasurer.

At a meeting of the stockholders of the Iowa Improvement Company, held on the 19th inst., the following officers were elected to serve for the ensuing year: Wayne Griswold, president; Chas. R. Bissell, vice-president; C. R. Field, secretary and treasurer; Geo. F. Woolston, superintendent.

The directors of the Pittsburgh, Chartiers and Youghiogheny Railway Company are: Jacob Henrici, Hon. Henry Hice, John Reeves, J. E. Schwartz, Roger Hartley, George S. Griscom, Edward Gregg, Hon. E. H. Stowe, O. P. Scaife, John G. McConnell, Wm. Miller, and W. A. Robinson. The officers are: President, J. E. Schwartz; secretary, R. T. Hill; treasurer, Hazen Brown; general manager, Joseph Ramsey, Jr.

At the annual election of officers of the Central Pacific Railroad held at San Francisco on the 26th inst., the following gentlemen were elected directors: Leland Stanford, C. P. Huntington, Charles Crocker, C. F. Crocker, W. V. Huntington, E. H. Miller, Jr., and E. W. Hopkins. The directors elected Leland Stanford, president; C. P. Huntington, first vice-president; Charles Crocker, second vice-president; E. H. Miller, Jr., secretary; and E. W. Hopkins, treasurer.

At the annual meeting of the Midland Improvement and Construction Company, whose work in North Carolina has done very much to develop the capabilities of the State through excellent railroad facilities, held in Boston on the 15th inst., the following directors were elected; Lewis Coleman, William S. Denny, Laban Pratt, John C. Chaffin, Henry S. Tarbell, Daniel J. Sprague, W. J. Best, F. B. Beaumont, and C. B. Lancaster. Clerk and treasurer, Wm. S. Denney.

At the annual meeting of the Vermont and Boston Telegraph Company held at White River Junction, Vt., on the 26th inst., the following directors were elected: Norvin Green, David H. Bates, Charles A. Tinker, Roswell H. Rochester, Norman Williams, Thomas Roche, George W. Yates, Henry C. Sherman and George W. Smith. At a subsequent meeting the following officers were elected: Norvin Green, president; R. H. Rochester, secretary and treasurer; D. H. Bates and C. A. Tinker, executive committee.

At a meeting of the directors of the Massachusetts Central Railroad Company, held in Boston on the 24th inst., the following changes were made in the directory: Moses W. Richardson, of Boston, in place of Dr. Franklin Bonney, of Hadley; Elisha S. Converse, of Malden, in place of Wm. A. Dickinson, of Amherst; Henry Woods, of the firm of C. F. Hovey & Co., in place of Charles A. Cotting, of Wayland. The members still remaining are J. Edwin Smith, of Worcester; Henry F. Hills, of Amherst, and Lewis J. Dudley, of Northampton.

At the annual meeting of the Rutland Railroad Company, held at Rutland, Vt., on the 26th inst., the following directors were elected: John B. Page, Rutland; James W. Hickock, Burlington; C. A. Brichard, Brandon; Jacob Edwards, Wallace J. Robinson, and Henry M. Whelney, Boston; John Trout, Rutland; Edward T. Mosely, Newburyport; James H. Williams, Bellows Falls. The directors re-elected John B. Page, president, and J. M. Haven, secretary and treasurer. Messrs. Page, Brichard, Mosely, Robinson and Hickock were appointed as a finance committee.

The convention of the Iron Moulders of the United States and Canada, which ended a session of two weeks' duration in Brooklyn on the 22d inst., elected the following officers: P. F. Fitzpatrick, of Cincinnati, president; Thomas White, of St. Louis, James P. Hooley, of New York, John H. Dance, of Canada, John G. Lewis, of Reading, Penn., vice-presidents; and trustees (who are placed under bonds of $4,000 each): Martin Fox, of Cincinnati; Alfred Thomas, of Cincinnati; William Maloney, of Troy, N. Y.; Daniel J. Wren, of Brooklyn; George Davidson, of St. Louis. The convention will next meet in 1886 at London, Canada.

Inventor of the Modern Plow.

In March, 1798, Jefferson wrote to Mr. Patterson: "In the lifetime of Mr. Rittenhouse, I communicated to him the description of a mold-board of a plow, which I had constructed and supposed to be what we might term the mold-board of least resistance." Jefferson was too busy to fully perfect his plow, and the credit of the modern implement, so far as can be ascertained, seems to be with Jethro Wood, a Massachusetts Quaker, who was born in 1771. If Benjamin West pressed the cat into the service of art and painted his first portrait with a brush cut from her fur, Wood, when only a few years old, melted down a pewter-cup in the nursery, and molded a plow, cutting the buckles out of a pair of suspenders to make the harness; and, fastening the family cat to his plow, endeavored to drive a straight furrow over the flower-beds, for which he was duly whipped. "He was always whittling," says his biographer, Mr. Gilbert (in his book just published in Chicago), "and used a large potato for his model, practising on curves, wings, line of traction and mold board in this convenient material." After much struggle, in 1819 he got out his second patent, which covers the true construction of all modern plows. Of course the invention met with the usual obstructions to acceptance. When he sent a plow to Russia to the Czar Alexander, he got a friend, the President of the New York Society of Natural History and Science, to write his letter to him in French to that autocrat. Unfortunately the diamond ring, which came in acknowledgment of plow and letter, was pocketed by the friend, and so the poor and unhtigious Quaker got nothing in return, as he declined to go to law about it. The story of this up-hill plowing is well told by Mr. Gilbert. In all, Mr. Wood appears to have received less than five hundred and fifty dollars for his invention. Other manufacturers appropriated his ideas, and by the time it was decided that he could claim a royalty on their improved plows, the last grant of his patent had but about a year to run. While laboring for a new extension he fell dead in the city of Washington, and the patent expired without renewal. His daughters, in 1848, went to Washington to petition for some relief on account of the unrequited services their father had rendered to American agriculture, and John Quincy Adams undertook to present their case. He was writing a note to Miss Wood in relation to these efforts, when he fell, dying, from his seat in the House, and the tremulous lines, the last his hand ever traced, were found on his desk and delivered to Jethro Wood's daughter.

To this Wood battle over the plow are traced several important changes in the patent laws, finally secured (after Jethro Wood's death) by the efforts of his son. The "pot-metal" plow—as the cast-iron plow was derisively called by the old man's neighbors—makes a very good story, and the not unusual one, unfortunately, of great American inventions. In the words of Seward, "No citizen of the United States has conferred greater economical benefits on his country than Jethro Wood—none of her benefactors have been more inadequately rewarded." Previous to Wood's time the plow was "a stick of wood plated with iron." The rise and progress of the plow from the forked stick, still used in Egypt, to the Colonial plow of this country, wood, covered with plates made by hammering out old horseshoes, is really a progress of civilization. Mr. Gilbert describes the plow that Jefferson invented, the New Jersey Newbold and the Peacock plows, and gives drawings of the beauty-lines of Wood's plow.

The Panama Canal.

The Panama Canal Company has held its first annual meeting of shareholders. The operations during the first year have been quite preliminary, but M. de Lesseps, in the report read, reminded proprietors, who have manifested some impatience to see the digging of the canal commenced, that according to the original plans the period of organization would not terminate before the end of 1882. The results attained, he said, had only tended to confirm the belief that the canal could be opened within six years from the commencement of the work of excavation. A great portion of the geological formation through which the canal will be made had been classed as "hard rock," but more complete surveys have proved that much of it consists of sand, common earth and soft rock, that may be excavated without boring. This discovery will permit the company to effect a considerable saving in the cost of the work. Returns of the sanitary condition of the Isthmus also show that the death rate

among the personnel of the company has not exceeded that among large assemblages of workmen in Europe. During the first four months of 1882 the average number of persons employed was 2,060, and the number of deaths from age, accident or malady averaged six only per month. The first call on the capital subscribed produced a sum of about 74,000,000 francs, of which 40,000,000 still remained unemployed at the end of the year, and the second call of 125 francs per share on 590,000 shares made at the commencement of the year was duly met. It was originally proposed that of the 600,000,000 francs required for the construction of the canal 300,000,000 would be obtained by shares and 300,000,000 by the issue of bonds. The meeting authorized the Board to issue a first series of 250,000 5 per cent bonds. Of that loan a sum of 60,000,000 francs will be employed for the payment of the last four annuities of the purchase of the Panama Railroad. By that purchase the company secures an entire monopoly in the transit across the Isthmus, and will be able to utilize the railway, its wharves and quays, for the construction of the canal.

The Cable Motor in Philadelphia.

ABOUT sixty workmen are engaged in laying the new tracks of the Union Passenger Railway on its Columbia avenue branch, along which the cars are to be hauled to and from Twenty-third street and the East Park entrance, a distance of a mile, by means of an underground steel cable running upon iron wheels, and moved by engines stationed at the depot at Twenty-third street. At present a double-track has been laid as far west as Thirtieth street, and the street paved to that point, and ground broken and the track laid on the northern side of the roadway to the railway bridge crossing Columbia avenue at Thirty-first street. About three squares remain to be completed, when the East Park entrance will be reached. Two Porter & Allen engines, of 100-horse power each, have been built at the Southwark Foundry, on Washington avenue, and are ready for delivery as soon as the boilers now at the depot are permanently in place. It is expected to have this car running on the straight track in three weeks, and around the curves and switches in a little longer time, some delay being found in getting the curved castings ready. The cable, which is of steel wire 1¼ inches in diameter, will run around iron wheels 14 inches in diameter, placed in manholes 32 feet apart, and, therefore, easy of access. An iron cable will be held in reserve for contingencies. The aperture in the street, through which the clutch-bar will be attached to or detached from the moving cable, thus causing the car to move or stop, as the conductor, who is to stand upon the front platform, may desire, is about three-eighths of an inch in diameter, and discernible only as a narrow slit, barely admitting the insertion of a finger, and apparently no impediment or obstruction to travel, as evidenced by the animals and vehicles belonging to the company which now daily pass over it with materials for paving and track-laying. The cars are to be run in couples, the front ones being built especially for the purpose, and provided with clutches and cow-catchers, and the rear ones with extra strong platforms, with the proper connecting apparatus. All the cars are to have safety-boards at the sides, so that in no case can a passenger get under the wheels. The work of laying the track is being done by George Rice, the chief engineer of the company, who personally supervises it, aided at times by Wm. H. Kemble, the president of the company. Ten gravel cars are being built, and ten of the old ones altered to adapt them to the system.

Mr. Kemble, who was on the ground yesterday afternoon, said that it was expected to have the work completed by the 4th of July, as the iron was to be all in readiness for laying by the 25th of June, whereas only one-fifth of the quantity was at hand at that time. While the company advertised for proposals from all iron manufacturers of standing in Philadelphia, Mr. Kemble said but few came forward, probably owing to the size of the castings, which weigh from 2,240 to 2,500 pounds each, and the loss consequent upon damage or breakage. If the company wants more made, which they expect will be the case, as they think of extending the cable road straight down Columbia avenue, he says he has no doubt there will be plenty to offer for the iron work. He is confident there can be no failure in working the road, as the cable motor is successful in San Francisco and Chicago, of which he was convinced by personal observation and repeated assurances, still continued, of the presidents of similar roads, that their lines can do the work laid out for them, and with less possibility of accident, than by the horse-power system. Mr. Kemble added, when interrogated as to the cost of the work, that this was not taken into consideration, further than that the company were building the road by day's work by their own men as cheaply as possible consistent with solid work and a due regard for the convenience and safety of the public. When the road is in operation, he said, they will then see where they can economize, and in extending the system, may save, in the weight of castings alone, which, he said, are $15 less per ton than when the present contract was made. Along Columbia avenue, east and west of Twenty-ninth street, there is a sharp descending grade to that point, upon which cars going in either direction can run by gravity alone for a distance of about four squares.—*Philadelphia Ledger, July* 22.

A SAFETY railway stove has been tested at Washington, D. C., in the presence of railway and post-office officials. When toppled over an automatic plug falls out and water is discharged upon the fire-pot from above and below, extinguishing the fire at once.

THE Pittsburgh, Cincinnati and St. Louis Railway Company is having one of Rodger's patent car platform illuminators put in a car of the Piqua division for trial. By a system of reflectors the lamp in the center of the car is made to throw a flood of light upon the platform from the projecting roof above. The patentee is W. S. Rodgers, a brakeman on the Piqua division.

CINCINNATI will open its tenth industrial exposition September 6, and it promises to excel in completeness all of its predecessors. The exhibits will be classified in eight departments, as follows: 1, machinery; 2, minerals, metals, railroad supplies, hardware, stoves and heating apparatus; 3, tobacco, liquors, provisions, cereals, etc.; 4, household furniture, pottery and ornaments; 5, textiles, clothing, etc.; 6, scientific and educational; 7, fine arts; 8, horticulture. The exposition will close on October 7th.

A RECENT investigation of the dirt banks at the collieries owned by the Philadelphia and Reading Coal and Iron Company showed that that there was at least 60,000,000 tons of them. Of this at least 40,000,000 tons can be utilized for fuel. This includes marketable sizes of coal ranging from buckwheat to small stove. It is the intention of the company, as soon as the jig houses now building for the treatment of this coal dirt are finished, to assort the sizes and send them to market. This month the company will use 10,000 tons of coal dust in engines of its own build for the purpose, under the patent of John E. Wootten, thus effecting a saving of $20,000 in fuel. The dirt banks in the Lehigh and Wyoming regions are to be treated as those in the Schuylkill region, and the engines on the connecting line between the Philadelphia and Reading and the New York Central and Hudson River railroads, now building, are to be of the dirt-burning pattern.

THE new road from Philadelphia to Long Branch is described in the last number of the proceedings of the Engineers' Club of Philadelphia by C. S. d'Invilliers. As it is twelve miles shorter than the old route, and runs for twenty-six miles within sight of the ocean, probably most Philadelphians who have visited Long Branch this summer have traveled over it, and are familiar with the route. The new part of the road is really only that which runs from "Whitings" to Barnegat bay, which is crossed on a pile bridge, and thence for twelve miles along Manasquan beach, between ocean and bay. Old roads with which the new section connects make up a through line from Philadelphia to Long Branch and all intermediate watering places. The building of the new road presented no great engineering difficulties, except that Manasquan beach is little more than a sand bar, parts of which are or were liable to be swept over by the sea in times of storm. In fact the "glades" between the sand dunes were freqnently covered with water at high tide, and at storm tide a stream of water eighteen to twenty inches in depth, running from sea to bay, crossed the line of the railroad. It was at first proposed to build pile-bridges over the glades, but a simpler plan was adopted. Old railroad ties were planted in the glades and a quantity of brush piled before and behind the ties, at first parallel and then at right angles to the sea. Sand was then thrown up outside of this to a height sufficient to prevent ordinary storm tides from passing over it. Nature is expected to complete the work by wind and wave. The cost has only been ten cents per lineal foot, as against seven dollars for the proposed bridges, and the dikes promise to be as effective as they have been cheap.

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We will send you the "Journal" for three months for $1. Try it, and you will be glad to continue taking it.

WE are in receipt of a letter addressed to our President, of which the following is a copy:—

GEORGE F. SWAIN, ESQ.

DEAR SIR: I have tried in various ways to obtain some information regarding the "Denver, Western and Pacific Railway." Sidney Dillon is president. The interest on the bonds has not been paid for six months, and the Union Pacific Railroad, whose stockholders own a majority of the stock, states (by their secretary) that no earnings have been reported, out of which to pay the interest. As I am much cramped on account of this failure to pay the coupons, I write to you in the hope that you will obtain information of the condition of the road, and give the same in your JOURNAL, which I read. It is rumored that this road is to be amalgamated with the "Colorado Central Railway." I would like to know if you think these bonds will ever be worth anything. Yours, truly,

JULY 14, 1882.

We submit the above letter to our subscribers and the readers of the JOURNAL, in hopes that some one among them may impart the desired information. We fail to find such a railway as the "Denver, Western and Pacific," in "Poor's Railroad Manual," and the slight investigation we have been able to make, leads us to imagine it to be a railroad only on paper.

SOCIABILITY.

SOCIAL natures are as universal as the human race itself. When you meet a person not social, you meet a man who from some cause is in an unnatural condition. He may have been disappointed in love, had his confidence betrayed by one he esteemed highly as a friend, met with sudden disaster and loss of all earthly possessions, been prostrated hopelessly by disease, or weighed down by a vivid consciousness of his sinfulness. In either case his over sensitive nature has caused him to retire within himself, and this retirement holds his sociability in control. It is well at times for men to thus retire, that they may take soundings as to their true position in life, but as no man can be social with himself alone, it is not wise for him to stay retired too long.

It is related of active business men who have retired after securing wealth, that they did not live long, and on the same principle a man who retires from his social nature becomes dead to the world. The social nature was given to man for a purpose. Its action is two-fold. He who is eminently social can look upon the shortcomings of those with whom he is brought in contact with a very lenient eye, and derive pleasure from parties seemingly the most barren. He can shake hands with the high and the low, the rich and the poor, and find in each something that will cause his face to ripple with the smile of pleasure. A man with this social nature derives so much comfort and pleasure in this world that the years slip by almost unnoticed, and life, barring a few shady spots, is flooded with sunshine.

But this is the selfish side, having reference only to the party having the social nature. There is another side, that which refers to the people with whom this party is brought in contact. How many times have we looked out of the window of our house on a cold, cheerless day in December, the black clouds completely obscuring the sun, and shedding upon the earth a drizzling rain. How forbidding everything outside of the house seemed, and how reluctantly we remained retired, not drawn out. How many times we have looked out of our houses on a bright, sunshiny day in June. Compared with the golden sunshine, the clear blue sky, the balmy air, all speaking of buttercups and daisies and singing birds, the house within seemed a prison, and we left it with a glad bound, the outside influences drawing us with irresistible power.

Such are the influences of the unsocial and the social natures upon us. The first comes to us with such a forbidding aspect that we of choice prefer what we have to what they can give, and are not drawn out. The second, or social nature comes to us as a lovely day in June, and we gladly leave all that we have to bask in the sunshine of its smiles, enjoy its pleasant words and hearty laughter, which are far sweeter music to human ears than the singing of birds or the murmuring of brooks. There is therefore a great and noble work before every social nature. It is to carry sunshine where clouds have lowered. The sick tossing upon beds of suffering find a deal of comfort in looking upon a sunshiny face. The man who has been the victim of misfortune feels himself not friendless when such a nature takes him by the hand. The tired mother, who feels as she tucks away the children in bed at nightfall that life means drudgery, loses this feeling while listening to the laughter of a social spirit. Even little children, whose cares and troubles and sorrows are as large in proportion as those who are older grown, will change their crying into laughter at the bidding of a good-natured soul.

So this sociability in every department and phase of life works out its two-fold action of making the person look with kindly eyes upon his neighbor and get good to himself, at the same time making him a large, luminous sun shedding cheer and comfort upon all who come within his influence.

At this point we would gladly drop the pen and write no further, but kindness as well as

justice demands that we shall show at least one evil connected with our social natures. In our reaching out for companionship and in our desire to help others to have enjoyment, we are apt to go into by and forbidden paths, which, if we are not careful, ultimately lead to ruin. There may be no harm in drinking a few glasses of beer during an evening; but if one of the party becomes drunken, then harm is done, and all are more or less morally responsible for this. They who had control over themselves should have exercised control over the unguarded one and saved him.

There may be no great wrong in throwing dice for cigars, provided all parties interested are simply gratifying their social natures; but when the stakes are doubled from one cigar until they reach thirty, they have lost sight of the social part and are gratifying the desire for gain, the ruling characteristic of gamblers. It may not be wrong for men who enjoy cards to make nominal stakes for the purpose of adding excitement to the game; but when one of the party holds a straight flush with a king at the head, and keeps raising two dollars better than his neighbor, who may hold four aces, he has lost sight of the sociability and, unwittingly perhaps, is seeking to fleece one whom he ought to protect, seeing that he calls him friend.

Now when a man drinks too much, or lets his cupidity overrule the social, or seeks to fleece instead of to befriend, it is only a question of time, opportunity and place when he will become involved in a quarrel the effects of which will be disastrous to all concerned.

It is not necessary to pursue this train of thought further. We have written enough to show the uses of sociability and the most apparent abuse. It remains necessary only to exhort to a more careful cultivation of our social natures, that ourselves and all with whom we are brought in contact may be made happy, and to advise a retirement within ourselves when we find that we are abusing our social natures by over-drinking or any other cause.

Railroads of Pennsylvania.

The annual report of the Secretary of Internal Affairs of Pennsylvania, relating to the operations of the railroad companies of that State for 1881, furnishes some interesting details.

The quantity of freight moved by all lines is classified as follows: Anthracite coal, 35,825,023 tons; bituminous coal, 19,085,066 tons; petroleum and other oils, 3,875,026 tons; pig iron, 3,963,353 tons; railroad iron, 1,641,455 tons; other iron castings, 3,070,002 tons; iron and other ores, 7,061,307 tons; stone and lime 4,359,327 tons; agricultural products, 10,006,508 tons; merchandise and manufactures, 8,816,676 tons; live stock, 2,157,646 tons; lumber, 6,359,430 tons; other articles, 9,214,263 tons.

The number of tons of 2,000 pounds of through freight moved is stated to be 40,677,031, and the gross amount of tonnage for the year (2,000 pounds per ton) is reported to be 132,410,302. The amount of through passengers on main road is 3,310,529, and the number of passengers of all classes is reported to be 57,270,037.

The aggregate receipts of the steam railways of the State are reported as follows: Passengers, $26,241,082.91; freight, $107,473,605.58; mails and express, $3,250,754.84; miscellaneous, $8,188,664.15; total, $145,154,107.48. The expenses are classified as follows: Charged to cost of road and equipment, $22,920,427.63; charged to maintenance and buildings, $18,360,288.68; charged to maintenance of motive power and cars, $17,398,915.24; miscellaneous, $49,762,453; total, $85,521,657.36.

A comparative statement gives the number of passengers carried in 1879 as 41,583,552; in 1880, 45,026,726; in 1881, 57,270,037. The tonnage of 1879 is stated to be 111,727,809; of 1880, 111,348,416; of 1881, 132,410,302. The receipts of the last three years compare as follows: 1879, $128,984,830; 1880, $133,945,771; 1881, $145,154,106.

A table of comparative expenses shows that the advance in the cost of railway operations during the period from 1880 to 1881 was universal. The reported expenses in 1879 were $75,731,288.67; in 1880, $75,185,377.95; and in 1881, $85,521,656.36. Every important road was obliged to increase its expenses, on account of the advance in labor and materials, and the uniformity in this upward movement in expenses is very noticeable.

Important Advance in Telegraphy.

It has remained for Albert L. Parcelle, a skilled mechanic and talented inventor, to produce a mechanism by which the barriers to rapid and cheap telegraphy are broken down, and which, by simple applications of known principles, promises to entirely revolutionize the telegraphy of the world. His system is called "Harmonic Automatic Telegraphy," and differs from that in use by the Rapid Telegraph Company in two important points. The first is an improved and abbreviated construction of the alphabet, in which position is used to the great saving of characters and consequent saving of time in preparing the copy in the perforator. The second is the employment of a system of sympathetic resonance by which, with the use of a single wire and unskilled operatives, the same amount of work which is now done by ten wires and skilled labor can be accomplished. Thus for the first time in the history of telegraphy the Morse alphabet and system are done away with, as are also the translating and transcribing by the receivers.

Instead of requiring the ordinary handling and delay, the message, be it long or short, is rapidly prepared in a perforating machine, fed into the transmitter, and is instantly reproduced in clear Roman letters on sheets of paper, ready to be sent by messenger to the party addressed. The actual number of words sent on an average by the American Rapid is from 600 to 700 per minute, while the lowest computations made from results obtained from an instrument only partially completed, show a speed by the new method of 5,000 words per minute. A great advantage, too, is, that being sent over a single wire, the matter comes consecutively, and is, therefore, free from liability to error, as is often the case where several wires are used for the sending of a single dispatch. For press work the new method will prove of inestimable value, as by the use of this device a speech of 2,000 words, occupying about one column of the *Herald*, can be perforated, sent over the wire, and given to a messenger at the other end of the line for delivery and all ready for the type-setter in three and a-half minutes. Of course, in order to obtain this speed the copy is originally cut up into "takes" and distributed to several boys or girls, who transcribe the matter by means of the perforating machines, after which the several pieces are pasted together in one continuous strip. The strip runs through the instrument at great speed; and it will thus be seen that the celerity with which a dispatch is transmitted depends principally uppn the number of perforators employed. It will thus be understood that, from beginning to end, the system demands only unskilled labor, by reason of the high degree of automatic perfection attained, and herein lies the great secret of cheapness. The speed is another valuable consideration, and when both elements are combined the result seems to be, indeed, the long-sought desideratum.

The above brief outline of the development of Professor Parcelle's system was gathered from a report presented yesterday afternoon by Robert Spice, B. S., Professor of Analytical Chemistry and Physics of the Collegiate and Polytechnic Institute, Brooklyn, N. Y., at a special meeting of the stockholders of the Merchants' Union Telegraph Machine Company, in the company's offices in Mason Building. Among those present were a number of well-known capitalists of this city, New York and Chicago, besides gentlemen representing the principal telegraph companies of the country, whose interest in the new departure is openly manifest. It was apparent that the principles underlying the new system, and the methods for obtaining similar results at the ordinary rate of speed, were familiar to the latter gentlemen, whose admiration for the skill which produced the desired mechanical combinations, in which lay the grand success of the achievement, was freely expressed.—*Boston Herald, July* 12.

Electric Railway Brake.

An exhibition was given on the 20th inst., of the newly patented Waldumer electro-magnetic brake at Rockaway Beach. The system was applied to a train of four empty box-cars and a passenger coach, on a track of the New York, Woodhaven and Rockaway Railroad. The train made several trips at a speed of twenty-five miles per hour, and by an application of the brakes to the box-cars alone, the train was stopped without perceptible jar in less than its own length. With the train running at the same rate, the rear car was detached, and sole-

ly by the automatic action of the brake the isolated car was brought to a standstill within a distance of sixty feet. It is claimed that the device can be applied with equal facility to a train of forty cars. The results were considered entirely satisfactory by those present, among whom were W. W. Worthington, superintendent of the Fort Wayne, Cincinnati and Louisville Railway, and C. E. Garey, master car builder of the New York Central and Hudson River Railroad. The mechanism consists of a dynamo-electric generator, stationed on the running board of the locomotive and operated by a rotary engine of one horse-power, which is only in motion when the brake is being set. The force of the current is regulated by the speed of the rotary engine. The brake is set by a throttle-valve the same as with the air-brake. Two copper wires run from the dynamo generator under the tender. There is a flexible terminal between the cars and the coupling which disconnects automatically when the train separates. The wires run to a magnet four inches in diameter and fifteen in length, overlaid with insulated copper wires, which is practically a part of the axle and revolves with it. It is surrounded by an armature consisting of nine bars, which are engaged in the drum surrounding the whole. Its operation is such that when the current is turned into the wire of the magnet, the bars are attracted, and adhere to the magnet with a force proportionate to the strength of the current applied, causing the drum to revolve and wind up a chain communicating with the ordinary hand-brake device. By a system of leverage the initial power is increased eighty times at the point of application. The brake is released by simply stopping the rotary engine. The steam which works the rotary engine detracts nothing from the effective power of the locomotive, because it is used only when the steam is shut off from the locomotive. When attached to ordinary freight trains a "reserve generator" will be placed in the caboose, which supplies the power that operates the brakes in cases of accidental uncoupling or breaking. The inventor claims that by this system freight trains can be brought to a halt by a uniform application of perfectly regulated force to each car of the train, thus placing them under as complete control as are passenger trains with the air-brake. The inventor is Mr. A. L. Duwelius.

Hon. A. Campbell, Acting Secretary of State of the Dominion of Canada, in replying to a communication from the Lieutenant-Governor of British America transmitting resolutions adopted by the provincial House of Assembly in reference to the advisability of assisting immigration and inducing the railway contractors to employ white rather than Chinese labor on the Canada Pacific Railway in that province, says: "I have now to state for the information of your Government that his Excellency is advised that there are no means at the disposal of the Government to induce the contractors on the Canada Pacific Railway to import and employ the labor of white immigrants on their works instead of of Chinese. If, however, the contractor desires to prepay the passages of white laborers from the United Kingdom, the utmost facilities of assisted ocean passages, and such services as can be rendered by the agent of the Department of Agriculture, will be freely afforded. Transportation across the continent is, however, at present both difficult and expensive, and the Government have not at their disposal any means to assist such movement of immigrants."

Philadelphia and Reading Companies.

The following is the comparative statement of the Philadelphia and Reading Railroad Company and the Philadelphia and Reading Coal and Iron Company for the month of June, 1882 and 1881 :—

	1882.	
GROSS RECEIPTS.	*Profit for mo.*	*Year to date.*
Railroad traffic	$752,923 68	$4,519,411 37
Canal traffic	6,158 76	*l*7,225 37
Steam colliers	17,220 48	185,612 08
Richmond coal barges	*l*2,906 29	*l*12,249 01
Total Railroad Co	$773,396 64	$4,685,549 07
Reading Coal & Iron Co	70,778 35	326,065 66
Total of all	$844,174 99	$5,011,614 73
TONNAGE & PASSENGERS.	*Month.*	*Year to date.*
Tons of coal on railroad	712,200 06	4,314,730 02
Tons of merchandise	630,542 11	4,346,596 11
Passengers carried	1,064,259	6,432,661
Coal transp by stm colliers	43,652.00	324,808.02
TONS OF COAL MINED.		
By Coal and Iron Company	339,159.01	2,020,538.06
By tenants	133,874.00	789,973.04
Total mined from lands owned and controlled by Co. and from leasehold estates	473,053.01	2,810,511.10

	1881.	
GROSS RECEIPTS.	*Profit for mo.*	*Year to date.*
Railroad traffic	$674,667 34	$4,102,322 85
Canal traffic	73,281 82	101,823 75
Steam colliers	22,383 86	119,031 23
Richmond coal barges	1,864 48	*l*667 84
Total Railroad Co	$768,468 54	$4,322,512 99
Reading Coal & Iron Co	70,831 92	366,018 64
Total of all	$839,300 46	$4,688,531 63
TONNAGE & PASSENGERS.	*Month.*	*Year to date.*
Tons of coal on railroad	690,613.13	4,080,461.19
Tons of merchandise	558,106.04	3,539,769.01
Passengers carried	969,167	5,583,003
Coal transp by stm colliers	55,454.03	302,359.09
TONS OF COAL MINED.		
By Coal and Iron Company	350,403.15	1,852,621.16
By tenants	121,268.16	781.775.17
Total mined from lands owned and controlled by Co. and from leasehold estates	471,621.71	2,634,397.13

Total of both companies for the month of June, 1882 : Gross receipts, $3,017,983.50 ; gross expenses, $2,173,808.61—profit, $844,-174.99.

[From our Special Correspondent.]

La Compania Nacional Mexicana de Construccion.

EL FERROCARRIL DE MANZANILLO Y LAREDO.

Editor American Railroad Journal:

Our railroad ran their first train to Toluca on May 5th. I went up on the 3d in a buck-board and found the town full of excitement. You can hardly realize how people feel who expect to see a train for the first time in their own town. It was said that many people cried for joy.

The Governor had given orders for all houses to be painted, and I scarcely knew the old town; even the old adobe huts had been painted red, and marked off in imitation of brick. On either side of the street leading to the depot were placed thirty-foot poles with banners and streamers. Between were handsome serapies and brightly colored shawls. Just before the depot was a 50-foot arch for the train to pass through, beneath which was a band of music.

Ruralies (mounted soldiers) were placed on either side of the track with drawn swords. At 11:20 A. M., the train pulled in. Mr. Tilton and myself with our two buck-boards and mules, gaily decorated with Mexican colors, had driven in style to the depot, where we found fifteen thousand people—from the rich, aristocratic old lady and handsome daughter in their silver-mounted coach, down to the peon with scarce rags enough to cover him, all anxious for the first glimpse of the wonderful "maquina" (engine).

The engine, two parlor cars, and an open "vista" car were all nicely decorated with Mexican flags and wreaths, and when they ran beneath the arch the cheering was stupendous. The people crowded around so closely that it was difficult to get the dignitaries out of the cars. But at last it was accomplished, and they proceeded to a grand banquet of four hours' duration, given by the Government of Toluca.

The most enthusiastic toasts were given to Messrs. Sullivan and Palmer, and all concerned. The table was arranged in the regulation open square style, and two hundred guests sat down to it. Beautiful flowers and fine music were the auxiliaries to a handsome spread. I was fortunate enough to receive a personal invitation from the commissioners, most of whom I knew. That, and my recollections of the day, will be something to recall, when the pioneer railroad days in Mexico are over.

The railroad will be open for travel and traffic in a few days, and every one anticipates a heavy business. The telegraph line will be open to the public the 1st of June, 460 kilometres, and 150 kilometres more will be built at once. I have one bad piece of news for us, though. In the future we will only get our mail from New York every two weeks, instead of every week, which is too bad, but suppose that it cannot be helped. J. O., Jr.

Ciudad de Mexico, May 13, 1882.

Anticipating an unusually large crop of peaches and other fruits, the Baltimore and Ohio Railroad Company are making preparations for handling that perishable class of freight. One hundred house cars have been fitted at the Mt. Clare shops with ventilators and shelving, so as to admit of a free circulation of air while in transit. Four openings are made along the sides of the car near the top, and two at each end, one at the bottom and the other at the top. The openings are covered with a wire net work. New sliding doors of iron grating are also provided instead of the solid wooden ones. There are three tiers of shelving in each car, upon which fruit may be packed so as to secure the benefits of the ventilation. A new United States railway post-office car, similar to the five recently built, is under construction at Mount Clare.

The Turkish title Pasha—written also Pacha, Pashaw and Bashaw—is given to governors of provinces, ministers of state and naval or military officers of high mark. As applied to a military officer, it implies a rank equal to or above that of a brigadier-general. Bey or Beg, which means lord or commander, is a title given to the sons of a Pasha and to army officers of the rank of colonel. Arabi, as the commander of the fourth regiment of the Egyptian army, was known as Arabi Bey; it was upon his taking the office as minister of war in the present cabinet that he became a Pasha. It may be added that the term Bey has some latitude of meaning, since it is applied to the supreme authorities of Tunis and Tripoli.

OUR BOSTON LETTER.

Being a Review of Events.

[From our Special Correspondent.]

THE MASSACHUSETTS CENTRAL RAILROAD.

This great tunnel line (on paper) is just at present in that condition which a drowning man is generally supposed to be in when he is so far gone that he catches at straws, dead leaves and such other useless things as may come within his reach. That is to say, it is nearly under water financially; in fact, it might be said, metaphorically speaking, that only its hair is visible, and but little of that. It would be of no use to cover the history of this road, because it is well known to most of the readers of the JOURNAL. It has been uphill work from the first. It was begun in 1872, and went along slowly, until in 1880 active work was carried forward, and it was formally opened to the public in October of that year, some 26 miles being completed. The usual flourish of trumpets was indulged in, and to gain public favor the officers took the shortest road, *i. e*,, through their stomachs; in other words, a big dinner was given at Hudson (then the terminus), at which many railroad men were present. Much was then said about its future; it was to be a trunk line, sleeping-cars from the West were to come over it, a new freight line was to be established, other and competing lines were expected to turn into "two streaks of rust" before many years. The project looked well, the bonds sold at par, and even got a dollar higher. The unwary and the uninitiated bought its common stock. Finally the road was built through to Jefferson; but from that time the troubles commenced, and the work has proceeded no further, and is not likely to at present. From the first it has not paid expenses; large amounts of building material, bought long before it was needed, depreciated on their hands, the bonds went down, and finally wrecked the banking house of Chas. A. Sweet & Co., who undertook to float them. About this time ugly and unsavory reports about the road and its condition began to be noised abroad. Among other things it was ascertained that the rolling-stock was owned by Contractor Munson, and that the builders of it held a mortgage over him. The employes were seven weeks behind on their pay, the State was clamorous for its taxes, and clouds gathered around thick and fast. Many meetings have been held, much eloquence has been aired and much bile gotten rid of; finally it was figured that if $150,000 could be raised the present danger could be patched up. It was tried, and though every nerve was strained it could not be done. About this time the road defaulted the July interest on its bonds. Then the vultures (creditors) which had been so long hovering over descended upon its carcass and commenced their repast. President Boutwell at once resigned, as have many of the directors. The State commenced suit for $10,000 of unpaid taxes. Mr. Munson, the contractor, got tired of furnishing the road with rolling-stock for his own amusement, and last week two locomotives, four passenger cars, two combination cars, two milk cars and several freight cars were tied up at South Sudbury station, and will be sold at auction August 8th. The road owes the trainmen and clerks who work for it three months' pay. If one is led to wonder why people will work for such a road, when they seem to be doing so just for their own amusement, as in this case, they must reflect that they are probably able to live on faith, and that of course they regard the honor of being a railroad man to be sufficient compensation; anyway it is about all these people have had lately. The future of this concern is very uncertain. At present the Boston and Lowell Railroad is lending them rolling-stock with which to do business. "Verily they will have their reward" (if they can get it). All kinds of rumors are afloat that different roads are going to take this one and operate it, but there is nothing authentic as yet. When the Massachusetts Central officers can't make both ends meet, it is hard to see how any other officers are going to. The new president, Mr. Aldrich, is full of zeal, and is getting a board of directors congenial to himself. It is said that he has great confidence in the future of the road, and if he has, it is a good thing, and it is to be hoped that he will continue to have. The bonds are quoted at 40 and the stock at $4, and it requires a good deal of confidence in some one to buy it even at those figures. If something is not done soon the road will either go into a receiver's hands or be sold out for the bondholders.

The New England General Freight Agents Association, the New England General Ticket and Passenger Agents and the American Ticket Brokers Association have all met here within ten days.

A thousand shares of the Connecticut River Railroad new stock are to be sold at auction here in August.

The baggage-masters and brakemen of the Old Colony road have asked for ten cents per day more wages. If they get it the former will receive $2 per day and the latter $1.85.

President Bliss, of the Boston and Albany Railroad, will soon remove to this city from Springfield, to reside. His family are at present cruising along the coast in his yacht.

Mr. S. W. Cummings, formerly general pass. agent of the Fitchburg Railroad, and later auditor of the Atlantic and Pacific, has been appointed general pass. agent of the Central Vermont Railroad, with headquarters at St. Albans. Mr. Cummings is a very capable and popular man, and will be missed by his many friends in this city.

The JOURNAL man saw 13 car-loads more of poor children come in from their picnic at Lake Walden on the 20th. It was noticeable that about nine out of every ten of them brought home armsfull of "sweet fern," which, when dried, is a favorite smoking material with children.

The estimated earnings of the New York and New England Railroad for the week ending July 15 are $73,239.30, which is an increase of $16,280.62 over the same week of last year, or about 28.6 per cent.

Our beach roads to harbor resorts are doing a tremendous business, and their facilities are taxed to the very utmost. The Lynn and Boston Horse Railroad carried on the 21st 15,000 passengers in Lynn alone.

About this time of theyear, ye railroad clerk, instead of closely scanning the horizon for the appearance of signs of the approaching dawn of a new era in railroading, spends his time in scouring around among his friends, to see how many passes he can raise for his vacation.

Counsel has at last decided that the New York and New England can sell their Woonsocket division to the Boston and Albany, and give a clear title to it. By this the greatest obstacle to the Newton Circuit Railroad is removed.

A good story comes from the island of Nantucket, which has on it a railroad 4 miles long, to the effect that the officers of that road received a "car-tracer" from a western road, inquiring if a certain car of theirs was in any of the Nantucket Company's yards. The yardmaster of the road was summoned, an investigation was had; such a thing had never before happened in the history of the island. After solemn conclave, he was told to go and gather together all the cars of the company, and to see if any foreign cars had lit among them. He went and counted all his cars, of which the road owns three, and no stranger was found among them, and the tracer went back so inscribed.

Some bright individual bethought himself of the Boston office of the Globe Company, in the Rialto Building, and promptly made a levy on the furniture for $400, the amount of a claim which he had. It seems that none of the other creditors had thought of this; $600 was realized at the sale, and "another soul made happy."

New York and New England securities are to be listed on the New York Exchange before long.

The Old Colony Railroad will soon run cheap excursions to Rocky Point, R. I., and about that time ye festive clam will prepare his funeral oration, and say good bye to his friends.

At the coming exhibition of the New England Mechanics and Manufacturers Institute, to open September 6th, the following railroads of the South will exhibit the products of the country they open, also its mines and manufactures: The Richmond and Danville, the Georgia Pacific, the Chesapeake and Ohio, Louisville and Nashville, Norfolk and Western, East Tennesee, Memphis and Charleston, and the Shenandoah Valley railroads. So many roads are capable of pretty well airing what the South can produce.

The Old Colony Railroad has just completed a four mile link, from Taunton to Whittenton station, which was inspected by the Railroad Commissioners last week. By this trains will so run as to accommodate the Taunton people much better, and it will avoid the troubles at Weir Junction, about which there has been so much grumbling.

W. P. Granger, who was formerly connected with the Hoosac Tunnel and other enterprises in and around Boston, before his departure for San Domingo, has just returned home from there, having obtained for Boston and New York capitalists a concession to build a 100 mile railway from Santo Domingo to the port of Azua. He also surveyed the entire route of the concession. "CURTIS."

BOSTON, JULY 25th, 1882.

The Stock Exchanges and Money Market.

New York Stock Exchange.

Closing Prices for the week ending July 26.

	Th.20.	F.21.	Sat.22.	M.24.	Tu. 25.	W.26.
Adams Express	.....	140	.....	.....	.....	140
Albany and Susq	.....	.....	.....	.....	.....	.....
1st mortgage	.....	.....	113	.....	.....	.....
2d mortgage	.....	.....	.....	.....	.....	.....
American Express	93½	94	94	.....	94	95
Burl., C. R. & Nor	.....	.....	80	78½	.....	81
1st mortgage 58	.....	.....	102	.....	.....	101¼
Canada Southern	64¼	65	65	65½	63¾	63½
1st mortgage guar	.....	93½	93¾	93¾	93⅝	93¾
Central of N. Jersey	82	82½	84⅞	85	81½	81¼
1st mort. 1890	118¾	.....	119	.....	.....	.....
7s, consol. ass	.....	.....	.....	.....	.....	.....
7s, convertible ass	110½	110½	.....	111	.....	111¾
7s, Income	.....	.....	.....	.....	.....	.....
Adjustment	106	.....	.....	.....	106	106⅞
Central Pacific	93	92½	92⅞	95⅛	95½	95⅞
6s, gold	.....	116¼	.....	116⅞	116⅝	116⅝
1st M. (San Joaq)	.....	.....	110½	.....	.....	.....
1st M. (Cal. & Or.)	.....	.....	.....	.....	.....	.....
Land grant 6s	..	.....	.....	.....	.....	.....
Chesapeake & Ohio	25½	25¾	26	26¾	26⅛	26
1st pref	37¼	38	38	40	37½	38
2d pref	.....	.....	28	27½	27¾	27
1st mort., series B	83½	.....	85	.....	86	.....
Chicago and Alton	.....	139¾	.....	139½	.....	139¾
Preferred	.....	.....	.....	.....	.....	.....
1st mortgage	.....	.....	.....	.....	.....	.....
Sinking Fund	.....	.....	.....	.....	.....	.....
Chi,, Bur. & Quincy	134½	134	134⅛	134¾	134⅜	134¼
7s, Consol. 1903	.....	.....	.....	.....	128	.....
Chi., Mil. & St. Paul	118¾	119⅛	119¼	121⅛	120¾	120½
Preferred	133½	133¾	133¾	134⅞	135⅛	134⅞
1st mortgage, 8s	.....	.....	.....	.....	.....	.....
2d mort., 7 3-10s	.....	124	.....	.....	124	.....
7s, gold	.....	.....	.....	.....	124	.....
1st M. (La. C. div)	.....	.....	.....	.....	.....	.....
1st M. I. & M. div.)	.....	.....	.....	.....	.....	.....
1st.M. (I. & D. ext.)	.....	.....	.....	.....	.....	.....
1st M. (H.&D. div.)	116¼	.....	.....	.....	.....	.....
1st M.(C. & M.div.)	.....	.....	.....	.....	.....	.....
Consolidated S. F.	120½	120½	121½	.....	.....	.....
Chi. & Northwestern	134½	134½	134½	136½	136	136¼
Preferred	148¼	148½	.....	149¾	151	150
1st mortgage	.....	.....	.....	.....	.....	.....
Sinking Fund 6s	.....	.....	.....	.....	.....	.....
Consolidated 7s	.....	.....	.....	.....	.....	.....
Consol. Gold bo'ds	.....	.....	.....	.....	.....	127
Do. reg	.....	.....	.....	.....	.....	.....
Chi., R. Isl. & Pac.	134¼	134¼	133¾	133½	133½	133¾
6s, 1917, c	..	.....	.....	.....	.....	.....
Clev.,Col.,Cin.&Ind.	86	88¾	91¾	92	90¾	90
1st mortgage	.....	.....	.....	.....	.....	.....
Clev. & Pittsburg gr.	.....	.....	.....	.....	.....	.....
7s, Consolidated	.....	..	..	.....	.....	.....
4th mortgage	.....	.....	.....	.....	.....	.....
Col.,Chi.,& Ind. Cent	16¼	16	16⅞	16¾	16	16
1st mortgage	.....	134	.....	.....	.....	.....
2d mortgage	.....	..	.....	.....	.....	.....
Del. & Hud Canal.	114¼	115¾	115½	117⅝	117	116½
Reg. 7s, 1891	.....	.....	.....	.....	.....	.....
Reg. 7s, 1884	.....	.....	.....	.....	106	.....
7s, 1894	.....	.....	.....	.....	.....	119
Del.,Lack.& Western	132½	134½	137¾	139¾	138	137⅞
2d mortgage 7s	.....	.....	.....	.....	.....	.....
Consol. 1907	.....	.....	.....	.....	.....	.....
Erie Railway	....	.....	.....	.....	.....	.....
1st mortgage	.....	.....	.....	.....	.....	.....
2d mort. 5s, ext	.....	.....	.....	.....	.....	.....
3d mortgage	.....	.....	104½	.....	104½	.....
4th mort. 5s, ext	.....	.....	.....	.....	.....	.....
5th mortgage	.....	.....	.....	.....	.....	.....
7s, Consol. gold	.....	128½	.....	.....	130	.....
Great West. 1st mort	.....	.....	.....	.....	.....	.....
2d mortgage	.....	.....	.....	.....	.....	.....
Hannibal & St. Jo	.....	.....	.....	.....	.....	.....
Preferred	89¾	87½	89¼	89	88¼	88⅞
8s, Convertible	.....	.....	.....	107	....	.....
Houston & Tex. Cen	82	.....	89	90½	92	92
1st mortgage	.....	.....	.....	.....	.....	.....
2d mortgage	.....	.....	.....	126½	.....	.....
Illinois Central	138½	138⅜	138⅛	137½	137⅝	138
LakeShore&MichSo	115¼	116¾	116¼	116⅞	116½	114¾
Consol. 7s	.....	.....	.....	.....	.....	.....
Consol. 7s, reg	.....	.....	.....	.....	.....	.....
2d Consolidated	.....	122⅞	.....	.....	.....	.....
Leh. & W. B. con.ass	105	107	107	.....	.....	.....
Long Dock bonds	.....	.....	.....	.....	.....	.....
Louisville & Nash.	71⅞	71⅞	74⅛	74⅝	73⅝	74¼
7s, Consolidated	117⅜	117	.....	.....	.....	116¾
Manhattan	53	.....	53¾	53	53¼	.....
1st pref	....	.. ..	.....	.....	.....	90½
Met. Elevated	83	84½	.....	.....	84½	.....
1st mortgage	99	99⅝	99¾	99¾	100	99⅞
Michigan Central	98¼	98⅝	98⅞	99⅜	98⅛	97⅝
7s, 1902	.....	.....	.....	.....	.....	123
Morris & Essex	.....	124¼	124	124⅛	125¼	125
1st mortgage	.....	.....	.....	.....	.....	.....
2d mortgage	.....	.....	.....	.....	.....	.....
7s of 1871	.....	.....	.....	.....	.....	.....
7s, Convertible	...	... .	.....	.....	.....	.....
7s, Consolidated	121½	.....	121½	.....	.....	.....
N.Y.Cen. & Hud. R.	135⅛	135	135¼	135⅞	135⅞	135⅛
6s, S. F. 1883	.....	....	102¼	.....	.....	....
6s, S. F., 1887	... .	.....	.....	.....	.....	.....
1st mortgage	..	.....	.....	.....	.....	.....
1st mortgage, reg	.....	.....	.....	.....	.....	.....
N. Y. Elevated	.....	.....	.....	.....	.....	.....
1st mortgage	115½	116	.....	.....	.....	.....
N. Y. & Harlem	.....	.....	.....	.....	.....	.....
Preferred	.....	.....	.....	.....	.....	.....
1st mortgage	.....	.....	.....	.....	.....	.....
1st mortgage, reg	132	.....	.....	.....	.....	.....
N. Y., Lake Erie & W	40⅜	40¾	40⅞	41⅛	41⅛	40⅝
Preferred	80½	80¾	.....	.....	81⅛	81½
2d Consolidated	97¼	97½	98	97½	98	98
New 2d 5s fund	.....	94	.....	.....	94	.....
N.Y.,N.Hav'n&Hart	.....	.....	.....	....	180	177
North Mo. 1st mort	.....	.....	103¾	.....	.....	.....
Northern Pacific	47⅞	47	47¾	49½	48¾	48⅞
Preferred	87⅞	87⅞	87⅞	89¾	89	89
Ohio & Mississippi	39½	39¾	38⅜	39	38¾	38⅝
Preferred	.....	.....	.....	.....	.....	105
2d mortgage	.....	.....	.....	.....	.....	.....
Consolidated 7s	.....	.....	.....	.....	.....	.....
Consol. S. Fund	117	.....	.....	.....	.....	.....
Pacific Mail S. S. Co	46½	47¼	47⅞	.....	47¾	47⅞
Pacific R. R. of Mo.	.....	.....	.....	.....	.....	.....
1st mortgage	108½	.....	.....	.....	.....	.....
2d mortgage	.....	.....	.....	.....	.....	.....
Panama	.....	.....	.....	.....	.....	.....
Phila. & Reading	61⅞	61⅝	63	63	61½	61⅝
Pitts,Ft.W.&Chi.gtd	.....	.....	.....	.....	.....	.....
1st mortgage	.....	.....	.....	.....	.....	.....
2d mortgage	.....	.....	.....	.....	.....	.....
3d mortgage	.....	.....	.....	.....	.....	.....
Pullman Palace Car	129½	130	129⅝	.....	.....	131¼
Quicksil'r Min'g Co	10	12	12	.....	12½	.....
Preferred	.....	50	50	.....	50	.....
St. Louis & San Fran	42	42	.....	41	42½	43
Preferred	57⅛	57¼	57¼	58	59	59½
1st Preferred	.....	95½	95⅝	95	97	97
St. L., Alt'n & T. H.	33⅛	33½	35	35	.....	34
Preferred	....	74	74	74	75½	.....
1st mortgage	.....	.....	.....	.....	.....	.....
2d mort. pref	.....	.....	107	.....	.....	.....
Income bonds	.....	.....	.....	.....	.....	.....
St. L., Iron Mt. & S	.....	.....	.....	.....	.....	.....
1st mortgage	.....	.....	.....	.....	.....	.....
2d mortgage	.....	.....	.....	.....	.....	.....
Toledo and Wabash.	....	.....	.....	.....	.....	.....
1st mortgage	.. ..	.....	.....	.....	.....	.....
2d mortgage	104	104	.....	.....	.....	.....
7s, Consolidated	.....	.....	....	....	.....	.....
St. Louis Division	.....	.....	.....	100	.....	.....
Union Pacific	116⅝	116¼	116	117¼	116½	116½
1st mortgage	116⅞	.....	.....	116¾	.....	116⅝
Land Grant 7s	.....	.....	.....	.....	.....	.....
Sinking Fund 8s	.....	.....	.....	.....	.....	.....
United States Ex	.....	75¼	.....	.....	74	75¼
Wabash, St. L.& Pac	37	37	37⅛	38⅝	37⅞	38¼
Preferred	64¼	64½	65⅛	67⅛	67¾	68
New mort. 7s	.....	.....	.....	.....	.....	.....
Wells-Fargo Ex	.....	130	130	.....	130	.....
Western Pacific b'ds	.....	.....	.....	.....	.....	.....
Western Union Tel.	90⅛	90	90⅜	.....	89¾	89¼
7s., S.F conv., 1900	.....	.....	.....	.....	.....	.....
FEDERAL STOCKS :—						
U. S. 4s, 1907, reg	.....	...	.....	120¾	120⅝	.....
U. S. 4s, 1907, coup	.....	120¼	120⅜	120⅝	120⅜	.....
U. S. 4½s, 1891, reg	....	.....	.....	114⅞	.....	.....
U. S. 4½s, 1891, coup	... .	.....	.....	115	114⅞	.....
U. S. 5s, cont'd at 3½	102⅛	102⅛	101¾	.....	101⅛	101½
U. S. 6s cont'd at 3½	.....	... .	.....	....	102	.....
Dt. of Col. 3-65s, reg	.....	.....	.....	.....	.....	.....
Dt. of Col.3-65s,coup	.....	.....	.....	.....	.....	... .

Boston Stock Exchange.

Closing Prices for the Week Ending July 26.

	Th.20.	F.21.	Sat.22.	M.24.	Tu.25.	W. 26.
Atch.,Top.&San.Fe.	93½	93⅝	.....	94¾	94½	94½
1st mortgage	121	121	.....	121	.....	.....
Land Grant 7s	115	115¼	.....	.....	.....	115¼
Boston & Albany	166	166	.....	166	168	.....
Boston and Lowell	.....	.....	... .	.....	.....	.....
Boston & Maine	148½	148¼	.....	148	.....	148
Boston& Providence	.....	.....	.....	.....	.....	.....
Bos'n,Hart.& Erie7s	58	57¾	.....	.....	59	....
Burl.& Mo.R.L.G.7s	.....	.....	.....	.....	.....	.....
Burl.& Mo.R.in Neb	.....	.....	.....	.....	.....	.....
6s, exempt	.....	.....	.....	.....	.....	.....
8s	112	.....	.....	.....	.....	.....
Chi.,Burl. & Quincy	134⅞	134¼	.....	134¾	134½	134¾
Cin.,Sand&Clev($50)	29½	.....	.....	29¼	.....	.....
Concord ($50)	....	.....	.....	.....	.....	.....
Connecticut River	.....	.....	....	.....	.....	.....
Eastern	49	48¾	.....	48¾	.....	48½
New 4½ Bonds	.....	.....	.....	.....	110	109¾
Fitchbnrg	127½	.....	.....	.....	131½	.....
N.Y. & New England	.....	57	.....	57¼	58½	58¼
7s	....	117	.....	.....	.....	.....
Northern N. H	.....	.....	.....	.....	.....	.....
Norwich&Worcester	.....	.....	.....	.....	.....	.....
Ogden & Lake Cham	.....	.....	.....	.....	.....	.....
Old Colony	132	132	.....	132	132	.....
Ph.,Wil.&Balt.($50)	.....	.....	.....	.....	.....	.....
Portl'd,Saco & Ports	....	.....	.....	.....	.....	.....
Pueblo & Ark Val 7s	115¾	.....	.....	.....	.....	.....
Pullman Palace Car	130	.....	.....	130	.....	.....
Union Pacific	118	116	.....	117⅛	117	117⅛
6s	.....	.....	.....	.....	.....	.....
Land Grant 7s	...	.....	.....	.....	.....	.....
Sinking Fund 8s	.....	119½	.....	.....	119½	.....
Vermont & Mass	.....	.....	.....	.....	.....	.....
Worcester & Nashua	.....	.....	.....	.....	.....	.....
Cambridge (Horse)	.....	.....	.....	.....	.....	.....
Metropolitan(Horse)	.....	.....	.....	76	.....	.....
Middlesex (Horse)	.....	.....	.....	.....	.....	.....
Cal.&Hecla Min'gCo	243¼	.....	.....	247	.....	.....
Quincy	65	64¾	.....	64⅛	64⅜	59x

Philadelphia Stock Exchange.

Closing Prices for the Week Ending July 25.

	W.19.	Th.20.	F.21.	Sat.22.	M.24.	Tu 25.
Allegh'y Val. 7 3-10s	.....	.....	.....	.....	.....	.....
7s, Income	.....	.....	50	.....	.....	50
Buff., Pitts & West.	19½	19¾	20¼	21¾	19½	20⅝
Camd'n & Am. 6s, '83	.....	.....	.....	.....	.....	.....
6s, 1889	.....	.....	.....	.....	.....	.....
Mort. 6s, 1889	.....	.....	113	....	.....	.....
Camden & Atlantic	.....	.....	.....	.....	.....	.....
Preferred	....	.....	.....	.....	.....	.....
1st mortgage	.....	.....	.....	.....	.....	.....
2d mortgage	.....	.....	.....	.....	.....	.....
Catawissa	.....	.....	.....	24¼	.....	.....
Preferred	.....	.....	.....	.....	.....	.....
2d pref	.....	.....	.....	.....	.....	.....
7s, new	.....	.....	.....	.....	.....	.....
Del. & Bound Brook	.....	.....	.....	.....	.....	.....
7s	.....	.....	.....	.....	.....	.....
Elmira&Williamsp't	.....	.....	.....	.....	.....	.....
Preferred	.....	.....	.....	.....	.....	.....
Hunt. & B. Top Mt.	15⅝	... .	.....	.....	.....	.....
Preferred	....	28	.....	.....	.....	.....
2d mortgage	.....	.....	.....	.....	.....	.....
Lehigh Navigation	42¾	42¼	42¾	43	42⅞	42⅛
6s, 1884	.....	.....	103⅛	.....	.....	.....
Gold Loan	111½	.....	.....	.....	.....	.....
Railroad Loan	.....	116¾	.....	.....	.....	.....
Conv. Gold Loan	.....	.....	.....	.....	.....	.....
Consol. Mort, 7s	.....	.....	.....	.....	.....	.....
Lehigh Valley	61⅛	61⅛	61½	61½	61¾	61⅛
1st mort. 6s, coup	.....	.....	.....	123¾	.....	.....
1st mort. 6s, reg	.....	.....	120½	.....	.....	.....
2d mort. 7s	.....	.....	.....	.....	.....	.....
Consol mort. 6s	.....	.....	.....	.....	.....	.....
Consol.mtg.6s,reg	.....	.....	120¾	.....	.....	.....
Little Schuylkill	.....	.....	.....	57	57	.....
Minehill&Sch.Hav'n	61	.....	.....	.....	61¼	61½
North Pennsylvania	65	65	65	.....	.....	65
1st mortgage 6s	.....	105¾	106	.....	.....	.....
2d mortgage 7s	.....	.....	.....	122½	.....	.....
Genl. mtg.7s,coup	.....	.....	.....	.....	.....	.....
Genl. mtg. 7s, reg	.....	.....	.....	.....	.....	.....
Northern Central	49½	49½	.....	.....	49½	49⅝
5s	.....	.....	.....	.....	.....	.....
Northern Pacific	48	47⅝	47¼	47½	49¾	49
Preferred	88¾	88	88	88¼	89¾	89¼
Pennsylvania R. R.	62¾	62¼	62	61⅞	62⅛	62
1st mortgage	.....	.....	.....	.....	.....	.....
Gen'l mort	.....	.....	.....	.....	.....	.....
Gen'l mort reg	.....	.....	.....	.....	.....	...
Consol. mort. 6s	.....	.....	.....	.....	.....	.....
Consol. mort. reg	.....	.....	.....	.....	.....	121
Pa. State 5s, new	116⅛	.....	.....	.....	116	.....
do 4s, new	.....	.....	.....	.....	.....	.....
do 3½s, 1912	.....	.....	.....	.....	.....	.....
Phila. & Reading	30⅞	31⅛	30¾	31⅜	31⅝	30¾
1st mortgage 6s	.....	.....	.....	.....	.....	.....
7s of 1893	.....	.....	.....	.....	.....	123½
7s, new convert	78	78	78	78	78	78
Consol. mort. 7s	.....	.....	124	.....	.....	124½
Consol. mort. reg	....	.....	.....	.....	.....	.....
Gen'l mort. 6s	96¾	96¾	96	96¼	.....	96¼
Def.Income bonds	.....	.....	.....	29	.....	29
Philadelphia & Erie	17½	.....	18	17⅝	18	17¾
1st mortgage 5s	105	105	.....	.....	...	.....
2d mortgage 7s	...	.....	.....	.....	.....	.....
Pittsb.,Cin.&St.L.7s	.....	.....	.....	.....	.....	.....
Pitts.,Tit.&Buff. 7s,	.....	.....	98	97	.....	.....
Schuylkill Navi't'n.	. ..	.. ..	.....	.....	.....	.....
Preferred	13¾	.....	.....	.....	.....	.....
6s, 1895	.....	.....	.....	.....	.....	.....
6s, 1907	92	.....	.....	. ..	.....	.....
United Co. of N. J.	.....	188	188	.....	188	188¼
Hestonville, (Horse)	.....	.....	.....	.....	.....	.....
Chestnut&Wal.(do)	.....	.....	.....	.....	.....	.....

Baltimore Stock Exchange.

Closing Prices for the Week Ending July 25.

	W.19.	Th.20.	F.21.	Sat.22.	M.24.	Tu.25.
Baltimore & Ohio..	.....	.....	.....	.....	.....	.....
6s, 1885.....	.....	. . .	107	.....	.....	....
Central Ohio ($50)..	...	.....	.....	.....	.....	.....
1st mortgage.....	.....	.....	....	.....	.....	.....
Marietta & Cincin'ti	.....	.....	.....	.....	.....	.....
1st mortgage, 7s..	.....	.....	.....	.....	.....	.....
2d mortgage, 7s..	.....	.....	.....	.....	.....	.....
3d mortgage, 8s..	56¾	.....	56⅝	56½	56½	....
Northern Cen. ($50)	49¼	....	.....	.....	.....	49⅜
2d mort., 6s 1885..	.....	.....	.....	.....	105	.....
3d mort., 6s, 1900.	.....	.....	....	.....	.....	.....
6s, 1900, gold.....	.....	.....	116	.....	.....	.....
6s, 1904, gold.....	.....	....	.....	.....	.....	115⅜
Pitts.& Connellsv.7s	.....	...	....	.....	121½	.....
Virginia 6s, Consol.	....	58¼	.....	60	60¾	60¾
Consol. coupons..	....	60	.....	61¾	63	.....
10 40 bonds.....	43½	44¾	43¾	44	43⅞	43⅞
Def'd Certificates.	.....	.....	.....	.....	.....	.....
Western Maryland..	16⅞	.....	.....	.....	.....	.....
1st M.,end.by Balt	.....	.....	.....	....	.....	.....
2d M. do .	.....	.....	.....	.....	.....	.....
3d M., do .	.....	.....	.....	.....	.....	.....
1st M.,unendors'd	.....	.....	.....	.....	.....	.....
2d M.,end.WashCo	.....	.....	.....	.....	.....	.....
2d M., preferred..	.....	.....	.....	.....	.....	106½
City Passenger R R.	....	.....	.....	.....	.....	....

London Stock Exchange.

	Closing Prices — July 14.		July 7.	
Baltimore & Ohio 5s, 1927.....	106	108	105	107
Central of N. J., $100 shares....	93	98	93	98
Do. consol. mort.....	110	112	110	112
Do. Income Bonds.....	88	92	88	92
Central Pacific of Cal., $100 shs.	96¼	97⅛	94	95
Do. 1st mort. 6s, 1895-'98.....	118	120	117	119
Det.,G'd Haven & Mil. Equip bds	115	117	115	117
Do.Con.M.5p.c.,till'83aft'r6p.c	112	114	112	114
Illinois Central $100 shares.....	139	141	136½	137½
Do. S. F. 5s, 1903.....	106	108	106	108
Lehigh Valley Cons. mortgage..	115	119	115	119
Louisville & Nashville mort 6s.	98	100	98	100
Do. capital stock $100 shares.	71	73	67	69
N. Y. Cent. & Hud. R. mt. bds..	132	135	132	135
Do. $100 shares.....	136½	137½	134	135
Do mort. bonds (stg.).....	121	123	121	123
N.Y.,Lake Erie & West.,$100 shs	40¼	40⅝	36¾	37¼
Do. 6 p. c. pref. $100 shares ..	78	81	74	76
Do. 1st Con. Mort. bds (Erie) .	128	130	128	130
Do. do. Funded Coupon bds.	124	126	124	126
Do. 2d Consol Mort. bonds...	99	100	96½	97⅛
Do. do. Funded Coupon bds..	94	96	92	94
N.Y.,Pa.& Ohio 1st mort. bonds.	45	46	43	44
Do. Prior Lien bds (sterling)..	103	108	103	108
Pennsylvania, $50 shares.....	61¾	62¼	60½	61
General Mortgage.....	121	124	121	124
Phil.and Erie Gen.mort. 6s, 1920.	117	119	117	119
Philadelphia & Reading $50 shs	29¾	30¼	29¼	29¾
General Consol Mortgage.....	116	118	116	118
Do. Improvement Mortgage..	103	105	103	105
Do.Gen.Mtg.'74,ex-def'd coup.	97	98	97	98
St. L. Bridge 1st mort. gold b'd.	125	127	125	127
Do. 1st pref. stock.....	97	100	95	98
S. P'fic of Cal., 1st mort.6s,1905-6.	107	109	107	109
Union Pacific 1st. mtg	117	119	117	119
Wabash, St. L. & P. $100 shs.....	33	35	29	31
Do. $100 pref. shares.....	59	61	52½	53½
Do. gen. mort. bonds.....	84	86	80	82

AMERICAN RAILROAD JOURNAL.

Financial and Commercial Review.

THURSDAY EVENING, July 27, 1882.

The ruling rate for call loans on stocks in the morning hours was 3 per cent, and on Governments 2@2½ per cent. In the afternoon the quotation was 3@4 per cent. The fair ruling quotation was 3@3½ per cent. The extreme rates being 2½@4 per cent.

The actual rates for prime bankers' sterling were 4.85 @½ and 4.88@⅝, with cables 4.89@⅛ and prime commercial bills 4.83¾@4.84. The actual rates for Continental bills are as follows; Francs, 5.18¾ and 5.15, Marks, 94⅝@⅞, and 95¾@⅞, and Guilders, 40¼ and 40⅜.

The gross earnings of the Philadelphia and Erie Railroad for the month of June, 1882, were $341,613.65, the expenses $214,301.14, and the net earnings $127,312.51. The net earnings for the same period in 1881 were $128,008,98, the decrease being $696.47. The net earnings for the six months of 1882 were $573,516.29, while for the corresponding six months of 1881 they were $605,651.48, showing a decrease of $32,135.19.

At the annual meeting of the stockholders of the Rutland Railroad Company, held at Rutland, Vt., on the 26th inst., the annual report was presented, showing the receipts for the year to have been $348,990.12, and the disbursements $348,990.12. During the past year $40,000 of first mortgage bonds have been stamped down to 6 per cent, leaving only $3,000 now unstamped. A dividend of $1 per share has been declared on preferred stock, payable September 1 to the stockholders of record of August 15. The president stated that the present lease of the road to the Central Vermont had seven years to run, and that, in his opinion, the recent decision by the Supreme Court protects the Rutland Company's rights and strengthens the security for the return of the property at the expiration of the lease. He could see no reason why the corporation could not continue to pay semi-annual dividends, at least $1 a share on preferred stock.

Applications for more than double the amount of the loan asked for by the Quebec Government have been received.

The gross earnings of the Michigan Central for six months ended June 30 were $4,177,500, against $4,340,000 in 1881, and the net earnings $927,500, against $1,295,000; applicable to dividends $25,445, against $448,537.

The percentage of earnings of the Dubuque and Sioux City Railroad—leased to the Illinois Central Railroad Company at 36 per cent of its gross earnings—amounted in the year 1881 to $398,780, and the receipts were $4,464, making a total of net earnings of $403,244. The expenses and interest payments for the year amounted to $116,811, leaving a balance of $286,433, or 5¾ per cent on the capital stock of $5,000,000. The dividend payments for fourteen years have averaged 5 per cent, and the last dividend paid was at the rate of 6 per cent per annum.

The bids for $500,000 of the new Connecticut State 20-year 3½ per cent non-taxable bonds were opened at the State House in Hartford on the 26th inst. The bonds were taken at a premium, the awards being to bidders of 104 to 107.5. The total amount of the bids was $2,577,000, and the average of the awards was 105.4.

From the statement of the Canton Company of Baltimore we learn that the gross receipts for the year ending May 31, 1882, were $97,829.46, and the expenses $69,672,89—being an increase in receipts of about $7,000, and in expenses of about $30,000 over last year. The receipts of the company are derived from house, ground, warehouse and wharf rents, and from the Canton elevator and other sources. The increase in expenses appears to be in the payment of taxes, and may have included back taxes of previous years, as there is a difference of about $28,000 in this account. Included in the statement is a history of the sale of the Union Railroad to the Northern Central Railway Company and says: "Your directors offered to sell them the road, and after some negotiations accepted $594,000, subject to the existing mortgage of $1,500,000 and the interest thereon. What is known as the Union Railroad Sinking Fund, set down in this report at $689,885.34, created by the Canton Company to protect its indorsement of said Union Railroad bonds, was not included in this sale, but will remain, with accretions, intact until the maturity and payment of said Union Railroad bonds, by the Northern Central Company as agreed, when it will revert to the Canton Company." The Canton Company owned the stock of the Union Railroad Company, which it sold, as stated above, to the Northern Central Company. The trustees of the Canton Company's bonds are required, whenever they shall have in hand $100,000, to redeem a like amount of bonds. Under this provision $341,000 of Canton bonds were redeemed during the past year. The stock of the Canton Company consists of 50,000 shares at $16.25 per share (par value) $812,500, sterling bonds $600,000, less sinking fund $125,000, Canton gold sixes $1,075,000 less bonds redeemed $392,000. The money to be received from the Northern Central Railway Company in payment of Union Railroad stock and the $689,000 in Union Railroad Sinking Fund is expected eventually to redeem all of the mortgage bonds of the Canton Company and leave only the stock.

We learn that the Secretary of the Treasury is having prepared new gold notes or certificates of all the denominations of United States notes from $20 up to $5,000, the largest notes serving for Clearing House exchanges, while the smallest will be a great convenience to the banks in filling the orders of the Southern and Western banks for currency. The $10 silver notes will also be acceptable for the same purpose.

In reply to an inquiry addressed to the Baltimore *Sun* in reference to the terms of the bonds that are to be issued by the State of Maryland to retire the Defense Loan, hat paper states that an act passed by the last General Assembly and approved May 3, 1882, authorizes the issue of bonds not to exceed $3,000,000, bearing interest at the rate of 3.65 per cent per annum, payable semi-annually on 1st January and 1st July. The bonds are to be dated 1st January, 1884, redeemable in 15 years, and shall be exempt from all State, County, or Municipal taxation. These bonds are to be exchanged at not less than par for the certificates of the Defense loan on 1st of January, 1884, or at any earlier date if deemed advisable by the State officers. Should there be any bonds not exchanged proposals are to be invited for the same, and they are to be sold to the highest bidder at not less than par. The act also provides a sinking fund for the redemption of the new loan.

An analysis of the public debt of the United States just issued from the Treasury Department at Washington shows that the total interest-bearing debt July 1, 1882, was $1,463,810,400, the annual interest charge on which is $57,360,110, and the monthly interest charge $4,780,009; that the debt bearing no interest then amounted to $438,241,788. The population of the United States on that day is given at 52,799,000; so that the total public debt is $31.72 per capita, the annual interest per capita being $1.09. The public debt was largest on August 31, 1865, when the total interest-bearing debt was $2,381,530,294, and the annual interest charge $150,977,697. The debt bearing no interest then stood at $461,616,311. The population of the country was then 34,748,000, and the debt per capita was $78.25, and the interest charge per capita $4.29. The total debt, less cash in the Treasury, on August 31, 1865, was $2,756,431,571; on July 1, 1882, it was $1,675,023,474. In other words, the debt has been reduced in seventeen years $1,081,408,097.

The gross earnings of the Norfolk and Western Railroad for the month of June, 1882, were $174,843.38, the expenses (including estimated proportion of yearly taxes) $101,990.52, and the net earnings $72,852.86; for the month of June, 1881, the gross earnings were $156,888.26, the expenses, $95,516.38, and the net earnings $61,371.88—showing an increase in gross earnings of $17,955.12, with an increase in expenses of $6,474.14, making an increase in the net earnings of $11,480.98. For the six months ending June 30, 1882, the gross earnings were $1,024,959.54, the expenses $620,499.14, and the net earnings $404,460,40; for the six months ending June 30, 1881, the gross earnings were $995,129.40, the expenses $559,157.32, and the net earnings $435,972.08—showing an increase in gross earnings of $29,830.14, with an increase in expenses of $61,341.82, making a decrease in the net earnings of $31,511.68.

The total coinage at the Philadelphia Mint for the fiscal year ending June 30, 1882, was: In gold pieces $59,678,437.50; silver, $11,062,388.75; minor coinage, $644,757.75; making a total of $71,385,584. The weight of this coinage and the number of pieces was as follows: Gold, 110 tons; pieces, 8,270,450; silver, 326 tons; pieces, 11,100,300; minor coins, 170 tons; pieces, 46,865,725. The total weight of the gold, silver and minor coin alloy was 606 tons and 66,236,475 pieces. The whole amount of bullion operated upon in the different operative departments was as follows: In the melter and refiners, 8,085,022.94 ounces of gold, worth $150,419,031.57; of silver, 20,592,228.03 ounces, worth $23,961,864 34, or a total of $174,380,896.91. In the coiners' department, 7,527,054,58 ounces in gold, worth $140,038,224.91; of silver, 19,578,321.33 ounces, worth $22,782,046.63, or a total of $159,616,546.24. The grand total value of the pieces coined in the two departments was $291,102,014.23. The legal allowance for wastage in operating the bullion was: Upon gold, 11,848.55 ounces, worth $220,438,14; on silver, 50,466.65 ounces, worth $58,724.83, or a total legal allowance of gold and silver of $279,182.97. The actual loss was: Upon gold, $19,533,03, or one-twelfth of the legal allowance, and upon silver, $3,729.97, or one-sixteenth of the legal allowance. The total actual wastage in the year's operations was $23,263, or $255,889,97 less than the allowance made by law to meet the necessary wastage in coinage.

The Secretary of the United States Treasury at Washington has decided that the proviso in section 11 of the "act to enable national banking associations to extend their corporate existence, and for other purposes," will entitle holders of the new 3 per cent bonds to be issued in exchange for extended 6s and 5s to perpetuate the original numbers of the new bonds. This interpretation of the law is regarded as very important, as it will relieve those who may secure the low numbers from ap

prehension that in case they should be called upon to dispose of their bonds the premium would be wiped out, the rule of the Department requiring that the highest numbers shall be first subject to call.

The financial statement of the Eureka Consolidated Mining Company for the month of June shows that the base bullion product was about 294¼ tons, valued at $85,474.64. The excess of expenditures over receipts was $48,381.39. On the 12th inst. there was on hand, cash, $141,079.33 and 262 tons base bullion, valued at $65,645.25. The liabilities amounted to $20,389.30. Approximate net resources, $196,335.28.

The gross receipts of the Philadelphia and Reading Railroad Company for the month of June, 1882, from railroad traffic, were $1,617,277.08, the gross expenses (excluding rentals and interest) $864,348.40, and the profit $752,923.68; the gross receipts from canal traffic were $47,001.62, the gross expenses (excluding rentals) $40,842.85, and the profit $6,158.77; the gross receipts from steam colliers were $43,511.19, the gross expenses $26,290.71, and the profit $17,220.48; the gross receipts from Richmond coal barges were $6,945.06, and the gross expenses $9,851.35, showing a loss of $2,906.29—making the total gross receipts of the railroad company $1,714,729.95, the total gross expenses $941,333.31, and the total profit $773,396.64. The gross receipts of the Coal and Iron Company were $1,303,253.65, the gross expenses $1,232,475.30, and the profit $70,778,35. The total gross receipts of both companies were $3,017,983.60, the total gross expenses $2,173,808.61, and the total profit for the month $844,174.99, against $839,300.46 for the month of June, 1881, an increase of $4,874.53. The total profit for the year to date (seven months ending June 30, 1882,) were $5,011,614.73, against $4,688,531.63 for the corresponding period of the previous year, an increase of $323,083.10.

The following quotation of sales of railway and other securities, for the week, are in addition to those given elsewhere in our columns.

New York.—Atlantic and Pacific 1st, 99½; do. inc., 32; Atchison, Topeka and Santa Fe, 94¼; Boston and New York Air Line pref., 77; Boston, Hartford and Erie 1st, 58; Cairo and Fulton 1st, 107; Chicago, St. Paul, and Minneapolis 1st, 112; Chicago. St. Paul, Minneapolis and Omaha, 50½; do. pref., 111; do. consol., 105½; Cincinnati, Sandusky and Cleveland, 58; Central Iowa, 29½; Cedar Falls and Minn., 30; Columbia and Greenville pref., 76; Chesapeake and Ohio 1st, Series A, 106; do. cur. int., 54½; Col., Chi. and Ind. Cent. inc., 54½; Chicago, Burlington and Quincy 8s, 101¼; Chicago, Milwaukee and St. Paul, Chicago and Lake Superior div. 1st 93; do. Chicago and Pacific West div. 1st, 92⅞; do. Southern Minn. div. 1st, 107; Chicago, St. Louis and New Orleans, 5s, 102¾; do. 1st, 118; Dubuque and Sioux City, 92; Denver and Rio Grande, 63; do. 1st, 116½; do. consol., 102¾; Denver, South Park and Pacific 1st, 101¾; East Tenn., Va. and Ga., 11⅞; do. pref. 20¼; do. 5s, 76⅞; do. inc., 48¼; Elizabethtown, Lexingtonand Big Sandy 6s, 95; Evansville and Terre Haute 1st, 96; Fort Worth and Denver 1st, 98½; Green Bay, Winona and St. Paul, 12¾; do. inc., 26; Gulf, Colorado and Santa Fe 1st, 106½; Houston and Texas Central 1st, Western div., 106½; do. Waco and N. W. div. 1st, 110½; Indiana, Bloomington and Western, 46¼; do. 1st, 90; do. inc., 60; do. Eastern div., 1st, 95¾; International and Gt. Northern 1st, 106⅝; do. coup. 6s, 89; Keokuk and Des Moines, 19; Kansas Pacific 1st consol., 104; Louisville and Nashville, gen'l mort. 6s, 95; Long Island, 56; do. consol. 5s, 97¾; Lake Erie and Western, 43⅜; do. inc. 50½; do. Sandusky div. inc., 51¼; Louisville, New Albany and Chicago, 72; do. 1st, 102⅛; Louisiana and Missouri River, 19½; Lafayette, Bloomington and Muncie 1st, 101⅞; Manhattan Beach, 23; Marietta and Cincinnati 1st pref., 14; do. 2d pref. 5½; Minn. and St. Louis, 34½; do. pref., 70¾; do. 1st, 116; do. Southwest ext. 1st, 110⅞; do. Pacific ext. 1st, 101¾; Mobile and Ohio, 23; do. 1st deben., 80; do. 2d deben., 48; do. 3d deben., 37; do. 1st mort., 108½; Missouri, Kansas and Texas, 39½; do. gen'l mort. 6s, 88¼; do. consol. 7s, 110; do. 2d, 68½; Missouri Pacific, 105¾; do. 1st consol., 101½; do. 3d, 110¾; Milwaukee, Lake Shore and Western, 54¼; do. 1st, 102; Memphis and Charleston, 58½; Metropolitan Elevated 2d, 90; Michigan Southern, S. F., 106½; New York City and Northern gen'l mort., 62; Nashville, Chattanooga and St. Louis, 64½; New York, Chicago and St. Louis, 15¾; do. pref., 33¾; do. 1st, 92; New York, Ontario and Western, 29¾; Norfolk and Western, 18; do. pref., 55¾; do. gen'l mort. 102: Northern Pacific 1st, 103¾; New Orleans Pacific 1st, 92¾; Ohio and Mississippi, Springfield div. 1st, 117; Ohio Central, 19⅜; do. 1st, 93; do. inc., 43½; Ohio Southern, 19¾; do. 1st, 83; do. inc., 35; Oregon Railway and Nav., 149; Oregon Transportation, 86¼; Peoria, Decatur and Evansville, 38¾; do. inc., 80; Rensselaer and Saratoga, 135; Rome, Watertown and Ogdensburg, 40; do. inc., 44; Rochester and Pittsburgh, 31½; do. 1st, 108; do. inc., 45½; Richmond and Danville, 114; do. deben., 78; do. 6s, 99½; Richmond, Danville and West Point, 62; Richmond and Alleghany, 26; do. 1st, 86¾; Southern Pacific of California 1st,, 106; St. Louis, Kansas City and Northern, R. E. 7s, 108¼; do. Omaha div. 1st, 111; South Carolina, 25; do. 1st, 99; do. inc., 57½; St. Paul, Minneapolis and Manitoba, 134; do. 1st, 108½; do. 2d, 112; do. Dakota ext. 1st, 109¼; St. Paul and Duluth pref., 89¼; St. Louis, Iron Mountain and Southern 5s, 83¼; do. Cairo, Ark. and Texas 1st, 106; Toledo, Delphos and Burlington, 18; do. inc., 30; do. Dayton div. inc., 24½; Texas and Pacific, 51⅞; do. inc. Land Grant, 70¾; do. Rio Grande div. 1st. 91; St. Louis and San Franisco 2d, Class B, 90; Texas and St. Louis, 27⅞; Texas Central 1st, S. F. 7s, 107½; Wabash, St. Louis and Pacific, gen'l mort. 6s, 86; do. Chicago div, 1st, 84¼; Arkansas 6s, fund., 36; do. 7s, L. R. and Ft. S., 28; do. L. R., P. B. and N. O., 25; Alabama, Class A, 80; North Carolina 6s, special tax, 3d class, 12; do. consol. 4s, 79; South Carolina 6s, nonfundable, 9; Tennessee 6s, 57½; Virginia 6s, def., 12; Colorado Coal and Iron, 48¾; do. 1st, 90¾; Cameron Coal, 36¼; Maryland Coal, 18; Homestake, 19; Standard, 17¾.

Boston.—Atchison, Topeka and Santa Fe guar., 114⅞; Atlantic and Pacific blocks, 111¾; do. inc., 32⅞; Boston Land, 8¼; Boston Water Power, 4½; Boston, Clinton, Fitchburg and New Bedford, 64; do. pref., 132½; Burlington and Missouri River in Neb. 6s, non-exempt, 103; Connotton Valley, 8¾; do. 5s, new, 76; Chicago, Burlington and Quincy 7s, 127½; do. 4s, old, 86¼; do. Denver ext. 4s, 85⅝; Chicago, Milwaukee and St. Paul, Dubuque div. 6s, 103¾; do. Wisconsin Valley div. 1st, 99; California Southern, 27; do. 1st, 84; Central of Iowa, 30; Chicago and West Michigan, 70; Connecticut and Passumpsic River R. R., 95; Cincinnati, Sandusky and Cleveland 7s, 105; Flint and Pere Marquette, 24⅞; do. pref., 95¼; Iowa Falls and Sioux City, 91½; Kansas City, Southern and Western 7s, 120; Kansas City, St. Joseph and Council Bluffs 7s, 115¼; Kansas City, Fort Scott and Gulf, 80; Kansas City, Lawrence and Southern 5s, 104¾; Little Rock and Fort Smith, 58½; do. 7s, 107⅝; Louisiana and Mirsouri River, 19; do. pref., 35; Mexican Central, 29½; do. 7s, 86½; do. blocks No, 2, 121½; do. No. 3, 110; Massachusetts Central, 6; do. 6s, 47; Marquette, Houghton and Ontonagon, 75½; do. pref., 121¼; Michigan Central, 98½; New York and New England 6s, 105⅝; New Mexico and Southern Pacific 7s, 115; Northern Pacific 6s, 102¾; Oregon Short Line 6s, 102½; Ogdensburg and Lake Champlain 6s, 94; Rutland pref., 25½; do. 6s, 100; do. 5s, 71, Sonoro 7s, 108¼; Summit Branch, 16; Toledo, Delphos and Burlington inc., 28; do. Cincinnati and St. Louis div, 9; do. 6s, 71½; do. inc., 22¼; do. Dayton div. 6s, 70¾; do. inc., 23¼; do. Southeast div. inc., 22¾; do. Green Mountain div. inc., 22; Wisconsin Central, 18½; do. 1st, 77½; do. 2d series, 50; Franklin, 14¾; Harshaw, 2½; Huron, 2; Napa Quicksilver, 5½; Osceola, 32; Penabic, 11½; Silver Islet, 14¼.

Philadelphia.—Chesapeake and Delaware Canal 6s 86½; Central Transp., 34; Norfolk and Western pref.' 55¼; Nesquehoning Valley, 55; Philadelphia and Reading Coal and Iron mort. 7s, 8o; Pittsburgh Avenue 7s, 1885, 107½; Perkiomen 6s, 105; Philadelphia City 6s, 1899, 130; do. 4s, 1899, 112; do. 6s, 1903, 132, Philadelphia and Reading scrip, 100; do. deben. 6s, 60; Philadelphia, Wilmington and Baltimore 4s, 96; St. Paul and Duluth, 32¼; do. pref., 87½ Schuylkill Nav. Boat Loan 7s, 65; do. 6s, 1907, 92; Texas and Pacific consol. mort. 6s, 97¼ do. 1st, mort. 6s, 107½; do. Rio Grande div, 6s, 89¼; Union and Titusville 7s, 93; West Jersey 1st, 118; West Chester 7s, 118. The latest quotations are: City 6s, 108@120; do. free of tax, 127@133; do. 4s, new, 108@113; Pennsylvania State 5s, new loan, 116@117; do. 4s, old, 108@112; do. 4s, new, 115@116; Philadelphia and Reading Railroad, 30¾@30⅞; do. consol. mort., 7s, reg. 123@124; do. gen'l mort. 6s, coupon, 96@96½; do. 7s, 1893, 118½@119½; do. new conv., 77@78; United New Jersey R. R. and Canal, 188@188½; Buffalo, Pittsburg and Western, 20⅝@20¾; Pittsburgh, Titusville and Buffalo 7s, 95@97; Camden and Amboy mort. 6s, 1889, 112½@113¼; Pennsylvania R. R., 61¾@61⅞; do. general mort. 6s, coupon, 125@125½; do. reg., 125@125½; do. consol. mort. 6s, reg., 120½@121½; Little Schuylkill R. R., 56½@57½; Schuylkill Navigation, pref., 13@14; do. 6s, 1882, 91@92; Elmira and Williamsport pref., 58@60; do. 5s, 100½@101; Lehigh Coal and Navigation, 42½@42½; do. 6s, 1884, 103@104; do. R. R. loan, 116@117; do. Gold Loan, 111@112; do. consol. 7s, 116½@117; Northern Pacific, 48¾@49; do. pref., 88⅞@89; North Pennsylvania, 64½@65½; do. 6s, 105@108; do. 7s, 123@124; do. 7s, General mort. reg., 122@123; Philadelphia and Erie, 17½@18; do. 7s, 114@115; do. 5s, 104½@105; Minehill, 61@62; Catawissa 24@25; do. pref., 54@55; do. new pref., 53@54; do. 7s, 1900, 120@—; Lehigh Valley, 61¼@61¾; do.6s, coupon, 123@124; do. reg., 123@124; do. 7s, 133½@134½; do. consol. mort. 120½@121; Fifth and Sixth streets (horse), 160@161; Second and Third, 109@112; Thirteenth and Fifteenth, 66@75; Spruce and Pine, 40@45; Green and Coates, 80@90; Chestnut and Walnut, 90@93; Germantown, 65@70; Union, 110@115; West Philadelphia, 105½@115; People's 14@16; Continental, 100@102.

Baltimore.—Atlanta and Charlotte, 76⅜; do. 1st, 109½; Atlantic Coal, 1.15; Baltimore City 6s, 1884, 103¾; do. 6s, 1890, 117½; do. 6s, 131; do. 5s, 1916, 125; Baltimore and Ohio 2d pref., 121, Columbia and Greenville 1st, 102½; Maryand Defense 6s, 105¾; Marietta and Cincinnati 1st Trust certificates, 127½; do. 2d do. 100¾; do. 3d, do., 56½; Norfolk and Western, 20; Norfolk Water 8s. 135; Northern Central 5s, 97½; North Carolina consol. 4s, 82; Ohio and Mississippi, Springfield div. 1st, 117¼; Parkersburg Branch, 10½; Petersburg R. R. 1st, 87¾; Richmond and Danville gold bonds, 100; Virginia Peelers, 35; do. 10-40s coupons, 69; Virginia Midland, new, 41; do. 1st mort., 114; do 2d mort., 110; do. 4th mort., 54; do. 5th mort., 96½; do. inc., 70; Virginia and Tennessee 2d, 101½; Wilmington, Columbia and Augusta, 108¾. The latest quotations are: Atlanta and Charlotte 1st, 109@110½; do. inc., 85@87½; Baltimore and Ohio 6s, 1885, 107@—; Baltimore City 6s, 1884, 103¼@—; do. 6s, 1890, 117@117½; do. 5s, 1916, 125@—; Chesapeake and Ohio Canal 6s, 33¼@36; Columbia and Greenville 1st, 102@103; do. 2d, 86@87½; Marietta and Cincinnati 1st, 127@127½; do. 2d, 100½@100¾; do. 3d, 56½@56⅝; Northern Central, 49¼@50; do. 6s, 1904, gold, 115¾@116; do. 5s, 1926, —@97; Norfolk and Western pref., 54@57; Ohio and Mississippi, Springfield div. 1st, 118@120; Richmond and Danville, 110@—; Virginia and Tennessee 6s, 101⅜@101¾; Western Maryland 2d pref., 106½@108; do. 2d mort., Washington Co. guar., 116@—.

The Masher.

"What is that, mother?"
"A masher, dear;
You will always find it standing here,
Posed on the corner of the street,
Proudly displaying its tiny feet,
Twirling its little ten cent cane
And stupyfying its tender brain
With the smoke of a paper cigarette.
Don't touch it, dear, it was raised a pet."
"Will it bite, mother?"
Well, I should shout;
It will bite a free lunch for all that's out."

—*Washington Republican.*

THE Census Bureau has published a special bulletin devoted to the history and statistics of the manufacture of firearms and ammunition in the United States, and the condition of that industry in 1880. There was in operation at that time 38 establishments for the manufacture of firearms, with an invested capital of $8,315,289. The number of hands employed in these establishments was 4,579, to whom the sum of $2,560,089 was paid annually in wages. The materials used were valued at $1,781,326 and the products at $5,618,630. There were also in operation five establishments for the manufacture of fixed ammunition, with an invested capital of $834,000. These establishments paid $366,778 in wages to 1,176 workmen, used annually $1,238,452 worth of raw material, and turned out finished products valued at 1,929,966.

RAILROAD AND CANAL DIVIDEND STATEMENT.

Showing the amount of Stock Outstanding, the Dividend Periods and the date of last Dividend.

Marked thus(*)are leased roads.	Stock outstanding.	Divide'd Periods.	Last Dividend Payable.
Albany and Susq*...100	2,500,000	semi-an	July '82 2
Ashuelot.....100	210,000	q'arterly	Oct. '81 3½
Atch., Top. and S. Fe100	54,000,000	q'arterly	Aug. '82 1½
Atlanta and W. Point100	1,232 200	semi-an	Jan. '82 6
Atlantic and St. Law*100	5,840,000	semi-an	Mar. '82 3
Augusta and Savan'h100	1,022,900	semi-an	June'81 3½
Avon, Geneseo&MtM*100	225,000	semi-an	July '81 3
Baltimore and Ohio.100	14,792,566	semi-an	May '82 5
" " pref.100	5,000,000	semi-an	July '82 3
Washington Br....100	1,650,000	semi-an	Apl. '82 5
Berkshire*.....100	600,000	q'arterly	Apl. '82 1¾
Boston and Albany..100	20,000,000	q'arterly	June'82 2
Bos.&N.Y.AirLine pf.100	2,795,227	q'arterly	June'82 1
Bos.,Cl.,F.&N.B.pref.100	1,750,100	.....	Apl. '82 3½
Bos.,Conc.&Mont.pf*100	800,000	semi-an	May '82 3
Boston and Lowell..500	3,940,000	semi-an	July '82 2
Boston and Maine...100	6,921,274	semi-an	May '82 4
Boston & Providence100	4,000,000	semi-an	May '82 4
Attleborough Br...100	131,700	semi-an	July '82 3½
Bos.,Revere B&Lynn100	419,400	semi-an	July '82 3½
Buffalo,N. Y. & Erie*.100	950,000	semi-an	June'82 3
Camden & Atlantic.. 50	377,400	q'arterly	Apl '80 38
" " pref. 50	880,650	q'arterly	Apl '80 3½s
Camden & Burl. Co..100	381,925	semi-an	July '82 3
Canada Southern....100	15,000,000	.....	Feb. '81 2½
Cape May&Millville* 50	447,000	semi-an	June'81 3
Catawissa*..... 50	1,159,500	annual	Oct.'81 $1½
" pref..... 20	2,200,000	semi-an	May '82 3½
" new pref.. 50	1,000,000	semi-an	May '82 3½
Cayuga and Susq.*.. 50	589,110	semi-an	July '81 4½
Cedar Rapids&Mo.R*100	6,850,400	q'arterly	Aug. '82 1½
" " pref.100	769,600	semi-an	Aug .'82 3½
Central of Georgia...100	7,500,000	semi-an	June '82 4
Central of New Jersey100	18,563,200	q'arterly	July '76 2½
Central Ohio*..... 50	2,437,950	semi-an	July '82 3
" pref.. 50	411,550	semi-an	July '82 3
Central Pacific 100	59,275,500	semi-an	Aug. '82 3
Chemung*.....100	380,000	q'arterly	July '81 1½
Cheshire preferred ...100	2,155,300	semi-an	July '82 1½
Chicago and Alton...100	11,181,741	semi-an	Mar. '82 4
" " pref 100	2,245,400	semi-an	Mar. '82 4
Chi., Burl. & Quincy.100	55,337,455	q'arterly	June'82 2
Chi., Iowa & Nebras*.100	3,916,200	semi-an	July '82 4
Chi., Mil. & St. Paul.100	20,404,261	semi-an	Apl. '82 3½
" pref 100	14,401,483	semi-an	Apl. '82 3½
Chi. & N. Western....100	14,988,257	semi-an	June'82 3½
" pref.100	21,525,353	q'arterly	June'82 2
Chi., R. I. & Pacific..100	41,960,000	q'arterly	Aug. '82 1¾
Chi. and West Mich .100	6,151,000	semi-an	Feb. '82 2½
Chi.,St.P.,M.&O.pref.100	10,390,000	q'arterly	July '82 1¾
C., Ind., St. L. & Chi..100	6,000,000	q'arterly	July '82 1½
Cin., Sand. & Clev.pf. 50	429,037	semi-an	May '82 3
Clev. and Mahoning* 50	3,759,200	semi-an	Nov.'81 3½
Clev. and Pittsburg* 50	11,244,336	q'arterly	June'82 1¾
Columbus & Xenia*. 50	1,786,200	q'arterly	June'82 2
Colum.&HockingVal.100	2,500,200	semi-an	Aug.'81 208
Concord 50	1,500,000	semi-an	May '82 5
Concord and Ports.*.100	350,000	semi-an	July '82 3½
Conn.& Passump.Riv100	2,244,400	semi-an	Aug. '82 3
Connecticut River ..100	2,100,000	semi-an	July '82 4
Cumberland Valley.. 50	1,292,950	q'arterly	July '82 2½
" 1st pref 50	241,900	semi-an	Apl. '82 4
" 2d pref. 50	243,000	semi-an	Apl. '82 4
Danbury & Norwalk. 50	600,000	.....	Apl. '82 1½
Dayton and Mich.*.. 50	2,402,573	semi-an	Apl. '82 1¾
" " pref. 50	1,211,250	q'arterly	July '82 2
Delaware*..... 25	1,468,940	semi-an	July '82 3
Del. & Bound Brook*100	1,652,000	q'arterly	May '82 1¾
Del., Lack.& Western 50	26,200,000	q'arterly	July '82 2
Denver & Rio Grande.100	29,160,000	q'arterly	Jan. '82 1½
Den.,South P. & Pac.100	3,500,000	.....	Aug.'80 4
Detroit, Lans. & Nor.100	1,825,600	semi-an	Aug.'80 2½
" " pref.100	2,503,380	semi-an	Feb. '82 3½
Dubuque&Sioux C'y*100	5,000,000	semi-an	Apl. '82 3
East Pennsylvania*., 50	1,709 550	semi-an	July '82 3
East Mahanoy*..... 50	392,950	semi-an	July '82 3
Eastern (N. H.).....100	492,500	semi-an	June'82 2½
Eel River.....100	3,000,000	q'arterly	June '82 $1
Elmira.Jef.&Canand*100	500,000	annual	Sep. '80 5
Elmira&Williamsp't* 50	500,000	semi-an	May '82 1½
" " pref. 50	500,000	semi-an	July '82 3½
Erie and Pitsburg*.. 50	1,998,400	q'arterly	June '82 1¾
Evansville & Terre H.100	100,000	semi-an	Nov.'81 2
Fitchburg.....100	4,500,000	semi-an	July '82 3
F. & P. Marquette pf.100	6,500,000	semi-an	July '82 3
Ft.W. & Jackson pref.100	2,000,000	.....	May '82 2
Georgia. ..... .100	4,200,000	q'arterly	July '82 2½
Granite 100	1,250.000	semi-an	July '82 3
Han. & St. Jo. pref .100	5,083,024	semi-an	Aug. '82 3½
Harrisbg&Lancaster 50	1,182,500	semi-an	July '82 3½
Housatonic pref. ...100	1,180,000	q'arterly	July '82 2
Illinois Central.....100	39,000,000	semi-an	Mar. '82 3½
Ia.Falls & Sioux City*100	4,623,500	q'arterly	June'82 1¾
Iowa R. Land Co....100	7,620,000	q'arterly	Aug. '82 1
Jeffersonv. Mad.&Ind100	2,000,000	q'arterly	May '82 1¾
Joliet and Chicago*..100	1,500,000	q'arterly	June'82 1¾
Kan.C.,Ft.S.&Gulf...100	4,000,000	.....	Feb. '82 2
" " pref...100	2,750,000	semi-an	Feb. '82 4
Kentucky Central...100	500,000	semi-an	June'81 1
" " pref..100	5,583,500	semi-an	June'83 1
Lake Shore&Mich.So.100	49,466,500	q'arterly	Aug. '82 2
" (guar.)100	533,500	semi-an	Aug. '82 5
Lawrence*..... 50	450,000	q'arterly	July '82 2
Lehigh Valley..... 50	27,496,895	q'arterly	July '82 1½
" " pref. 50	106,300	q'arterly	July '82 1½
Little Miami..... 50	4,637)300	q'arterly	June'82 2
Little Rock & Ft. S..100	4,096,135	.....	July' 81 108
Little Schuylkill*... 50	2,646,100	semi-an	July '82 3½
Louisville & Nashv..100	19,130,913	semi-an	Feb. '82 3
Lowell & Andover....100	500,000	semi-an	Jan. '82 3½
Lykens Valley.....100	600,000	q'rterly	Oct. '81 2½
Manchester & Law..100	1,000,000	semi-an	May '82 5
Manhattan 100	13,000,000	.....	.....
" " 1st pref.100	6,500,000	q'rterly	July '82 1½
" " 2d pref.100	6,500,000	q'rterly	July '82 1½
Marietta& Cincinnati 50	1,386,350	.....	.....
" " 1st pref 50	8,105,600	semi-an	Sep. '66 38
" " 2d pref 50	4,440,000	semi-an	Sep. '66 38
Marq.Hout.&Ont.pf...100	2,259 026	.....	Feb. '82 4
Massawippi*.....100	400,000	semi-an	Feb. '82 3
Michigan Central....100	18,738,204	q'rterly	Aug. '81 1
Middlesex Central...100	280,000	semi-an	Feb. '82 3
Mill Creek&Minehill* 50	323,000	semi-an	July '82 5
M.Hill& Schuyl.Hav* 50	4,022,500	semi-an	July '82 3½
Missouri Pacific.....100	28,169,800	q'rterly	July '82 1½
Mobile&Montgomery100	3,022,517	semi-an	Feb. '80 2¼
Mont. & Wells River100	800,000	annual	Feb. '80 2
Morris and Essex.... 50	15,000,000	semi-an	July '82 3½
Mt Carbon&PtCarbon 50	282,350	semi-an	July '82 6
Nashua and Lowell..100	800,000	semi-an	July '82 4
Nashua & Rochester.100	1,305,800	semi-an	Apl. '82 1½
Nashv. & Decatur...100	1,827,000	semi-an	June'81 3
Nash.,Chat.&StLouis 25	6,670,325	semi-an	Apl. '82 1½
Naugatuck.....100	2,000,000	semi-an	Jan. '82 5
Nesquehoning Val'y* 50	1,300,000	semi-an	Mar.'82 3
N.Castle&Beaver Val* 50	600,000	q'rterly	Oct. '81 —
NewLondonNorth'n*100	1,500,000	q'rterly	July '82 1½
N. Y. Cen. & Hud. R.100	89,428,330	q'rterly	July '82 2
N. Y. and Harlem....100	7,950,000	q'rterly	July '82 4
" " pref.100	1,500,000	q'rterly	July '82 4
" City Line.. —	.....	annual	Apl. '82 3
N.Y.,LakeErie&West.100	77,083,900	.....	.....
" " pref.100	8,156,825	.....	Jan. '82 6
N. Y., N. H. & Hart..100	15,500,000	semi-an	Jan. '82 5
N. Y., Prov. & Boston100	3,000,000	q'rterly	May '82 2
Niag.Bridg&Canand*100	1,000,000	semi-an	July '81 3
North Carolina*.....100	3,000,000	semi-an	Sep. '81 3
" " pref.100	1,000,000	semi-an	Sep. '81 3
N. Eastern (S.C.) pref100	86,000	semi-an	May '81 4
Norfolk & Western pref.	15,000,000	q'rterly	June '82 $1
North Pennsylvania. 50	4,527,150	q'rterly	May '82 1¾
Northern Central.... 50	6,142,000	semi-an	July '82 3
Northern N. Hampsh100	3,068,400	semi-an	June'82 3
Northern N. Jersey*.100	1,000,000	semi-an	July '80 2½
Norwich&Worcester*100	2,604,400	semi-an	July '82 5
Ohio 100	18,500,000	.....	.....
Ohio and Miss. pref..100	4,030,000	semi-an	Mar.'75 3½
Old Colony.....100	7,333,800	semi-an	July '82 3½
Oregon R'way&Nav.100	6,000,000	q'rterly	Aug. '82 2
Oswego & Syracuse..100	1,320,400	semi-an	Aug.'81 4½
Panama..... 100	7,000,000	.....	July '82 6½
Paterson & Hudson*.100	630,000	semi-an	July '82 4
Paterson & Ramapo.100	248,000	semi-an	July '82 4
Pember.&Hightst'n*. 50	342,150	semi-an	Jan. '82 3
Pennsylvania..... 50	77,672,750	semi-an	May '82 4
Pennsylvania Co..... 50	20,000,000	semi-an	June'81 2½
Peoria & Bureau Val*100	1,200,000	semi-an	Feb. '82 4
Philadelphia & Erie*. 50	7,013,700	semi-an	.....
" " pfd 50	2,400,000	semi-an	Jan. '75 4
Phil,Ger.&Norrist'n* 50	2,231,900	q'rterly	June'82 3
Phil. and Reading... 50	32,726,375	q'rterly	Jan. '76 2½
" " pref. 50	1,551,800	q'rterly	July '76 3½
Phila and Trenton..100	1,259,100	q'rterly	July'82 2½
Phila., Wil. and Balt. 50	11,585,750	semi-an	July '82 4
Pittsb., Ft. W. & Chi.*100	19,714,285	q'rterly	July'82 1¾
" Special Imp.100	6,770,900	q'rterly	July'82 1¾
Pittsfield&N.Adams..100	450,000	semi-an	July'82 2½
Portl., Saco & Portsm100	1,500,000	semi-an	July '82 3
Providence &Worces.100	2,000,000	semi-an	July '82 3
Rensselaer&Saratog.*100	7,000,000	semi-an	July '82 4
Rhode Island& Mass.100	100,000	.....	Jan. '81 3
Richmond& Danv...100	3,866,000	q'rterly	May '82 2
Richmond & Petersb100	1,009,300	semi-an	Jan. '81 3
Roch.&Genesee Val.*100	555,200	semi-an	July '82 3
Rome,Watert.& Ogd..100	5,293,900	semi-an	July '75 1¾
Rutland preferred.. 100	4,000,000	semi-an	Sept. '82 1
St.L.,Alt. & T.Haute.100	2,300,000	.....	.....
" " pref.100	2,468,406	.....	May '82 3
St.L.&S.Fran.1st pref100	4,500,000	.....	Aug. '82 3½
St.L.,I.Mt.&South'n.100	21,459,921	semi-an	Feb. '74 3
St. P. & Duluth pref.100	4,705,000	q'rterly	June'82 1¾
St. P., Minn. & Man..100	15,000,000	semi-an	Aug.'82 3½
Schuylkill Valley*... 50	576,050	semi-an	July '82 2½
Seaboard & Roanoke.100	1,229,600	semi-an	May '82 5
Shamokin V.&Pottsv 50	669,450	semi-an	Feb. '82 3
Shore Line*.....100	1,000,000	semi-an	July '82 4
Sioux C.&Pacific pref100	160,000	semi-an	Apl. '82 3½
South Br. (N. J.)*....100	438,300	semi-an	Jan. '82 3
South Western (Ga.)*100	3,892,300	semi-an	Dec. '81 3½
Stockbridge&Pitts.*. 100	448,700	semi-an	Oct. '81 1½
Summit Branch*.... 50	4,010,150	semi-an	Feb. '76 3
Syr., Bingham&N.Y.*100	2,500,000	semi-an	Feb. '81 2
Terre Haute & Ind...100	1,988,150	semi-an	Aug. '82 4
Troy and Boston....100	1,609,000	semi-an	Feb. '80 2
Union Pacific. 100	61,000,000	q'rterly	July '82 1¾
United Cos of N. J.*.100	20,490,000	q'rterly	July '82 2½
Utica, Shenango&S V100	4,000,000	semi-an	Nov.'81 3
Utica and Black Riv.100	1,772,000	semi-an	Mar. '82 2
Vermont and Mass..100	3,050,000	semi-an	Apl. '82 3
Wab. St.L.& Pac.pref.100	22,615,100	q'rterly	Nov.'81 1½
Ware River*.....100	750,000	semi-an.	July '82 3½
Warren (N. J.).....100	1,800,000	semi-an.	Apl. '82 3½
Warwick Valley.....100	340,000	semi-an.	July '82 2½
Westchest&Phil.pref100	821,300	semi-an.	July '80 2
West Jersey.....100	1,359,750	semi-an.	Apl. '83 38
Wilmingt'n&Weld'n.100	1,456,200	semi-an.	July '82 3
Wil., Col., & Aug 100	960,000	semi-an.	July '82 3
Winchester&Poto'c.*100	180,000	semi-an.	July '82 3
Winchester&Strasb.*100	74,700	semi-an.	July '82 3
Worcester & Nashua. 75	1,789,800	semi-an.	July '82 1½
HORSE-POWER R. R.			
Albany City.....100	200,000	annual	.....'80 5½
Baltimore City..... 25	1,000,000	semi-an.	July '82 3
Balt.,Cat.&El. Mills..100	.....	semi-an.	July '82 2
BleeckerSt.&Ful.F'y.100	900,000	semi-an.	July '81 ¾
Boston&Chelsea pref. 50	110,000	semi-an.	Apl. '82 3
Broadway (Brooklyn)100	250,000	q'arterly	Oct. '81 3
B'way&7th Av,(N.Y.)100	2,100,000	q'arterly	Oct, '81 2
B'klyn&Hunter's Pt.100	400,000	semi-an.	Apl. '79 3
Brooklyn City.....100	2,000,000	q'arterly	Dec.'81 3½
Bushwick (Brooklyn)100	309,000	semi-an.	July '81 2½
Cambridge.....100	908,000	q'arterly	Apl. '82 4½
Cen.Park,N.& E.Riv.100	1,800,000	q'rterly.	July '82 2
Christoph'r&TenthSt100	650,000	semi-an.	Aug. '81 2½
Citizens' (Phil.)..... 50	192,500	q'rterly.	Jan. '82 2½
Citizens' (Pbg.)..... 50	200,000	annual..	....'80 14½
Coney Island&Bklyn100	500,000	semi-an.	Oct. '80 5
Continental (Phil.) .. 50	580,000	semi-an.	July '82 6
D.Dock,E.B'way&Bat100	1,200,000	q'arterly	Nov.'81 4
Eighth Av. (N. Y.)...100	1,000,000	q'rterly.	Oct. '81 3
42d St. & G. St. Ferry100	747,000	semi-an.	Nov.'81 6
Frankf.&Southw (Ph) 50	600,000	q'rterly.	Jan. '82 6
Germantown, (Ph.).. 50	572,800	q'rterly.	July '82 2½
Girard College (Ph.) . 50	500,000	semi-an.	July '71 3
Grand St. & Newton..100	170,091	semi-an.	July '81 2½
Green&Coates St.(Ph) 50	150,000	q'rterly.	July '82 3
Heston,Mantau&F'm 50	299,381	semi-an.	Jan. '75 4
Highland.....100	600,000	semi-an.	July '82 4
Lomb.&SouthSts(Ph) 25	195,000	semi-an.	Oct. '75 4
Lynn and Boston....100	200,000	semi-an.	May '82 4
Malden and Melrose.100	165,000	.....	.....
Metropolitan (Bost.). 50	1,500,000	semi-an.	July '82 4
Middlesex (Boston)..100	650,000	semi-an.	May '82 3½
N.Y.,Bay Ridge&Jam100	150,000	.....	Oct. '78 7
Ninth Av. (N.Y.)....100	797,320	.....	.....
Orange &Newark....100	282,555	.....	.....
People's (Phila.) pref. 25	124,744	.....	July '82 2
Philadelphia City... 50	475,000	semi-an.	July '82 4
Phila. and Darby.... 20	200,000	semi-an.	July '81 3½
Phila.&Grey's Ferry. 50	308,000	semi-an.	Jan. '82 6
Pbg,Alleg.&Manches. 50	300,000	q'rterly.	Oct. '81 3
Ridge Avenue (Ph.).. 50	420,000	semi-an.	Oct. '81 11
Second Avenue (N.Y.)100	1,199,500	semi-an.	July '81 2½
Second&ThirdSt.(Ph) 50	771,076	q'rterly.	Jan. '82 4½
17th &19th sts (Ph.).. 50	250,000	semi-an.	July '81 3
Sixth Avenue (N. Y.)100	750,000	semi-an.	Oct. '81 5
Somerville (Boston).100	113,000	semi-an.	May '82 3
South Boston..... 50	600,000	semi-an.	July '82 4
Third Avenue, N. Y..100	2,000,000	q'rterly.	Nov.'81 5
13th and 15th sts.,Ph 50	334,520	q'rterly.	Jan. '82 4
23d street, N. Y.....100	600,000	semi-an.	Aug.'81 4
Union, Boston.....100	374,300	semi-an.	Jan. '82 4
Union, Phila..... 50	1,005,000	semi-an.	Jan. '82 7
West Philadelphia... 50	750,000	semi-an.	July '77 10
CANALS.			
Chesapeake and Dela 50	2,078,038	semi-an.	June'75 2
Delaware Division... 50	1,633,350	semi-an.	Feb. '82 $1
Delawa. and Hudson100	20,000,000	q'rterly.	June'82 1¾
Delaware & Raritan*.100	5,847,400	q'rterly.	July '82 2½
Lehigh Coal and Nav 50	11,204,250	semi-an.	June'82 2
Monongahela Nav... 50	1,004,500	semi-an.	July '82$3
Morris, consolidated.100	1,025,000	semi-an.	Feb. '81 2
" preferred...100	1,175,000	semi-an.	Feb. '81 5
Pennsylvania..... 50	4,501,200	.....	.....
Schuyl. Nav., com.*. 50	859,100	annual..	Au. '81 50c.
" " pref... 50	3,200,000	annual..	Aug. '81 $1
MISCELLANEOUS.			
Adams Express.....100	12,000,000	q'rterly.	June'82 2
American Express... 50	18,000,000	semi-an.	July '82 3
Amoskeag Manuf.Co.100	3,000,000	semi-an.	June'81 5
Calumet&HeclaMin'g —	100,000 S.	q'rterly.	Aug. '82 $5
Central Mining Co....100	.....	semi-an.	Feb. '82 2½
Consolidation Coal..100	10,250,000	semi-an.	Jan. '82 2
George's Creek C.&I.100	.....	semi-an.	Jan. '82 3
Maryland Coal.....100	4,400,000	semi-an.	Feb. '76 1½
Mariposa L. &Mining100	10,000,000	.....	.....
" pref100	5,000,000	.....	.....
Missouri Val.LandCo100	200,000	semi-an.	July '82 12
National Tube Works100	1,000,000	q'rterly.	July '82 3
Pac. Mail Steamship.100	20,000,000	q'rterly.	Sept.'69 3
Pennsylvania Coal... 50	5,000,000	q'rterly.	May '82 3
Pullman Palace Car..100	10,032,800	q'rterly.	Aug. '82 2
Quicksilver, com....100	5,708,700	.....	May '82 0.4
" pref....100	4,291,300	.....	May '82 6
Quincy Mining Co... 25	40,000 shs	semi-an.	Aug. '82 $5
Quincy R. R. Bridge.100	1,750,000	semi-an.	July '82 5
SiouxC.&I.F.L.&L.Co100	500,000	semi-an.	June'82 5
Spring Mt. Coal.....100	1,500,000	semi-an.	June'82 3½
Topeka Equip'nt Co.100	255,500	semi-an.	Apl. '82 5
United States Ex....100	7,000,000	q'rterly.	May '82 1
Wells-Fargo & Co. Ex100	6,250,000	semi-an.	July '82 4
Western Union Tel..100	80,000,000	q'rterly.	July '82 1¾

RAILROAD EARNINGS.—MONTHLY.

	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total.
Burl., Cedar Rap. & Northern:													
1880	184,316	165,170	188,325	141,652	149,504	153,378	143,432	160,160	179,804	204,991	189,330	193,419	2,053,484
1881	167,750	124,510	148,551	184,680	165,630	205,912	174,351	209,112	221,801	221,748	203,880	232,812	2,259,037
1882	252,823	225,631	224,107	178,304	199,278	211,257	.....	.....	.....	.....	.....	.....	.....
Central Pacific:													
1880	1,200,614	1,070,487	1,373,438	1,356,716	1,778,488	1,724,950	1,840,067	1,973,438	1,964,997	1,120,229	2,199,466	1,905,221	20,508,112
1881	1,602,907	1,454,218	1,709,637	1,872,370	2,091,410	2,159,381	1,859,000	2,059,000	2,293,000	2,514,000	2,267,000	2,110,000	23,947,951
1882	1,876,000	1,702,000	1,987.000	2,052,000	2,353,000	2,239,000	.....	.....	.....	.....	.....	.....	.....
Chesapeake and Ohio:													
1880	202,335	198,681	222,762	221,559	199,443	214,352	238,236	259,110	247,303	211,820	240,795	218,009	2,674,308
1881	162,540	184,389	228,479	227,343	252,235	241,135	225,096	262,858	247,144	237,303	235,585	203,562	2,702,762
1882	210,455	209,708	208,981	267,454	255,939	260,753	.....	.....	.....	.....	.....	.....	.....
Chicago and Alton:													
1880	534,054	497,013	626,473	542,961	616,128	617,524	708,906	761,120	767,349	785,199	696,776	574,695	7,718,198
1881	487,890	461,641	529,915	558,190	548,556	635,860	671,466	771,466	768,897	750,359	680,133	635,307	7,553,988
1882	579,447	530,480	584,483	561,787	553,412	613,886	.....	.....	.....	.....	.....	.....	.....
Chicago and Northwestern:													
1880	1,154,632	1,131,683	1,361,725	1,294,573	1,875,608	1,671,177	1,699,686	1,767,938	2,020,245	2,105,217	1,855,671	1,477,902	19,416,007
1881	1,240,667	963,208	1,178,795	1,474,612	1,879,006	2,306,640	1,983,031	2,315,164	2,292,676	2,341,097	2,019,037	1,855,476	21,849,209
1882	1,620,336	1,471,945	1,696,568	1,634,819	2,058,133	2,022,700	.....	.....	.....	.....	.....	.....	.....
Chicago, Burlington and Quincy:													
1880	1,432,740	1,411,870	1,732,518	1,489,894	1,909,627	1,682,956	1,773,643	1,834,321	1,862,285	1,934,762	1,837,860	1,552,018	20,454,494
1881	1,307,948	1,034,821	1,418,149	1,574,371	1,679,455	2,083,803	1,888,558	2,173,945	2,262,981	2,031,001	1,816,133	1,905,490	21,324,150
1882	1,658,834	1,457,300	1,566,217	1,530,838	1,505,261	.....	.....	.....	.....	.....	.....	.....	.....
Chicago, Milwaukee and St. Paul:													
1880	764,298	738,749	900,675	871,041	1,134,745	1,037,958	1,026,708	991,297	1,257,677	1,493,620	1,472,037	1,397,308	13,086,119
1881	990,847	682,717	916,989	1,259,946	1,538,491	1,729,811	1,560,000	1,678,000	1,645,000	1,590,000	1,569,000	1,855,000	17,025,462
1882	1,435,000	1,377,000	1,561,000	1,518,000	1,629,000	1,620,000	.....	.....	.....	.....	.....	.....	.....
Chicago, St. Paul, Minneapolis and Omaha:													
1880	193,827	173,078	259,783	259,208	232,146	218,093	236,995	251,013	300,833	342,052	342,894	312,173	3,122,097
1881	257,786	158,594	251,648	261,211	350,124	404,562	392,702	385,586	363,685	382,714	380,733	391,950	3,981,296
1882	307,498	315,100	405,779	356,558	406,420	363,109	.....	.....	.....	.....	.....	.....	.....
Cincinnati, Indianapolis, St. Louis and Chicago:													
1880	155,697	172,541	198,220	168,199	186,995	200,332	204,138	233,478	343,627	239,881	209,014	198,254	2,412,185
1881	182,523	171,511	191,005	183,710	191,096	188,256	178,861	229,858	219,977	212,606	194,805	192,623	2,296,916
1882	200,042	186,879	208,066	204,269	199,110	.....	.....	.....	.....	.....	.....	.....	.....
Denver and Rio Grande:													
1880	124,759	126,922	160,883	164,882	193,925	295,455	373,132	400,133	406,583	473,318	408,562	349,196	3,478,007
1881	307,476	317,681	398,493	433,111	514,767	584,230	548,284	606,193	620,643	665,686	566,819	643,417	6,206,812
1882	491,914	412,987	535,055	559,917	614,298	537,462	.....	.....	.....	.....	.....	.....	.....
Hannibal and St. Joseph:													
1880	176,079	166,965	216,061	206,735	191,317	179,396	224,312	238,081	233,448	242,214	207,147	279,635	2,561,391
1881	154,401	122,874	176,356	190,812	172,950	190,740	198,110	215,308	202,567	313.433	201,782	180,376	2,230,966
1882	138,284	154,717	168,798	148,913	154,917	155,030	.....	.....	.....	.....	.....	.....	.....
Illinois Central:													
1880	595,212	613,806	613,008	535,732	665,120	681,736	724,095	732,755	806,836	880,211	783,120	673,184	8,304,812
1881	631,281	524,499	557,789	662,493	673,259	803,887	720,004	868,407	828,847	815,238	737 218	703,475	8,586,397
1882	728,173	689,387	695,371	674,603	674,749	663,746	.....	.....	.....	.....	.....	.....	.....
Indiana, Bloomington and Western:													
1880	80,498	89,690	116,185	90,374	85,733	106,954	103,438	116,732	110,622	121,343	96,621	104,619	1,233,079
1881	90,283	83,261	192,085	203,677	200,064	199,846	83,764	117,956	195,307	181,674	160,826	156,697	.....
1882	195,824	175,755	206,235	205,934	182,554	186,133	.....	.....	.....	.....	.....	.....	.....
Louisville and Nashville:													
1880	674.455	575,035	612,593	563,883	655,014	976,229	772,537	827,088	931,910	1,000,326	953,086	949,184	9,491,346
1881	816,960	805,124	947,959	850,862	828,726	1,227,885	817,135	876,192	951,566	1,002,950	1,065,223	1,122,285	11,326,859
1882	950,065	960,036	1,073,745	950,007	946,435	1,187,385	.....	.....	.....	.....	.....	.....	.....
Mobile and Ohio:													
1880	250,116	204,094	168,301	140,091	129,249	121,855	131,621	140,593	184,246	264,714	251,368	287,373	2,373,621
1881	224,347	216,768	230,916	163,551	145,803	136,517	131,009	159,348	209,044	252,921	252,434	262,025	2,406,437
1882	161,433	158,154	152,651	145,272	137,645	132,572	.....	.....	.....	.....	.....	.....	.....
Nashville, Chattanooga and St. Louis:													
1880	205,633	191,154	169,457	155,466	158,839	144,155	151,594	169,326	167,473	178,266	182,087	175,996	2,049,448
1881	178,143	190,866	207,710	183,525	104,430	154,549	150,430	168,317	179,979	172,121	152,059	173,127	2,075,256
1882	156,994	159,961	161,005	154,155	137,645	119,074	.....	.....	.....	.....	.....	.....	.....
New York and New England:													
1880	164,232	149,907	183,845	179,689	183,701	219,891	205,056	249,885	235,642	215,491	210,856	198 108	2,396,302
1881	189,749	173,614	212,019	216,913	217,185	231,518	246,821	280,524	299,573	261,199	242,412	237,729	2,809,255
1882	213,840	217,261	265,222	263,544	283,244	290,060	.....	.....	.....	.....	.....	.....	.....
New York, Lake Erie and Western:													
1879	1,147,173	1,207,391	1,356,780	1,372,755	1,350,574	1,230,419	1,273,533	1,450,223	1,492,497	1,713,697	1,515,835	1,398,224	16,509,127
1880	1,296,381	1,252,218	1,644,958	1,643,151	1,592,544	1,661,812	1,580,976	1,606,874	1,786,417	1,899,910	1,799,338	1,726,788	19,149,361
1881	1,443,437	1,425,765	1,847,261	1,709,057	1,776,891	1,794,982	1,787,081	1,772,895	1,734,200	.....	.....	.....	.....
Northern Central:													
1880	334,494	330,860	415,325	386,130	329,788	419,193	450,298	453,923	464,093	512,918	459,054	494,310	5,050,387
1881	386,157	382,657	452,906	487,273	465,588	487,287	440,811	498,008	429,565	449,664	487,160	476,622	5,443,697
1882	407,368	413,551	430,194	435,129	482,607	482,752	.....	.....	.....	.....	.....	.....	.....
Northern Pacific:													
1880	81,390	77,259	119,357	185,700	217,613	253,105	241,277	223,500	330,300	358,456	300,822	220,993	2,629,710
1881	116,508	78,803	162,984	216,210	312,705	412,024	404,180	411,624	490,096	565,485	428,903	434,331	4,044,576
1882	239,800	269,000	384,000	438,000	568,332	631,342	.....	.....	.....	.....	.....	.....	.....
Philadelphia and Erie:													
1880	224,307	245,372	327,678	334,947	311,470	331,024	308,699	347,532	322,737	367,082	324,966	281,919	3,727,733
1881	224,303	225,501	285,573	293,323	343,792	350,585	291,669	303,849	276,522	292,392	284,078	282,772	3,454,309
1882	252,727	246,246	265,311	277,851	341,415	341,614	.....	.....	.....	.....	.....	.....	.....
St. Louis and San Francisco:													
1880	198,091	195,948	193,146	176,164	167,664	173,607	213,297	259,995	280,873	328,194	290,329	226,063	2,698,371
1881	212,435	178,234	262,050	265,298	283,399	260,254	252,333	286,373	279,064	308,569	284,320	287,914	3,160,245
1882	256,784	244,654	274,959	242,806	253,419	240,177	.....	.....	.....	.....	.....	.....	.....
St. Louis, Alton and Terre Haute:													
1880	153,139	163,737	168,994	155,462	147,928	150,207	191,077	216,759	204,295	221,863	188,773	184,503	2,146,741
1881	175,725	166,012	201,137	197,447	172,177	165,896	158,674	189,295	187 299	179,921	162,544	153,852	2,112,801
1882	168,987	149,619	178,145	157,450	162,842	142,742	.....	.....	.....	.....	.....	.....	.....
St. Louis, Iron Mountain and Southern:													
1880	555,983	490,195	451,560	408,241	349,053	363,454	432,655	565,869	671,219	688,365	632,052	656,951	6,265,597
1881	570,957	560,791	704,002	548,300	479,075	474,302	533,512	644,386	690,400	719,239	687,280	709 498	7,319,744
1882	516,370	501,127	585,008	581,977	519,120	529,700	.....	.....	.....	.....	.....	.....	.....
St. Paul, Minneapolis and Manitoba:													
1880	180,239	137,645	261,798	333,014	281,899	243,407	272,089	232,579	274,188	345,057	300,675	297,641	3,160,231
1881	254,187	159,482	320,962	425,685	382,642	405,322	387,488	414,954	485,736	605,708	508,530	528,262	4,878,960
1882	395,461	418,358	531,004	570,890	858,902	856,417	.....	.....	.....	.....	.....	.....	.....
Texas and Pacific:													
1880	245,785	219,165	215,070	174,177	141,083	153,066	195,711	226,073	266,570	303,666	312,184	301,858	2,754,408
1881	281,176	260,781	319,928	295,066	281,782	285,405	320,466	354,082	337,117	578,668	357.724	381,218	3,921,569
1882	310,785	255,644	332,911	359,543	409,228	384,713	.....	.....	.....	.....	.....	.....	.....
Union Pacific Railway:													
1880	1,433,636	1,393,992	1,730,509	1,937,220	2,027,269	1,928,528	1,934,215	1,913.035	2,270,179	2,707,860	2,251.148	1,869,335	23,448,445
1881	1,339,799	1,374,740	1,674,860	1,766,894	2,319,238	2,590,969	2,528,826	2,638,659	2,844,357	3,289 350	2,773,608	2,267,004	27,451,831
1882	1,961,088	1,759,863	2,226,832	2,462,004	2,491,590	.....	.....	.....	.....	.....	.....	.....	.....
Wabash, St. Louis and Pacific:													
1880	776,790	759,451	978,629	892,024	948,773	953,468	1,966,742	1,189,478	1,178,950	1,501,203	1,131,787	1,050,816	12,428,112
1881	811,617	818,922	1,121,592	1,023,482	1,144,660	1,308,993	1,131,751	1,542,838	1,490,027	1,396,300	1,399,555	1,328,278	14,461,570
1882	1,229,965	1,134,768	1,315,776	1,378,194	1,204,864	1,149,682	.....	.....	.....	.....	.....	.....	.....

CORRESPONDENCE.

[We pay no attention to communications unless the name and address of the writer are given, though the same will not be published if so requested. We assume no responsibility for statements made by correspondents, and we do not necessarily endorse ideag advanced by them. Under these conditions we think it of value to our readers to devote a liberal space to the free discussion by others—whose opinions may be at variance with our own—of subjects pertinent to our department of journalism.]

Examination of Railroad Employes.

Editor American Railroad Journal:

The calm and candid discussion of important questions in public journals is pretty sure to elicit truth, and in the end to settle differences. I was therefore glad to see, in your issue of July 15th, a presentment of the opposition to scientific tests for visual defects, as applied to railroad engineers. Between Dr. Schultze and myself, there is evidently no controversy, and probably there would be none between Mr. Huntington and myself, in discussing precisely the same subject. When reasonable men disagree about matters of fact or opinion, it often happens that they mistake each other's ground.

Let me here disclaim any disposition to detract at all from the importance, character, qualifications and worthiness of railroad engineers as a class. The grave responsibility imposed on them is answered by a general fidelity and, as occasion demands, a heroism never excelled in chivalric days of old. Their praise is in everybody's mouth: it costs nothing. I should be glad to see them rewarded by something more substantial and satisfying to their families, their service better organized, their situation more firmly established, and their qualifications better defined.

Right here I would remark that a most important qualification for a locomotive engineer, which would, more than any other, contribute to success in gaining and keeping good employment, is a mechanical education, that would fit him to both repair and build an engine. Some possess this accomplishment; but, I believe, not the majority. In medicine, while the propriety and utility of specialties are recognized, it is an established principle and custom for specialists to receive a general medical education, and to practice the general branches of the art before taking up special practice. The advantage in case of a locomotive engineer would be manifold, but to himself chiefly in securing better and more constant employment. At times transportation business grows dull, fewer engine-drivers are needed, and some of the simple specialists are cast adrift. If all were competent mechanics, it would be practicable for the important railroad companies to build their engines at their own shops, by their own locomotive engineers thus utilized during the dull season. During the busy season, or in any emergency, the shops would fill any requisition for extra engines and engineers. Besides, this arrangement would provide a retirement for engineers disabled, through a variety of infirmities, for the trying duties of engine-driving—even a refuge where the man of science and worsteds could not molest nor make afraid.

Now a few words of criticism upon the quotation from Mr. Huntington's paper. Its grammar is granted faultless, and its rhetoric admirable. Let us examine the logic. Color has been selected as the basis of railroad signals, simply because it is more striking to the average eye than size, shape or position, especially at night. If then three or four per cent of men are insensible to the distinction between green and red, are they to be regarded as equal to the others? If it could be explained how "Old Reliable," who was color-blind, always understood the meaning of the colored signals, by day and by night, it would be valuable information to other color-blind men, and its revelation might save them all; for I hold, that no man ought to be condemned by the worsted test alone, but have the privilege of the flags and lanterns, if found defective with the former. As to illiteracy and the loss of one eye, I am not aware that the doctors have proposed them for disqualifications. The logical conclusion drawn from the case of the deaf brakeman, would be to select deaf men for this particular duty. I fully agree that no man should be discharged for a trivial defect, nor for a fancied one. Every man should have ample opportunity to prove his exemption from defect, if this be suspected. Moreover, I take it that experts and examiners should not be authorized to discharge men. Their function is to test for certain physical qualifications and to report accordingly. The examiner, having found a man disqualified for a certain position, might recommend him for another, where no danger would ensue. A large and well organized company could manage such a transfer as would work no injustice, and little hardship, to the man. Better for the company to continue his former pay than to gamble on the risk of damages to settle.

I desire also to say something more about examiners, their selection and qualifications, but must defer this to another occasion.

S. S. H.

New Orleans, July 21, 1882.

A Good Excuse.—In Montana, on a day fixed for a wedding, the bridegroom did not come to time. He was sued for breach of promise, and showed that all the hours of the day specified he was treed by a bear.

A Chance for the Girls.—The male inhabitants of New South Wales appear to be in a sad condition. A great number of them find it to be physically impossible to procure wives. According to a report recently issued on the population of that colony, no less than 79,000 women are required to equalize the sexes. The other Australian colonies require about the same number in proportion to their population.

The Sewaren House, at Sewaren, N. J., on the Long Branch division of the Central Railroad of New Jersey, is fast gaining ground as a pleasant summer resort, not only on account of its being easy of access from the city, and its unusually good management, but because there are no better fishing grounds than right in its immediate vicinity. It is on the beach, so that at high-water fish are caught from the porch, and there are unexcelled opportunities for smooth-water bathing and boating.

List of Patents for Railway Interests.

Bearing date of July 25, 1882.

[Reported expressly for the Am. Railroad Journal.]

261,666. Railway Joint and Nut Lock, W. P. Brown, Zanesville, Ohio.

261,678. Check Vibrations in Elevated Railways, etc., T. Coates, Waterville, N. Y.

261,683. Car Coupling, T. Cordrey, Fort Wayne, Ind.

261,540. Car Coupling, P. H. Dennis, Sauk Rapids, Minn.

261,813. Railway Signaling Apparatus, J. A. Amery, Boston, Mass.

261,702. Car Coupling, R. E. Gracy, Williamsport, Penn.

261,814. Railway Switch Stand, A. Harley, Topeka, Kansas.

261,747. Car Axle Lubricator, W.G. Mitchell, New York, N. Y.

261,783. Locomotive Boiler, G. S. Strong, Phila., Pa.

261,785. Locomotive Window, J. M. Taylor, Fredericton, N. B.

261,786. Railway Locomotive, J. M. Taylor, Fredericton, N. B.

261,570. Wedge Bolt for Locomotives, J. Sullivan, Elmira, N. Y.

The Coal Trade.

The leading coal-carrying companies make the following reports of their tonnage for the week ending July 15, and for the year to that date, compared with their respective amounts carried to the same time last year:—

	Week.	1882.	1881.
Reading Railroad	189,308	4,665,360	4,427,038
Schuylkill Canal	12,104	173,545	229,305
Lehigh Valley	158,788	3,642,068	3,313,682
Delaware, Lackawanna and Western	105,979	2,200,223	2,120,960
Shamokin	24,560	530,176	548,651
Central R. R. of New Jersey	106,610	2,160,306	2,044,034
United R. R. of New Jersey	38,561	874,681	799,835
Pennsylvania Coal	37,153	650,244	653,025
Delaware and Hudson Canal	81,938	1,684,190	1,774,843
Huntingdon and Broad Top Mountain	6,323	228,750	260,555
Penn. and New York	36,990	883,332	855,357
Clearfield, Pa	36,634	1,520,572	1,275,970

The total tonnage of anthracite coal from all the regions for the week ending July 15, as reported by the several carrying companies, amounted to 693,934 tons, against 649,883 tons in the corresponding week last year, an increase of 44,051 tons. The total amount of anthracite mined for the year is 13,790,929 tons, against 13,548,929 tons for the same period last year, an increase of 421,942 tons. The quantity of bituminous coal sent to market for the week amounted to 55,171 tons, against 103,632 tons in the corresponding week last year, a decrease of 48,461 tons. The total amount of bituminous mined for the year is 2,244,797 tons, against 2,585,177 tons for the corresponding period last year, a decrease of 340,380 tons. The total tonnage of all kinds of coal for the week is 749,105 tons, against 753,515 tons in corresponding week last year, a decrease of 4,410 tons, and the total tonnage for the coal year is 16,215,668 tons, against 16,134,106 tons to same date last year, an increase of 81,562 tons. The quantity of coal and coke carried over the Pennsylvania Railroad for the week ending July 15 was 205,821 tons, of which 157,879 tons were coal and 47,942 tons coke. The total tonnage for the year thus far has been 5,873,170 tons, of which 4,274,828 tons were coal and 1,598,342 tons coke. These figures embrace all the coal and coke carried over the road, east and west. The shipments of bituminous coal from the mines of the Cumberland coal region for the week ended July 15 were 10,148 tons, and for the year to that date 547,425 tons, a decrease of 492,591 tons as compared with the corresponding period of last year. The shipments were: To the Baltimore and Ohio Railroad—For the week, 7,715 tons; year, 454,701 tons; decrease as compared with 1881, 257,863 tons. Chesapeake and Ohio Canal—Week, 2,433 tons; year, 13,950 tons; decrease as compared with 1881,

187,233 tons. Pennsylvania Railroad — Week, none; year, 74,842 tons; decrease as compared with 1881, 50,944 tons. The Reading Railroad shipment for last week, ending July 22, was about 190,500 tons, of which 61,200 tons were sent to and 47,000 tons shipped from Port Richmond, and 19,800 tons sent to and 16,000 shipped from Elizabethport.—*Philadelphia Ledger, July 24.*

The Suez Canal in 1882.

I was glad to see how much of the banks are now cased with stone. Trees grow with difficulty in the sand, and their roots suffer from the salt water. A sandy bank is carried by the wash of the steamers into the deep-water channel. But this stone casing resists the wash, and when it is complete the company will be able to increase without danger their regulation speed. We met with no obstacle for two hours. In this great highway of nations we saw no life save the wild marsh birds and the waste of water stretching away to the yellow desert. There are *gares*, or passing places, every few miles, where the deep waterway is widened from twenty-four to fifty yards and sometimes more, and a signalman system stops or allows to pass the ships, according as the next run is free or occupied. We passed the first *gare* successfully, but at the second the ball was hoisted above the flag, which in canal language means "go into the siding." Nothing came by before sunset, when all traffic ceases, and we lay in the quiet moonlight with every intention to proceed at sunrise. But when I came up next morning to see the start, I found a fleet of great ships, each with its noisy little tug and yellow flags at the mast-heads, slipping along in single file. It was a grand way of realizing the work of the canal. Nineteen vessels went by, averaging, our captain told me, 1,500 tons burthen. All save two carried the British flag. Three were crammed with pilgrims—forecastle, main-deck and quarter-deck one mass of life. Even the boats were full of them, and from under a canvass awning peeped the veiled faces of women. One lot was Russian pilgrims from the Caucasus—savage-looking fellows in fur caps and black cloaks; the other was Algerians and Moors in turban and burnous. The rest of the ships were cargo-laden, twenty-two and twenty-three feet in the water. All went by safely till the seventeenth, the Scotch Greys, came. She went a yard or two out of her course and at once was aground. She had passed us, but others had still to come, and there was nothing for it but to wait till the Scotch Greys got free. Hawsers were made fast to stern and bow on either bank, and after an hour's shouting and steaming and winching, the big ship swung into place. The rest came by without disaster, and we got under way ourselves at 11 o'clock.

The canal is not big enough for the present traffic. Shipping to the extent of over 3,000,000 tons passes through every year, and it is steadily on the increase. Ships have to wait their turn, and much valuable time is wasted at either end and in the passage. The accommodation may be increased in two ways. The whole length of the canal may be widened so as to allow of ships passing each other everywhere. Such a work would not be difficult, but it would be very costly. The deep-water passage would have to be more than doubled in width, as the slow speed makes steering difficult, and ships in passing would require plenty of sea room to avoid accidents. The present width of twenty-five yards would have to be raised to sixty, but it would not be necessary to increase the width of surface of the whole waterway, which is already 100 yards from bank to bank. The second mode of increasing the facilities of passage is more feasible, and has much to recommend it. It consists in a considerable increase of the number of *gares* or passing-places, and in the lengthening of those already in existence. There are at present thirteen, and they might easily be increased to twenty. The same precautions now practiced would be still enforced in the passing of ships. The block system would be carried out from *gare to gare*. The buoying of the passage is already excellent, and there would be no increase to the danger of fouling and jamming. The consequence of such accidents in so narrow a waterway as the canal is so serious that I think, on the whole, the increasing of the *gares* is most to be recommended. But one or the other improvement is necessary. —*Correspondent London Times.*

Pennsylvania Railroad.

The statement of the business of all the lines of the Pennsylvania Railroad Company east of Pittsburgh and Erie, for June, 1882, as compared with the same month in 1881, shows:

An increase in gross earnings of	$286,319
An increase in expenses of	240,529
An increase in net earnings of	$45,790

The six months of 1882, as compared with the same period in 1881, show:

An increase in gross earnings of	$1,007,010
An increase in expenses of	1,904,041
A decrease in net earnings of	$807,031

All lines west of Pittsburgh and Erie for the six months of 1882 show a deficiency in meeting all liabilities of $120,657, being a decrease as compared with the same period of 1881 of $1,645,521.

The City of Alexandria.

The city of Alexandria, which has been devastated by the guns of the British fleet under Admiral Seymour, is one of the most celebrated cities of the Old World, and since its foundation in the year 332 B. C. has experienced many vicissitudes. Its name was derived from its founder, Alexander the Great, and it has been both a great center of commerce and a noted seat of learning and philosophy, the library known as the Alexandrian Library having been the greatest one of ancient times. It is supposed that in the time of its greatest prosperity the city had a population of 600,000. Its decline began in the latter part of the seventh century, after its capture by the Saracens. The modern city, populous and with a growing commercial importance, covers a site near that of the ancient city, being located on a mole or isthmus connecting the mainland with the island of Pharos. It is the great emporium of the commerce between Europe and India, and has an artificial harbor with a breakwater two miles long. The work of constructing this harbor was begun in 1871, and the breakwater is one of the most important works of the kind on the Mediterranean. The population of the city some years ago was 219,602, the foreigners numbering perhaps 70,000. Some of the new streets in the city present the appearance of a European city, but in the Turkish quarter the streets are narrow and dirty. Among the principal buildings are the palace of the Pacha, a large naval arsenal, naval and military hospitals, a Custom House, a tribunal of commerce, and various schools. Several newspapers are published in the city. The chief articles of export are grain, sugar, drugs, cotton, gums, rice, dates and hides.

Northern Central Railway.

The Northern Central Railway Company furnishes the following comparative statement of its gross earnings and operating expenses for the month of June:

	1882.	1881.
Gross earnings	$482,762 40	$487,287 46
Operating expenses	285,169 43	293,987 27
Extraordinary expenses	24,139 98	11,609 26
Total expenses	309,309 41	305,596 53
Net earnings	$173,452 99	$181,690 93

For six months ended June 30 :—

	1882.	1881.
Gross earnings	$2,651,671 36	$2,661,867 97
Operating expenses	1,617,049 15	1,586,918 71
Extraordinary expenses	157,391 39	34,487 66
Total expenses	$1,774,440 54	$1,621,406 37
Net earnings	$877,,250 82	$1,040,461 60

Transportation of Goods in Bond.

Much trouble having been experienced in the transportation of bonded freight between the East and points on the Pacific coast, the Pacific Railroad Company have sent out the following suggestions relating thereto, which connecting railroads are respectfully requested to comply with: Cars should be in good order, and as nearly new as practicable. Very few old cars can be sent 3,000 miles without transfer. They should be of the 4 ft. 8½ in. gauge. The Custom House manifests should in all cases accompany the cars, or be sent on so as to arrive at Council Bluffs, Atchison, Kansas City, Hannibal, St. Louis, Cairo or Columbus, Ky., before the cars. Full carloads should be made up as near as practicable. When necessary, freight not bonded should be put into the same car to complete the load. All freight in each car should be consigned to the same city. Freight for Sacramento and San Francisco should not be loaded together. Cars loaded with less than 12,000 pounds of freight will not be taken unless the goods are so bulky as to fill the car with a less weight.

Somebody says that "women would never do to run railroads, as the trains would always be behind."

A new style of car is about to be introduced on the Southern Pacific Railroad, destined to be run from California to the Gulf as wheat cars, and on their return as immigrant cars. The interior will be like other freight cars. Along the sides will be sleeping bunks, lowered and suspended by an iron rod and hinge, but capable of being closed up flush when freight is carried. There are windows, of course, and it is said the cars will be as comfortable and warm as the most luxurious Pullman sleeping-car.

Humors of the Boston Stock Exchange.

A few years ago a mischievous member procured about a dozen pigeons, and, taking them into the board room before the time of assembling, distributed them around in the drawers of the long tables at which the members sit during the formal call. As may be imagined, "when the drawers were opened the birds began to fly," and the sudden manner in which the individuals thus favored jumped from their seats was laughable in the extreme, and the consternation of the bald-headed ones, who sought to protect their defenceless heads with pocket handkerchiefs, was still more ludicrous. Unlike the pigeons, the perpetrators were never caught. On another occasion, the day before the Fourth of July, an entire brass band was engaged and smuggled into the visitors' gallery without the least suspicion of the fact being known to any one outside of the half dozen in the secret. At a given signal, as the session approached its end, the soul-inspiring strains of "Boccaccio" burst forth amid yells and cheers from the astonished members. Another frequent joke: Some one with no orders is quietly perusing a newspaper held open, when an unseen hand holds a match to one corner and suddenly it blazes up; and amid yells of laughter and loud cries of "Fire!" it is stamped out before the astonished victim realizes what has happened. When huge rubber spittoons were first invented, a number were purchased and placed in various portions of the board-room. Some destructive genius conceived the idea of putting a large firecracker into one or two of them and setting them off. Taking advantage of the president's back being turned, a match was applied to the fuse, and whiz! bang! up flew the covers to the ceiling, half startling the nervous ones out of their senses, and creating much excitement among others. Some two years since one of the most popular members of the board, noted for being "a lady's man," joined the Cadets, and, on the fact becoming known, a toy sword and gun were procured, and half a dozen boys rigged out in District Telegraph boys' jackets and paper caps marched into the room, and, stopping in front of the would-be soldier, presented him with the implements of war, accompanied by a neat little speech, in the course of which they said, that if he killed as many men as he had (metaphorically speaking) ladies, his country would be well served.

When a new member is admitted he is generally made the victim of a time-honored joke, as ancient as the Exchange itself. Nevertheless its perpetration seems to be attended with as much enjoyment by the old members as if it was a new idea. On the first or second day after the new member makes his appearance on the floor he is handed a note by one of the board messengers, and on opening it finds that it reads something like this: "Mr. B———, please step to the door a moment. I am waiting outside to give an order." It is usually signed by some one's initials. Thinking he is about to receive a good order, and swelling with his newly acquired importance, he rushes out to see—nobody. In some instances these victims have been known to go even to their offices in search of the imaginary customer. During his absence the word is passed round, and when he reenters, if he has the effrontery to do so, he is greeted with shouts and yells and cries of "What will you take for your order?" "Did you see your man?" etc. If he takes it good humoredly, and joins in the laugh against himself, he is declared fully initiated and receives no further annoyance. Sometimes an old member is served in this way, and then the cheers are redoubled, for it is not often that an old bird can be caught with such chaff.—*Boston Herald.*

The Jaffa and Jerusalem Railroad.

A little double, iron track,
A station here, a station there,
A locomotive, tender, tank,
A coach with patent swinging chair;
A postal car and baggage, too,
A platform of the Miller make,
With buffer, duffer, chain and spike
And nobby automatic brake—
Such is the pride of Orient herdes,
And Syria's brightest modern gem—
The railroad train that snails along
'Twixt Jaffa and Jerusalem.

Beware, O sacred Mooley cow,
The engine when it rings its bell!
Beware, O camel, when you hear
The whistle's sharp and warning swell!
And, native of the Holy Land,
Unused to modern travel's snare
And soothed by guileful taffy talk,
The awful peanut boy beware!
Else, trusting to his words and wares,
Thou may'st have reason to condemn
The style of trade that's fashionable
'Twixt Jaffa and Jerusalem!

And when, ah! when the bonds fall due,
How vexed and wroth will wax the State—
From Nebo's Mount to Nazareth
The cry will sound, "Repudiate!"
From Hebron to Tiberius,
From Jordan banks unto the sea,
Will swell the chorus, loud and long,
Against that "—— monopoly."
The horny-handed shepherd swain,
Oppressed by bonded stratagem,
Will curse that corporation line
'Twixt Jaffa and Jerusalem!

—[*Denver Tribune.*

The Electric Hairbrush.

Mrs. M'Farren of Bristol, R. I., has a small boy, now of the age of six years, who has given her much anxiety. Not only has he been an exceptionally mischievous boy, with an absolutely unlimited capacity for surreptitious jam, but he was until lately physically weak and under-sized. His mother has been accustomed to punish him with a hairbrush of the ordinary kind, but the effect of the punishment had always been to make the boy sullen and gloomy, and there were times when she asked herself if punishment really did the boy any good. A year ago Mrs. M'Farren was prevailed upon to buy an electric hairbrush, with the view of improving the condition of her hair. As the brush was an unusually large and strong one, she naturally used it in the education of the boy. The first time that it was applied to him he had been guilty of some particularly heinous juvenile crime, and was therefore punished with more than usual severity. To his mother's surprise, the moment he was released he sprang up and turned several hand-springs, at the same time breaking forth into song. For the rest of the day he was in the very highest spirits, and not a trace of his former sullen manner was visible. This was such an unexpected and utterly unprecedented state of things that his mother could not account for it only on the supposition that the effect of four years of frequent punishment had been cumulative, and had only just begun to show itself. The boy continued to get into mischief, and was, of course, daily punished. Every time that the hairbrush was applied to him his muscular activity increased. Moreover, he suddenly began to grow tall and strong, and his various bodily ailments disappeared. At the end of a year he was the tallest, heaviest, and strongest boy of his age in the whole town, and although his restless activity constantly led him into breaches of maternal law, nothing could check the flow of his spirits or spoil his perennial good humor. There can be no reasonable doubt that these wonderful changes in the mental and physical constitution of the McFarren small boy were due to the electrical propensities of the hairbrush used by his mother during the past year. The electricity, driven into his system by impact, filled him with high spirits and gave an impulse to his physical growth. It is thus evident that the ability of the electrical hairbrush to infuse electricity into the scalp and thus promote the growth of the hair is its least valuable property. Hereafter it will be used not merely as the universal instrument of juvenile punishment, but as the readiest and surest means of infusing vitality into the sick and weakly of whatever age, and Mrs. McFarren's name will be forever associated with the greatest of the electrical discoveries. —*N. Y. Times.*

Brotherhood of Locomotive Engineers.

A meeting was recently held at Winona, Minn., of the Brotherhood of Locomotive Engineers, at which Grand Chief Engineer P. M. Arthur delivered a short address. Among other things he said: "Nineteen years ago last April the engineers of the Michigan Central Railroad conceived the idea of forming an association. A meeting was called at Detroit, which was attended by ten delegates. The necessity of something permanent was recognized and a bond of union was adopted with twelve engineers. In a short time ten subdivisions were formed. In August of the same year the Brotherhood of the Footboard were formed. During the first year forty-four divisions were formed, and at the next meeting the name was changed to the present name of Brotherhood of Locomotive Engineers. During nineteen years 191 divisions have been formed, embracing nearly nine-tenths of all the locomotive engineers of the country. The motto of the society is sobriety, truth, justice and morality. We believe in doing unto others as you would they should do unto you. The brotherhood was independent of political and religious creeds. A journal of the order has been published, with 12,000 subscribers, in which a list of all dismissals was published. It might seem hard, but it had been found to be beneficial, and finally to lead to reformation. The charitable work of

the order was attested in the distribution of between $1,000,000 and $2,000,000 to the widows and orphans of engineers.

A New Needle-Making Machine.

EUGENE FONTAINE, who for a number of years has been connected with the National Pin Works, of Detroit, and whose name is well-known as the designer of a fast railroad engine, has invented a machine for making needles. It has a capacity of 60 complete needles per minute, and will doubtless work a complete revolution in the mode of manufacture. Most of the needles the world uses are made in England, by hand, very few being made on this continent, and none in this country. A company has been organized in Brooklyn, N. Y., with a capital of $500,000 and its pays Mr. Fontaine $25,000 in cash, and $75,000 in stock for his patents; it also gives him $5,600 per year for three years, as a salary, to superintend the building and working of the machines. Twenty-five machines are expected to turn out 725,000 needles per day.—*Detroit Price Current.*

A Great Marine Refrigerator.

A STEAMSHIP has just left the Clyde for Australia fitted with a refrigerating machinery on the system introduced by Hick, Hargreaves & Co., and distinguished from all others fitted for this trade in the capacity of the chamber in which the frozen meat is to be carried. This space has a capacity of about 700 tons, the largest refrigerator room yet fitted on any ship. At the trials at sea of the machinery, it produced a continuous stream of cold dry air for the meat chamber, the temperature of the air flowing from the machine being 85 deg. Fahr. below zero, and the large chamber was kept steadily at zero, or 32 deg. below the freezing point. Hick, Hargreaves & Co. have just completed and shipped to Queensland for the company a cold-air machine which is said to be the largest ever made, being intended for freezing 1,000 tons of fresh meat, and keeping it frozen in store ready for shipment. As the average weight of an Australian sheep is about eighty pounds, this enormous freezing machine will keep 23,000 sheep frozen in the Queensland stores in a perfectly fresh state for any length of time necessary before shipment.—*Montreal Star.*

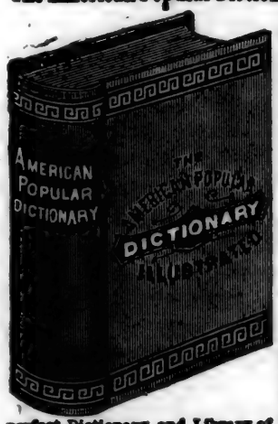
THERE were received by the New York and New England Railroad Company during June from the West at Newburg, on the Hudson, 1,725 cars; and 1,110 empty cars and 762 loaded ones were delivered by them at that point.

THE Northern Central Railroad officials had commenced examining employes of the road to ascertain whether or not they were color-blind or deaf, and thus fit or unfit for service. An official approached one of the local employes with: "Now Blank, take the cotton out of your ears and listen! Can you hear this watch tick where I now hold it?" Blank "cocked his ear professional," and didn't hesitate a moment in assuring the official that he could "hear that watch tick as easy as to hear the blows of a trip-hammer." "Look here, Blank," said the official, assuming a more serious air; "do you know that you're an awful liar? I wasn't examining your capacity to tell the truth, but your hearing; or it might go hard with you. This watch is broken and hasn't ticked for ten years!"—*Elmira Advertiser.*

THE Ontario Car Works are engaged in the completion of a number of conductors' vans or cabooses for use upon the Canadian Pacific Railway. These embody some very commendable improvements designed to promote the comfort of the trainmen, and are worthy of special mention. They are provided with a cupola from which the conductor can observe his surroundings and other trains ascertain his number, while the interior is furnished with sliding seats placed along the side of the car, and in a compartment at the opposite end will be stored a supply of mattresses and blankets. At night these seats can be drawn out, the mattresses placed upon them, and thus made into comfortable beds. There are also closets and drawers for carrying clothing and other articles, besides water-closets and other conveniences. The stoves have large ovens, and are thus rendered available for cooking purposes, and the whole car is well adapted for its purpose.

THE London *Engineer* says that there is a new local demand about Wolverhampton for iron sheets intended for export to the United States. The Anglo-American Company, which is making roofing shingle in Wolverhampton, has now introduced to that town machinery for cutting out sheets into shapes suitable for use in the making of coal vases, pails and stove shovels. Thus outlined, the sheets have not to pay the duty on the other side which would be carried by the scrap inseparable from the cutting up of a sheet as it leaves the mill, while from the scrap the ears of the pail are shaped and the holes are punched at the same operation. The saving of duty and the much lower original cost of the iron on this side make it much more profitable for the company to carry on in England that part of its operations described than in the United States. It has, therefore, sent over all its shaping machinery, and, quite apart from its shingle branch, it will use up twenty-five tons of sheets per week.

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THREE DOLLARS PER SHARE WILL BE PAID ON presentation of Dividend Warrant No. 14 on and after August 1, at this office, or at the office of the Company, 23 Broad Street, New York. Transfer books will be closed from 2.15 P. M. July 15, to 10 A. M. August 3, by order of the Board of Directors.

E. H. MILLER, JR., Secretary.

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The transfer-books will be closed at 3 o'clock P. M. on MONDAY the THIRD DAY of JULY next, and will be re-opened on the morning of Friday, the fourth day of August next.

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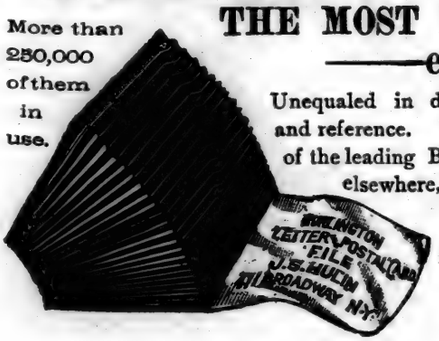
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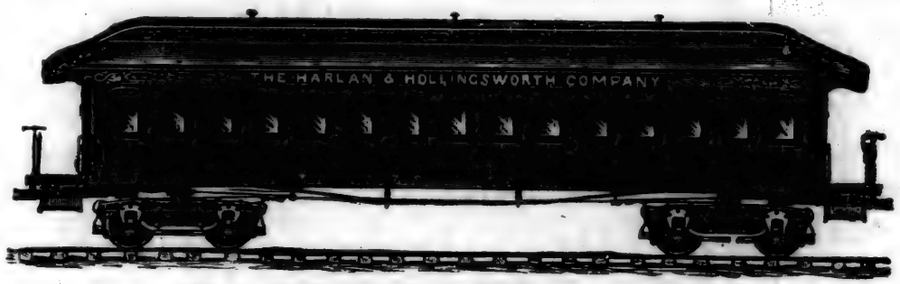
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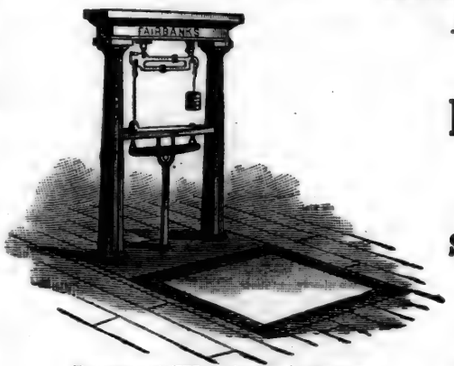
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SECOND QUARTO SERIES.—VOL. XXXVIII., NO. 30.] NEW YORK, AUGUST 5, 1882. [WHOLE NO. 2,415.—VOL. LV.

CONSOLIDATION.

IT is proposed to merge the Baltimore and Delta Railroad into the Maryland Central Railroad Company under a charter of 1867, which authorizes the city indorsement for six hundred thousand dollars.

THE stockholders of the Cato and Beech Creek Railway Company and of the Williamsport and Clarfield Railroad Company, met in Philadelphia on the 28th ult., at the office of the first named company, and effected a consolidation of the two corporations.

THE articles of agreement of the consolidation of the Cleveland, Youngstown and Pittsburgh, the Alliance and Lake Erie, and the Steubenville, Canton and Cleveland Railroad companies were filed on the 25th ult., in the office of the Secretary of State of Ohio. The new name is to be "The Cleveland, Youngstown and Pittsburgh Railroad Company." Of the nine directors, five shall be residents of Ohio, and the rest of New York. The capital stock is to be $1,000,000, in ten thousand shares, one share in either of the three roads consolidated to be worth one share in the consolidation. The consolidation was made by the vote of 1,742 shares, all of which were represented at the meeting in which the election was held.

INCORPORATION.

THE Newburgh Horse Railroad Company of Newburgh, N. Y., has been incorporated with a capital of $250,000.

THE Shellabarger Compartment Stock Car Company, of New York, has been incorporated with a capital of $300,000.

THE Great Southern Lumber and Railway Supply Company of New York filed articles of incorporation at Albany the 29th ult.; capital, $500,000.

THE Dayton and Michigan Railroad Elevator Company of Toledo, with a capital of $125,000, has filed a certificate of incorporation with the Secretary of State of Ohio.

THE Hornellsville and Conhocton Valley Railway Company, of Hornellsville, capital, $160,000, has filed articles of incorporation with the Secretary of State at Albany.

THE Rational Horse Shoeing Company of Boston has taken a charter, that with a capital of $10,000 it may engage in the business of horse shoeing and manufacturing and selling horse-shoes and horse-nails. John E. Russell is its president and treasurer.

A COMPANY has been incorporated in Newark, N. J., under the title of the Rowan Gold Mining and Milling Company. The object of the organization is to develop the Rowan mine, near Salisbury, North Carolina. The capital of the company is $250,000. It is claimed that the ore taken from the mine shows an average yield of seventy-four dollars per ton.

A CERTIFICATE of incorporation of the Ohio River and Indiana Railway Company has been filed with the Secretary of State at Columbus, Ohio. Capital stock, $5,000,000. The incorporators are C. A. Layton, M. D. Shaw, J. W. Leiter, J. C. Hassenier, James Wilson, Jr., J. W. Timmermeister and W. S. Rogers—all of Wapakoneta. The proposed road is to be an air-line through the State, from a point on the Ohio River in Jefferson County to the State line in Mercer County.

ARTICLES of incorporation of the Loma Prieta Railroad Company were filed on the 8th ult. in the office of the clerk of Santa Cruz county, Cal. The purpose of the company is the operation of a single track steam railroad in Santa Cruz county, the route of which is: Commencing at Aptos, to the point of the confluence of Aptos and Bridge creeks, to the point of the confluence of Aptos Creek with a creek running from White's Lagoon, the whole length of the road being five miles. The capital stock of $50,000, divided into 500 shares. The directors are George Crocker, A. C. Bassett, N. T. Smith, J. L. Willcutt and A. Sanborn.

A NEW company styling itself the "Dominion Bridge Company, Limited," has just made application to the Dominion Government for letters patent of incorporation. The object of the company is stated to be the "manufacturing, constructing, erecting, dealing in and selling wood, iron and steel bridges, and the carrying on of bridge building in all its branches." Also the manufacturing of and dealing in the products and workings of iron and steel, in all its branches. The company is composed of Job Abbott and Phelps Johnson, both of Toronto; Angus Thom, of Montreal; Henry Macfarlane, of Stratford, Ont., and Luke Lyman, of Northampton, Mass. The capital stock is to be $500,000. The head office will be in Montreal, and branch offices in Toronto and other places in the Dominion. The workshops or manufactory will be in Montreal, or at least in the suburbs. The company have not as yet decided upon a site for them, but some place between the city and Lachine, in close proximity to the Grand Trunk and Canadian Pacific Railways, will doubtless be selected. The extent of ground required is very large, branch tracks being wanted to all the different railways. It is hoped to have everything ready to start work by March or April next. The buildings required will be numerous and extensive, and will be constructed wholly of brick or stone and iron. The company expect to manufacture much of the iron they require, and also steel, if possible.

CONSTRUCTION.

TRAINS are now running regularly on the Catskill Mountain Railroad.

THE Mexican Central Railway was inaugurated on the 28th ult., at Leon, 250 miles from the City of Mexico.

THE Sabine Pass and Texas Northern Railway has a force of two hundred men engaged on the grading.

IT is proposed to build an underground railroad in Paris. The cost of its construction is put at $30,000,000.

THE St. John and Sorel Railway Company has commenced a survey of its proposed line from St. John to Chambly Basin.

ENGINEERS of the Atchison, Topeka and Santa Fe Railroad Company are engaged in preliminary surveys to connect their road to Guaymas, Sonora, with the Mexican Central, in Chihuahua.

THE grading of the Chicago and West Michigan Railroad has been completed from La Porte to Hanna station, a distance of eighteen miles. The survey has been completed and stakes set as far as La Crosse.

THE passage of the bill granting the right of way for the Southern Pacific Railroad through the Papago Reservation is regarded very favorably, and will, it is thought, largely promote the railway interest of Arizona.

SURVEYS are being made for a new coal road—forty-five miles—from Hawley, Penn., into the Lackawanna Valley. The road is to form a link between the Pennsylvania and the New York, Lake Erie and Western railroads.

THE surveys over the proposed route of the South Pennsylvania Railroad between Harrisburg, Pa., and Wheeling, West Virginia, via Bedford and Somerset counties, have been completed. The engineers are now prospect-

ing for a route to the Fayette county coal and iron region.

THE Riverside *Press* says that there is now on hand enough iron to complete the California Southern Railroad to Colton, with three shiploads to come, and it is generally believed by those best informed that the line will be extended through the Cajon Pass during the coming winter.

THE Alliance, Niles and Ashtabula, known as the new Short Line, has been completed, and trains commenced running regularly on it between Niles and Ashtabula on the 1st inst. Hereafter all freight handled by the Pennsylvania Company to and from the West for the Mahoning Valley will be sent over this line.

THE Government of Victoria, Australia, has been empowered to expend upwards of $12,000,000 in building additional lines of railway. Most of the roads will be for the purpose of opening up the agricultural districts. They will not be costly or intended to carry fast trains. In all there will be 56 lines built, but their aggregate length will not exceed 827½ miles.

SIR CHARLES TUPPER, the Canadian Minister of Railways and Canals, visited this city on the 28th ult., for the purpose of closing a contract with the European and American Short Line Railway Company recently formed for the construction of the first section of the line through Nova Scotia, viz: from Oxford to New Glasgow via Pictou. Sir Charles, having made thorough inquiry, and perfectly satisfied himself as to the ability of the company to successfully prosecute the work, executed the contract in the presence of Mr. Schreiber, an officer of the Department of Railways. The Short Line Railway was represented by Dr. Norvin Green, president of the Western Union Telegraph Company, and among the members of the board are Gen. Vasquez, A. L. Blackman and Erastus Wiman. Mr. Blackman intends to commence construction as soon as possible.

THE Pittsburgh, Chartiers and Youghiogheny Railway Company is rapidly pushing the construction of the first division of their road. The company under its present title was chartered to build from Chartiers (McKees Rocks) to Upper St. Clair, Allegheny county, following the valley of the Chartiers Creek to the mouth of Painters' Run, thence by a tunnel of 1,700 feet to McGlaughlin's Run, and up that stream to Upper St. Clair; from this point a charter has been obtained (and two corps of engineers are now locating the line) eastward, via Peter's Creek, (crossing the river either at Elizabeth or Monongahela City), thence across to Sewickley Creek and up the Sewickley through the coke region, and down the Loyalhanna to Latrobe This will be the main line; various branches will be built, those located and under construction now being as follows: George's Creek, Painter's Run and Tom's Run. The latter branch will in all probability be the beginning of a line west to the Ohio River. The line will be opened to Mansfield in September, for passenger and general traffic. The construction of the roadway, bridges, etc. has been very thorough. All bridges upon the Union Line are of iron. The track is laid with 56-pound steel rails. The line of the road traverses the best and largest gas-coal field in the State, besides being a country thickly settled, and requiring an outlet by rail. In all probability this line in a few years will be the inlet to Pittsburgh of three roads—one from the East, one from the South, and another from the West.

SOME of the most rapid railway building ever done is now in process on the Canadian Pacific Railway, and before next spring the iron track will penetrate a distance of 663 miles west of Winnipeg. D. C. Shepherd, of the contracting firm of Langdon, Shepherd & Co., has just returned to St. Paul, Minn., from the scene of operations on the extreme northern route, and where the firm has a 500 mile contract which is to be completed this year. Having undergone the interviewing process Mr. Shepherd is reported to have said: "We contracted in February last to construct 500 miles of road for the Canadian Pacific Railway Company, and to complete the work during 1882. Of that number of miles about 50 were partially graded and nearly completed. Work began in March, but owing to the snow and water, the late spring, and the freight blockade, operations were greatly retarded until June 1. The initial point was Flat Creek, 33 miles west of Brandon. I have just returned from the line, and the grading is all under way. The end of the track was 127 miles west of Flat Creek on Thursday, July 27; and the grading was completed 50 miles further; in fact, the grading is all under way to Moose Jaw Creek, midway between the 105th and 106th meridians. The grading is progressing at the rate of six miles per day, and the iron is being placed at the rate of three miles per day. We have 4,200 men at work, including teamsters, and 1,600 teams. The present rate of track-laying, however, will soon be increased by four miles per day, as we shall put on two gangs of men in reliefs, and work fifteen hours out of the twenty-four instead of eleven hours, as at present. We shall show a record at track-laying which has never been surpassed on the continent. In fact the iron now is going down just as fast as it can be pulled from the cars. Notwithstanding the adverse influences encountered early in the spring, we expect to complete the 500 miles of grading before it freezes up, and perhaps fifty miles more. We shall increase our force as rapidly as possible. The track-laying will go on all winter, and we shall have the grade all ironed by spring a distance of 663 miles west of Winnipeg. Not only that, but we hope to carry it fifty miles further, beyond the crossing of the Saskatchewan River."

ORGANIZATION.

THE directors of the Southern Pacific Railroad Company, elected on the 28th ult., are: Charles Crocker, Charles F. Crocker, Charles Mayne, W. V. Huntington, N. T. Smith, J. L. Willcutt and Moses Hopkins. The officers are: Charles Crocker, president; Charles F. Crocker, vice-president; N. T. Smith, treasurer; J. L. Willcutt, secretary.

THE officers of the New York, Chicago and St. Louis Railway Company, so far chosen, are as follows: President, C. R. Cummings; first vice-president, C. S. Brice; second vice-president, D.W. Caldwell; treasurer, B. G. Mitchell; secretary, L. M. Schwan; general manager, Lewis Williams; chief engineer, J. A. Latcha; general freight agent, G. B. Spriggs; general passenger agent, Henry Monett.

AT the annual meeting of the stockholders of the Chattaroi Railroad Company, held on the 26th ult., the following board of directors was elected: George C. Wood, James C. Holden, New York; George W. Carlisle, W. A. Goodman, George T. Stedman, Cincinnati; George S. Richardson, Ashland; Jay H. Northup, Louisa, Ky. George T. Stedman was chosen president; George S. Richardson, vice-president, and George S. Carlisle, secretary and treasurer. Charles H. Rockwell was selected as superintendent. The earnings for last year paid off all the interest on the bonds and left a balance after all running expenses of some $14,000. It is expected that trains will be running through Peach Orchard Tunnel, 2,700 feet long, by December, when the work of mining and shipping coal will be done on a large scale.

The First Napoleon's Sleeping-Car.

W. BARNET LE VAN, M. E., of Philadelphia, says that from all accounts no doubt Napoleon I. used, in 1815, the first "sleeping, dining-room and parlor car" that was ever built. This car, or chariot, was taken at Waterloo, and was presented to the Prince Regent of England, by whom it was afterward sold to Bullock for $12,500. It eventually found its way to Madame Tussaud's wax-work exhibition, London, where it may still be seen. This very curious and convenient chariot of the First Napoleon was built by Symons, of Brussels, for the Russian campaign, and is adapted for the various purposes of a pantry and a kitchen, for it has places for holding and preparing refreshments, which, by aid of a lamp, could be heated in the carriage. It served also for a bedroom, a dressing room, an office, etc. The seat is divided into two by a partition about six inches high. The exterior of the ingenious vehicle is in the form and of the dimensions of our large coaches, except that it has a projection in front of about two feet, the right hand half of which is open to the inside to receive the feet, thus forming a bed, while the left hand side contained a store of various useful things. Beyond the projection in front, and nearer to the horses, was the seat of the coachman, ingeniously contrived so as to prevent the driver from viewing the interior of the carriage, and yet so placed as to afford those within a clear sight of the horses and of the surrounding country. Beneath this seat is a receptacle for a box, about two and a-half feet in length and four inches deep, containing a bedstead of polished steel, which could be fitted up in a couple of minutes. Over the front window is a roller blind of strong, painted canvas, which, when pulled out, excluded rain while it admitted air. On the ceiling of the carriage is a network for carrying small traveling requisites.

THE large iron screw steamer Excelsior was successfully launched at the Harlan & Hollingsworth ship-yard, Wilmington, Del., on the 27th ult. She was built for the Morgan Steamship Company, of New York, is 351 feet long and 32½ in depth, and is constructed to carry 3,500 tons.

Railroads as Common Carriers.

In the proceedings before Judge Haight in the Supreme Court Chambers, instituted by the Attorney-General, Leslie W. Russell, on behalf of the people against the New York Central and Hudson River Railroad Company and the New York, Lake Erie and Western Railroad Company, for mandamuses to compel the railroads to receive and transport freight as common carriers, a decision was rendered on the 27th ult. by the Judge, in which he denies the relief sought. The main parts of the decision are as follows:

Some of the questions presented upon this application are new and of vast importance. The conflicts that from time to time arise between capital and labor present the most serious and difficult problem that the Government at the present day has to solve. It is the duty of the Court to guard and protect to the utmost every right of the poor man who is compelled to support himself and family by manual labor, and when an opportunity presents, and in a proper case, this Court will not be slow to act in his behalf. But in this proceeding it is powerless to aid him. The Court has not the power to prescribe a scale of wages. It has not the power to say that he shall work for $1.70 per day, or that his employer shall pay him $2 per day. Hitherto the amount of wages to be paid has been left to the parties to determine by contract, express or implied. If the power exists at all to change the law in this regard, such power rests in the legislative, and not in the judicial, branch of the Government.

The questions presented upon the motion to quash the proceedings are purely legal, and do not involve the merits. The first question presented is: Will the writ of mandamus issue on the application of the Attorney-General to compel a common carrier to discharge his duties as such? A franchise is a grant of a right or privilege to an individual or individuals or a corporation by the Government or sovereign power. The right to maintain highways, ferries and bridges to facilitate communication between different parts of the State rests in the Government or sovereign power. And these rights can be exercised by others only under grant or authority of the State. The State has conferred upon the respondent the right to build, maintain and operate a railway for public use in the conveyance of persons and property for hire. It has also conferred upon it the right of eminent domain. The right to construct a road from and to the place or places named in the charter, the maintaining and operating of it for the public use, pertain to the Government, and the Government is therefore interested in and has the power through its Attorney-General to compel the exercise of the franchises so conferred upon the respondent by the writ of mandamus. It has accordingly been held that the writ of mandamus will issue to compel a railroad corporation to operate the whole road as one continuous line, to compel the running of passenger trains to the terminus of the road; to compel a corporation to deliver grain at an elevator standing upon the line of the road, consigned to it in bulk; to compel it to run daily trains; to compel the replacement of a track taken up in violation of its charter; to compel it to construct its road across streams so as not to interfere with navigation; to compel it to build a bridge. It is contended, however, that whilst the writ will issue to compel the exercise and discharge of the duties which belong to the State or Government, and which are conferred upon the respondent by the State, it will not issue to compel a common carrier to discharge his duty as such. One of the duties imposed by law upon railroad corporations is that of common carrier. The statute provides "that every such corporation shall start and run their cars for the transportation of passengers and property at regular times to be fixed by public notice, and shall furnish sufficient accommodation for the transportation of all such passengers and property as shall within reasonable time previous thereto be offered for transportation."

The right to become a common carrier of persons and property for hire does not pertain to or emanate from the Government. Every citizen, without grant or license, has the right to carry persons or property from point to point within the State upon such terms or for such compensation as shall be agreed upon. The liability of a common carrier of property is that of insurer of the property, except in cases of loss or destruction by the act of God or public enemies. Ample and complete remedies are provided for the recovery of all damages that the shipper or consignee may sustain through the fault or negligence of the common carrier. In the case of the people against the Susquehanna Railroad Company (57 N. Y., 161) the Court of Appeals said: "The people of this State have no general power to invoke the action of courts of justice by suits in their name of sovereignty, for the redress of civil wrong sustained by some citizens at the hands of others. When the people come into court as plaintiffs in a civil action, they must come upon their own rights for the relief to which they themselves are entitled. It is not enough for the people to show that wrong has been done to some one. The wrong must appear to have been done to the people in order to support an action by the people for redress."

It has also been held that the neglect or refusal of a common carrier to transport or deliver freight according to the law governing the duties of such carrier is a private wrong to the particular shipper or consignee concerned, and redressible by suit at the instance of such shipper or consignee, and that it is not such a public wrong as will authorize a suit by and on the part of the State.—Morawetz on "Private Corporations," at section 496, says: "The duties which devolve upon railroad companies by reason of the exercise of powers conferred by the Government for public purposes must not be confounded with their obligations as common carriers for hire. A railroad company is under obligations to the public to operate its line of road because the road was constructed with the public aid, for a public purpose. The usual duties of a common carrier then attach by virtue of the employment in which the company is engaged. If the company neglects to operate the road which it has built, this is an injury to the public in general, and redress can be obtained only through the State, by writ of mandamus. But the duties of a railroad company as common carrier for hire may be enforced by any person injured through the usual remedy by action for damages." See also sections 486 and 487; also *Ex parte* Robbins, 7 Dowling's Reports, 566. The case of the People *ex rel.* Ohlen agt. the respondent corporation, reported in the 22d Hun, p. 533, was decided by the General Term of this department. An alternative writ of mandamus had been issued upon the application of the Attorney-General on the relation of Ohlen to require the defendant to receive and carry crude oil for the relator on its tank cars from a place called Carrolton to a place called Weehawken Docks on the defendant's road, and the usual compensation for such transportation was tendered to the defendant company. The alternative writ was quashed at Special Term and on appeal it was held that the railroad company wrongfully refused to receive and transport the oil tendered to it, but that the remedy of the party aggrieved was by an action at law; that such remedy was appropriate and adequate; and a mandamus compelling the company to receive and transport such oil should not be granted. This decision establishes the law upon the question considered, in this department, and this court is bound by it.

If a mandamus cannot issue upon the application of the Attorney-General on the relation of the party aggrieved to compel the respondent to carry his freight, how can it issue on the application of the Attorney-General alone? From my examination of the authorities bearing upon the question, I have come to the conclusion that the neglect or refusal of a railroad corporation to receive and transport freight tendered to it by citizens of the State, is a private wrong for which the citizen is entitled to recover in an action at law such damages as he has sustained—that it is not such a public wrong as will authorize the issuing of the writ of mandamus. The writ of mandamus is a high prerogative writ which will only issue to compel the performance of a duty that is clear and distinct. It will not issue in dubious or doubtful cases. It will only issue when there is no adequate or complete remedy at law.

There is still another reason why the writ asked for cannot be granted.

The order to show cause asks that the respondent corporation be required forthwith to resume the discharge of its duties as a common carrier, and also forthwith to resume the exercise of its franchises by receiving, transporting and delivering all freight and such other property as may be offered to or hereafter received by such company, etc. Section 28, of the General Railroad Act, as amended by chapter 133, of the laws of 1880, provides that every corporation formed under this act shall have power "to regulate the time and manner in which passengers and property shall be transported."

Under this statute a discretion is given to the corporation to regulate the time and manner for transporting the property that shall be tendered to it. Doubtless this discretion must be exercised reasonably, and so as not to cause damage to shippers or consignees. This discretion seems to be necessary. Many kinds of property are presented for transportation. Some have to be transported with great dispatch, as in the case of live-stock, fruits, vegetables, and articles of a perishable nature. Unperishable freight must of necessity give way to perishable articles. Again, large and unusual quantities of freight ofttimes are presented in a single day without notice to the corporation. Reasonable time must therefore be given to enable the company to get its cars to the place of delivery and transport the same.

The writ of mandamus, when it is issued, must clearly and distinctly state the act or duties which are by it commanded to be performed, so that the party to whom it is adressed may distinctly understand what he is to do. If he fails or neglects to perform, an attachment will issue against him, to the end that he may be adjudged in contempt of the process of the court. It is not in the power of the Court to look into the future and determine the kinds or quantities of freight that will be hereafter presented for transportation, and by an order specify how and in what manner the same shall be carried or what kinds shall take preference. The motion to quash must be granted.

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GOVERNMENT REVENUES, EXPENSES AND BOUNTIES.

CONGRESS is engaged in a very notable struggle with its own virtue in the matter of administering the National revenues. The taxes imposed during the war, to enable the country to meet the enormous drain of money while in actual conflict, and after fighting ceased to meet the interest and extinguish the principal of the public debt, for the most part remain, and the result is a surplus over ordinary expenditures of *one hundred and fifty million dollars a year*. Of course, it is practicable to pay off so much of the National debt with this plethora of money, and in great part it has been so used, with the result which might have been foreseen, that of lowering the rate of interest at which the Nation could borrow; so that at this moment it is, no doubt, practicable for the United States to borrow on bonds at two per cent per annum—the bonds themselves, however, being tax free, which brings the actual rate up to about four per cent, as compared with other taxable investments. In all probability the present time may be regarded as high-water-mark of American finance, as it is hardly likely that the demand for the use of money throughout the world will remain at so low a figure. War is, indeed, a cause of high money rates, since it offers opportunities for speculation, or in other words, sales on current fluctuations, which are apt to be sudden and extreme; but it is also, at the other extreme, a cause of cheap money, since it also stops the confidence and course of industry, and the demand for loans. Great wars, and short ones, are the fashion of these times, and they are generally succeeded by long intervals of peace. At no other era in the history of the world has there been among its inhabitants so little time lost in fighting and destroying; nor, on the other hand, so much accumulation, or so much well directed industry. Truly enough, there is yet an immense amount of misdirected, useless and worse than useless activity; but never were men so generally employed at productive labor; never were so many domesticated animals engaged in this useful co-operation; and what is of infinitely more importance, the human powers, as well as the human knowledge, have been multiplied many fold by inventions and machinery.

With nations, as with families and individuals, greater abundance gives rise to greater waste. It is no longer possible, apparently, to conduct even a popular government on the same scale of economy as prevailed in the early days of the Republic. There were complaints of extravagance then, as there are now, when the ratio per capita of outlay is fully double. One is led to these reflections by the issues now being debated in Congress; (1) over the proposed amendments to the Revenue Bill, (2) over the ordinary Legislative and Executive appropriations, (3) the Bill of National Improvements, commonly known as the River and Harbor Bill, (4) the Land Grants to Railroads, and (5) the Pension Bills. The first named illustrates the danger and the difficulty of lodging power anywhere so that it shall not degenerate into abuse. The House of Representatives has the exclusive right of originating revenue measures; at the head of the Ways and Means Committee, chance has placed W. D. KELLEY, who is an extreme protectionist (which may be accounted for by the fact that no other could be elected from his district), and who is otherwise distinguished only for his many vagaries and heresies. The result is a Revenue Bill designed to continue as much as possible of the protection of manufactures, without relieving the customs tariff of many of its absurd inequalities. It satisfies neither party, and the party in power feels its danger of being made responsible for it. It is part of the policy of squandering, which has become intolerable in nearly all directions. The Army, the Navy, the Legislators, the Judiciary, the Pensioners, the officeholders, are over-paid, and the public money is being lavished on contractors for Naval vessels, for Indian supplies, for Public buildings at all manner of unimportant places, and notoriously for so-called improvements to the water-courses and harbors in nearly every State of the Union. This river and harbor business is a survival from the early days, when the coast and navigable rivers were the chief means of transportation, aside from animal power; but the conditions of transportation have changed, while the water appropriations keep increasing as if railroads had never been heard of. From the amount of solicitude shown by Members and Senators to obtain as large a slice as possible of this annual appropriation for rivers and harbors, one would suppose Members were so stupid as to continue it as a praiseworthy art. It is really an attempt to bribe the voters with their own money, and signalizes the decay of representative probity.

Contrast this zeal to pay out of the Treasury, year after year, money to deepen creeks which are not in any legitimate sense navigable streams at all—mere "push-boat" water-ways—with the backwardness of paying the real

debts of the country, such as the Japanese Indemnity, the Geneva Award, and a thousand other debts to contractors, whose survivors suffer by the neglect of the Government. The Congress assumes authority to fix its own rates of compensation for carrying the public mails on railroads, and lays down very arbitrary rules for its service; the railroad companies comply rather than have a struggle with so irresponsible a body as Congress, knowing that the people desire the benefit of cheap postage even though the Government steal a part of the transportation service.

Contrast the evident desire of Congress to favor the water navigation of the several districts with its hostility to railroad corporations who have accepted its promises of lands as inducements to construct railroads. Just now the two great remaining unearned land grants—the Northern Pacific and the Atlantic and Pacific—are being earned as rapidly as capital can do so, not less than 300 miles of rails per annum are going down in that remote and uninhabited region; and yet Congress, in a severe spasm of virtue, or rather in a desperate resolve to do something for a show of economy, as an offset to its extravagance in all other directions, is with difficulty restrained from confiscating the remaining land-grants. In plain words, after having prodigally given away millions of money, which must be raised by taxation, it proposes to make a repudiation for economy by stealing something from the railroad corporations—that is essentially and legally the force of what is now proposed. Fortunately the courts of all civilized nations have passed judgment upon like attempts. They say it is not now allowable for a government, any more than for an individual, to set traps for those who confide in its promises. The United States had a two thousand mile strip of territory between the Missouri River and its west coast that was useless as a National resource, and a positive barrier to its communication and defense. The only, the inevitable way to improve it was to devote a part of the land to putting railroads through it. This was done on four different parallels of latitude—the 48th, the 42d, the 35th, and the 32d. The 42d and 32d have been put in operation, the other two are rapidly approaching completion. The inducements of land do not seem to have been excessive in amount, since two of the largest and best grants failed to enlist capital to complete the roads within the specified terms. The mistake that was made, undoubtedly, was in committing the later undertakings to a single corporation instead of opening them to competition from either end, as was done in the case of the original Pacific Railroad. The effect of this in the case of the Northern Pacific, the Texas and Pacific, and the Atlantic and Pacific was to create a sort of exclusive claim, or privilege, of building roads along those routes. The superior enterprise of the State corporations—the Southern Pacific, in California, and the Oregon Transportation Company, in Oregon—has, in a measure, mitigated that mistake. The lands ought to have been so given as to belong to such companies as might build contiguous roads through them, not as a bounty to any particular corporation. The matter has no great significance now, but for the fact that owing to this original blunder Congress is at present disposed to deprive the companies which built along the 32d parallel of their justly earned reward of lands, apparently as a sort of penalty for the superior enterprise and fidelity in pushing it through to completion within the ten years' term. In other words it is sought to put the United States in the attitude of taking advantage of a technicality in language and get an important military road constructed along its border without giving the promised aid. There is a long line of decisions that a grantor of land, on condition of subsequent specific performance, cannot, if the performance is not strictly kept, stand silently by and see the grantee continue his improvements on the land, and then repudiate the bargain. Such is the standard of honor now prevailing in our National Legislature that a majority can be found to recommend the Nation to do that which, if done by a private person, would stamp him as a cheat and a swindler.

Fitchburg Railroad Improvments.

The work of laying a double track and making various other improvements on the line of the Vermont and Massachusetts division of the Fitchburg Railroad has made steady progress this season, and before winter the second track will be completed to Orange. With the exception of about four miles the track is laid with steel rails from Fitchburg city to Greenfield. Between Ashburnham and Gardner six of the seven highway crossings at grade, some of which were very dangerous, have been abolished or are soon to be, and the highways have been carried over or under the track. The only remaining grade-crossing will be abolished next year. Work on the new location between Baldwinville and Royalston has been vigorously pushed and one track is laid, except a gap of about 500 feet, which includes a proposed bridge over Otter River, and a ledge which remains to be excavated. This change of location dispenses with four long bridges over Miller's River, and five grade crossings, besides reducing the maximum grade of this part of the road from 50 to 21 feet. The second track has been laid two miles east of Royalston station. West of Royalston the second track is laid about two-thirds of the way to Pequoig. The long ledge, nearly one mile east of Pequoig, has been excavated for the second track and much of the stone has been used for abutments and retaining walls. The experiment of cutting a new channel for Miller's River just east of Pequoig has been attended with entire success, and the whole current now passes through the new channel. The railroad has been swung to the south at this point and the embankment is nearly finished across the old channel of the river. The change does away with two long bridges, and the expense of the change is only about two-thirds the cost of new bridges at this place. At Miller's Falls a new depot, 63x24 feet, is in process of construction to replace the one burned last Christmas, and will accommodate both the Fitchburg and New London Northern roads. The improvements are made under the supervision of assistant superintendent E. K. Turner, and the work is of the most thorough and substantial character.

Sir John and Lady Rose, accompanied by Mr. Robert Herbert, Under Secretary for the Colonies, arrived in this city from London on the 30th ult. They intend to make a short tour of the United States and Canada. They came in the Guion Line steamer "Alaska," which made the voyage from Queenstown to Sandy Hook in seven days and seventeen minutes, the fastest western voyage on record. Her fastest time from New York to Queenstown was six days and twenty-two hours.

The Pittsburgh *Chronicle* says that the first railroad engine built in this country was of one-horse power, had a three and a-half inch cylinder, and a fourteen inch stroke, while the boiler which generated the steam was about the size of an ordinary wash boiler, stood upright, and was, in fact, a multi-tubular boiler. To secure the requisite pressure of steam to drive the machine a small bellows arrangement was provided, which was kept in action by means of a belt running over a driver, and the latter was kept revolving by a cord running on the wheels. The wheels of this locomotive were two and one-half feet in diameter and were geared to the engine with cogs. The engine could pull a car-load of passengers at the rate of twelve miles an hour.

A late Danish invention, intended to prevent the wheels of cars from "grinding" when passing sharp curves, is thus described: The axle is divided in the center, the end on one-half having a hollow and that of the other a corresponding projection, somewhat like a ball-and-socket joint. The desired stiffness is imparted by a tube which surrounds the axle, and extending between the naves of the wheel bears against gun-metal collars. At the center, between the tube and the axle, is a gun-metal bearing in which the axle can revolve. The wheels act in such a manner that in running along a straight rail both they and the axle turn together as in an ordinary pair of wheels, but on passing round a curve the axle slips in its joint, so that the wheel on the inner radius of the curve is retarded and the outer wheel accelerated in proportion to the sharpness of the curve, with the result of securing greater smoothness of travel in the vehicle and less tear and wear of the tire and the rail.

[From our Special Correspondent.]

OUR ST. LOUIS LETTER.

THE rapid strides which are being made by the Paramore narrow-gauge lines in Arkansas and Texas, and the judicious combination entered into by their owners with the Illinois Central Railroad, make them a prominent rival to what is called the "Gould system," which embraces the Iron Mountain, Missouri Pacific, and several leased lines. Col. Paramore and his colleagues have now formed a perfect chain of connections between all the principal points East and West, and their roads are receiving a fast-growing patronage from all sections. There can be no doubt of their popularity, in the West at least, where a large majority of the people (whether rightly or otherwise it is not for your correspondent to say) have come to look upon the aforesaid "Gould system" or combination in the light of a huge monopoly. As to the immense power wielded by Mr. Gould in the commercial destinies of the Southwest, there is no question. If wisely used he can subserve more than any other man the business interests of that region, for his lines traverse the most remote quarters, and even desert places as yet scarcely touched by civilization, and unpeopled save by the road agent and kindred involuntary pioneers, are crossed and re-crossed by oftentimes empty coaches in order to keep up a through line to San Francisco. The only apprehension business men have hitherto entertained is, that this great power so controlled by a single individual might be used to the detriment of Western commerce, and hence they by no means disguise their satisfaction now that they are assured the Paramore lines are to be not only independent of Mr. Gould's great scheme but an active and dangerous rival in catering to the demands of the public. In all truth, the commercial world in which we Western people move is a little "scary" of Mr. Gould's speculative manœuvering, and welcomes any competing line which, like Col. Paramore's, has "come to stay." It is because of this that folks hereabouts who are not afraid to express their opinions, favor the narrow-gauge connections so strongly in opposition to the Gould roads. And it is because of this that the legislatures and people of Arkansas and Texas sympathise so cordially with the Colonel in his efforts to divert from the Gould combination sufficient freight and passenger traffic to sustain and successfully operate an opposition line. That he has done so is now a well-established fact; and that a keen and lively rivalry exists between the two combinations is equally certain. Business men in this section universally deprecate the entrusting of their affairs to any one railroad. They go in for healthy competition, and hence the rise in the Paramore Railroad stock. There is no truth whatever in the rumor echoed around here a short time since to the effect that Mr. Gould was negotiating so as to absorb and swallow up the younger line, and your correspondent can state, on the best possible authority, that there is no probability whatever of any such contingency arising. Col. Paramore, as a Western man, takes a patriotic and praiseworthy pride in furthering and developing the resources of this part of the country, and scouts the idea of his line ever getting into the hands of any clique or combination inimical to the welfare of Western commerce. Merchants and others in this as well as the adjoining cities have the utmost confidence in the sincerity of Col. Paramore, and generally express themselves as determined to stand by him and his road in opposition to the Gould combination. The situation is an interesting one just now, and judging from the immense outlay the Texas and St. Louis Railroad is making in the way of equipment, etc., it is certainly evident there will be no "backing down" on its part in the coming fight for supremacy.

A new branch of road, 20 miles in length, is to be completed November 1st from Doniphan, in this State, to connect with the Iron Mountain at the most practicable point in Butler county. Col. W. H. Righter, of Ripley county, is the moving spirit in the undertaking, and Capt. Hayes, Col. Hoxie and Chief Engineer Morley guarantee the completion of the line at the time named, provided right of way is obtained. In this there will be no difficulty, so the work will begin immediately.

There is a strong probability that the Marshall and Northwestern Railroad will soon run its line into and open a branch at Gilmore, Tex. A delegation of citizens of the latter place have just waited on President Hartzwell at Pittsburgh, and obtained assurances to that effect.

Capt. R. S. Hayes, senior vice-president of the Gould lines, who has been East for several days past, has now gone to Galveston, Texas, on important business connected with his roads. He is accompanied by Col. Hoxie, general manager of the Iron Mountain.

Capt. C. W. Rogers, general manager of the 'Frisco line, has just returned from an inspection tour over the Arkansas branch of the road. He passed with his car through the Boston Mountain Tunnel, which is now opened to traffic.

Col. A. A. Talmage, general manager Missouri Pacific, has gone East.

Mr. O. W. Ruggles, general passenger agent, Michigan Central Railroad, Chicago, made a flying visit to his numerous friends in this city a few days ago.

Mr. G. D. Bacon, general Western passenger agent, Ohio and Mississippi Railroad, has returned from a trip to Colorado and New Mexico.

Mr. J. C. Gault, second vice-president of the Wabash road, has been East for the past week on business connected with his line. He returns home to night.

Mr. H. C. Townsend, general passenger agent of the Wabash, has been for the past few days in New York in the interest of his road.

The Colorado Mining Exposition opens today at Denver, and large crowds of our citizens are heading for the show, as all the railroads are issuing tickets at reduced fares. The exhibition promises to be a grand success.

Mr. Sanborn, of the C., B. and Q., has been enjoying the mountain scenery of Colorado for the past fortnight.

Col. J. W. Paramore, president Texas and St. Louis Railway, has been presented with one of the most elegant, expensive and beautifully finished easy-chairs in St. Louis. It is the gift of Mr. W. G. Veal, president of the Dallas Board of Trade, and is intended as a slight token of regard towards the Colonel for his efforts in promoting the commercial prosperity of Texas by the completion of his narrow-gauge lines. The chair is unique and artistic in design, and Texas antlers and horns are charmingly woven together in its construction.

The Atchison, Topeka and Santa Fe road during 1882 earned $16,360,000 gross, $6,871,000 net, and after paying a 6 per cent dividend and all other charges, will still have a net surplus left of $2,491,000.

The Texas and St. Louis Railway will soon have over 700 miles in operation. The company has ordered 20 passenger locomotives, has 20 "moguls" of 26 tons each on hand, and several consolidated engines of 30 tons each. A contract has been let to the United States Rolling-Stock Company for 900 freight cars, 50 caboose cars, 50 stock cars, etc., while still another contract has been closed with the Pullman Palace Car Company for eight first-class passenger cars, 8 second-class passenger cars, 8 mail and express cars and 8 baggage cars. The same company are also building for this road 6 magnificent sleepers, and altogether the equipment of the Paramore narrow-gauge lines in Arkansas and Texas promises to be equal to any other road in the country for comfort and convenience.

P. H. T.

ST. LOUIS, AUGUST 1, 1882.

JENKINS VAN SCHAICK and H. K. Thurber have been appointed Brooklyn Bridge trustees to fill vacancies.

THE National Mining Exposition was opened at Denver, Colorado, on the 1st inst. Hon. Wm. D. Kelley, of Pennsylvania, made the opening address.

FONTAINE Engine No. 2 recently arrived at St. Thomas from Detroit, and will be got in readiness for the fast trip over the Canada Southern Railway.

THE City Passenger Railway Company of Montreal, have ordered two new cars from Schenectady, N. Y., one open and one closed. They have all the latest improvements, and are intended for the St. Catherine street route.

THE Pennsylvania Company is now building all its passenger coaches one foot narrower than the ordinary pattern, reducing the width by making the aisle narrower. The object is to make the car lighter, and to lessen the resistance. The pattern adopted reduces the weight 5 per cent and the resistance fully 10 per cent, yet the coach is just as convenient and rides easier than the ordinary wide coach.

THE bridges on the Palmer-Sullivan Mexican Railway now in course of construction between the City of Mexico and Paso del Norte, on the Rio Grande, were contracted for with an American bridge company. On revising the estimate the company discovered that it was not possible to compete with English builders at the current rates for steel and iron. So the plans and working drawings were sent to England, where the iron work is to be manufactured and shipped in bond via New Orleans and St. Louis to its destination.

[From Our Special Correspondent.]

OUR CINCINNATI LETTER.

It is stated by good authority that control of a majority of the Cincinnati Northern stock has been secured by Mr. R. M. Pomeroy, and the remainder of the Boston syndicate, and that also some important changes will take place at the Company's annual meeting, which will be held in November. Negotiations are pending, it is said, with the Boston parties, for an exchange of all their stock in the Cincinnati Northern, for the Avondale Branch, which will doubtless become of considerable value when completed as far as Clifton, and placed in good running order.

Mr. John Pontius has been appointed traveling engineer of the Columbus, Chicago and Indiana Central division of the Pittsburgh, Cincinnati and St. Louis Railway, and his headquarters will be at Columbus, Ohio. The following circular, containing the rules governing this office has been issued by Supt. Miller: "Road foremen of engines report to and receive their instructions from the superintendent. They must frequently ride upon the engines and give instructions to enginemen and firemen, in regard to the proper working and firing of the engines to obtain the greatest economy in the consumption of fuel and stores. They must give particular attention to the capacity of the engines for generating steam, observe that the standard pressure is not exceeded, and see that the boilers are washed out as often as necessary. They must see that the engines are equipped with signals, tools and every article necessary, and must report when they are not in good working order. They must report the number of cars to be allotted to each class of engines, and when engines of freight trains are not given cars to their full capacity or when they are overloaded. They will consult and advise with the master mechanic and engine-house foreman in regard to the daily condition and requirements of the engines. They will report the qualifications of enginemen and firemen, and any violation of the rules or neglect of duty which may come to their knowledge, and advise the superintendent of all matters relating to the economical and efficient working of the engines." The duties required by the above are certainly of such a nature as to cause the position of traveling engineer to be anything but popular.

A Bill in Chancery has just been filed by Messrs. Robert Garrett & Son, of Baltimore, Md., in the United States Court at Columbus, vs. the Steubenville and Indiana Railroad Company and others, asking that liens on the road be duly marshalled and that the road be sold. The plaintiffs claim the first lien, which, together with interest, amounts to something over $200,000, being balance due on a former decree. The road is now being operated by the Pittsburgh, Cincinnati and St. Louis Railroad, and embraces that portion of the railway between Newark and Steubenville.

A petition on behalf of the State of Ohio vs. the Cincinnati and Milford Railroad Company, to forfeit its franchises has just been filed by Prosecuting Attorney Outcalt, and the determination of the case will be expected with considerable interest. The charges made in the petition are:—

1. Non-user, in that the company was incorporated as a railroad company 1872, with power to build, operate and maintain a railroad from Cincinnati to Milford, and that it has not complied with the obligations of it charters in any respect, has built no road, acquired no rights of way, made no surveys, and acquired no rolling-stock.

2. Mis-user, in that being incorporated with power to build, maintain and operate a railroad from Cincinnati to Milford, it has, instead of so doing, allowed a stock-yard's company to use its name in building a switch about 500 yards in length, connecting the Hamilton and Dayton road with the yards of said stock-yards company; that it issued the full amount of its capital stock, although nothing was paid thereon by any subscribers, and that said stock was distributed pro rata among the holders of the stock of the United Railroad Stock-Yards Company, which company guaranteed the payment of dividends upon said stock, and leased said switch, which it has ever since held and controlled. The State prays the Court, upon the foregoing grounds, to forfeit the charter of the company.

Stockholders of the Cincinnati, New Orleans and Texas Pacific Railroad, *i. e.*, those outside of the Erlanger syndicate, have not at present particularly encouraging prospects, the company having recently passed its quarterly dividend, and the stock not now being marketable at over 80. The look-out in the face of many rumors that are now current does not present a very hopeful phase.

Recent developments also show that an over-issue of stock in this company to about the tune of $300,000 has been made by G. E. Doughty, secretary to the company, and now deceased; certificates having been signed in blank by the president and filled up by Doughty, by whom they were then hypothecated. It is stated, however, that the deceased secretary's estate is sufficient to make the amount good, though in some quarters there are misgivings as to this point.

On July 29 articles of incorporation for the Ohio River and Indiana Railroad were filed with the Secretary of State. Among its incorporators are C. A. Layton, N. D. Shaw, J. W. Leiter and J. Wilson, all of Wapakoneta, Ohio. The project is the Ohio division of the proposed through line from New York to Council Bluffs, which is represented by Hon. R. W. Thompson and a New York syndicate. The capital stock of the company is $5,000,000.

Mr. Chas. H. Clough, for a number of years ticket agent at the Dayton Union Depot, has resigned his position, and has made an engagement with the N. T. C. and St. Louis Railroad Company, to take effect October 1, with headquarters at Chicago.

General W. B. Shattuck has just returned from the East, and says that in his opinion the fall passenger business will be the largest ever known.

An Indianapolis authority states that there will be no immediate changes of Bee Line officials on account of the purchase of the Indianapolis and St. Louis road. It is the intention, however, before many months, to consolidate the auditor's, treasurer's and car accountant's departments of the Indianapolis and St. Louis with the Cleveland, Columbus, Cincinnati and Indianapolis, and they will therefore be removed to Cleveland, Ohio. C. C. Gale will continue as superintendent of the Indianapolis and St. Louis, without change of headquarters.

Mr. P. P. Young, traveling agent of the Chesapeake and Ohio, has resigned his post in order to accept the general agency of the Northern Pacific for all the territory southeast of Chicago. His headquarters will be in this city.

A report from Canton, Ohio, says that twenty-four conductors, engineers, brakemen, telegraph agents and station agents of the Connotton Valley Railroad, left in a body on the 31st ult., anticipating a discharge by W. W. Hungerford, the new manager. It is also said that to demonstrate their views as to the new management, they opened a switch with the evident intention of wrecking a freight train, but fortunately were unsuccessful in their attempt. The vacant conductors' positions have been filled with new men from the Texas and Mexican Railroad, with which the new general manager was recently associated.

List of Patents for Inventions Relating to Railway Interests.

[Reported expressly for the Am. Railroad Journal.]

10,170. Railway Frog and Rail Coupling: J. W. Close, Buffalo, N. Y., reissue.
261,831. Car Coupling: J. I. Davis, Jeffersonville, Ind.
262,013. Locomotive: Leon Debarnet, Buenos Ayres, Argentine Republic.
261,923. Safety Attachment for Railway Cars: E. Henn, Jersey City, N. J.
262,071. Locomotive Furnace: E. Mallett, Jr., New York, N. Y.
262,085. Railway Car: J. Milton, Hamilton, Va.
262,104. Car Coupling: M. Owens, Quincy, Ill.
261,953. Car Coupling: D. B. Pratt, Perry Center, N. Y.
261,872. Car Coupling: D. P. Prescott, Vernon, Vt.
261,882. Hand Car: H. T. Stock, Toledo, Ohio.
261,883. Grain Car Door: G. G. Tanner, Indianapolis, Ind.
262,169. Locomotive Head Light: E. Wilhelm, Buffalo, N. Y.

The Phœnix Iron Company, Phœnixville, Penn., will begin operating new mechanical rotary puddlers in about ten days. Trouble with workmen necessitated the introduction of the mechanical puddler.

Through drawing-room cars will be run on the Housatonic Railroad, between Pittsfield and New York, on trains leaving New York at 3:45 P. M., arriving in Pittsfield at 9:35 P. M., and leaving Pittsfield at 3:20 P. M. arriving in New York at 9:00 P. M.

The ship Glendon, Capt. Thatcher, sailed from Philadelphia on the 29th ult., for New Tacoma, with twenty-four hundred tons of steel rails for the Northern Pacific Railroad. Four bars of these rails, thirty feet in length make one ton of iron. The rails will cover a single-track road for a distance of twenty-five miles. They were manufactured by the Pennsylvania Steel Works, at Steelton, Penn.

The Stock Exchanges and Money Market.

New York Stock Exchange.

Closing Prices for the week ending Aug. 2.

	Th.27.	F.28.	Sat.29.	M.31.	Tu. 1.	W.2.
Adams Express	139½	140	.....	.....	.....	139
Albany and Susq	.....	.....	.....	.....	.....	.....
1st mortgage	.....	.....	.....	.....	.....	.....
2d mortgage	.....	.....	.....	.....	.....	.....
American Express	.....	95	95	95¼	95	94
Burl., C. R. & Nor	.....	80	.....	.....	79	.....
1st mortgage 5s	101½	.....	101¼	101½	101¾	.....
Canada Southern	64¼	64½	63½	62½	63⅞	64⅜
1st mortgage guar	93¾	93½	93¾	93½	93½	.....
Central of N. Jersey	82	81	81	79¾	81¾	81½
1st mort. 1890	.....	118⅜	.....	.....	.....	.....
7s, consol. ass	.....	.....	.....	.....	.....	.....
7s, convertible ass	.....	.....	.....	.....	112½	.....
7s, Income	.....	.....	.....	.....	.....	.....
Adjustment	.....	107½	.....	.....	108	.....
Central Pacific	96½	96¼	96	95½	96	95⅞
6s, gold	.....	116⅜	.....	.....	117	116¼
1st M. (San Joaq)	.....	.....	.....	.....	.....	.....
1st M. (Cal. & Or.)	.....	.....	.....	.....	.....	.....
Land grant 6s	.....	.....	.....	106½	.....	.....
Chesapeake & Ohio	24⅝	25⅜	25⅛	25⅛	25⅛	25¾
1st pref	.....	.....	37½	38½	38½	38½
2d pref	.....	.....	.....	26½	27	.....
1st mort., series B	.....	85¾	85½	85¾	.....	.....
Chicago and Alton	140	141	.....	139½	139½	141
Preferred	.....	.....	.....	.....	.....	.....
1st mortgage	.....	121	.....	.....	.....	.....
Sinking Fund	.....	113½	.....	.....	.....	.....
Chi,, Bur. & Quincy	134½	134¼	134¼	134	134¼	134⅞
7s, Consol. 1903	.....	.....	.....	.....	.....	.....
Chi., Mil. & St. Paul	120⅞	120⅜	120⅜	120⅛	120⅝	121⅞
Preferred	134½	134	134	.....	136	135
1st mortgage, 8s	.....	.....	.....	.....	.....	.....
2d mort., 7 3-10s	.....	.....	.....	.....	.....	.....
7s, gold	.....	.....	.....	.....	.....	.....
1st M. (La. C. div)	.....	.....	.....	.....	.....	.....
1st M. I. & M. div.)	.....	.....	.....	.....	.....	.....
1st.M. (I. & D. ext.)	.....	.....	.....	.....	.....	.....
1st M. (H.&D. div.)	117⅛	.....	.....	.....	.....	.....
1st M.(C. & M.div.)	.....	.....	.....	.....	.....	.....
Consolidated S. F.	121⅛	.....	121⅛	.....	.....	.....
Chi. & Northwestern	137½	137	137	137¼	137⅜	148
Preferred	150	150⅞	151¼	151	152	165
1st mortgage	.....	.....	.....	.....	.....	102
Sinking Fund 6s	.....	.....	.....	.....	.....	.....
Consolidated 7s	.....	.....	.....	.....	.....	.....
Consol. Gold bo'ds	127¼	.....	.....	.....	126¾	126¾
Do. reg	.....	.....	.....	.....	.....	.....
Chi., R. Isl. & Pac.	133	133⅛	133⅛	133⅛	133	133¾
6s, 1917, c	128¾	.....	.....	.....	.....	.....
Clev.,Col.,Cin.&Ind.	90¼	89	89	84	87	88½
1st mortgage	123	.....	.....	.....	.....	.....
Clev. & Pittsburg gr.	140	139	.....	.....	.....	.....
7s, Consolidated	.....	.....	.....	125¼	.....	.....
4th mortgage	.....	.....	.....	.....	.....	.....
Col.,Chi.,& Ind. Cent	16	16⅛	15¾	15¼	15¼	15
1st mortgage	.....	.....	.....	.....	.....	.....
2d mortgage	.....	.....	.....	.....	.....	.....
Del. & Hud Canal.	117	116¼	116⅛	114⅜	115¾	115⅞
Reg. 7s, 1891	.....	.....	.....	.....	.....	.....
Reg. 7s, 1884	106	106	.....	.....	.....	.....
7s, 1894	118¾	.....	.....	118¾	.....	.....
Del.,Lack.& Western	130½	138½	138	137½	139	138¾
2d mortgage 7s	.....	.....	.....	.....	.....	.....
Consol. 1907	.....	.....	.....	.....	.....	.....
Erie Railway	.....	.....	.....	.....	.....	.....
1st mortgage	.....	.....	.....	.....	.....	.....
2d mort. 5s, ext.	.....	.....	.....	.....	.....	.....
3d mortgage	104⅜	.....	.....	.....	.....	.....
4th mort. 5s, ext.	.....	.....	.....	.....	.....	.....
5th mortgage	.....	.....	.....	.....	113	.....
7s, Consol. gold	.....	.....	.....	.....	.....	130
Great West. 1st mort	.....	.....	.....	.....	.....	.....
2d mortgage	.....	102¾	.....	.....	102¾	.....
Hannibal & St. Jo	.....	.....	.....	.....	.....	.....
Preferred	89¼	91½	93⅛	93½	93⅛	94
8s, Convertible	.....	.....	.....	107⅞	107¾	.....
Houston & Tex. Cen	91½	90½	88	.....	.....	90
1st mortgage	.....	.....	.....	.....	110	.....
2d mortgage	.....	.....	.....	.....	126	.....
Illinois Central	138½	137¾	137⅞	138¼	137⅞	138⅛
LakeShore&MichSo	116⅜	115¾	115¼	114¾	116⅜	114¼
Consol. 7s	.....	.....	.....	.....	.....	.....
Consol. 7s, reg	.....	.....	.....	126	.....	.....
2d Consolidated	.....	.....	.....	.....	.....	.....
Leh. & W. B. con.ass	.....	.....	.....	106	.....	.....
Long Dock bonds	.....	.....	.....	.....	.....	.....
Louisville & Nash.	74⅞	74¾	75⅝	74¾	75⅞	75¼
7s, Consolidated	.....	117¼	.....	.....	.....	.....
Manhattan	.....	53½	.....	53½	54	.....
1st pref	.....	90½	.....	.....	90¼	.....
Met. Elevated	.....	.....	.....	83¾	.....	.....
1st mortgage	99¾	99⅞	.....	99¾	99⅞	99¼
Michigan Central	99⅞	98⅜	99⅜	98⅜	100⅜	100¼
7s, 1902	.....	.....	124	124	.....	124¾
Morris & Essex	.....	.....	125¼	.....	.....	125
1st mortgage	.....	.....	.....	.....	.....	.....
2d mortgage	.....	.....	.....	.....	.....	.....
7s of 1871	.....	.....	.....	.....	.....	.....
7s, Convertible	.....	.....	.....	.....	.....	.....
7s, Consolidated	121¾	.....	.....	.....	.....	.....
N.Y. Cen. & Hud. R.	136½	135⅝	135½	135⅛	135⅝	135⅝
6s, S. F. 1883	.....	.....	.....	.....	.....	.....
6s, S. F., 1887	.....	.....	.....	.....	.....	.....
1st mortgage	.....	.....	.....	.....	.....	.....
1st mortgage, reg	.....	.....	.....	.....	.....	.....
N. Y. Elevated	.....	.....	107	.....	.....	.....
1st mortgage	.....	116¼	.....	.....	.....	115½
N. Y. & Harlem	.....	.....	.....	.....	.....	.....
Preferred	.....	.....	.....	.....	.....	.....
1st mortgage	.....	.....	.....	.....	.....	.....
1st mortgage, reg	.....	.....	.....	.....	.....	.....
N. Y., Lake Erie & W	41	40⅞	40⅜	40	40⅜	40¼
Preferred	...	80¼	80¼	.....	79⅜	79
2d Consolidated	98¼	98¼	98⅜	98¼	98⅜	98
New 2d 5s fund	.....	.....	.....	94	.....	.....
N.Y.,N.Hav'n&Hart	.....	.....	.....	.....	.....	.....
North Mo. 1st mort	.....	.....	.....	.....	.....	.....
Northern Pacific	49¼	49⅜	49	48⅝	50	50
Preferred	89½	90	89⅞	89¼	91⅜	90⅞
Ohio & Mississippi	38¾	39½	39½	38¾	39⅝	40
Preferred	.....	.....	.....	.....	.....	.....
2d mortgage	.....	.....	.....	.....	.....	.....
Consolidated 7s	.....	.....	.....	.....	.....	.....
Consol. S. Fund	.....	.....	.....	.....	.....	.....
Pacific Mail S. S. Co	47¼	47	46¾	46¼	47¼	46⅝
Pacific R. R. of Mo.	.....	.....	.....	.....	.....	.....
1st mortgage	.....	108½	.....	.....	.....	.....
2d mortgage	.....	.....	.....	.....	111	.....
Panama	.....	165	.....	165	.....	.....
Phila. & Reading	62	62	62¼	60⅛	62	61⅞
Pitts,Ft.W.&Chi.gtd	133¼	.....	.....	.....	.....	.....
1st mortgage	.....	.....	.....	.....	.....	.....
2d mortgage	.....	.....	.....	.....	.....	.....
3d mortgage	.....	.....	.....	.....	.....	.....
Pullman Palace Car	130½	132	129	128¾	.....	128
Quicksil'r Min'g Co	.....	11¾	12	11	11	.....
Preferred	.....	.....	.....	.....	.....	.....
St. Louis & San Fran	43	43	43¾	42¼	43⅛	43¾
Preferred	59⅛	60	61⅛	60	61	61
1st Preferred	.....	98	100	.....	99⅞	.....
St. L., Alt'n & T. H.	.....	35¾	35¼	35	36	35⅞
Preferred	.....	80	78½	.....	79½	79⅞
1st mortgage	.....	.....	.....	.....	.....	.....
2d mort. pref	.....	.....	.....	.....	.....	.....
Income bonds	.....	95	.....	96	.....	.....
St. L., Iron Mt. & S	.....	.....	.....	.....	.....	.....
1st mortgage	.....	.....	.....	.....	.....	.....
2d mortgage	.....	.....	108	.....	108¾	.....
Toledo and Wabash	.....	.....	.....	.....	.....	.....
1st mortgage	.....	.....	.....	.....	.....	.....
2d mortgage	.....	.....	.....	.....	.....	.....
7s, Consolidated	.....	.....	.....	.....	.....	.....
St. Louis Division	.....	105¾	.....	.....	.....	.....
Union Pacific	117	116⅞	116	116	117½	117¼
1st mortgage	.....	117	.....	116⅝	.....	116⅞
Land Grant 7s	114½	.....	.....	.....	.....	.....
Sinking Fund 8s	.....	123	.....	.....	123	.....
United States Ex	.....	.....	.....	74½	.....	74½
Wabash, St. L.& Pac	38¾	38½	37¾	37¾	38⅛	39¼
Preferred	68¾	68½	68	67½	68	68¼
New mort. 7s	.....	.....	.....	.....	.....	.....
Wells-Fargo Ex	128	.....	.....	.....	.....	123
Western Pacific b'ds	110	110	.....	.....	.....	.....
Western Union Tel.	89¾	89⅜	89½	88⅞	90⅜	.....
7s., S.F conv., 1900	.....	.....	118	.....	.....	118
FEDERAL STOCKS:—						
U. S. 4s, 1907, reg	120⅜	120½	.....	120¼	.....	.....
U. S. 4s, 1907, coup	120½	120⅜	.....	.....	120⅜	.....
U. S. 4½s, 1891, reg	.....	.....	.....	114⅜	.....	.....
U. S. 4½s, 1891, coup	.....	.....	.....	114½	.....	.....
U. S. 5s, cont'd at 3½	101⅜	101⅜	101½	.....	.....	101
U. S. 6s cont'd at 3½	.....	.....	.....	101¼	.....	.....
Dt. of Col. 3-65s, reg	108⅜	.....	.....	.....	.....	.....
Dt. of Col.3-65s,coup	.....	.....	.....	.....	.....	.....

Boston Stock Exchange.

Closing Prices for the Week Ending Aug. 2.

	Th.27.	F.28.	Sat.29.	M.31.	Tu.1.	W. 2.
Atch.,Top.&San.Fe.	94	94	93¾	93⅞	94	94¾
1st mortgage	.....	.....	.....	.....	.....	120¾
Land Grant 7s	115½	.....	115¾	.....	.....	.....
Boston & Albany	167¼	167	.....	168	167¾	167
Boston and Lowell	.....	.....	.....	.....	.....	102½
Boston & Maine	.....	148	148	148	147½	147¾
Boston& Providence	.....	.....	160	160	.....	.....
Bos'n,Hart.& Erie7s	57¼	56⅞	56¼	.....	53¾	.....
Burl.& Mo.R.L.G.7s	.....	.....	.....	.....	.....	.....
Burl.& Mo.R.in Neb	.....	.....	.....	.....	.....	.....
6s, exempt	.....	.....	.....	122	.....	.....
4s	.....	.....	.....	.....	.....	.....
Chi.,Burl. & Quincy	134½	134⅛	134⅜	134½	134	135
Cin.,Sand&Clev($50)	28¾	.....	59¼	29	.....	.....
Concord ($50)	.....	.....	.....	.....	.....	.....
Connecticut River	.....	.....	.....	.....	.....	.....
Eastern	49	48¾	48½	.....	45½	47
New 4½ Bonds	.....	109¾	.....	109¾	109½	109¼
Fitchburg	.....	131¾	.....	131	132	132
N.Y. & New England	57½	57¾	56¼	54½	53½	53¾
7s	117	.....	.....	116¾	.....	116¼
Northern N. H	.....	.....	.....	.....	.....	.....
Norwich&Worcester	.....	.....	.....	.....	.....	.....
Ogden & Lake Cham	.....	.....	.....	.....	.....	.....
Old Colony	132½	.....	.....	134	134½	134½
Ph., Wil.&Balt.($50)	.....	.....	.....	.....	.....	.....
Portl'd,Saco & Ports	....	.....	.....	.....	.....	.....
Pueblo & Ark Val 7s	115	.....	.....	.....	115	114¾
Pullman Palace Car	.....	131	.....	.....	130	.....
Union Pacific	.....	116⅛	.....	117	.....	117¼
6s	.....	.....	.....	116¾	.....	.....
Land Grant 7s	.....	.....	.....	.....	.....	.....
Sinking Fund 8s	.....	.....	119½	119½	.....	.....
Vermont & Mass	.....	.....	.....	.....	.....	.....
Worcester & Nashua	.....	.....	.....	.....	.....	.....
Cambridge (Horse)	.....	.....	.....	.....	.....	.....
Metropolitan(Horse)	76	.....	.....	.....	.....	.....
Middlesex (Horse)	.....	.....	.....	.....	.....	.....
Cal.&Hecla Min'gCo	243	243	.....	243	.....	.....
Quincy	.....	.....	.....	.....	55	55½

Philadelphia Stock Exchange.

Closing Prices for the Week Ending Aug. 1.

	W.26.	Th.27.	F.28.	Sat.29.	M.31.	Tu 1.
Allegh'y Val. 7 3-10s	.....	.....	.....	.....	.....	.....
7s, Income	.....	51⅝	51¾	52	.....	51
Buff., Pitts & West.	21¼	21¾	21½	21⅜	21½	21⅜
Camd'n & Am. 6s, '83	.....	.....	.....	.....	.....	.....
6s, 1889	.....	.....	.....	.....	.....	.....
Mort. 6s, 1889	112½	.....	.....	.....	.....	.....
Camden & Atlantic	.....	.....	.....	.....	.....	.....
Preferred	43	.....	.....	.....	.....	.....
1st mortgage	.....	.....	.....	.....	.....	.....
2d mortgage	.....	.....	.....	.....	.....	.....
Catawissa	.....	.....	.....	.....	.....	.....
Preferred	55	.....	.....	.....	.....	.....
2d pref	.....	.....	.....	.....	.....	.....
7s, new	.....	.....	.....	.....	.....	.....
Del. & Bound Brook	.....	.....	.....	.....	.....	.....
7s	.....	.....	.....	.....	.....	.....
Elmira&Williamsp't	.....	.....	.....	.....	.....	.....
Preferred	.....	.....	.....	.....	.....	.....
Hunt. & B. Top Mt.	.....	15	15	.....	15	.....
Preferred	....	...	.....	.....	.....	.....
2d mortgage	.....	.....	.....	.....	.....	.....
Lehigh Navigation	42½	42⅝	42⅜	43	42½	43
6s, 1884	.....	103⅜	.....	.....	.....	103⅝
Gold Loan	.....	.....	.....	.....	.....	.....
Railroad Loan	.....	115x	.....	.....	.....	.....
Conv. Gold Loan	116½	.....	.....	.....	.....	.....
Consol. Mort, 7s	.....	.....	.....	.....	116½	116½
Lehigh Valley	61½	61½	62	63¼	63	62⅝
1st mort. 6s, coup	.....	.....	.....	.....	.....	.....
1st mort. 6s, reg	123	.....	.....	.....	.....	.....
2d mort. 7s	.....	.....	.....	.....	.....	.....
Consol mort. 6s	.....	.....	.....	.....	.....	.....
Consol.mtg.6s,reg	.....	.....	.....	.....	.....	.....
Little Schuylkill	.....	.....	.....	57	.....	57
Minehill&Sch.Hav'n	.....	.....	.....	61¼	61½	.....
North Pennsylvania	65	.....	.....	.....	.....	64⅞
1st mortgage 6s	.....	.....	.....	.....	.....	.....
2d mortgage 7s	.....	.....	.....	.....	.....	.....
Genl. mtg.7s,coup	.....	.....	.....	.....	.....	.....
Genl. mtg. 7s, reg	.....	.....	.....	.....	.....	.....
Northern Central	.....	.....	.....	.....	.....	49½
5s	.....	.....	.....	96⅜	.....	.....
Northern Pacific	49	49½	49⅝	49¼	48¾	50
Preferred	89	89⅜	90	89⅞	89¾	91½
Pennsylvania R. R.	62½	62¼	62⅜	62⅜	61⅞	00⅞
1st mortgage	.....	.....	.....	.....	.....	.....
Gen'l mort	.....	.....	.....	.....	.....	.....
Gen'l mort reg	.....	.....	.....	.....	.....	...
Consol. mort. 6s	.....	.....	.....	.....	.....	.....
Consol. mort. reg	.....	.....	.....	.....	.....	.....
Pa. State 5s, new	.....	.....	.....	.....	.....	.....
do 4s, new	113	.....	.....	.....	.....	.....
do 3½s, 1912	.....	.....	.....	.....	.....	.....
Phila. & Reading	30⅞	31	31	30⅞	30⅝	30½
1st mortgage 6s	.....	.....	.....	.....	.....	.....
7s of 1893	.....	.....	.....	.....	.....	.....
7s, new convert	.....	.....	.....	78	.....	.....
Consol. mort. 7s	.....	124⅛	.....	.....	.....	.....
Consol. mort. reg	.....	.....	.....	.....	.....	.....
Gen'l mort. 6s	96¼	96¼	96¼	.....	.....	.....
Def.Income bonds	.....	.....	.....	.....	.....	.....
Philadelphia & Erie	.....	17⅛	17½	.....	...	.....
1st mortgage 5s	.....	105	.....	105	105	.....
2d mortgage 7s	.....	.....	114½	.....	114½	114½
Pittsb.,Cin.&St.L.7s	.....	.....	.....	.....	100	.....
Pitts.,Tit.&Buff. 7s	.....	.....	.....	.....	.....	96x
Schuylkill Navi't'n	.....	.....	.....	.....	.....	.....
Preferred	.....	.....	.....	.....	13½	.....
6s, 1895	.....	.....	.....	.....	.....	107¾
6s, 1907	91	.....	91	.....	.....	91
United Co. of N. J.	188¼	188	188¼	.....	.....	.....
Hestonville, (Horse)	.....	.....	.....	.....	.....	.....
Chestnut&Wal.(do)	.....	.....	.....	.....	.....	.....

Baltimore Stock Exchange.

Closing Prices for the Week Ending Aug. 1.

	W. 26.	Th. 27.	F. 28.	Sat. 29.	M. 31.	Tu. 1.
Baltimore & Ohio..	.....	.....	.....	.....	.....	.....
6s, 1885.....	.....	. . .	.....	.....	.....	....
Central Ohio ($50)..	...	.....	.....	.....	.....	.....
1st mortgage.....	.....	110¾	....	.....	111	.....
Marietta & Cincin'ti	.....	.....	.....	.....	.....	.....
1st mortgage, 7s..	.....	.....	.....	.....	.....	....
2d mortgage, 7s..	.....	.....	100¾	.....	.....	.....
3d mortgage, 8s..	.....	....	56¾	.....	.....	57
Northern Cen. ($50)	.....	....	.....	50	.....	.....
2d mort., 6s 1885..	.....	.....	.....	.....	.....	.....
3d mort., 6s, 1900.	.....	.....	.....	.....	.....	117½
6s, 1900, gold.....	.....	.....	.....	.....	.....	.....
6s, 1904, gold.....	.....	.....	.....	.....	.....	.....
Pitts. & Connellsv. 7s	.....	....	....	.....	.....	.....
Virginia 6s, Consol.	.....	60⅞	61	.....	.....	.....
Consol. coupons..	62¼	.....	.....	60¼	.....	.....
10 40 bonds.....	....	43¼	.....	43⅝	.....	43¼
Def'd Certificates.	.....	.....	.....	.....	.....	.....
Western Maryland..	.....	.....	56⅞	.....	.....	.....
1st M., end. by Balt	.....	.....	.....	.....	.....	.....
2d M. do	.....	.....	.....	.....	.....	.....
3d M., do	.....	.....	.....	.....	.....	.....
1st M., unendors'd	.....	.....	.....	.....	.....	.....
2d M., end. WashCo	.....	.....	.....	.....	.....	.....
2d M., preferred..	106½	.....	.....	.....	.....	.....
City Passenger R R.	....	.....	.....	.....	.....	.....

London Stock Exchange.

	Closing Prices — July 14.		July 21.	
Baltimore & Ohio 5s, 1927.....	106	108	106	108
Central of N. J., $100 shares....	93	98	93	98
Do. consol. mort.....	110	112	110	112
Do. Income Bonds.....	88	92	90	95
Central Pacific of Cal., $100 shs.	96¼	97¼	97¼	98¼
Do. 1st mort. 6s, 1895-'98.....	118	120	117	119
Det., G'd Haven & Mil. Equip bds	115	117	115	117
Do. Con. M. 5p.c., till '83 aft'r 6p.c	112	114	112	114
Illinois Central $100 shares.....	139	141	140	142
Do. S. F. 5s, 1903.....	106	108	106	108
Lehigh Valley Cons. mortgage..	115	119	115	119
Louisville & Nashville mort 6s.	98	100	98	100
Do. capital stock $100 shares.	71	73	73	75
N. Y. Cent. & Hud. R. mt. bds..	132	135	132	135
Do. $100 shares.....	136¼	137⅛	137½	138⅛
Do mort. bonds (stg.).....	121	123	121	123
N.Y., Lake Erie & West., $100 shs	40¼	40¾	41⅛	41¾
Do. 6 p. c. pref. $100 shares ..	78	81	82	84
Do. 1st Con. Mort. bds (Erie) .	128	130	133	138
Do. do. Funded Coupon bds.	124	126	129	131
Do. 2d Consol Mort. bonds...	99	100	99	100
Do. do. Funded Coupon bds..	94	96	96	98
N.Y., Pa. & Ohio 1st mort. bonds.	45	46	47¼	48¼
Do. Prior Lien bds (sterling)..	103	108	103	108
Pennsylvania, $50 shares.....	61¾	62¼	63¼	63¾
General Mortgage.....	121	124	123	125
Phil. and Erie Gen. mort. 6s, 1920.	117	119	117	119
Philadelphia & Reading $50 shs	29¾	30¼	31¼	31¾
General Consol Mortgage.....	116	118	116	118
Do. Improvement Mortgage..	103	105	103	105
Do. Gen. Mtg. '74, ex-def'd coup.	97	98	97	98
St. L. Bridge 1st mort. gold b'd.	125	127	125	127
Do. 1st pref. stock.....	97	100	97	100
S. P'fic of Cal., 1st mort. 6s, 1905-6.	107	109	108	110
Union Pacific 1st. mtg	117	119	118	120
Wabash, St. L. & P. $100 shs.....	33	35	27	28
Do. $100 pref. shares.....	59	61	65	67
Do. gen. mort. bonds.....	84	86	87	89

AMERICAN RAILROAD JOURNAL.

Financial and Commercial Review.

THURSDAY EVENING, August 3, 1882.

The quotation for call loans on stocks in the forenoon was 3@3½ per cent, and on United States bonds 2@2½ per cent. In the afternoon the rate on stocks remained the same, but in the last hour fell to 2@2½ per cent.

The posted rates for prime bankers' sterling were 4.86 and 4.89. The actual rates were 4.85@4.85¼ and 4.88¼@4.88½, with cables 4.89@4.89¼ and prime commercial bills 4.83¾@4.84. The actual rates for Continental bills are as follows; Francs, 5.19⅜ and 5.15, Marks, 94⅞@94¾, and 95⅝@95½, and Guilders, 40⅛ and 40⅜.

The following analysis of the public debt statement for July was prepared by John M. Carson, Clerk of the Committee on Ways and Means. The new fiscal year opens with a reduction in the public debt for the first month of nearly $14,000,000, which is the largest reduction ever made for July in previous years and nearly $4,000,000 in excess of the reduction made for July, 1881. This is attributable first to a large increase in receipts from customs compared with last year, and to a reduction in the interest charge. The agitation in Congress touching reduction of taxes on tobacco undoubtedly affected the revenue, but did not affect it to that extent as to cause any material falling off in the receipts from that source for the month, as will be seen by reference to the table of receipts for the month given below. The loan of July and August, 1861, has disappeared from the debt statement. This was the first loan authorized by the Government on account of the rebellion. The amount authorized to be issued was $250,000,000, but the amount actually issued was $189,300,000. The loan of 1863, which is now being called for redemption, amounted in the aggregate to $75,000,000. This amount has been reduced to less than $48,000,000, and of this $31,000,000 are called, a call for $15,000,000 maturing August 1. This loan will be entirely redeemed by December 1. The available cash balance is nearly $139,500,000, a decrease of about $1,000,000 compared with July 1. The standard silver dollars in the Treasury now number nearly $89,000,000, against which there are outstanding silver certificates amounting to $54,758,000, thus showing that the Treasury is absolute owner of $34,000,000 of the silver dollars now on hand. Compared with July 1 this is an increase of nearly $1,500,000. In gold coin and gold bullion there has been a decrease of $3,500,000 during the month. Other items of the Treasurer's statements of liabilities and assets are without material change since last month. Compared with July of last year the month just closed shows an increase in receipts of over $3,000,000, the greater part of this increase arising from customs. It will be observed that receipts from internal revenue fell off only a few thousand dollars. The receipts for July, 1882, were from the following sources: Customs, $19,950,637; internal revenue, $12,255,167; miscellaneous, $5,516,863—total, $37,822,667. And for July, 1881: from customs, $17,541,188; internal revenue, $12,300,633; miscellaneous, $4,780,669—total, $34,622,490. The ordinary expenditures were less than $20,000,000 for July, and about $500,000 less than for July, 1881.

At a meeting of the stockholders of the Eastern Shore Railroad Company, held at Princess Anne, Md., on the 1st inst., the act of Assembly authorizing the issue of $500,000 in new mortgage bonds was unanimously accepted. Interest on the same was fixed at 5 per cent, and Samuel M. Felton, J. Taylor Gause, and Daniel Cummins were selected as trustees of the new loan, $400,000 of which is to be expended in redeeming outstanding bonds. The balance will be used in improving the road and equipment.

At the close of business on the 1st inst. the total conversions of Hartford and Erie bonds into stock amounted to $16,268,000, which leaves $3,732,000 of bonds outstanding.

In the settlement of the Lewis will case, which has been partially effected under a special act of Congress, one-fourth of the estate is to be divided among the heirs and $900,000 is, under the decree of the Circuit Court of the United States for New Jersey, to be applied to the reduction of the National debt.

The capital of the Brooklyn (Ohio) Street Railroad Company has been increased from $30,000 to $60,000.

The estimated earnings of the Chesapeake and Ohio Railway Company for the 3d week in July, 1882, were $72,871.82, against $50,791.66 for the 3d week in July, 1881, an increase of $22,080.16. The increase for three weeks in July was $63,574.42.

The House joint resolution authorizing the issue of two per cent bonds has been reported adversely from the Senate Finance Committee.

The lands thus far sold by the St. Paul and Duluth Railroad Company have averaged $8 per acre, and there remains unsold 1,267,697 acres.

John E. Johnson, of the banking-house of Brown Brothers & Co., has been admitted to membership in the New York Stock Exchange, having purchased the seat of John A. Buckingham. Brown Brothers & Co. have not hitherto had a representative in the Exchange.

The Indianapolis and Cincinnati Railroad was sold on the 28th ult., and purchased by E. B. Thomas for the Cleveland, Columbus, Cincinnati and Indianapolis Railway Company for $1,396,000. The sale was made subject to a first mortgage indebtedness of $2,000,000, on which there is an accrued interest of $131,110, and probably miscellaneous claims aggregating $1,000,000. It, is, however, expected that at least one-half of the claims will not be allowed to come in ahead of the second mortgages, so that the real indebtedness is estimated at $2,631,110, adding to which $1,396,000, the price paid, gives a total amount of $4,027,110. According to the decree, the taxes, and such other claims as may be preferred by the courts, will be paid out of the purchase money, and the residue will be used as a dividend on the second mortgage bonds. The second mortgage bondholders gave notice of an attempt to prevent the confirmation of the sale, but Mr. Thomas does not think it will be successful. He thinks the property brought a fair price. The entire value of the property represented in the bid is nearly $12,000,000.

Four installments on the stock of the Phœnixville and Westchester Railroad Company were called at Philadelphia on the 1st inst., making in all 50 per cent that has now been called. The road will soon be put under contract.

A statement is published of the canal business of Buffalo showing that the amount of tolls collected during July, 1882, was $27,836.94, against $55,541.92 during July, 1881, a decrease of $27,704.98; and from the opening of the canal to August 1, 1882, $127,955.64, against $150,151.52 for the corresponding time in 1881, a decrease of $22,195.88. The number of boats cleared in July, 1882, was 745; in July, 1881, 1,101; a decrease of 356. Number cleared from commencement to August 1, this year, 2,802; do. last year, 2,811; a decrease of 9.

The annual report of the Atlanta and West Point Railroad Company shows receipts of $430,009.51 and operating expenses of $254,515.22; net earnings, $175,494.29, which is $2,017.17 per mile. The surplus above interest ($75,234.15) and fixed dividends ($80,093) was $20,167.14. The passenger receipts increased $49,000, mainly on account of the Atlanta Cotton Exposition.

L. V. F. Randolph, Treasurer of the Illinois Central Railroad Company, gives notice that he will pay a semi-annual dividend of 3½ per cent on the 1st of September next to shareholders of record on the 12th inst., after which, and until the 5th of September, the transfer-books will be closed.

By referring to the "Statement of the Public Debt" issued on the 1st inst., it will be seen that the total debt of the United States on the 31st of July amounted to $1,916,152,464.72, less cash in the Treasury $241,098,013,52, leaving net $1,675,054,433.20. Since the 1st of July the reduction of the debt is $13,860,027.52. Of the bonded debt $250,000,000 bears 4½ per cent interest, $739,350,500 bears 4 per cent. $449,311,000 bears 3½ per cent, and $14,000,000 bears 3 per cent. Interest has ceased on $13,909,715, and upon $438,654,331, being in the shape of certificates of deposit, legal tenders, etc., there is no interest. In addition to the above there are $64,623,512 6 per cent bonds issued to Pacific Railroad Companies, and known as currency 6s.

The amount of United States circulation outstanding is $346,681,016 legal tenders; $59,695 old demand notes; $74,725 one and two year notes; $220,360 compound interest notes, and $15,422,403.77 fractional currency; total, $362,458,199.77. The amount of national bank circulation outstanding is $357,976,083, showing an increase in July of $105,893, and an increase since 1st August, 1881, of $1,739,145. The amount of lawful money held in the treasury to redeem the notes of insolvent and liquidating banks and banks retiring circulation is $38,650,477. Increase in the past month $611,063, and in the year $5,212,145.

The following quotation of sales of railway and other securities, for the week, are in addition to those given elsewhere in our columns.

New York.—Atlantic and Pacific 1st, 99¼; do. inc., 33½; Am. Dock and Imp. 5s, 94½; Boston and New York Air Line pref., 77; Chicago, St. Paul, Minneapolis and Omaha, 52; do. pref., 110¼; do. consol., 105½; Cedar Falls and Minnesota, 27; Chesapeake and Ohio 1st, Series A, 106; do. cur. 6s, 54½; Chicago, Milwaukee and St. Paul, Chicago and Pacific West div. 1st, 93⅜; do. Southern Minn. div. 1st, 108; Chicago and Northwestern S. F. 5s, 100¾; Cairo and Fulton 1st, 108½; Chicago, Burlington and Quincy 8s, 101½; Columbia and Greenville 2d, 88¼; Chicago and Eastern Illinois 1st, 100; Col., Chi. and Ind. Cent. inc., 53; Dubuque and Sioux City, 95; Denver and Rio Grande, 63; do. 1st, 115½; do. consol., 102; Denver, South Park and Pacific 1st, 101½; East Tenn., Va. and Ga., 11⅞; do. pref. 19¾; do. inc., 48¾: do. 5s, 77; Evansville and Terre Haute, 77½; 1st, 96; Elizabethtown, Lexington and Big Sandy 6s, 96; Fort Worth and Denver 1st, 98⅝; Green Bay, Winona and St. Paul, 12½; do. inc., 28; Gulf, Colorado and Santa Fe 1st, 106¾; Houston and Texas Central 1st, Western div., 112; Indianapolis, Decatur and Springfield 1st, 102; Indiana, Bloomington and Western, 46¾; do. Eastern div. 6s, 95; International and Gt. Northern 1st, 105; do. coup. 6s, 88; Jefferson 1st, 106; Kentucky Central 6s,

107½; Keokuk and Des Moines 1st, 106¼; Kansas Pacific 1st consol., 104½; Louisville and Nashville gen'l mort. 6s, 96; do. 2d, 101; Lafayette, Bloomington and Muncie 1st, 102; Long Island, 57½; Lake Erie and Western, 42½; do. 1st, 106; do. inc. 58; do. Sandusky div. inc., 50½; Louisville, New Albany and Chicago, 73; Lehigh and Wilkesbarre inc., 85; Manhattan Beach, 20; Minn. and St. Louis, 33½; do. pref., 69; do. Pacific ext. 1st, 101¾; do. Southwest ext. 1st, 110⅞; Mobile and Ohio, 22⅜; do. 1st, 111; Missouri, Kansas and Texas, 41⅞; do. gen'l mort. 6s, 87; do. consol. 7s, 107; do. 2d, 69; Missouri Pacific, 105⅞; do. 1st consol., 101¾; do. 3d, 111; Milwaukee, Lake Shore and Western, 54¾; do. 1st, 101¾; do. inc., 76⅞; Memphis and Charleston, 55, Michigan Southern, S. F., 107½; New York, Chicago and St. Louis, 16½: do. pref., 36¼; do. 1st, 94; Nashville, Chattanooga and St. Louis, 65½; do. 1st, 113⅝; New York, Ontario and Western, 29⅛; Norfolk and Western, 20; do. pref., 56¾; Northern Pacific 1st reg., 103¾; do. coupon, 104; New Orleans Pacific 1st, 93⅜; New York City and Northern gen'l mort., 56½; Ohio Central, 19; do. 1st, 95; Ohio Southern, 19½; do. 1st, 86½; do. inc., 31½, Oregon Railway and Nav., 150¼; do. 1st, 107; Oregon Transportation, 89; Oregon Short Line 6s, 105; Peoria, Decatur and Evansville, 38¼; do. 1st, 106; do. inc., 80; Pennsylvania Co. 4½s, reg., 98⅛; do. coup. 96½; Rochester and Pittsburgh 27⅞; do. 1st, 108; do. inc., 47; Richmond and Alleghany, 24; do. 1st, 89; Richmond and Danville, 114¼; do. 1st, 100; do. deben., 79; Richmond, Danville and West Point, 61½; St. Paul, Minneapolis and Manitoba, 131½; do. 1st, 109; do. 2d, 113; do. Dakota ext. 1st, 108½; St. Paul and Duluth, 30; do. pref., 85; South Carolina, 27; do. 1st, 100; Southern Pacific of California 1st, 106; South Pacific of Missouri 1st, 110; St. Louis, Alton and Terra Haute dividend bonds, 50; St. Louis, Iron Mountain and Southern 5s, 82; St. Louis, Kansas City and Northern, Omaha div. 1st, 111¼; Scioto Valley 1st, 95; St. Louis and San Francisco 2d, Class A, 98⅛; Texas and Pacific, 53¾; do. inc. Land Grant, 70; do. Rio Grande div. 1st, 88⅝; Toledo, Delphos and Burlington, 18; do. inc., 30; Texas and St. Louis, 30; Texas Central 1st, 107½; Utah Southern gen'l mort. 7s, 105¼; do. ext. 1st, 113; Virginia Midland, 56⅛; do. inc., 71; Wabash, St. Louis and Pacific, gen'l mort. 6s, 85¾; do. Chicago div, 1st, 85; Winona and St. Peter 1st, 106; Arkansas 7s, L. R., P. B. and N. O., 22, Alabama, Class A, 79½; North Carolina 6s, special tax; 3d class, 8; South Carolina 6s, non-fundable, 9; Tennessee 6s, 57½; American District Telegraph, 56; Colorado Coal and Iron, 48¾; do. 6s, 90½; Cameron Coal, 35½ Standard Mining Co., 15⅝.

Boston.—Atchison, Topeka and Santa Fe plain 5s, 88; do. mort. 5s, 97; Atlantic and Pacific blocks, 110¼; do. inc., 32; Boston and Albany 7s, 125; Boston and Lowell 7s, 120½; Boston Land, 8⅜; Boston Water Power, 4¼; Boston, Clinton, Fitchburg and New Bedford, 64½; do. pref., 131; California Southern, 25; Central of Iowa, 28; Chicago and West Michigan, 69; Connotton Valley, 8¾; do. 5s, 68¾; Connecticut River pref., 154; Chicago, Burlington and Quincy 4s, Denver ext., 85; Cincinnati, Sandusky and Cleveland 7s, 104; Connecticut and Passumpsic River pref., 92; Cambridge City 6s, 118; Chicago, Milwaukee and St. Paul, Dubuque div. 5s, 103⅞; Detroit, Lansing and Northern, 75; do. 7s, 118; Dubuque and Sioux City 7s, 107; Flint and Pere Marquette, 24; do. pref., 96; Iowa Falls and Sioux City, 91½; Kansas City, St. Joseph and Council Bluffs 7s, 115¼; Kansas City, Fort Scott and Gulf 7s, 109⅞; Kansas City, Lawrence and Southern 5s, 104½; Little Rock and Fort Smith, 57; do. 7s, 107½; Marquette, Houghton and Ontonagon, 77½; Massachusetts Central, 5½; do. 6s, 43¼; Mexican Central, 30; do. blocks No, 2, 121½; do. No. 3, 109¾; do. 7s, 86¾; do. inc., 29; Maine Central, 65; New York and New England 6s, 105⅞; Ogdensburg and Lake Champlain 6s, 95; Oregon Short Line subs., 120; do. 6s, 103; Portsmouth, Gt. Falls and Conway, 30; Rutland pref., 26; do. 6s, 100; do. 5s, 70; Sonoro 7s, 107¾; Summit Branch, 14½; Toledo, Delphos and Burlington trust cert., 112; do. Branch inc., 20; Toledo, Cincinnati and St. Louis, 8½; do. 6s, 68; do. inc., 28; do. Southeast div. 6s, 69½; do. Dayton div. 6s, 70; do. Iron Mountain inc., 23; Wisconsin Central, 18; Atlantic Mining Company, 15½; Franklin, 14½; Harshaw, 2¼; Huron, 2½; National, 2½; Osceola, 32; Penabic, 11¾; Silver Islet, 14½; Sullivan, 17⅛.

Philadelphia.—American Steamship Company 6s, 105½, Central Transp., 34¼; Camden and Burlington County Railroad, 30; Huntington and Broad Top Mt. consol. 5s, 90; do. 1st, 117; Lehigh Valley An. bonds, 115; Norfolk and Western pref. 57½; Nesquehoning Valley, 55¾; Oil Creek 1st, 106; Oregon Steam Nav., 44; Pennsylvania R. R. consol. mort. 5s, 107½; Philadelphia 4s, 1897, 112; do. 4s, 1894, 109; do. 4s, 1884, 102; do. 4s, 1904, 113; do. 6s, 1883, 101½; do. 6s, 1895, 125½; do. 6s, 1899, 130; Perkiomen 5s, 106; Philadelphia, Wilmington and Baltimore 4s, 95¾; Pennsylvania Canal 6s, 93; Philadelphia and Reading scrip, 100; Philadelphia and Reading Coal and Iron mort. 7s, 83; Sunbury, Hazleton and Wilkesbarre 2d, 25; Texas and Pacific, 55½; do. 1st, 107½; do. consol. mort. 6s, 96; Rio Grande div, 1st, 88¾; West Jersey R. R., 46; West Chester and Philadelphia 7s, 119; Western Pennsylvania 6s, A. and O., 112; do. J and J., 108. The latest quotations are: City 6s, 108 @120; do. free of tax, 127@133; do. 4s, new, 108@ 113; Pennsylvania State 5s, new loan, 116¼@ 117; do. 4s, old, 108@112; do. 4s, new, 112@116; Philadelphia and Reading Railroad, 30⅞@31; do. consol. mort. 7s, reg. 124@125; do. gen'l mort. 6s, coupon, 96@96¼; do. 7s, 1893, 119@—; do. new conv., 76@76½; United New Jersey R. R. and Canal, 188@188½; Buffalo, Pittsburg and Western, 21¼@21¾; Pittsburgh, Titusville and Buffalo 7s, 95@98; Camden and Amboy mort. 6s, 1889, 112½@113¼; Pennsylvania R. R., 62@ 62⅛; do. general mort. 6s, coupon, 123½@124¼; do. reg., 122½@123½; do. consol. mort. 6s, reg., 121@121⅛; Little Schuylkill R. R., 56½@57; Schuylkill Navigation, pref., 13@14; do. 6s, 1882, 90@92; Elmira and Williamsport pref., 58@60; do. 5s, 100¼@101; Lehigh Coal and Navigation, 43⅜@43⅝; do. 6s, 1884, 103½@104; do. R. R. loan, 116@116½; do. Gold Loan, 111½@112½; do. consol. 7s, 116½@117; Northern Pacific, 50@50¾; do. pref., 91@91¾; North Pennsylvania, 64½@65; do. 6s, 105@107; do. 7s, 123@124; do. 7s, General mort. reg., 121½@122½; Philadelphia and Erie, 16@18; do. 7s, 114 @115; do. 5s, 104@105; Minehill, 61@62; Catawissa 24@24½; do. pref., 54@55; do. new pref., 54@54½; do. 7s, 1900, 120@—; Lehigh Valley, 63@63⅛; do. 6s, coupon, 123 @125; do. reg., 123@124; do. 7s, 134@137; do. consol. mort. 120@121; Fifth and Sixth streets (horse), 160@161; Second and Third, 108@112; Thirteenth and Fifteenth, 65@75; Spruce and Pine, 40@46; Green and Coates, 80@90; Chestnut and Walnut, 90@93; Germantown, 69½@70; Union, 110@115; West Philadelphia, 106@ 115; People's 14@15; Continental, 100@102.

Baltimore.—Atlantic Coal, 1.20; Atlanta and Charlotte, 76; do. 1st, 109¼; Baltimore City 6s, 1890, 117¾; do. 5s, 1916, 125½; Charlotte, Columbia and Augusta, 53¾; Canton Co. 6s, 102¼; Columbia and Greenville 2d, 88; Georgia Creek, 95; Maryand Defense 6s, 106; Marietta and Cincinnati 1st Trust certificates, 128; do. 2d do. 101½; do. 3d, do., 57; Ohio and Mississippi, Springfield div. 6s, 120¾; Richmond and Danville gold bonds, 99¾; Virginia Midland, old, 100; do. 1st pref., 110; do 3d mort., 93; do. 5th mort., 97; do. inc., 75; Virginia 10-40 coupons, 65½; Virginia Peelers, 34; Wilmington, Columbia and Augusta, 109. The latest quotations are: Atlanta and Charlotte, 75¾@76½; do. 1st, 109@109¼; Baltimore and Ohio, 194@195; do. 6s, 1885, 107¼@—; Baltimore City 6s, 1884, 103¾@—; do. 6s, 1886, 109@—; do. 6s, 1890, 117@118; do. 6s, 1893, 118½@—; do. 5s, 1916, —@125; Columbia and Greenville 1st, 102@103; Canton Co. 6s, 102½@103; Central Ohio 1st, 110½@111; Marietta and Cincinnati 1st, 128@ 128¼; do. 2d, 101⅛@101½; do. 3d, 57@57½; Norfolk and Western pref., 55¼@58; Northern Central, 49¼@49¾; do. 6s, 1900, 117@117½; do. 6s, 1910, gold, 116½@117; do. 5s, 1926, 98½@99; Ohio and Mississippi, Springfield div. 1st, 120½@121; Richmond and Danville, 111@—; Union Canal 6s, 118@—; Virginia Midland 5th mort., 96½@—; do. inc., 73@75; Virginia consols, 60¼@61; do. consol. coupons, 60@62; Virginia 10-40s, 43¼@43⅝; do. 10.40 coupons, 65@65¼.

HENRY ERSKINE, pleading before Lord Thurlow, had to speak of a certain curator, and gave the Scotch pronunciation of the word, with the accent on the first syllable. "Pardon me, Sir," said Thurlow; "we pronounce the word cu-*ra*-tor in England, following the analogy of the Latin language, in which the penultimate syllable is long." "I thank you, my Lord," replied Erskine, "and I bow at once to the authority of a Se-*na*-tor so learned, and an o-*ra*-tor so eloquent as your Lordship."

Pennsylvania Railroad.

THE business of the Pennsylvania Railroad Company for the month of June, 1882, on its lines east of Pittsburgh and Erie, as officially reported, compares with the same month of 1881 and 1880 as follows:—

	1880.	1881.	1882.
Gross earnings.....	$3,291,476	$3,807,437	$4,093,756
Operating expenses.....	2,279,229	2,318,894	2,559,423
Net earnings.....	$1,012,247	$1,488,543	$1,534,333

The net earnings of the leased lines of the company, west of Pittsburgh and Erie, for the six months ended June 30, 1882, show a deficiency in meeting rental of $120,657 against a surplus of $1,428,864 for the same period of 1881. The following statement shows the comparative results of the whole system's business for six months—January 1 to June 30—for three years:—

	1880.	1881.	1882.
Gross earnings.....	$19,504 071	$21,553,839	$22,65c,847
Operating expenses...	11,4c9,862	12,556,885	14,46c,725
Net earnings of Eastern lines.....	$8,094,2c9	$8,996,954	$8,190,122
Add—Profits of leased lines west of Pittsburgh and Erie....	1,311,136	1,524,864	.....
Deduct—Loss by leased lines west of P'tsburgh and Erie	.....	.....	120,657
Total net to Pennsylvania Railroad.....	$9,405,345	$10,521,818	$8,c69,465
Decrease in net earnings for six months from 1881.....			2,452,352
Decrease in net earnings for six months from 1880.....			1,335,880

Immense Telescope for Russia.

THE Russian Observatory at Poulkovo will shortly be in possession of a gigantic telescope. For a long time this observatory, constructed in 1839 by order of the Czar Nicholas, possessed the most powerful instruments in the world, but of late years the scientific progress which has been made in England, France and the United States has put the Poulkovo Observatory in the shade. The University of Virginia, for instance, has now the enormous McCormick telescope, the objective of which is 26¼ inches in diameter, and 33 feet long, while the Naval Observatory at Washington has one of the same calibre, and Mr. Deck, a wealthy Californian, is about to place a still greater telescope on Mount Hamilton, near San Jose. Four years ago the Russian Government accordingly determined to construct a new instrument which, both in respect to its mechanism and optic power, would surpass any existing telescope. The astronomer, Otto Sturve, was commissioned to superintend the work, the execution of which was intrusted to Alvin Clark & Co., of Cambridge, Mass. The glasses, consisting of an amalgam of flint and crown glass, have been in hand for nearly a year, and by the month of October they will be ready for use. The total length of the Poulkovo telescope, says the London *Telegraph*, will be 45 feet, and the diameter of the glass 30 inches, exclusive of the mounting. The telescope will be placed in a meadow to the southwest of the principle building of the Poulkovo Observatory, and it will stand upon a movable iron turret which will itself rest on rails. This telescope will be so powerful that the moon will be brought to an apparent distance of only a hundred miles from the earth.

RAILROAD AND CANAL DIVIDEND STATEMENT.

Showing the amount of Stock Outstanding, the Dividend Periods and the date of last Dividend.

Marked thus(*)are leased roads.	Stock outstanding.	Divide'd Periods.	Last Dividend Payable.
Albany and Susq*...100	2,500,000	semi-an	July '82 2
Ashuelot.....100	210,000	q'arterly	Oct. '81 3½
Atch., Top. and S. Fe100	54,000,000	q'arterly	Aug. '82 1½
Atlanta and W. Point100	1,232 200	semi-an	Jan. '82 6
Atlantic and St. Law*100	5,840,000	semi-an	Mar.'82 3
Augusta and Savan'h100	1,022,900	semi-an	June'81 3½
Avon,Geneseo&MtM*100	225,000	semi-an	July '81 3
Baltimore and Ohio.100	14,792,566	semi-an	May '82 5
" " pref.100	5,000,000	semi-an	July '82 3
Washington Br....100	1,650,000	semi-an	Apl. '82 5
Berkshire*.....100	600,000	q'arterly	Apl. '82 1¾
Boston and Albany..100	20,000,000	q'arterly	June'82 2
Bos.&N.Y.AirLine pf.100	2,795,227	q'arterly	June'82 1
Bos.,Cl.,F.&N.B.pref.100	1,750,100	.....	Apl. '82 3½
Bos.,Conc.&Mont.pf*100	800,000	semi-an	May '82 3
Boston and Lowell..500	3,940,000	semi-an	July '82 2
Boston and Maine...100	6,921,274	semi-an	May '82 4
Boston & Providence100	4,000,000	semi-an	May '82 4
Attleborough Br...100	131,700	semi-an	July '82 3½
Bos.,Revere B &Lynn100	419,400	semi-an	July '82 3½
Buffalo,N. Y. & Erie*.100	950,000	semi-an	June'82 3
Camden & Atlantic.. 50	377,400	q'arterly	Apl '80 38
" " pref. 50	880,650	q'arterly	Apl '80 3½s
Camden & Burl. Co...100	381,925	semi-an	July '82 3
Canada Southern....100	15,000,000	.....	Feb. '81 2½
Cape May & Millville* 50	447,000	semi-an	June'81 3
Catawissa*..... 50	1,159,500	annual	Oct.'81 $1½
" pref..... 20	2,200,000	semi-an	May '82 3½
" new pref.. 50	1,000,000	semi-an	May '82 3½
Cayuga and Susq.*.. 50	589,110	semi-an	July '81 4½
Cedar Rapids&Mo.R*100	6,850,400	q'arterly	Aug. '82 1½
" " pref.100	769,600	semi-an	Aug .'82 3½
Central of Georgia...100	7,500,000	semi-an	June '82 4
Central of New Jersey100	18,563,200	q'arterly	July '76 2½
Central Ohio*..... 50	2,437,950	semi-an	July '82 3
" pref.. . 50	411,550	semi-an	July '82 3
Central Pacific 100	59,275,500	semi-an	Aug. '82 3
Chemung*.....100	380,000	q'arterly	July '81 1½
Cheshire preferred ..100	2,155,300	semi-an	July '82 1½
Chicago and Alton...100	11,181,741	semi-an	Mar. '82 4
" " pref 100	2,245,400	semi-an	Mar. '82 4
Chi., Burl. & Quincy.100	55,337,455	q'arterly	June'82 2
Chi., Iowa & Nebras*.100	3,916,200	semi-an	July '82 4
Chi., Mil. & St. Paul.100	20,404,261	semi-an	Apl. '82 3½
" " pref 100	14,401,483	semi-an	Apl. '82 3½
Chi. & N. Western...100	14,988,257	semi-an	June'82 3½
" pref.100	21,525,353	q'arterly	June'82 2
Chi., R. I. & Pacific..100	41,960,000	q'arterly	Aug. '82 1¾
Chi. and West Mich .100	6,151,000	semi-an	Feb. '82 2½
Chi.,St.P.,M.&O.pref.100	10,390,000	q'arterly	July '82 1¾
C., Ind., St. L. & Chi..100	6,000,000	q'arterly	July '82 1½
Cin., Sand. & Clev.pf. 50	429,037	semi-an	May '82 3
Clev. and Mahoning* 50	3,759,200	semi-an	Nov.'81 3½
Clev. and Pittsburg* 50	11,244,336	q'arterly	June'82 1¾
Columbus & Xenia*. 50	1,786,200	q'arterly	June'82 2
Colum.&HockingVal.100	2,500,200	semi-an	Aug.'81 208
Concord 50	1,500,000	semi-an	May '82 5
Concord and Ports.*.100	350,000	semi-an	July '82 3½
Conn.& Passump.Riv100	2,244,400	semi-an	Aug. '82 3
Connecticut River ..100	2,100,000	semi-an	July '82 4
Cumberland Valley.. 50	1,292,950	q'arterly	July '82 2½
" 1st pref 50	241,900	semi-an	Apl. '82 4
" 2d pref. 50	243,000	semi-an	Apl. '82 4
Danbury & Norwalk. 50	600,000	.....	Apl. '82 1½
Dayton and Mich.*.. 50	2,402,573	semi-an	Apl. '82 1¾
" " pref. 50	1,211,250	q'arterly	July '82 2
Delaware*..... 25	1,468,940	semi-an	July '82 3
Del. & Bound Brook*100	1,652,000	q'arterly	May '82 1¾
Del., Lack.& Western 50	26,200,000	q'arterly	July '82 2
Denver & Rio Grande.100	29,160,000	q'arterly	Jan. '82 1½
Den.,South P. & Pac.100	3,500,000	.....	Aug.'80 4
Detroit, Lans. & Nor.100	1,825,600	semi-an	Aug.'80 2½
" " pref.100	2,503,380	semi-an	Aug. '82 3½
Dubuque&Sioux C'y*100	5,000,000	semi-an	Apl. '82 3
East Pennsylvania*., 50	1,709 550	semi-an	July '82 3
East Mahanoy*..... 50	392,050	semi-an	July '82 3
Eastern (N. H.).....100	492,500	semi-an	June'82 2½
Eel River.....100	3,000,000	q'arterly	June '82 $1
Elmira.Jef.&Canand*100	500,000	annual	Sep. '80 5
Elmira&Williamsp't* 50	500,000	semi-an	May '82 1½
" " pref. 50	500,000	semi-an	July '82 3½
Erie and Pitsburg*.. 50	1,998,400	q'arterly	June '82 1½
Evansville & Terre H.100	100,000	semi-an	Nov.'81 2
Fitchburg.....100	4,500,000	semi-an	July '82 3
F. & P. Marquette pf.100	6,500,000	semi-an	July '82 3
Ft.W. & Jackson pref.100	2,000,000	.....	May '82 2
Georgia. 100	4,200,000	q'arterly	July '82 2½
Granite 100	1,250,000	semi-an	July '82 3
Han. & St. Jo. pref .100	5,083,024	semi-an	Aug. '82 3½
Harrisbg&Lancaster 50	1,182,500	semi-an	July '82 3½
Housatonic pref. ...100	1,180,000	q'arterly	July '82 2
Illinois Central.....100	39,000,000	semi-an	Sept. '82 3½
Ia.Falls & Sioux City*100	4,623,500	q'arterly	June'82 1¾
Iowa R. Land Co....100	7,620,000	q'arterly	Aug. '82 1
Jeffersonv. Mad.&Ind100	2,000,000	q'arterly	May '82 1½
Joliet and Chicago*..100	1,500,000	q'arterly	June'82 1½
Kan.C.,Ft.S.&Gulf...100	4,000,000	.....	Feb. '82 2
" " pref..100	2,750,000	semi-an	Aug. '82 4
Kentucky Central...100	500,000	semi-an	June'81 1
" " pref..100	5,583,500	semi-an	June'83 1
Lake Shore&Mich.So.100	49,466,500	q'arterly	Aug. '82 2
" (guar.)100	533,500	semi-an	Aug. '82 5
Lawrence*..... 50	450,000	q'arterly	July '82 2
Lehigh Valley..... 50	27,496,895	q'arterly	July '82 1½
" " pref. 50	106,300	q'arterly	July '82 1½

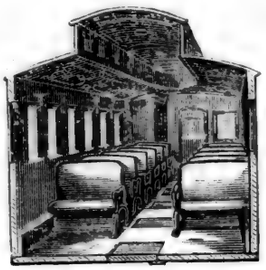
Marked thus(*)are leased roads.	Stock outstanding.	Divide'd Periods.	Last Dividend Payable.
Little Miami..... 50	4,637)300	q'arterly	June'82 2
Little Rock & Ft. S..100	4,096,135	.....	July'81 108
Little Schuylkill*.. . 50	2,646,100	semi-an.	July '82 3½
Louisville & Nashv..100	19,130,913	semi-an.	Feb. '82 3
Lowell & Andover...100	500,000	semi-an.	Jan. '82 3½
Lykens Valley.....100	600,000	q'rterly.	Oct.' 81 2½
Manchester & Law..100	1,000,000	semi-an.	May '82 5
Manhattan 100	13,000,000	.....	.....
" " 1st pref.100	6,500,000	q'rterly.	July '82 1½
" " 2d pref.100	6,500,000	q'rterly.	July '82 1½
Marietta& Cincinnati 50	1,386,350	.....	.....
" " 1st pref 50	8,105,600	semi-an.	Sep. '66 38
" " 2d pref 50	4,440,000	semi-an.	Sep. '66 38
Marq.Hout.&Ont.pf..100	2,259 026	.....	Aug. '82 4
Massawippi*.....100	400,000	semi-an.	Aug. '82 3
Michigan Central....100	18,738,204	q'rterly.	Aug.'81 1
Middlesex Central...100	280,000	semi-an.	Feb. '82 3
Mill Creek&Minehill* 50	323,000	semi-an.	July '82 5
M.Hill& Schuyl.Hav* 50	4,022,500	semi-an.	July '82 3½
Missouri Pacific.....100	28,169,800	q'rterly.	July '82 1½
Mobile&Montgomery100	3,022,517	semi-an.	Feb. '80 2¼
Mont. & Wells River100	800,000	annual	Feb. '80 2
Morris and Essex.... 50	15,000,000	semi-an.	July '82 3½
Mt Carbon&PtCarbon 50	282,350	semi-an.	July '82 6
Nashua and Lowell..100	800,000	semi-an.	July '82 4
Nashua & Rochester.100	1,305,800	semi-an.	Apl. '82 1½
Nashv. & Decatur...100	1,827,000	semi-an.	June'81 3
Nash.,Chat.&StLouis 25	6,670,325	semi-an.	Apl. '82 1½
Naugatuck.....100	2,000,000	semi-an.	Jan. '82 5
Nesquehoning Val'y* 50	1,300,000	semi-an.	Mar.'82 3
N.Castle&Beaver Val* 50	600,000	q'rterly.	Oct. '81 —
NewLondonNorth'n*100	1,500,000	q'rterly.	July '82 1½
N. Y. Cen. & Hud. R.100	89,428,330	q'rterly.	July '82 2
N. Y. and Harlem....100	7,950,000	q'rterly.	July '82 4
" " pref.100	1,500,000	q'rterly.	July '82 4
" City Line.. —	.....	annual	Apl. '82 3
N.Y.,LakeErie&West.100	77,083,900	.....	.....
" " pref.100	8,156,825	.....	Jan. '82 6
N. Y., N. H. & Hart..100	15,500,000	semi-an.	Jan. '82 5
N. Y., Prov. & Boston100	3,000,000	q'rterly.	Aug. '82 2
Niag.Bridg&Canand*100	1,000,000	semi-an.	July '81 3
North Carolina*.....100	3,000,000	semi-an.	Sep. '81 3
" " pref.100	1,000,000	semi-an.	Sep. '81 3
N. Eastern (S.C.) pref100	86,000	semi-an.	May '81 4
Norfolk & Western pref. 50	15,000,000	q'rterly.	June '82 $1
North Pennsylvania. 50	4,527,150	q'rterly.	May '82 1¾
Northern Central.... 50	6,142,000	semi-an.	July '82 3
Northern N. Hampsh100	3,068,400	semi-an.	June'82 3
Northern N. Jersey*.100	1,000,000	semi-an.	July '80 2½
Norwich&Worcester*100	2,604,400	semi-an.	July '82 5
Ohio 100	18,500,000	.....	.....
Ohio and Miss. pref..100	4,030,000	semi-an.	Mar.'75 3½
Old Colony.....100	7,333,800	semi-an.	July '82 3½
Oregon R'way&Nav.100	6,000,000	q'rterly.	Aug. '82 2
Oswego & Syracuse..100	1,320,400	semi-an.	Aug. '81 4½
Panama..... 100	7,000,000	.....	July '82 6½
Paterson & Hudson*.100	630,000	semi-an.	July '82 4
Paterson & Ramapo.100	248,000	semi-an.	July '82 4
Pember.&Hightst'n*. 50	342,150	semi-an.	Jan. '82 3
Pennsylvania..... 50	77,672,750	semi-an.	May '82 4
Pennsylvania Co..... 50	20,000,000	semi-an.	June'81 2½
Peoria & Bureau Val*100	1,200,000	semi-an.	Feb. '82 4
Philadelphia & Erie*. 50	7,013,700	semi-an.	.....
" " pfd 50	2,400,000	semi-an.	Jan. '75 4
Phil,Ger. &Norrist'n* 50	2,231,900	q'rterly.	June'82 3
Phil. and Reading... 50	32,726,375	q'rterly.	Jan. '76 2½
" " pref. 50	1,551,800	q'rterly.	July '76 3½
Phila. and Trenton..100	1,250,100	q'rterly.	July'82 2½
Phila., Wil. and Balt. 50	11,585,750	semi-an.	July '82 4
Pittsb.,Ft. W. & Chi.*100	19,714,285	q'rterly.	July'82 1¾
" Special Imp.100	6,770,900	q'rterly.	July '82 1¾
Pittsfield&N.Adams..100	450,000	semi-an.	July '82 2½
Portl., Saco & Portsm100	1,500,000	semi-an.	July '82 3
Providence &Worces.100	2,000,000	semi-an.	July '82 3
Rensselaer&Saratog.*100	7,000,000	semi-an.	July '82 4
Rhode Island& Mass..100	100,000	.....	Jan. '81 3
Richmond& Danv...100	3,866,000	q'rterly.	May '82 2
Richmond & Petersb100	1,009,300	semi-an.	Jan. '81 3
Roch.&Genesee Val.*100	555,200	semi-an.	July '82 3
Rome,Watert.& Ogd..100	5,293,900	semi-an.	July '75 1½
Rutland preferred.. 100	4,000,000	semi-an.	Sept. '82 1
St.L.,Alt. & T.Haute.100	2,300,000	.....	.....
" " pref.100	2,468,406	.....	May '82 3
St.L.&S.Fran.1st pref100	4,500,000	.....	Aug. '82 3½
St.L.,I.Mt.&South'n.100	21,459,921	semi-an.	Feb. '74 3
St. P. & Duluth pref.100	4,705,000	q'rterly.	June'82 1¾
St. P., Minn. & Man..100	15,000,000	semi-an.	Aug. '82 3½
Schuylkill Valley*... 50	576,050	semi-an.	July '82 2½
Seaboard & Roanoke.100	1,229,600	semi-an.	May '82 5
Shamokin V.&Pottsv 50	669,450	semi-an.	Feb. '82 3
Shore Line*.....100	1,000,000	semi-an.	July '82 4
Sioux C.&Pacific pref100	169,000	semi-an.	Apl. '82 3½
South Br. (N. J.)*....100	438,300	semi-an.	Jan. '82 3
South Western (Ga.)*100	3,892,300	semi-an.	Dec. '81 3½
Stockbridge&Pitts.*.100	448,700	semi-an.	Oct. '81 1½
Summit Branch*.... 50	4,010,150	semi-an.	Feb. '76 3
Syr.,Bingham&N.Y.*100	2,500,000	semi-an.	Feb. '81 2
Terre Haute & Ind...100	1,988,150	semi-an.	Aug. '82 4
Troy and Boston....100	1,609,000	semi-an.	Feb. '80 2
Union Pacific. 100	61,000,000	q'rterly.	July '82 1¾
United Cos of N. J.*.100	20,490,000	q'rterly.	July '82 2½
Utica, Shenango&S V100	4,000,000	semi-an.	Nov.'81 3
Utica and Black Riv.100	1,772,000	semi-an.	Mar. '82 2
Vermont and Mass..100	3,050,000	semi-an.	Apl. '82 3
Wab. St.L.& Pac.pref.100	22,615,100	q'rterly.	Nov.'81 1½

Markedthus(*)are leased roads.	Stock outstanding.	Divide'd Periods.	Last Dividend Payable.
Ware River*.....100	750,000	semi-an.	July '82 3½
Warren (N. J.).....100	1,800,000	semi-an.	Apl. '82 3½
Warwick Valley.....100	340,000	semi-an.	July '82 2½
Westchest&Phil.pref100	821,300	semi-an.	July '80 2
West Jersey.....100	1,359,750	semi-an.	Apl. '83 38
Wilmingt'n&Weld'n.100	1,456,200	semi-an.	July '82 3
Wil., Col., & Aug 100	960,000	semi-an.	July '82 3
Winchester&Poto'c.*100	180,000	semi-an.	July '82 3
Winchester&Strasb.*100	74,700	semi-an.	July '82 3
Worcester & Nashua. 75	1,789,800	semi-an.	July '82 1½
HORSE-POWER R. R.			
Albany City.....100	200,000	annual	.....'80 5½
Baltimore City..... 25	1,000,000	semi-an.	July '82 3
Balt.,Cat.&El. Mills..100	....	semi-an.	July '82 2
BleeckerSt.&Ful.F'y.100	900,000	semi-an.	July '81 ¾
Boston&Chelsea pref. 50	110,000	semi-an.	Apl. '82 3
Broadway (Brooklyn)100	250,000	q'arterly	Oct. '81 3
B'way&7th Av,(N.Y.)100	2,100,000	q'arterly	Oct. '81 2
B'klyn&Hunter's Pt.100	400,000	semi-an.	Apl. '79 3
Brooklyn City.....100	2,000,000	q'arterly	Dec. '81 3½
Bushwick (Brooklyn)100	300,000	semi-an.	July '81 2½
Cambridge.....100	908,000	q'arterly	Apl. '82 4½
Cen.Park,N.& E.Riv.100	1,800,000	q'rterly.	July '82 2
Christoph'r&TenthSt100	650,000	semi-an.	Aug. '81 2½
Citizens' (Phil.)..... 50	192,500	q'rterly.	Jan. '82 2½
Citizens' (Pbg.)..... 50	200,000	annual..	....'80 14½
Coney Island&Bklyn100	500,000	semi-an.	Oct. '80 5
Continental (Phil.) .. 50	580,000	semi-an.	July '82 6
D.Dock,E.B'way&Bat100	1,200,000	q'arterly	Nov. '81 4
Eighth Av. (N. Y.)...100	1,000,000	q'rterly.	Oct. '81 3
42d St. & G. St. Ferry100	747,000	semi-an.	Nov.'81 6
Frankf.&Southw (Ph) 50	600,000	q'rterly.	Jan. '82 6
Germantown, (Ph.).. 50	572,800	q'rterly.	July '82 2¼
Girard College (Ph.) . 50	500,000	semi-an.	July '71 3
Grand St. & Newton .100	170,091	semi-an.	July '81 2½
Green&Coates St.(Ph) 50	150,000	q'rterly.	July '82 3
Heston,Mantau&F'm 50	299,381	semi-an.	Jan. '75 4
Highland.....100	600,000	semi-an.	July '82 4
Lomb.&SouthSts(Ph) 25	195,000	semi-an.	Oct. '75 4
Lynn and Boston....100	200,000	semi-an.	May '82 4
Malden and Melrose.100	165,000	.....	.....
Metropolitan (Bost.). 50	1,500,000	semi-an.	July '82 4
Middlesex (Boston)..100	650,000	semi-an.	May '82 3½
N.Y.,Bay Ridge&Jam100	150,000	..... .	Oct. '78 7
Ninth Av. (N. Y.)....100	797,320	.....	.....
Orange &Newark....100	282,555	.....	.....
People's (Phila.) pref. 25	124,744	..... .	July '82 2
Philadelphia City... 50	475,000	semi-an.	July '82 4
Phila. and Darby.... 20	200,000	semi-an.	July '81 3½
Phila.&Grey's Ferry. 50	308,000	semi-an.	Jan. '82 6
Pbg,Alleg.&Manches. 50	300,000	q'rterly.	Oct. '81 3
Ridge Avenue (Ph.).. 50	420,000	semi-an.	Oct. '81 11
Second Avenue (N.Y.)100	1,199,500	semi-an.	July '81 2½
Second&ThirdSt.(Ph) 50	771,076	q'rterly.	Jan. '82 4½
17th &19th sts (Ph.).. 50	250,000	semi-an.	July '81 3
Sixth Avenue (N. Y.)100	750,000	semi-an.	Oct. '81 5
Somerville (Boston)..100	113,000	semi-an.	May '82 3
South Boston..... 50	600,000	semi-an.	July '82 4
Third Avenue, N. Y..100	2,000,000	q'rterly.	Nov. '81 5
13th and 15th sts.,Ph 50	334,520	q'rterly.	Jan. '82 4
23d street, N. Y.....100	600,000	semi-an.	Aug. '81 4
Union, Boston.....100	374,300	semi-an.	Jan '82 4
Union, Phila..... 50	1,005,000	semi-an.	Jan. '82 7
West Philadelphia... 50	750,000	semi-an.	July '77 10
CANALS.			
Chesapeake and Dela 50	2,078,038	semi-an.	June'75 2
Delaware Division... 50	1,633,350	semi-an.	Feb. '82 $1
Delawa. and Hudson100	20,000,000	q'rterly.	June'82 1¾
Delaware & Raritan*.100	5,847,400	q'rterly.	July '82 2½
Lehigh Coal and Nav 50	11,204,250	semi-an	June'82 2
Monongahela Nav... 50	1,004,500	semi-an.	July '82 $3
Morris, consolidated.100	1,025,000	semi-an.	Feb. '81 2
" preferred....100	1,175,000	semi-an.	Feb. '81 5
Pennsylvania..... 50	4,501,200	.....	.....
Schuyl. Nav., com.*. 50	859,100	annual..	Au. '81 50c.
" " pref... 50	3,200,000	annual..	Aug. '81 $1
MISCELLANEOUS.			
Adams Express.....100	12,000,000	q'rterly.	June'82 2
American Express... 50	18,000,000	semi-an.	July '82 3
Amoskeag Manuf.Co.100	3,000,000	semi-an.	June'81 5
Calumet&HeclaMin'g —	100,000 S.	q'rterly.	Aug. '82 $5
Central Mining Co....100	.....	semi-an.	Feb. '82 2½
Consolidation Coal..100	10,250,000	semi-an.	Jan. '82 2
George's Creek C.&I.100	.....	semi-an.	Jan. '82 3
Maryland Coal.....100	4,400,000	semi-an.	Feb. '76 1½
Mariposa L. &Mining100	10,000,000	..... .	.....
" pref100	5,000,000	.....	.....
Missouri Val.LandCo100	200,000	semi-an.	July '82 12
National Tube Works100	1,000,000	q'rterly.	July '82 3
Pac. Mail Steamship.100	20,000,000	q'rterly.	Sept. '69 3
Pennsylvania Coal... 50	5,000,000	q'rterly.	May '82 3
Pullman Palace Car..100	10,032,800	q'rterly.	Aug. '82 2
Quicksilver, com....100	5,708,700	..... .	May '82 0.4
" pref....100	4,291,300	.....	May '82 6
Quincy Mining Co... 25	40,000 shs	semi-an.	Aug. '82 $5
Quincy R. R. Bridge.100	1,750,000	semi-an.	July '82 5
SiouxC.&I.F.L.&L.Co100	500,000	semi-an.	June '82 5
Spring Mt. Coal.....100	1,500,000	semi-an.	June '82 3½
Topeka Equip'nt Co.100	255,500	semi-an.	Apl. '82 5
United States Ex....100	7,000,000	q'rterly.	Aug. '82 1
Wells-Fargo & Co. Ex100	6,250,000	semi-an.	July '82 4
Western Union Tel..100	80,000,000	q'rterly.	July '82 1½

RAILROAD EARNINGS.—MONTHLY.

	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total.
BURL., CEDAR RAP. & NORTHERN:													
1880	184,316	165,170	188,325	141,652	149,504	153,378	143,432	160,160	179,804	204,991	189,330	193,419	2,053,484
1881	167,750	124,510	148,551	184,680	165,630	205,912	174,351	209,112	221,801	221,748	203,880	232,812	2,259,037
1882	252,823	225,631	224,107	178,304	199,278	211,257	.....	.....	.....	.....	.....	.....	.....
CENTRAL PACIFIC:													
1880	1,200,614	1,070,487	1,373,438	1,356,716	1,778,488	1,724,950	1,840,067	1,973,438	1,964,997	1,120,229	2,199,466	1,905,221	20,508,112
1881	1,602,907	1,454,218	1,709,637	1,872,370	2,091,410	2,159,381	1,859,000	2,059,000	2,293,000	2,514,000	2,267,000	2,110,000	23,947,951
1882	1,876,000	1,702,000	1,987.000	2,052,000	2,353,000	2,239,000	.....	.....	.....	.....	.....	.....	.....
CHESAPEAKE AND OHIO:													
1880	202,335	198,681	222,762	221,559	199,443	214,352	238,236	259,110	247,303	211,820	240,795	218,009	2,674,308
1881	162,540	184,389	228,479	227,343	252,235	241,135	225,096	262,858	247,144	237,303	235,585	203,562	2,702,762
1882	210,455	209,708	208,981	267,454	255,939	260,753	.....	.....	.....	.....	.....	.....	.....
CHICAGO AND ALTON:													
1880	534,054	497,013	626,473	542,961	616,128	617,524	708,906	761,120	767,349	785,199	696,776	574,695	7,718,198
1881	487,890	461,641	529,915	558,190	548,556	635,860	671,466	771,466	768,897	750,359	680,133	635,307	7,553,988
1882	579,447	530,480	584,483	561,787	553,412	613,886	.....	.....	.....	.....	.....	.....	.....
CHICAGO AND NORTHWESTERN:													
1880	1,154,632	1,131,683	1,361,725	1,294,573	1,875,608	1,671,177	1,699,686	1,767,938	2,020,245	2,105,217	1,855,671	1,477,902	19,416,007
1881	1,240,667	963,208	1,178,795	1,474,612	1,879,006	2,306,640	1,983,031	2,315,164	2,292,676	2,341,097	2,019,037	1,855,476	21,849,209
1882	1,620,336	1,471,945	1,696,568	1,634,819	2,058,133	2,022,700	.....	.....	.....	.....	.....	.....	.....
CHICAGO, BURLINGTON AND QUINCY:													
1880	1,432,740	1,411,870	1,732,518	1,489,894	1,909,627	1,682,956	1,773,643	1,834,321	1,862,285	1,934,762	1,837,860	1,552,018	20,454,494
1881	1,307,948	1,034,821	1,418,149	1,574,371	1,679,455	2,083,803	1,888,558	2,173,945	2,262,981	2,031,001	1,816,133	1,905,490	21,324,150
1882	1,658,834	1,457,300	1,566,217	1,530,838	1,505,261	.....	.....	.....	.....	.....	.....	.....	.....
CHICAGO, MILWAUKEE AND ST. PAUL:													
1880	764,298	738,749	900,675	871,041	1,134,745	1,037,958	1,026,708	991,297	1,257,677	1,493,620	1,472,037	1,397,308	13,086,119
1881	990,847	682,717	916,989	1,259,946	1,538,491	1,729,811	1,568,706	1,678,000	1,645,000	1,590,000	1,569,000	1,855,000	17,025,462
1882	1,435,000	1,377,000	1,561,000	1,518,000	1,629,000	1,620,000	1,465,000	.....	.....	.....	.....	.....	.....
CHICAGO, ST. PAUL, MINNEAPOLIS AND OMAHA:													
1880	193,827	173,078	259,783	259,208	232,146	218,093	236,995	251,013	300,833	342,052	342,894	312,173	3,122,097
1881	257,786	158,594	251,648	261,211	350,124	404,562	392,702	385,586	363,685	382,714	380,733	391,950	3,981,296
1882	307,498	315,100	405,779	356,558	406,420	363,109	.....	.....	.....	.....	.....	.....	.....
CINCINNATI, INDIANAPOLIS, ST. LOUIS AND CHICAGO:													
1880	155,697	172,541	198,220	168,199	186,995	200,332	204,138	233,478	343,627	239,881	209,014	198,254	2,412,185
1881	182,523	171,511	191,005	183,710	191,096	192,299	178,861	229,858	219,977	212,606	194,805	192,623	2,296,916
1882	200,042	186,879	208,066	204,269	199,110	195,948	.....	.....	.....	.....	.....	.....	.....
DENVER AND RIO GRANDE:													
1880	124,759	126,922	160,883	164,882	193,925	295,455	373,132	400,133	406,583	473,318	408,562	349,196	3,478,007
1881	307,476	317,681	398,493	433,111	514,767	584,230	548,284	606,193	620,643	665,686	566,819	643,417	6,206,812
1882	491,914	412,987	535,055	559,917	614,298	537,462	495,797	.....	.....	.....	.....	.....	.....
HANNIBAL AND ST. JOSEPH:													
1880	176,079	166,965	216,061	206,735	191,317	179,396	224,312	238,081	233,448	242,214	207,147	279,635	2,561,391
1881	154,401	122,874	176,356	190,812	172,950	190,740	198,110	215,308	202,567	313,433	201,782	180,376	2,230,966
1882	138,284	154,717	168,798	148,913	154,917	155,030	.....	.....	.....	.....	.....	.....	.....
ILLINOIS CENTRAL:													
1880	595,212	613,806	613,008	535,732	665,120	681,736	724,095	732,755	806,836	880,211	783,120	673,182	8,304,812
1881	631,281	524,499	557,789	662,493	673,259	803,887	720,004	868,407	828,847	815,238	737 218	763,475	8,586,397
1882	728,173	689,387	695,371	674,603	674,749	663,746	.....	.....	.....	.....	.....	.....	.....
INDIANA, BLOOMINGTON AND WESTERN:													
1880	80,498	89,690	116,185	90,374	85,733	106,954	103,438	116,732	110,622	121,343	96,621	104,619	1,233,079
1881	90,283	83,261	192,085	203,677	200,064	199,846	83,764	117,956	195,307	181,674	160,826	156,697	.....
1882	195,824	175,755	206,235	205,934	182,554	186,133	.....	.....	.....	.....	.....	.....	.....
LOUISVILLE AND NASHVILLE:													
1880	674,455	575,035	612,593	563,883	655,014	976,229	772,537	827,088	931,910	1,000,326	953,086	949,184	9,491,346
1881	816,960	805,124	947,959	850,862	828,726	1,227,885	817,135	876,192	951,566	1,002,950	1,065,223	1,122,285	11,326,859
1882	950,065	960,036	1,073,745	950,007	946,435	1,187,385	.....	.....	.....	.....	.....	.....	.....
MOBILE AND OHIO:													
1880	250,116	204,094	168,301	140,091	129,249	121,855	131,621	140,593	184,246	264,714	251,368	287,373	2,373,621
1881	224,347	216,768	230,916	163,551	145,803	136,517	135,548	159,348	209,044	252,921	252,434	262,025	2,406,437
1882	161,433	158,154	152,651	145,272	137,645	132,572	136,398	.....	.....	.....	.....	.....	.....
NASHVILLE, CHATTANOOGA AND ST. LOUIS:													
1880	205,633	191,154	169,457	155,466	158,839	144,155	151,594	169,326	167,473	178,266	182,087	175,996	2,049,448
1881	178,143	190,866	207,710	183,525	104,430	154,549	150,430	168,317	179,979	172,121	152,059	173,127	2,075,256
1882	156,994	159,961	161,005	154,155	137,645	119,074	.....	.....	.....	.....	.....	.....	.....
NEW YORK AND NEW ENGLAND:													
1880	164,232	149,907	183,845	179,689	183,701	219,891	205,056	249,885	235,642	215,491	210,856	198 108	2,396,302
1881	189,749	173,614	212,019	216,913	217,185	231,518	246,821	280,524	299,573	261,199	242,412	237,729	2,809,255
1882	213,840	217,261	265,222	263,544	283,244	290,060	.....	.....	.....	.....	.....	.....	.....
NEW YORK, LAKE ERIE AND WESTERN:													
1879	1,147,173	1,207,391	1,356,780	1,372,755	1,350,574	1,230,419	1,273,533	1,450,223	1,492,497	1,713,697	1,515,835	1,398,224	16,509,127
1880	1,296,381	1,252,218	1,644,958	1,643,151	1,592,544	1,661,812	1,580,976	1,606,874	1,786,417	1,899,910	1,799,338	1,726,788	19,149,361
1881	1,443,437	1,425,765	1,847,261	1,709,057	1,776,891	1,794,982	1,787,081	1,772,895	1,734,200	.....	.....	.....	.....
NORTHERN CENTRAL:													
1880	334,494	330,860	415,325	386,130	329,788	419,193	450,298	453,923	464,093	512,918	459,054	494,310	5,050,387
1881	386,157	382,657	452,906	487,273	465,588	487,287	440,811	498,008	429,565	449,664	487,160	476,622	5,443,697
1882	407,368	413,551	430,194	435,129	482,607	482,752	.....	.....	.....	.....	.....	.....	.....
NORTHERN PACIFIC:													
1880	81,390	77,259	119,357	185,700	217,613	253,105	241,277	223,500	330,300	358,456	300,822	220,993	2,629,710
1881	116,508	78,803	162,984	216,210	312,705	412,024	404,180	411,624	490,096	565,485	428,903	434,331	4,044,576
1882	239,800	269,000	384,000	438,000	568,332	631,342	.....	.....	.....	.....	.....	.....	.....
PHILADELPHIA AND ERIE:													
1880	224,307	245,372	327,678	334,947	311,470	331,024	308,699	347,532	322,737	367,082	324,966	281,919	3,727,733
1881	224,303	225,501	285,573	293,323	343,792	350,585	291,669	303,849	276,522	292,392	284,078	282,772	3,454,309
1882	252,727	246,246	265,311	277,851	341,415	341,614	.....	.....	.....	.....	.....	.....	.....
ST. LOUIS AND SAN FRANCISCO:													
1880	198,091	195,948	193,146	176,164	167,664	173,607	213,297	259,995	280,873	328,194	290,329	226,063	2,698,371
1881	212,435	178,234	262,050	265,298	283,399	260,254	252,333	286,373	279,064	308,569	284,320	287,914	3,160,245
1882	256,784	244,654	274,959	242,806	253,419	240,177	.....	.....	.....	.....	.....	.....	.....
ST. LOUIS, ALTON AND TERRE HAUTE:													
1880	153,139	163,737	168,994	155,462	147,928	150,207	191,077	216,759	204,295	221,863	188,773	184,503	2,146,741
1881	175,725	166,012	201,137	197,447	172,177	165,896	158,674	189,295	187 299	179,921	162,544	153,852	2,112,801
1882	168,987	149,619	178,145	157,450	162,842	142,742	.....	.....	.....	.....	.....	.....	.....
ST. LOUIS, IRON MOUNTAIN AND SOUTHERN:													
1880	555,983	490,195	451,560	408,241	349,053	363,454	432,655	565,869	671,219	688,365	632,052	656,951	6,265,597
1881	570,957	560,791	704,002	548,300	479,075	474,302	533,512	644,386	690,400	719,239	687,280	709 498	7,319,744
1882	516,370	501,127	585,008	581,977	519,120	529,700	.....	.....	.....	.....	.....	.....	.....
ST. PAUL, MINNEAPOLIS AND MANITOBA:													
1880	180,239	137,645	261,798	333,014	281,899	243,407	272,089	232,579	274,188	345,057	300,675	297,641	3,160,231
1881	254,187	159,482	320,962	425,685	382,642	405,322	387,488	414,954	485,736	605,708	508,530	528,262	4,878,960
1882	395,461	418 358	531,004	570,890	858,902	856,417	.....	.....	.....	.....	.....	.....	.....
TEXAS AND PACIFIC:													
1880	245,785	219.165	215,070	174,177	141,083	153,066	195,711	226,073	266,570	303,666	312,184	301,858	2,754,408
1881	281,176	260,781	319,928	295,066	281,782	285,405	320,466	354,082	337,117	578,668	357,724	381,218	3,921,569
1882	310,785	255,644	332,911	359,543	409,228	384,713	.....	.....	.....	.....	.....	.....	.....
UNION PACIFIC RAILWAY:													
1880	1,433,636	1,393,992	1,730,509	1,937,220	2,027,269	1,928,528	1,934,215	1,913,035	2,270,179	2,707,860	2,251.148	1,869,335	23,448,445
1881	1,339,799	1,374,740	1,674,860	1,766,894	2,319,238	2,590,969	2,528,826	2,638,659	2,844,357	3,289 350	2,773,608	2,267,004	27,451,831
1882	1,961,088	1,759,863	2,226,832	2,462,004	2,491,590	.....	.....	.....	.....	.....	.....	.....	.....
WABASH, ST. LOUIS AND PACIFIC:													
1880	776,790	759,451	978,629	892,024	948,773	953,468	1,966,742	1,189,478	1,178,950	1,501,203	1,131,787	1,050,816	12,428,112
1881	811,617	818,922	1,121,592	1,023,482	1,144,660	1,308,993	1,131,751	1,542,838	1,490,027	1,396,300	1,399,555	1,328,278	14,461,579
1882	1,229,965	1,134,768	1,315,776	1,378,194	1,204,864	1,149,632	.....	.....	.....	.....	.....	.....	.....

On Holes.



In this world there is a great variety of holes, some of use and some worse than useless. There is the arm-hole to a coat, there is the rat-hole, key-hole, and a lot of others, including the knot-hole, which is not a hole till the knot is out. We heard of a man who bought a cake of beeswax weighing 5 pounds. After getting it home and breaking it, he found a large hole in the middle ; he immediately took it to the merchant, and accused him of cheating. The merchant told him it was a mistake, but if he would weigh the hole, he would deduct, and return him his money for the weight of the hole. The merchant being perfectly honest, made it right. But who would think of a patent on a hole? And yet this has been done lately. This is for an escape of passengers, in case of a railroad accident. But the holes are not seen till the accident takes place, when trap-doors are thrown open in the floor of the cars, in the aisle. How many during the past few years would have been glad to have discovered such a hole, and for the want of it have lost their lives, in the burning or upsetting of the car, who would have been saved by such a simple contrivance. Cars can be altered with very little expense, and built with little or no extra cost. More particulars can be had of J. McDougal, room 18, 43 Exchange place.

"The Blaine and Davis road" is the local name of the new West Virginia Railroad controlled by Senator Davis and ex-Secretary Blaine.

The longest three-quarter inch rod ever made was recently rolled at the Albany Iron Works in Troy, N. Y. It is 236 feet in length. The manufacture was experimental, to determine how long a rod could be rolled. The rolls moved with lightning speed to carry the rod through before it cooled.

Although an immense sum has been spent by Pittsburgh, Pa., for city water-works, and there is a debt thereon of five millions, the engines are practically useless from repeated breaks, and the city has to rely on pumps belonging to large iron manufactories, idle from the strike.

A train of twenty-five cars of tea and silk, which left San Francisco July 12, made the run to Kansas City in six days and six hours, and from Deming to Kansas City, a distance of 1,150 miles, in sixty-six hours. A second train of twenty-nine cars left San Francisco twenty-four hours later, and made the same time to Kansas City. This time is believed to be unprecedented.

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EXCELSIOR SELF CAR COUPLING.

Patented August 3, 1880.

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IT HAS NO EQUAL

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BABCOCK & WILCOX CO., WATER TUBE STEAM Boilers, 30 Cortlandt Street, N. Y.

BROWN MANUFACTURING CO., ABSORBENT Wiper Cloths, Providence, R. I.

BEARDSLEY, D. N. & CO., MANUFACTURERS OF Superior Oak and Chestnut Lumber, and Railroad Ties, 9 Murray Street, N. Y.

CHESTER STEEL CASTING CO., MANUFACTURE Steel Castings, Cross-heads, Rocker-arms, Pistonheads, etc., for Locomotives, 407 Library St., Phila., Pa.

DAVIDS, JOHN B. & CO., WRITING INKS, 184 William Street, N. Y.

DAVIS, JOHN H. & CO., BANKERS AND BROKERS, 17 Wall Street, N, Y.

DODGE & SINCLAIR, MANUFACTURERS OF RUBber and Leather Belting, 21 Park Row, N. Y.

EVANS, GEO. A. IRON AND STEEL RAILS, 74 WALL Street, N. Y.

EAGLE TUBE CO., BOILER TUBES, 614 to 626 WEST Twenty-fourth Street, N. Y.

EAMES VACUUM BRAKE CO., RAILWAY TRAIN Brakes, 15 Gold Street, N. Y.

FAIRBANKS & CO., STANDARD SCALES, RAILROAD and Warehouse Trucks, and Copying-presses, 311 Broadway N. Y.

GORDON & DUGGAN, RAILWAY SWITCHES, 28 State Street, Boston, Mass.

GUEST, WM. A. & CO., IRON AND STEEL RAILS, 41 and 43 Pine Street, N. Y.

GEORGE, EVAN P. Jr., COUNSELLOR AT LAW AND Solicitor of Patents, 4 and 6 Warren Street, N. Y.

HARLAN & HOLLINGSWORTH CO., MANUFACTURE Passenger Cars, Wilmington, Del.

HAYWARD, S. F. GENERAL AGENT BABCOCK Fire Extinguisher, 407 Broadway, N. Y.

IVISON, BLAKEMAN, TAYLOR & CO., STEEL PENS 753 and 755 Broadway N. Y.

JOHN STEPHENSON CO., TRAM-CAR BUILDERS, New York.

KAOLATYPE ENGRAVING CO., 104 FULTON ST., New York.

KNOX & SHAIN, MANUFACTURERS OF ENGINEERing and Telegraphic Instruments, 716 Chestnut Street, Philadelphia, Pa.

MOLLER & SCHUMANN, MANUFACTURERS OF Coach and Car Varnishes, Brooklyn, N. Y.

NATIONAL TUBE WORKS CO., MANUFACTURE Wrought Iron Pipes and Tubes, 104 and 106 John Street, N. Y.

NATIONAL RAILWAY PATENT WASTE COMPANY 240 Broadway, N. Y.

PARDEE CAR WORKS, PARDEE, SNYDER & CO., (Limited) Watsontown, Pa.

PERKINS & CHOATE, AGENTS FOR STEEL OR IRON Rails, 23 Nassau Street, N. Y.

RIEHLE BROS., STANDARD SCALES AND TESTING Machines, 115 Liberty Street, N. Y.

NEW YORK. AUG. 2, 1882.

THE FORTIETH SEMI-ANNUAL CASH DIVIDEND of the ILLINOIS CENTRAL RAILROAD COMPANY, being three and a-half (3½) per cent on its capital stock, will be paid by the undersigned September 1, 1882, to shareholders as registered at the close of business on the 12th of August, after which and until the 5th day of September the transfer-books will be closed.

L. V. F. RANDOLPH, Treasurer.

THE LAKE SHORE AND MICHIGAN SOUTHERN RAILWAY CO.

TREASURER'S OFFICE, GRAND CENTRAL DEPOT, NEW YORK, June 27, 1882.

The Board of Directors of this company have this day declared a QUARTERLY DIVIDEND of TWO PER CENT upon its capital stock, payable on Tuesday, the first day of August next, at this office.

The transfer-books will be closed at 3 o'clock P. M. on MONDAY the THIRD DAY of JULY next, and will be re-opened on the morning of Friday, the fourth day of August next

E. D. WORCESTER, Treasurer.

Rendle's Patent Systems of Glazing Without Putty.

Some of the largest railway stations in the world have been glazed on Rendle's system; for instance, the Carlisle Citadel station, 322,000 square feet of glass; Gordon street station, Glasgow, 130,000 feet; Bridge street station, Glasgow, 100,000 feet; Dundee station, 100,000 feet; etc., etc.

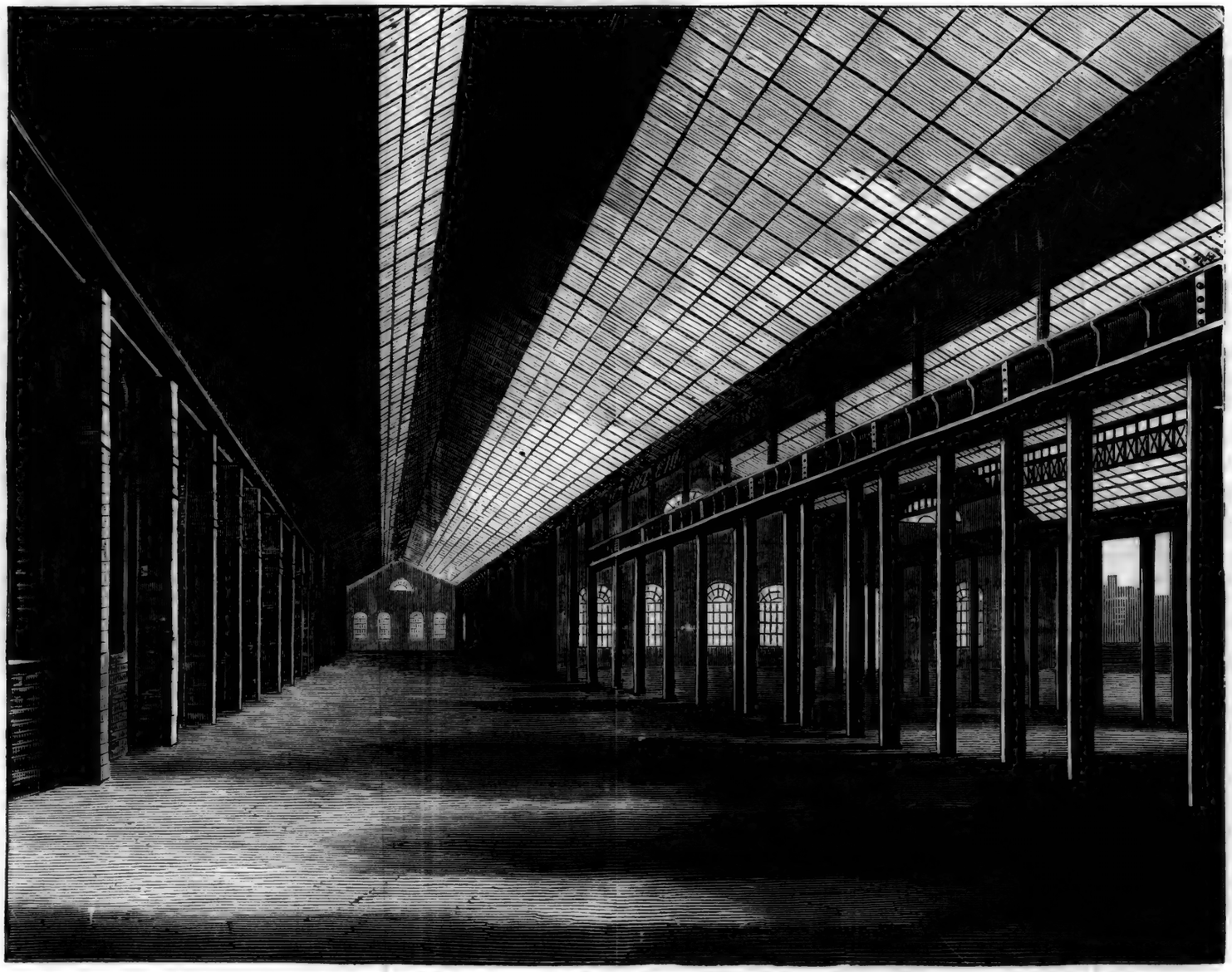
These systems have now been in practical use in the United States for more than a year, and have scored a decided success. Several railroad companies have adopted the systems for depot skylights, etc., among which are the New York Central and Hudson River Railroad (which was the first to introduce the systems in this country, for its new Buffalo depot, viz: a skylight 30x460 in.), New York, Pennsylvania and Ohio Railroad, Flint and Pere Marquette Railroad, etc.

A large number of manufacturing concerns have adopted the systems for top-lighting as follows: Yale Lock Manufacturing Company, Stamford, Conn., 52 sky-lights, 3x4 in., Renfrew Manufacturing Company, Adams, Mass., 132 sky-lights, 4 and 6x12, for their new weaving factory; Bamabo Manufacturing Company, Fall River, Mass., continuous sky-light, 20x220, for their new weaving factory; Hamilton Web Company, Wickford, R. I., continuous sky-light, 12x150; Messrs. Poole & Hunt, of Baltimore, Md., the well-known manufacturers of mill gearing, continuous sky-light, using nearly 5,000 square feet of glass; Messrs. Wm. Skinner & Sons' Silk Mills, Holyoke, Mass., sky-light, 6x45; Messrs. S. A. Greene & Sons, Clyde Bleachery and Print Works, Riverpoint, R. I., sky-lights, 6x32; Straight Line Engine Company, Syracuse, N. Y.; the Washburn & Moen Manufacturing Company, Worcester, Mass., six large sky-lights; the Holly Manufacturing Company, Lockport, N. Y., sky-light, 12x100; Messrs. Wallcott & Campbell, New York Mills, New York, seven sky-lights; N. W. Gardner, Esq., architect, Buffalo, nine sky-lights; Miami Soap and Oil Works, Cincinnati, O.; Messrs. Weaver & Seligman, East Saginaw, Mich., Lawn Tennis Association, New York, twelve sky-lights, 9x10; etc., etc.

The systems are especially adapted for roofs of conservatories, plant-houses, etc., and it is expected that they will very soon supersede the old unsatisfactory method of putty glazing.

In England more than five hundred conservatories, etc. have been glazed on Rendle's systems, and experience by work done in this country for more than a year shows that they are as well adapted for this climate as for that of England.

A large conservatory, 150 feet long, is now in process of erection for the Columbus (Ohio) Asylum for the Insane, under this system, and conservatories, etc. have already been erected in different parts of the country, among which is a conservatory, 20x50, for W. E. Story, Esq., proprietor of the *Times* newspaper, Chicago, which has given entire satisfaction; conservatory, 20x100, George Westinghouse, Jr., Esq., Pittsburgh, Pa.; Mrs. Robert Pitcairn, Pittsburgh, Pa., 20x55; Napoleon Hill, Esq., Memphis, Tenn.; Messrs. Muscowitz Bros., corner Fifth avenue and Thirty-first street, New York, etc., etc.



WHITWORTH GUN FACTORY, OPENSHAW, NEAR MANCHESTER.—GLAZED ON RENDLE'S PATENT "ACME" SYSTEM.

The systems have taken first premium at the Cincinnati Exposition; Boston, Mass., Charitable Mechanic Association, silver medal; Pittsburgh, bronze medal. In addition to these, three medals have been awarded in England and one in Paris.

Illustrated catalogues and further particulars can be had by addressing the patentee, Arthur E. Rendle, 7 Warren street, New York.

KNOX & SHAIN,

Manufacturers of Engineering and Telegraphic Instruments. No. 716 Chestnut Street, Philadelphia. Two Medals awarded by the Franklin Institute, and one by the Centennial.

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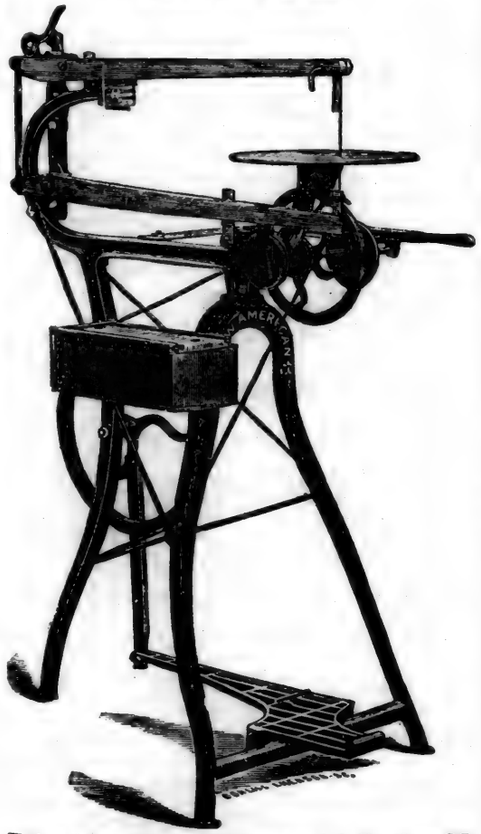
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Connecting at Syracuse, N. Y., at 7.15 P.M., with through sleeping cars for Cincinnati, Cleveland, Toledo, *DETROIT AND CHICAGO.*

3.00 P.M. CINCINNATI EXPRESS.

Pullman Sleeping Car attached, running through to Cincinnati without change. (Only Line running Pullman Cars from Boston.) This car runs *via* Erie Railway and N.Y., P. & O. R.R., making direct connection for Louisville, St. Louis, Kansas City, New Orleans, and all points in Texas and New Mexico.

3.00 P.M. ST. LOUIS EXPRESS.

THE ONLY LINE which runs a THROUGH SLEEPING-CAR from

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ARRIVING AT 8.00 A.M. SECOND MORNING.

Through sleeping car for Buffalo, Toledo, Fort Wayne, Logansport, Lafayette, Danville Tolono, Decatur and St. Louis, making direct connection with through Express Trains for Kansas, Colorado, Texas, and all points in the

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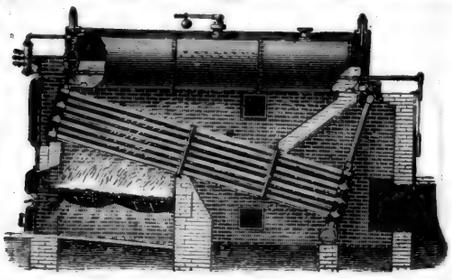
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During the Centennial season—six months closing September 10, 1876—the Erie Railway carried almost THREE MILLION passengers, without a single accident to life or limb, or the loss of a piece of baggage.

And for a whole year the official records of the United States Post Office Department show the arrivals of Erie Railway trains in New York, on time, to be from 15 to 27 per cent ahead of competing lines.

Facts well worthy the consideration of travelers.

E. S. BOWEN, *General Superintendent.* JNO. N. ABBOTT, *Gen. Passenger Agent.*



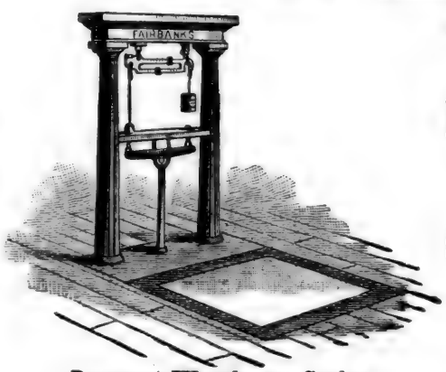
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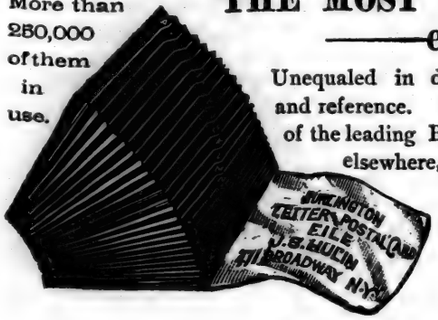
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The Coal Trade.

THE leading coal-carrying companies make the following reports of their tonnage for the week ending July 22, and for the year to that date, compared with their respective amounts carried to the same time last year :—

	Week.	1882.	1881.
Reading Railroad	195,355	4,850,716	4,620,121
Schuylkill Canal	11,313	184,858	254,716
Lehigh Valley	132,391	3,774,458	3,438,901
Delaware, Lackawanna and Western	111,243	2,311,467	2,214,479
Shamokin	29,609	572,165	569,692
Central R. R. of New Jersey	110,850	2,271,157	2,250,452
United R. R. of New Jersey	37,772	912,403	836,170
Pennsylvania Coal	34,213	684,458	679,219
Delaware and Hudson Canal	85,654	1,769,844	1,860,747
Huntingdon and Broad Top Mountain	6,176	234,927	274,324
Penn. and New York	26,392	909,724	891,578
Clearfield, Pa.	47,688	1,568,260	1,327,311

The total tonnage of anthracite coal from all the regions for the week ending July 22, as reported by the several carrying companies, amounted to 684,030 tons, against 646,007 tons in the corresponding week last year, an increase of 38,023 tons. The total amount of anthracite mined for the year is 14,654,903 tons, against 14,194,936 tons for the same period last year, an increase of 459,967 tons. The quantity of bituminous coal sent to market for the week amounted to 59,200 tons, against 101,897 tons in the corresponding week last year, a decrease of 42,697 tons. The total amount of bituminous mined for the year is 2,303,992 tons, against 2,686,976 tons for the corresponding period last year, a decrease of 382,984 tons. The total tonnage of all kinds of coal for the week is 743,230 tons, against 747,904 tons in corresponding week last year, a decrease of 4,674 tons, and the total tonnage for the coal year is 16,958,895 tons, against 16,881,912 tons to same date last year, an increase of 76,983 tons. The quantity of coal and coke carried over the Pennsylvania Railroad for the week ending July 22 was 222,763 tons, of which 175,907 tons were coal and 46,856 tons coke. The total tonnage for the year thus far has been 6,095,933 tons, of which 4,450,735 tons were coal and 1,645,198 tons coke. These figures embrace all the coal and coke carried over the road, east and west. The shipments of bituminous coal from the mines of the Cumberland coal region for the week ended July 22 were 9,531 tons, and for the year to that date 556,956 tons, a decrease of 530,386 tons as compared with the corresponding period of last year. The shipments were: To the Baltimore and Ohio Railroad—For the week, 7,662 tons; year, 462,463 tons; decrease as compared with 1881, 272,700 tons. Chesapeake and Ohio Canal—Week, 1,869 tons; year, 15,819 tons; decrease as compared with 1881, 201,443 tons. Pennsylvania Railroad — Week, none; year, 74,842 tons; decrease as compared with 1881, 59,750 tons. The Reading Railroad shipment for last week, ending July 29, was about 195,000 tons, of which 71,500 tons were sent to and 64,000 tons shipped from Port Richmond, and 8,500 tons sent to and 10,600 tons shipped from Elizabethport.—*Philadelphia Ledger, July 31.*

Progress in Telephony.

SOME important telephone results have been lately obtained by M. van Rysselberghe, the Belgian meteorologist, whose very ingenious meteorograph was shown at the Paris Exhibition last year. He has succeeded in eliminating from telephonic communication through a wire the inductive action of a neighboring telegraph wire (which gives a crackling kind of noise in the telephone). Moreover, he can employ the same wire at the same time for both telephonic and telegraphic work. Thus, in a recent experiment, a message was sent from Brussels by the Morse telegraph to the directing engineer of telegraphs in Paris; and an oral message sent by telephone was distinctly heard while the Morse receiver was in action. Paris is 344 kilometres wire length from Brussels. Among other recent telephonic connections we note Venice and Milan (284 kilometres), Berlin and Hamburg (288 kilometres), Paris and Dijon (314 kilometres), Paris and Nancy (353 kilometres). At the forthcoming exhibition in Munich telephony is to be tried between that town and Dresden, a distance of 550 kilometres (or about 343 miles). American accounts report experiments in progress as to what may and what may not be done in telephony on underground wires, a cable for the purpose having been laid by the American Bell Telephone Company along the Boston and Providence Railroad. There are 21 rubber-covered copper wires within a lead pipe, 10 of these being also covered with tinfoil to carry off extraneous induction currents, while 10 are twisted together; the twenty-first wire is covered with cotton and paraffined. A French naval committee has lately reported on the use of the telephone in giving operations. The transmitter approved as best is a small, flat, circular telephone, having interiorly two spiral magnets superposed. The Gaiffe telephone as receiver gives good effects. Microphones (both the ordinary microphone and the Ader) are pronounced less advantageous. A comparison was also made with the ordinary speaking-trumpet, which proves inferior to the telephone, especially as the depth increases (owing to the effects of pressure on the membrane in the case of the trumpet). Various modifications of the telephone appear from time to time. One of these is Bottcher's telephone, the peculiarity of which is that the magnet, instead of being fixed in the case, is suspended by steel wires, so that it can, to some extent, participate in the vibrations of the membrane, but in opposite direction. The magnetic variations are thus increased, and stronger induction currents introduced in the coil.—*London Times.*

The City of Cairo.

CAIRO is the capital of Egypt, the most populous city in Africa, and contains 380,000 people. Three-fourths of these are Mahommedans, 60,000 Copts, and the rest chiefly native Jews, and Greeks, Armenians and Europeans. The city lies mostly on the level plain of the Nile valley, and occupies a site about seven miles in circumference. From without its aspect is most enchanting, but within it is far less attractive, the houses being mostly built of mud or sun-baked brick, one-story high. Those of the rich, however, are from two to three stories high, and built of brick, wood or soft stone. The streets are dusty and neglected, and very little rain falls. A great rain is deemed a calamity, as it moistens the garbage, which quickly sends forth pestiferous exhalation. The water, which during the overflow of the Nile is conveyed into the city by a canal, becomes stagnant in May and June, and is another prolific source of disease. The different races that inhabit Cairo live in distinct quarters, of which there are many, as the Jew's quarter, the Frank quarter, the Coptic quarter, etc. The streets leading to each quarter are closed by gates at night. The city is surrounded by walls. It is the central station of the overland route to India, and its commerce is considerable. One of the most lucrative trades is that in precious stones and jewelry. It is connected by rail with Alexandria and Suez, and caravans annually arrive from Darfoor, Sennaar and Moorzook. Each year an immense caravan assembles at Cairo, to make the pilgrimage to Mecca, and this is the source of a great traffic.

Imports of Dry Goods at New York.

THE Imports of Foreign Dry Goods at New York for the month of July, were :—

ENTERED FOR CONSUMPTION.

	1880.	1881.	1882.
Manufs. of wool	$2,118,542	$1,798,987	$2,328,209
Manufs. of cotton	1,710,612	1,594,666	1,751,383
Manufs. of silk	2,570,055	2,472,397	3,034,761
Manufs. flax	842,286	836,749	1,023,138
Miscell. dry goods	489,881	466,620	610,863
Total ent. for consumption	$7,713,376	$7,169,419	$8,748,354

WITHDRAWN FROM WAREHOUSE.

	1880.	1881.	1882.
Manufs. of wool	$756,622	$619,842	$648,591
Manufs. of cotton	432,239	239,538	248,693
Manufs. of silk	379,707	267,122	444,534
Manufs. of flax	312,989	300,593	293,550
Miscell. dry goods	57,121	79,560	75,583
Total withdr'n from warehouse	$1,938,678	$1,506,655	$1,710,951
Add ent. for con	7,713,376	7,169,419	8,748,354
Total thrown on the market	$9,652,054	$8,676,074	$10,459,305

ENTERED FOR WAREHOUSING.

	1880.	1881.	1882.
Manufs. of wool	$1,491,640	$598,662	$1,018,946
Manufs. of cotton	568,737	277,273	425,677
Manufs. of silk	668,576	429,620	558,259
Manufs. of flax	517,438	347,848	426,881
Mis. dry goods	110,394	149,360	194,923
Total ent. for warehouse	$3,356,785	$1,802,763	$2,624,686
Add entered for consumption	7,713,376	7,169,419	8,748,354
Total ent. at port	$11,070,161	$8,972,182	$11,373,040

The Imports of Foreign Dry Goods at New York for seven months from January 1, were:—

ENTERED FOR CONSUMPTION.

	1880.	1881.	1882.
Manufs. of wool	$11,645,781	$9,227,753	$12,675,012
Manufs. of cotton	14,556,332	13,120,313	15,332,442
Manufs. of silk	17,538,783	15,255,565	21,125,096
Manufs of flax	9,004,508	6,915,630	8,486,455
Mis. dry goods	5,098,071	4,605,796	5,401,341
Total entered for consumption	$57,843,475	$49,125,057	$63,020,346

WITHDRAWN FROM WAREHOUSE.

	1880.	1881.	1882.
Manufs. of wool	$3,512,310	$4,511,747	$3,836,777
Manufs. of cotton	2,215,049	3,025,859	2,305,227
Manufs. of silk	2,892,340	3,042,894	3,258,033
Manufs. of flax	2,414,460	3,215,526	2,376,192
Mis. dry goods	1,083,954	1,437,448	1,443,935
Total withdrawn from warehouse	$12,118,113	$15,933,474	$13,220,164
Add entered for consumption	57,843,475	49,125,057	63,020,346
Total thrown on the market	$69,961,588	$64,358,531	$76,240,510

ENTERED FOR WAREHOUSING.

	1880.	1881.	1882.
Manufs. of wool	$5,931,616	$3,790,565	$4,686,459
Manufs. of cotton	2,984,533	2,577,250	2,637,060
Manufs. of silk	3,547,208	2,826,692	3,524,177
Manufs. of flax	3,927,839	2,500,310	2,451,875
Mis. dry goods	1,275,871	1,569,562	1,456,052
Total entered for warehouse	$17,577,067	$13,264,379	$14,755,623
Add entered for consumption	57,843,475	49,125,057	63,020,346
Total ent. at port.	$75,420,542	$62,389,436	$77,775,969

These figures represent only the foreign gold cost, freight and duty not included.

THE Railroad Commissioners of Illinois say that they have agreed to revise the present railroad classifications sufficiently to meet the wishes of the leading railroad companies, and no further controversy is likely to occur between the companies and the commissioners. The revised classifications will simplify rates and enable the roads to make a better show of earnings.

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Gray's Universal Automatic Car Coupler.

Invented by RICHARD E. GRAY, of Williamsport, Pa.

THERE is perhaps no article or device needed so much among the railroads in general as a car-coupler that will couple cars of unequal heights together without any inconvenience to the operatives, but also save the lives and limbs of thousands of brakemen. Public sentiment demands that there shall be a general revolution in that branch of railroading. Among the hundreds of railroads in our country there are men killed and other maimed for life every day in the year, from coupling cars by the present imperfect system. In most cases of death, or being crippled while coupling cars, it may be said to be a quadruple loss. First, the victim loses his own life or limb, as the case may be; second, his family loses his support; third, the community loses a citizen; fourth, the railroad companies lose a vast amount of money paid out for damages sustained by employes who are injured while in their service.

Out of over 63,000 patents that have been issued for car-couplers alone, not one of them has met the requirements of the railroad companies, as a freight-car coupler.

The principle of the pivet-hook system has come the nearest to it of any other, and is used successfully on passenger cars. But heretofore the mechanical construction of a coupler on that principal, has rendered it entirely inefficient for freight cars.

GRAY'S UNIVERSAL AUTOMATIC CAR-COUPLER, entirely does away with all links, springs, spring-locks, spring-levers, sliding-blocks, and similar objectionable devices heretofore employed for automatic couplers. The whole construction is plain, simple and durable, and there is not a weak point in it. While coupling cars with this there is no reason why a brakeman should ever lose his life or get crippled in any way; because under no circumstances does he have to go between them to either couple or uncouple. Cars of unequal heights are coupled without any changes or inconvenience as well as though they were uniform.

This invention relates to car-couplings of the class known as "twin" couplings, and more especially to that type in which the draw-bars or draw-heads, are provided with pivoted-hooks to constitute the coupling devices. The object of the invention is to bring into general use, more especially on freight cars, a coupling that is simple in construction, durable, and most efficient in coupling cars of unequal heights, and also to prevent accidents among the operatives.

The device is a *pivoted-hook automatic car-coupler* attached to the ends of the cars in the usual manner. The draw-head and pivoted-hook on each end of the car are precisely the same in construction. The draw-heads are similar to the ones used on the Pennsylvania Railroad Company's freight cars, with the exception of the slotted cap on the end for the link to pass through. In place of said cap, the ends of the draw-head jaws are rounded to help form a knuckle joint. There is a hook fitted into the recess between the said jaws, pivoted at the same point where the coupling pin at present in use passes vertically down through the draw-head. The pivot-pin is also the pin that draws the load. The said pin always remains intact. The said pivot, or draw-pin, is more substantial than the one now used.

In the present system of coupling there is a space of four inches between the jaws of the draw-head, where the coupling pin passes through, which gives the links, when coupled, a purchase, or leverage, of about two inches either way, which results very frequently in the bending or breaking of said pin.

In the Automatic Coupler there is no leverage at all when the draft comes on the pin, because the pivoted-hook fills the recess between the jaws of said draw-head; thereby rendering it impossible for the pivot, or draw pin, to either bend or break. The pivot-hook has a shank or tail end to it which reaches back from the pivot-pin about six inches. When the pivot-hook is in a coupled position the shank is in line or parallel with the draw-head, and between the jaws of said draw-head.

At the rear end of the shank, and near the inner edge of the shank and draw-head, there is a vertical opening, or hole, to admit a coupling-pin to rigidly hold the pivoted-hook to the draw-head in a coupled position. The said coupling-pin has a solid collar around the center of it, which rests upon the draw-head when in a coupled position. The upper end of said pin is fitted to move endwise through a vertical opening in a supporting arm, or yoke, that is firmly bolted to the top jaw of the draw-head, so that the said coupling-pin is always guided and supported in a vertical position, and prevented from being detached from the coupler.

In order to prevent the locking of the coupling-hook, by accidental or unauthorized closing to its coupling position, while insuring its locking when the two cars come together to be coupled, there is a pivoted latch fitted on the top side of the shank of the pivoted-hook which has a vertical opening corresponding with the the openings, or holes, in the draw-head and pivoted-hook shank. This latch, or plate is drawn out of its chamber, or recess, by a lug fastened on the top surface of the hook-shank, as the pivoted-hook is racked, or swung around when the cars are being uncoupled, thereby bringing the solid surface of the latch over the vertical opening of the pivoted-hook shank; therefore the coupling-pin is upheld in its unlocking position, and prevents the locking of the coupling-hook by accidental or unauthorized movement of said hook. In order to readily raise the coupling-pin from the side of the cars, so as to avoid the necessity of going between them or climbing on the platform to uncouple, there is a lever employed to raise the said coupling-pin, which is very simply and substantially fastened to the draw-head.

Now suppose that two cars are coupled, and the trainmen are desirous of uncoupling them. It matters not which side of the car the brakeman is on; he places his hand upon the end of the lever and presses down upon it and thereby raises the coupling-pin. The pivoted-hook readily swings, or rocks around as the cars separate.

The pivoted-latch is now drawn out so as to uphold the coupling-pin in an unlocked position, even if the pivoted-hook were moved back to its locking position; because the lug on said shank has no further control over it, on account of a concentric slot in said latch, which said lug moves back in, thereby leaving it out of its recess to uphold the coupling-pin until the cars come together to effect the coupling.

When the trainmen are desirous that the cars should not couple when they come together while they are shifting cars or making up a train, there is a hook provided and fastened to the end of the car to place the lever in, in order to uphold the coupling-pin and force the pivoted-latch automatically into the recess, thereby bringing the vertical opening in it to correspond with the vertical opening in the hook-shank. In this case the coupling-pin would drop to its normal position automatically, and effect a coupling when not desired, if the pin were not upheld by said lever.

When the brakeman is desirous of coupling said cars, he detaches said lever from the hook by which it has been held down; raises it up and lays it in another hook higher up on the end of the car, which is provided as a safeguard when it is desired that the couplers shall remain locked. The coupling-pin is now upheld by the pivoted-latch, and the pivot-hook is swung outward, thereby moving the shank out of the recess and across the path of the coupler of the approaching car, which is held rigid by the coupling-pin, which rests in its normal position. The nose of the coupler on the approaching car strikes the shank and pivot-latch of the unlocked coupler, and forces them into the recess, causing the vertical openings to coincide with those in the draw-head, at which time the coupling-pin drops automatically into the opening, and the coupling is effected. It matter not whether the cars are uniform, or vary two, four, six or eight inches in height; the coupling is effected with the same ease as though all were uniform.

Suppose that one railroad has adopted Gray's Universal Car-Coupler, and another road is still using the link system of coupling, and cars are exchanged; a provision is made to obviate any difficulty that might arise in effecting a coupling. In the heads of the pivoted-hooks are recesses to receive the coupling-links in common use for coupling cars, a pin passing vertically downward across those recesses to secure the link to the hook.

In a word, Gray's Universal Car-Coupler, is plain, simple, durable, not liable to get out of repair, works speedily and easily. If a car should be thrown from the track, turned over or precipitated down an embankment, it will disengage itself from the rest of the train and not drag the other cars along with it.

WHEN Sir Robert Peel introduced the bill for the increased grant to Maynooth, he rested his arguments less upon any broad scheme of policy which might have compromised him directly with powerful parties than upon the fact that the principle had been sanctioned, though obscurely, by Parliamentary authority. This gave occasion to Mr. Disraeli to make a hit at the Premier, which was at once humorous and true. He said that with him "great measures were always rested on small precedents; that he always traced the steam-engine back to the tea-kettle; that, in fact, all his precedents were tea-kettle precedents."

AMERICAN Railroad Journal.

ESTABLISHED 1831.

Steam Navigation, Commerce, Finance, Banking, Machinery, Mining, Manufactures.

SECOND QUARTO SERIES.—VOL. XXXVIII., No. 31.] NEW YORK, AUGUST 12, 1882. [WHOLE No. 2,416.—VOL. LV.

CONSTRUCTION.

THE Connotton Valley Railroad will be completed to Coshocton by October 1.

A TEN-MILE extension of the Little Rock, Mississippi River and Texas Railway, from Monticello to Warren, has been opened.

THE railway extension to the Hay River in New South Wales was opened by the Government July 4. The extension makes the line the longest in Australia, the Hay River being 450 miles from Sydney.

THE laying of track on the Alliance and Steubenville (southern) extension will begin at once. Steel rails are being delivered by the Pittsburgh, Fort Wayne and Chicago Railway, and the road will be pushed rapidly to Steubenville.

THE Ouachita division of the Little Rock, Mississippi and Texas Railroad has been opened for business to Warren, Bradley county. Regular freight and passenger trains are now running. The road is to be completed to Texarkana.

THE Utah extension of the Denver and Rio Grande Railway has reached Cimmeron, and track-laying is progressing at the rate of two miles per day. The Colorado Coal and Iron Company is working night and day in the manufacture of rails for the road.

THE International and Great Northern Railroad Company has authorized the immediate construction of thirty miles of the Trinity and Sabine Pass branch from Moscow, Polk county, to Forin, a connection with the East Texas Railroad at or near Woodville, Tyler county.

THE Cincinnati, Selma and Mobile Railroad is completed to its connection with the Alabama and Great Southern Railroad, except the trestle over Big Creek, 1,200 feet long. Material for the latter has at last reached the ground and trains will be running through in about fifteen days.

THE Buffalo extension of the Buffalo, Pittsburgh and Western Railroad will be in running order by September 1st. The rails are laid to the Erie crossing in Buffalo. The cars will enter the Buffalo, New York and Philadelphia depot, corner of Louisiana and Exchange streets.

THE Lehigh and Hudson River Railroad is completed from Greycourt, on the line of the New York, Lake Erie and Western Railroad, to Belvidere, N. J.; and a new time-table will be issued, taking effect on the 14th inst., at which time through trains will be put on, and the line opened for through business.

J. MURRAY MITCHELL has returned from England, where he has been to place the bonds of the Ottawa and Gatineau Valley Railway and Hull Colonization Railway in the London money market. He has been quite successful on his mission and the construction of the road will be pushed forward as rapidly as possible.

THE Sioux City and Pacific Railroad is now completed and open for business to Thatcher, Neb , 50 miles west of Long Pine, opening up the intermediate stations of Ainsworth, Johnstown, Wood Lake and Arabia. Thatcher, the present terminus, is 300 miles west of Missouri Valley. The line crossing the Missouri River at Blair intersects the Union Pacific at Fremont, cutting off 33 miles between Chicago and Fremont.

The annual statement of the Minister of Public Works, at Wellington, New Zealand, confirms the intention of the Government to raise a loan of $3,000,000 for a term of three years, $1,650,000 to be expended on railways, and the balance in the purchase of native lands, the erection of public buildings, for immigration purposes, and in the construction of roads and harbors. A special of loan $1,000,000 will be raised to complete the trunk railway.

THE Cairo (Ills.) *Argus* says that the Cairo and Texas Narrow Gauge Railroad is in running order for 195 miles from Bird's Point, where it crosses the Nobel and St. Francisville branch of the Iron Mountain road at a place newly named Paragould in Arkansas. From there it will be pushed on through Texas as rapidly as it can be constructed, and it will be entirely completed before many months. The incline of the road is just before the Iron Mountain incline at Bird's Point.

THE work of extending the Canadian Pacific Railway from Prince Arthur's Landing to the Nepigon, north of Lake Superior, is to begin immediately. C. Perry, who has charge of the location survey from Swift Current Creek to Old Bow Fort, beyond Calgarry, at the foot of the Rocky Mountains, states that his division has been finally located, and that Seiretan, another engineer, has completed the location of his line from Moose Jaw Creek, near An Appelle, to Swift Current Creek, thus completing the entire survey from Winnipeg to the Rocky Mountains; and at the rate at which the construction is now advancing the line will be completed to Calgarry by July, 1883.

INCORPORATION.

THE Ohio River and Indiana Railroad Company has filed articles of incorporation with the Secretary of State of Ohio; the capital is $500,000.

THE Chicago and Hocking Valley Railway Company has filed at Columbus, Ohio, a certificate including Vinton county in its list of counties.

A CERTIFICATE of incorporation of the New York and Council Bluffs Railway Company, with a capital of $5,000,000, has been filed in the office of the Secretary of State of Ohio.

THE Virginia Court of Appeals has issued a preemptory mandamus to compel the clerk of the House of Delegates to publish the bill incorporating the Virginia and Carolina Railroad as one of the acts passed at the last session of the Legislature.

A CHARTER was issued at the State Department, Harrisburg, Penn., on the 3d inst., to the Lehigh Rolling Mills Company, for the manufacture of iron and steel, with a capital of $1,000,000. The business office will be located in Philadelphia and the operations at Allentown. The stockholders are Ario Pardee, Hazleton; Ario Pardee, Jr., Montgomery county; Franklin A. Comly, Montgomery county; John R. Fell and Harry C. Cochran, Philadelphia.

A CHARTER has been issued to the Kanawha and Chesapeake Railroad Company. The road which it is proposed to build will commence on the north side of the Great Kanawha near Charleston, and run then by the most practicable route as far as may be on the north side of the river to a point on the Chesapeake and Ohio road on or near the Kanawha Falls in Fayette county, W. Va. The corporation is to be perpetual; will have its head office in New York City. The capital stock is $1,200,000; divided in $100 shares, which are held by Collis P. Huntington, New York; Isaac E. Gates, Elizabeth, N. J.; James B. Howes, North Tarrytown, N. Y.; Edward H. Pardee and George Howes, New York; William H. Hogeman and C. P. Snyder of Charleston.

THE longest bar of iron ever manufactured in this country was rolled at the Phœnixville (Penn.) Rolling Mills last week. The bar measured three-quarters of an inch in diameter and was 286 feet long.

Statement of the Public Debt of the United States, August 1, 1882.

DEBT BEARING INTEREST.

	Amount Outstanding.	Accrued Interest.
6 per cent loan 1863-'81 continued at 3½ per ct	$47,807,100 00	$139,437 37
5 per cent funded loan of 1881	401,503,900 00	3,513,159 13
4½ per cent funded loan of 1891	250,000,000 00	1,875,000 00
4 per cent funded loan of 1907	738,897,750 00	2,462,992 50
4 per cent refunding certificates	452,750 00	1,090 16
3 per cent navy pension fund	14,000,000 00	35,000 00
Aggregate of debt bearing interest	$1,452,661,500 00	$8,027,098 16
Interest due and unpaid		2,338,709 51

DEBT ON WHICH INTEREST HAS CEASED SINCE MATURITY.

	Amount Outstanding.	Interest due and unpaid
4 to 6 per cent. old debt, 1837.	$57,665 00	$64,174 81
5 per cent. Mexican indemnity stock, 1846	1,104 91	85 74
6 per cent. bonds, 1847-'67.	1,250 00	22 00
6 per cent. bounty land scrip, 1847-'49	3,275 00	213 06
5 per cent. Texas indemnity bonds, 1850-'64	20,000 00	2,945 00
5 per cent. bonds, of 1858-'78	7,000 00	875 00
5 per cent. bonds, of 1860-'71	10,000 00	600 00
6 per cent. 5-20 bonds, 1862, called	367,700 00	8,185 64
6 per cent. 5-20 bonds, June 1864, called	57,450 00	1,052 12
6 per cent, 5-20 bonds, 1863, called	70,550 00	18,617 11
5 per cent. 10-40 bonds, 1864, called	378,950 00	68,733 19
6 per cent. Consol. bonds, 1865, called	373,950 00	12,648 47
6 per cent. Consol. bonds, 1867, called	908,500 00	113,543 69
6 per cent. Consol. bonds, 1868, called	268,750 00	21,593 24
6 per cent. loan, Feb. 8, 1861, matured Dec. 31, 1880	80,000 00	4,950 00
5 per cent. funded loan 1881, called	1,085,800 00	17,766 64
Oregon War Debt, March 2, 1881, matured July 1, 1881.	8,100 00	1,579 50
6 per cent loan of July 17 and Aug. 5, 1861, matured June 30, 1881	667,350 00	19,558 50
6 per cent loanof July 17 and Aug. 5, 1861, continued at 3½ per cent, matured Dec. 24, 1881, and Jan. 29, 1882, called	8,793,700 00	117,054 00
6 per cent. loan of March 3, 1863, matured June 30, 1881.	192,200 00	6,693 00
1-10 to 6 per cent. Treasury notes, prior to 1846	82,525 35	2,668 06
1-10 to 6 per cent. Treasury notes, 1846	6,000 00	206 00
6 per ct. Treasury notes, 1847.	950 00	57 00
3 to 6 per cent. Treasury notes, 1857	1,700 00	99 00
6 per ct. Treasury notes, 1861.	3,000 00	364 50
7 3-10 per cent. 3 years' Treasury notes, 1861	16,300 00	1,104 43
5 per cent. 1 year notes, 1863.	41,975 00	2,110 85
5 per cent. 2 year notes, 1863.	32,750 00	1,627 30
6 per ct. compound interest notes, 1863-64	220,360 00	45,017 47
7 3-10 per cent. 3 years' Treasury notes, 1864-65	138,900 00	20,437 21
6 per cent. certificates of indebtedness, 1862-63	4,000 00	253 48
4 to 6 per cent. temporary loan, 1864	2,960 00	244 19
3 per cent. certificates, called.	5,000 00	394 31
Aggregate of debt on which interest has ceased since maturity	$13,909,715 26	$555,384 51

DEBT BEARING NO INTEREST.

Demand notes, 1861-62	$59,695 00	
Legal tender notes, 1862-63	346,681,016 00	
Certificates of Deposit	12,730,000 00	
Coin certificates, 1863	5,017,940 00	
Silver certificates, 1878	67,119,210 00	
Unclaimed interest		5,726 51
Fractional currency, 1862, 1863 and 1864 $15,422,403 77		
Less amount estimated as lost or destroyed, act of June, 21, 1879 8,375,934 00		
	7,046,469 77	
Aggregate of debt bearing no interest	$438,654,330 77	$5,726 51

RECAPITULATION.

	Amount Outstanding.	Interest.
Debt bearing interest in coin, viz:		
Bonds at 6 per cent., continued at 3½ per cent.	$47,807,100 00	
Bonds at 5 per cent, continued at 3¼ per cent.	401,503,900 00	
Bonds at 4½ per cent.	250,000,000 00	
Bonds at 4 per cent.	738,897,750 00	
Refunding certificates	452,750 00	
Navy pension fund, 3 p.c	14,000,000 00	
	$1,452,661,500 00	$10,365,807 67
Debt on which interest has ceased since maturity.	13,909,715 26	555,384 51
Debt bearing no int., viz:		
Old demand and legal-tender notes	$346,740,711 00	
Certificates of deposit	12,730,000 00	
Coin & silver certificates.	72,137,150 00	
Fractional currency	7,046,469 77	
	$438,654,330,77	
Unclaimed interest		5,726 51
	$1,905,225,546 03	$10,926,918 69
Total debt, principal and interest to date, including interest due and unpaid	$1,916,152,464 72	

AMOUNT IN TREASURY.

Interest due and unpaid		$2,338,709 51
Debt on which interest has ceased		13,909,715 26
Interest thereon		555,384 51
Gold and silver certificates		72,137,150 00
U. S. notes held for redemption of certificates of deposit		12,730,000 00
Cash balance available Aug. 1, 1882		139,427,072 24
		$241,098,031 52
Debt, less am't in Treas'y Aug 1, 1882		$1,675,054,433 20
Debt, less am't in Treasury July 1, 1882		1,688,914,460 72
Decrease of debt during the month		$13,860,027 52
Decrease of debt since June 30, 1882		$13,860,027 52

BONDS ISSUED TO THE PACIFIC RAILROAD COMPANIES, INTEREST PAYABLE IN LAWFUL MONEY.

	Amount Outstanding.	Accrued Interest not paid.
Central Pacific bonds, 1862-64	$25,885,120 00	$129,425 60
Kansas Pacific bonds, 1862-64	6,303,000 00	31,515 00
Union Pacific bonds, 1862-64	27,236,512 00	136,182 56
Cent. Branch Union Pacific bonds, 1862-64	1,600,000 00	8,000 00
West'n Pacific Bonds, 1862-64	1,970,560 00	9,852 80
Sioux City & Pacific bonds, 1862-64	1,628,320 00	8,141 60
Totals	$64,623,512 00	$323,117 56

Interest paid by the United States, $55,344,682.74; interest repaid by transportation of mails, &c., $15,221,035.61; interest repaid by cash payments: 5 per cent net earnings, $655,198.87; balance of interest paid by United States, $39,468,448.26.

The foregoing is a correct statement of the public debt, as appears from the books and Treasurer's returns in the Department at the close of business, July 31, 1882.

CHARLES J. FOLGER,
Secretary of the Treasury.

The American Bankers' Convention.

SPEAKING of the subject to be discussed at the Convention of the American Bankers' Association, to be held at Saratoga on the 16th inst., George Marshland, corresponding secretary of the Association, in an interview, is reported to have said :—

"The convention this year will discuss banking progress and development; will deduce from the speeches and communication proper lessons for instruction as to the progress already achieved and the dangers which threaten the financial situation, and devise means by which such dangers may be averted.

"Another important subject will be the South, the want of diversified industries there, and the need of emigration. Our object is to enrich the South, and papers will be read by southern gentlemen in regard to the growth and progress of the country. A series of papers will also be read on banking in the Western States, on banking in the State of New York and the interior, on the importance of sound banks that do not issue currency, but do business under State laws and operate harmoniously with the national banks and private banking institutions, so as to improve our whole banking system and make it more capable of meeting the growing requirements of our national commerce and augmenting wealth.

"Another prominent topic will be the changes in our banking system, which are due to the fact that New York is becoming every year more and more the center of international exchanges. To meet the pressure of the expanding business of the banks it has been suggested that a broader basis of capital is necessary, so as to give greater stability to banking machinery, on which rests the whole fabric of our commerce and trade. It is well-known that banking capital in New York is not augmenting in proportion to the increase of business done. Twenty-five years ago the banking capital of the City was about $65,000,000, and the exchanges through the Clearing-house were $8,000,000,000. At present the aggregate of bank capital is less than it was a quarter of a century ago, while the exchanges of the year are $48,000,000. Thus, with a superstructure five times as great, the banking mechanism has a basis of capital which is contracting instead of enlarging with the augmentation of pressure caused by the rapid growth of the work it has to do.

"The progress of this mischievous diminution of the capital of the banks, which has been noted in all our large cities just as in New York, is causing grave anxiety among the financial communities, and one of the chief objects of the convention this year is to investigate it, and discover, if possible, some efficient remedy, so that our banking system will be responsive to the wants of the country, and will continue to be what it was through the financial pressure of the war, as stable and free from panics and financial revulsions as the other banking systems of Europe.",

THE Allen Paper Car Wheel Company already find it necessary to make large additions to their new mill at Morris, Ills. A boiler house 42 by 68 feet, to contain six boilers has been put under contract to be completed within ninety days.

A DECISION was recently rendered in the United States District Court of Ohio, on the question of discrimination in freights. The complainants were coal dealers who were charged higher rates for freight than other parties who made larger shipments, and for this they brought their action against the Pennsylvania Railroad Company for violating the laws relating to common carriers. The Court has decided that a difference in freight rates is justifiable by the difference in cost of shipment, but that the quantity which a shipper may send in the course of a year does not entitle him to a discrimination against a shipper who sends less in a year. It makes a difference to a railroad whether one ton or a thousand tons be shipped at a time, but it is a matter of indifference whether the same quantity of goods be delivered by one or by several shippers in the course of a year's business. Railroad companies under this decision have no right to make any discrimination in freight rates that are not justified by actual difference in expense of carrying.

Journal of Railroad Law.

SUPREME COURT OF PENNSYLVANIA.

MOORE AND WIFE *vs.* RAILROAD COMPANY.

A trespasser upon the tracks of a railroad company cannot recover damages for injuries received from passing trains, and a child of tender years is no exception to the rule.

Cauley v. R. R. Co., 37 Legal Int. 513, followed.

Sterret and Trunkey, JJ. dissent.

Error to the Court of Common Pleas No. 3 of Philadelphia county.

Opinion by GREEN, J., Jan. 23, 1882.

The only evidence in this case as to the position of deceased when he was struck was that given by the plaintiff's witness. He testified: "The boy was on the outer side, on the end of the sleepers, walking, at twenty to twenty-five feet north of telegraph pole; he was walking from sleeper to sleeper when I saw him; about a second of time from my sight of him and when he was struck." He also said: "the lad was twenty or twenty-five feet north of telegraph pole when struck * * * walking on outer edge of sleeper towards Orthodox street." At another place he testified: "I squatted down to look under train running up and saw boy on outer end of sleepers walking; the train then was right on him; train struck him." The foregoing being the only testimony as to what the boy was doing at the moment he was struck, it was affirmatively established, and entirely undisputed, that the deceased was walking on and along the track at the time of the accident. He was not on the track at a public crossing, nor was he in the act of crossing. It is true that the railroad track at this place was laid upon the bed of a public street, and hence the right to cross it was not limited to the highway or street crossings. But the boy was walking *along* the track and not across it when he was struck. This he clearly had no right to do. There was an ample sidewalk and roadway for all foot passengers and others desiring to proceed in the same direction with the railroad. The boy was sent on an errand to a store on Orthodox street. He had not yet reached that street, but was going toward it. Instead of walking on the foot-walk at the side of the street, or even in the roadway, until he reached Orthodox street, and then crossing the railroad track, he appears to have diverged from both, if he was at any time upon either, and of that there is no evidence, and walked upon the cross-ties of the railway. This, at least, is all that appears in the testimony given by the plaintiffs of which there is no contradiction. Of course, in such circumstances, he was a trespasser, and not only put himself in peril by his rashness, but also endangered the safety of passing trains, and the lives of passengers. We have so frequently held that in such circumstances there can be no recovery that it is unnecessary to quote the authorities. As the testimony was entirely undisputed, it was the duty of the court to pass upon it, which they did by directing a non-suit. In this there was no error. The circumstance that the trespasser in this instance was a boy ten years of age can not affect the application of the rule. The defendant owed him no greater duty than if he had been an adult. They are not subject to an obligation to take precautions against any class of persons who may walk on and along their tracks. In Railroad vs. Hummell, 8 Wr. 375, the rule was applied to the case of a child seven years old. And so also in the latest case of the kind that has been before us, Cauley v. Railroad, 37 Legal Intelligencer, 513, the rule was in no wise relaxed, although the person injured was a boy of tender years. In the first of these cases we used the following language, having reference to the facts in evidence: "But if the use of a railroad is exclusively for its owners, or those acting under them; if others have no right to be upon it; if they are wrongdoers whenever they intrude, the parties lawfully using it are under no obligations to take precautions against possible injuries to intruders upon it. Ordinary care they must be held to, but they have a right to presume and act on the presumption that those in the vicinity will not violate the laws; will not tresspass upon the right of a clear track; that even children of a tender age will not be there; for though they are personally irresponsible, they cannot be upon the railroad without a culpable violation of duty by their parents or guardians. Precaution is a duty only so far as there is reason for apprehension. No one can complain of want of care in another where care is only rendered necessary by his own wrongful act."

This language is entirely appropriate to the present case, with the added force derived from the testimony of one of the plaintiffs, that the deceased, his son, was a bright, intelligent boy, strong and healthy, and of rather exceptional capacity, and nearly ten years of age. If the rule against trespassers on railroad tracks is made to depend upon the intelligence and age of the trespasser, it is easy to see that the law upon that subject will very soon become involved in inextricable confusion. Seeing no error in this record the judgment is affirmed.

Trunkey and Sterrett, JJ. dissent.

MacGregor J. Mitcheson, Esq., for the plaintiffs in error.

Wayne MacVeigh, Esq., for defendant in error.—*Phila. Legal Int., Aug.* 4.

Bridging the Hudson River.

THE proposal to erect a bridge over the Hudson River at Cornwall by the Highland Junction Railroad Company has aroused great interest among the residents of Orange and Dutchess counties, in this State, through which the bridge and the ten miles of road will pass. Charles H. Swan, General Manager, in a communication to the *Herald*, says that "the bridge will form the connecting link between six or more great lines of railway—the New York, Lake Erie and Western, the New York, Ontario and Western, the Lehigh and Hudson, over which the Lehigh Valley, Delaware, Lackawanna and Western, Pennsylvania, Central of New Jersey, Philadelphia and Reading, and Baltimore and Ohio will find their way to the New York and New England Railroad, to Boston and the entire East. By this means an all rail communication will be established between the immense coal regions of Pennsylvania and the Eastern States without the necessity of breaking bulk. Fifteen years ago passengers and freight were obliged to cross the river at Albany by ferry in summer and in winter on the ice. The increase of traffic compelled the erection of a bridge, and now there are three bridges. At the point where our company proposes to bridge the Hudson traffic now demands it.

"At Albany there is only one feeder to the bridge from the West, and the Boston and Albany Railroad from the East and the Hudson River Railroad from the South, while via this new route we shall have seven great lines of roads from the West. New York City will be greatly benefitted by this bridge, as coal can be brought from the mines via the bridge to the New York City and Northern Railroad and delivered by rail in this city to coal yards, which system prevails in Philadelphia. The new route is an important one, and since the New York and New England road has been opened to Fishkill, where they now use a ferry to cross the river to connect with the Erie, its earnings have increased for the first five months of this year over those of last year twenty-three per cent. Our company have completed their surveys and are getting ready for active work. We have power under a charter granted us to build the bridge, and we propose to go ahead.

"There will be no obstruction to navigation, as the bridge will be 150 feet high. No other place on the river offers so many natural facilities for the construction of such a work. Two mighty natural buttresses on each side of the river stand ready as foundations to sustain the bridge. The business is there, only waiting means for crossing at less expense. Within a few days we shall elect a new board of directors, after which active work will be commenced."

THE Arabic for cat is "gitt." That ought to be the English of it, too.

THE last arch of the Philadelphia and Reading Railroad bridge at Wissahickon has been completed.

Two barges with 672 tons of steel rails arrived at Belleville, Canada, on the 24th ult. They are to be laid on the Grand Junction Railway lines between Belleville and Stirling. About 1,000 tons more will be laid on this line.

A WHISTLING buoy was placed in position near Kitts Rocks, outside the harbor of Portsmouth, N. H., on the 31st ult. Popular opinion would doubtless consign all the whistling boys to the same locality, while correspondent "S," in this week's issue, would gladly hav all the "smoking" boys placed in the sam position, too.

A GENTLEMAN who has just returned Georgia gives us a most pleasing account o home life of Mr. J. Van Buren, *the oldest motive engineer in the United States.* He lives Clarksville, Ga., among the mountains, and is considered the authority on horticultural matters for that region, and his advice is sought after and his opinion highly regarded in other matters as well. He is now 82 years of age and his house, clean, neat and nicely painted, is completely embowered in flowers, while the grounds show thrift and enterprise. We hope he has many years of life still before him.

American Railroad Journal.

ESTABLISHED 1831.

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CONGRESS AS A GUARDIAN OF THE PUBLIC WELFARE.

CONGRESS has at last adjourned, and it is note worthy that the popular feeling for it is one of decided contempt. The newspapers, which are not at all times safe guides or indications of public opinion, are, with unusual unanimity, without regard to party bias, condemning it in the most outspoken terms. The principal charge laid upon it as a body is a reckless disregard of the public revenues, as shown in more lavish appropriations for carrying on the government than were ever before known. The total amount appropriated, ordinary and extraordinary, is stated at $294,000,000, which the Democrats allege is $78,000,000 more than for the preceding year when the Democratic party held the purse-strings, in the House at least. Making all due allowance for the scanty appropriations made by Democrats, which were necessarily afterwards supplemented by deficiency bills, there remains the great fact that the appropriations for government uses are rapidly increasing, out of proportion to the growth of numbers, wealth, or perfection of governmental service rendered. Nor can either of the political parties lay claim to any particular credit, or shirk the blame for this state of things—for sins of omission or commission—the fault rests upon both, and involves causes which lie deeper than mere partisan policy.

The complaint which members will find it hardest to escape is that of squandering nearly $22,000,000 on what are called "Rivers" and "Harbors," only a few of which have any merit. This is nothing more nor less than a growing and monstrous abuse of power, as it is expected to serve as a recommendation to the members for renomination in their several districts. Congressmen feel this as they never felt it before. One of the most hardy and shameless of those who voted to override the veto, justified it by an allusion to the appropriations for new furniture in the White House, and another, by charging that the President was evidently swayed by the railroad owners who were jealous of the water transportation. These excuses furnish evidence of the internal unsoundness of our national legislative body. It is true that the large surplus of income over the necessary outgo is the temptation to this extravagance; and it is becoming painfully evident that the men we elect to impose our taxes and expend them wisely are not to be trusted with so much power: they are tempted beyond their strength. Can the great body of the people be made to understand this fact, and bear it in mind in their selection of representatives?

Both parties have tried to make a record for a desire to reduce unnecessary and vexatious taxes; but they have not done it, and have shown more anxiety to be able to lay the fault to their adversaries than to do the desired work. A full Treasury seems to be a continued invitation to waste and pilfering; and it seems we must wait until the pressure of events, such as a period of prostrate business, rather than the sagacity of law-makers, shall cut down the expenses.

In the language of one of themselves, "Congress has become demoralized." This is the fact, in the strict sense of the term; there has been a lowering of the standard of moral sense. This has come about by the trade of politics, whereby both parties are found bidding for the vote of the rabble of ignorant, and not altogether honest, populace. This is the "floating vote;" and to gain this, nothing, in the opinion of the candidates, seems so potent as spoils. The result is, as might be expected, a collection of broken-down lawyers and business failures, whom their neighbors will hardly trust with any business or financial responsibility. They are charged with the solemn power of levying taxes and spending the money so raised. The result is a systematic voting of money out of the pockets of those who have, by the help of those who have not, having either neglected their equal chances or squandered what they did have. This perhaps is one of the rooted difficulties of a government which accords to the adult, having nothing but his life and liberty to take care of, the same voice in public affairs as he who has both life, liberty and property. Owners and managers of railroads, who represent not merely the accumulated property of the country, but also its business and prudence, owe it to themselves and to the community to let their influence be felt in the selection of Congressmen. They are forced into political interference; for these politicians will, by the let-alone policy, plunge their hands into the pockets of their more provident neighbors, and not content with this, will presently insist upon taking control of the savings and directing the railroad management and the diversion of the revenues.

The Congress which has just adjourned has with difficulty been restrained from assuming the control and regulation of fares and freights on all the railroads of the country. It has a few weeks of life left yet next session; and, although it is powerless to accomplish this purpose, its successors are to be chosen in the meantime; and it is here that the custodians of all the great vested interests should do their work. Some of the States are actually assuming the prerogatives within their borders which

Congress desires over the whole country. Aside from the urgent necessity for raising the standard of integrity for general purposes, it is imperative in the interests of property that it should be done at the fountain of political preferment, rather than wait until the agrarian element is in a majority power and then act.

The Hannibal and St. Joseph Railroad Bond Case.

In 1851 and 1855 the State of Missouri issued its bonds to aid the construction of the Hannibal and St. Joseph Railroad for the principal sum of $3,000,000, drawing 6 per cent interest, and which fall due one-half in 1885 and one-half in 1895. The company regularly paid all of the interest on these bonds from their issue, even during the war, down to July 1, 1881. The State defaulted on its railroad bonds during the war, and in 1865 it owed about $20,000,000 of bonds on which there was about six millions of unpaid interest. None of these, however, were the Hannibal and St. Joseph bonds.

In 1865 the Legislature authorized the company to issue $3,000,000 of bonds at 6 per cent interest, mortgage its property to trustees to secure the same, and further provided that "whenever the said trustees should pay into the treasury of the State a sum of money equal in amount to all indebtedness due or owing by said company to the State, and all liabilities incurred by the State, by reason of having issued her bonds and loaned the same to said company as a loan of the credit of the State, *together with all interest that has, and may at the time when such payment shall be made, have accrued* and remain unpaid by said company, and such fact shall have been certified to the Governor of the State by the Treasurer, the Governer is required to make over and assign to the said trustees all of the first lien of the State."

On the 20th of June, 1881, the trustees for the company paid into the State treasury, $3,000,000 and interest up to July 1, 1881, and received the Treasurer's receipt and certificate. When this receipt and certificate were presented to the Governor he refused to make the assignment of the State's lien unless ordered by the court to do so, claiming a larger sum. The company had advised the State in advance of the proposed payment, and the State on the 26th of March, 1881, passed an act in anticipation of this payment which provided that the State officers should apply the money received from the trustees to the payment of the outstanding five-twenty option bonds of the State and other State bonds as fast as they should mature, and until money could be so applied to be invested by the State officers in United States or Missouri sixes. If it had been thus applied and thus invested the amount of State indebtedness drawing 6 per cent interest would by reason of such payment have been by this time nearly extinguished. The State officers, instead of thus applying and thus investing the money put it in bank, drawing interest at the rate of only three-quarters of 1 per cent per annum, where it has remained ever since. Afterwards the State not only refused to assign the lien but even refused to return the $3,000,000 and would do nothing.

The company brought suit to compel it to make the assignment, and it was recently heard and decided by Judge McCrary, who in his opinion adopts the theory of the company that the act of 1881 was mandatory upon the State officers and they were bound to apply and invest the money according to its directions, and that if this act had been complied with about $90,000 additional to the $3,000,000 already paid would have been and is the utmost that in any view the State could claim. The opinion throughout fully sustains the theory of the company.

The decree of the Court is that on the payment of an amount approximately $90,000 (the exact sum to be computed by the Master), the State will be enjoined, and when the exact amount is ascertained, which cannot exceed $100,000, the trustees for the company will be entitled to the full assignment of the State's lien. The opinion and the judgment of the Court sustain every position taken by the company except that the company claimed that the $3,000,000 was a full satisfaction of all its obligations and that it was not bound to pay even the $90,000. The claim of the State was that the company owed not simply $90,000 but $1,700,000, and that it was not under any obligation to comply with the act of 1881. The decision on both points is against the State and in favor of the company, and is understood to be entirely satisfactory to the latter. The company was represented in the litigation by ex-Judge Dillon, General Swayne and Mr. Elihu Root, of New York, and the State by Mr. Glover and Henderson & Shields, of St. Louis, and by the Attorney-General of the State.

Vermont Central and Vermont and Canada Railroads.

The opinion of the Supreme Court of Vermont in the case of Langdon against the Vermont and Canada Railroad *et al.* has been filed. It was drawn up by Justice Redfield, of Montpelier, and was partly summarized in the mandate of the court previously published. It decides in substance that possession and management of the Vermont Central and Vermont and Canada Railroads and property connected therewith, has been in the Court of Chancery, in the hands of managers appointed by and holding for the Court as its officers, continuously from 1861 to the present time, and that the cause in which they were appointed during that whole period has been and still is pending, that the deduction which has been drawn from the opinion of the Supreme Court delivered by Judge Barrett, in 1877, that the judicial custody and management of the property ceased in 1864, is erroneous and unfounded —the management has been judicial, and the fact that for many years the parties in interest consented to and acquiesced in all that was done, and any possible errors in procedure, do not impair the jurisdiction of the Court, its judicial hold of the property or the judicial character of its decrees; that the Court had full judicial power to appoint the Central Vermont Company receivers and managers on the petition, as it did in 1873; that the debt legitimately incurred by the managers since 1861, after applying all equitable assets, is a charge in the nature of an equitable mortgage upon the whole property of the trust, and will be enforced by strict foreclosure. The claim made in the argument that this should be enforced, if at all, only against the income of the property, is not sustained. It is upon the corpus, including franchises. It stands like any other trust. The owners pooled their property for a common purpose, and the expenses incurred in its administration they thus imposed as debts upon the property, and they must be paid. The statute of frauds has no application. The Canada company has no estate except its perpetual right to receive rent. As this is subjected to the payment of trust debts its entire property is gone unless redeemed by the payment of them. Neither that company nor the Central can get its road out of the possession of the Court until the receiver's debt is paid. It is not strange that the property thus pooled and put to hazard in a great enterprise should be lost to its original owners. Such is the common fate. The compromise decree of 1864 has been claimed to have no more binding effect than a contract of the parties. This is not true, because the property was in the custody of the court in an adversary proceeding, and this was merely an act of procedure in its administration. The consent and agreement of the parties cannot detract from its judicial character and binding force. The Court had full jurisdiction at the time and the decree was founded on evidence as well as consent. It is therefore binding upon all parties until set aside. The claim that the property by some alchemy has drifted out of the judicial hold and been set adrift because of some error in procedure or administration, is without legal foundation, and would be a caricature upon justice. It has not, being once lawfully in the custody of the Court, without knowledge of the Court or parties so drifted out of the jurisdiction that rights in it now can only be settled by wreckers in a scramble for salvage.

No More Chinese.

The Anti-Chinese law takes effect to-day. The Chinaphobists of the Pacific coast may henceforth hurl back every Mongolian who attempts to set foot on these shores, and the fortunate Celestials now with us will enjoy a growing monopoly of the laundry business, which cannot long escape the attention of Mr. Thurber. The fifty thousand Chinese laborers in Cuba, soon to return to China, must take some other route than across American territory, and hence the five million dollars which they would leave in the United States will go into foreign pockets. These thing sare not likely to improve our friendly relations with China, and even California, with its great interests in Asiatic commerce, may perhaps find that it will loose quite as much as it has expected to gain by the obnoxious law which the politicians of the Pacific slope have forced upon the country.—*N. Y. Herald Aug.* 5

The Bethlehem Iron Company's Furnace at Bergen, Northampton county, Penn., has been relighted after thorough repairs.

The Stock Exchanges and Money Market.

New York Stock Exchange.

Closing Prices for the week ending Aug. 9.

	Th.3.	F. 4.	Sat.5.	M.7.	Tu. 8.	W.9.
Adams Express	.....	140	140	139	.....	.....
Albany and Susq.	.....	....	.....	.....	.....	.....
1st mortgage	.....	.....	....	.....	....	.....
2d mortgage	.....	.....	.....	.....	.....	.....
American Express	91⅞	.....	95	95	.....	94¾
Burl., C. R. & Nor.	.....	....	80	81½	. ...	.....
1st mortgage 5s	.....	.....	.....	.....	.....	101¾
Canada Southern	64½	63¾	64	66½	64¾	64¾
1st mortgage guar	.....	93½	93½	.....	93½	93½
Central of N. Jersey	79⅞	79	79	77⅝	79⅛	80¾
1st mort. 1890	.....	.....	115¼	.....	.....	....
7s, consol. ass	.....	.....	.....	.....	.....	....
7s, convertible ass.	.....	111¾	....	.....	111¾	.....
7s, Income	.....	.....	.....	.....	.....	.....
Adjustment	... .	.....	....	.....	.....	.....
Central Pacific	95⅛	95¼	95⅞	94⅞	95⅛	95¼
6s, gold	116⅛	.....	.....	....	....	.....
1st M. (San Joaq)	.....	.....	.....	112	.....	.....
1st M. (Cal. & Or.)	.....	.....	.....	.....	.....	....
Land grant 6s	105⅛	.....	....	.....	.....	.....
Chesapeake & Ohio	.....	25¾	25⅛	25	.....	.....
1st pref	39	38⅛	38	.....	.....	38
2d pref	.....	.....	.....	.....	.....	.....
1st mort., series B	85¼	85⅛	85¾	84¾	85¼	85⅛
Chicago and Alton	143¼	143¾	145	144	144½	144
Preferred	....	.....	.....	.....	.....	.....
1st mortgage	.....	.....	.....	.....	.....	.....
Sinking Fund	.....	.....	.....	.....	.....	.....
Chi., Bur. & Quincy	136¾	137¾	138¾	138	139	139⅞
7s, Consol. 1903	.....	....	128¾	.....	....	.....
Chi., Mil. & St. Paul	123⅞	123	122¾	122⅝	124⅛	124¾
Preferred	137¼	137	136⅛	136	137	137¼
1st mortgage, 8s	.....	.....	.....	.....	.....	.....
2d mort., 7 3-10s	.....	.....	.....	118x	.....	.....
7s, gold	.....	.....	.....	.....	.....	.....
1st M. (La. C. div)	.....	.....	.....	.....	.....	.....
1st M. I. & M. div.)	.....	.....	.....	... .	.....	122
1st M. (I. & D. ext.)	.....	....	.....	122	.....	123
1st M. (H.&D. div.)	.....	.....	118	.....	.....	....
1st M. (C. & M. div.)	.....	.....	.....	.....	.....	.....
Consolidated S. F.	.....	122½	123	.....	.....	.....
Chi. & Northwestern	146½	143½	143½	141⅜	143⅜	144
Preferred	165¼	160¾	161½	161	164¾	165¼
1st mortgage	.....	.....	.....	.....	105⅛	.....
Sinking Fund 6s	.....	.....	.....	.....	.....	.....
Consolidated 7s	.....	.....	.....	.....	.....	....
Consol. Gold bo'ds	.....	.....	...	.....	.....	.....
Do. reg	.....	.....	.....	.....	....	.....
Chi., R. Isl. & Pac.	136½	136¼	137	136⅛	137	138⅛
6s, 1917, c	..	.....	.....	.....	.....	.....
Clev., Col., Cin. & Ind.	88	86¾	87	87	.....	87¼
1st mortgage	.....	.....	.....	.....	.....	....
Clev. & Pittsburg gr.	.....	.....	.....	.....	.....	139
7s, Consolidated	.....	..	124	.....	.....	.....
4th mortgage	.....	.....	.....	.....	.....	.....
Col., Chi., & Ind. Cent	12	11¼	12½	12½	13	13⅛
1st mortgage	.....	.....	.....	.....	.....	.....
2d mortgage	.....	.....	.....	.....	.....	.....
Del. & Hud Canal.	113⅜	115½	116	115⅛	116⅝	116⅝
Reg. 7s, 1891	.....	.....	.....	....	115	115
Reg. 7s, 1884	.....	.....	.....	.....	.....	.....
7s, 1894	.....	.....	118	.....	.....	118
Del., Lack. & Western	139	138⅞	139¼	138	139¾	142⅞
2d mortgage 7s	.....	.....	.....	.....	.....	.....
Consol. 1907	.....	.....	.....	.....	.....	.....
Erie Railway	....	.....	.....	.....	.....	.....
1st mortgage	.....	.....	.....	.....	.....	.....
2d mort. 5s, ext.	.....	.....	.....	.....	.....	.....
3d mortgage	.....	.....	.....	104½	.....	104¼
4th mort. 5s, ext.	.....	.....	.....	.....	.....	.....
5th mortgage	.....	.....	.....	.....	.....	.....
7s, Consol. gold	.....	.....	130	.....	.....	.....
Great West. 1st mort	.....	.....	.....	.....	.....	.....
2d mortgage	.....	102½	.....	.....	.....	.....
Hannibal & St. Jo.	.....	.....	.....	.....	.....	.....
Preferred	94	93½	93⅝	93¾	97⅞	97
8s, Convertible	107⅛	107½	.....	.....	.....	108⅛
Houston & Tex. Cen	88¼	87	.....	.....	....	89⅞
1st mortgage	.....	.....	.....	.....	.....	.....
2d mortgage	.....	.....	.....	.....	.....	.....
Illinois Central	140	141	142	141	141¾	141¾
LakeShore & MichSo	117	116½	116	115½	116½	116⅜
Consol. 7s	.....	.....	.....	.....	.....	.....
Consol. 7s, reg	.....	.....	125½	.....	.....	125
2d Consolidated	.....	.....	.....	.....	. ..	....
Leh. & W. B. con. ass	.....	.....	.....	.....	107	107
Long Dock bonds	.....	.....	.....	.....	.....	.....
Louisville & Nash.	74⅞	74	74	73⅜	74⅜	74⅜
7s, Consolidated	118	118	.....	.....	.....	.....
Manhattan	53⅜	.....	.....	53½	54	.....
1st pref	90⅜	.....	.....	.....	90¾	90
Met. Elevated	83	83	83½	.....	84	.....
1st mortgage	99⅝	99½	99⅝	99	99⅞	99½
Michigan Central	101¼	100½	100½	99⅜	101⅜	100⅜
7s, 1902	.....	.....	.....	.....	.....	.....
Morris & Essex	125⅛	126⅝	127⅜	126⅛	126	127¾
1st mortgage	.....	....	....	.....	.....	.....
2d mortgage	.....	.....	.....	.....	114	.....
7s of 1871	.....	123½	.....	.....	.....	.....
7s, Convertible	....	... .	.....	.....	.....	.....
7s, Consolidated	122	121	.....	.....	124	.....
N. Y. Cen. & Hud. R.	137¼	137½	137⅜	136⅝	137½	137½
6s, S. F. 1883	.....	....	.....	.....	102¾	.....
6s, S. F., 1887	... .	.....	.....	.....	.....	.....
1st mortgage	..	.....	.....	.....	.....	.....
1st mortgage, reg.	132	133	.....	.....	.....	.....
N. Y. Elevated	103	....	.....	.....	.....	.....
1st mortgage	.....	.....	.....	.....	.....	111⅛
N. Y. & Harlem	.....	... .	.....	.....	.....	.....
Preferred	.....	.....	.....	.....	.....	.....
1st mortgage	.....	.....	.....	.....	.....	.....
1st mortgage, reg	.....	.....	.....	.....	.....	.....
N. Y., Lake Erie & W	40¾	40½	40⅛	40½	40⅝	40¾
Preferred	80¾	81¼	.....	80⅝	.....	80¾
2d Consolidated	98	98	98	98	.....	98
New 2d 5s fund	.....	.....	.....	.....	.....	.....
N. Y., N. Hav'n & Hart	.....	.....	.....	180	181	.....
North Mo. 1st mort	.....	117⅛	.....	.....	.....	118
Northern Pacific	50¾	50	49¾	49	50¾	51¾
Preferred	91¾	90¾	91	89¾	91⅞	94
Ohio & Mississippi	40	40	39⅜	37¾	39¾	39½
Preferred	....	.....	112	.....	.....	.....
2d mortgage	.....	.....	.....	.....	.....	.....
Consolidated 7s	.....	.....	.....	.....	.....	.....
Consol. S. Fund	.....	.....	.....	.....	117	.....
Pacific Mail S. S. Co	46⅞	46½	46¾	....	46¾	47
Pacific R. R. of Mo.	.....	.....	.....	.....	.....	.....
1st mortgage	.....	.....	.....	.....	.....	.....
2d mortgage	.....	.....	.....	.....	.....	.....
Panama	.....	166	.....	.....	.....	.....
Phila. & Reading	61	60⅜	60	58¼	60	60½
Pitts, Ft. W. & Chi. gtd	135½	.....	.....	.....	.....	134½
1st mortgage	.....	.....	.....	.....	.....	.....
2d mortgage	.....	.....	.....	.....	.....	.....
3d mortgage	.....	.....	.....	.....	.....	.....
Pullman Palace Car	129x	128	128	129	127½	128½
Quicksil'r Min'g Co	10⅞	.....	.....	.....	.....	.....
Preferred	....	.....	.....	.....	.....	... .
St. Louis & San Fran	43	43	42	.....	....	42½
Preferred	60⅞	61	61	60	61	61
1st Preferred	99¼	100	.....	99½	98¾	99
St. L., Alt'n & T. H.	37½	.....	37⅜	37¼	41	42
Preferred	80	84	84½	84	85	86
1st mortgage	.....	.....	.....	.....	.....	.....
2d mort. pref	.....	.....	.....	.....	.....	.....
Income bonds	.....	.....	.....	.....	99⅞	....
St. L., Iron Mt. & S	.....	.....	.....	.....	.....	.....
1st mortgage	114½	115	.....	.....	.....	.....
2d mortgage	108	.....	....	.....	108¼	.....
Toledo and Wabash.	....	.....	.....	.....	.....	.....
1st mortgage	.. ..	.....	.....	.....	.....	.....
2d mortgage	.....	.....	.....	.....	103½	.....
7s, Consolidated	.....	.....	....	....	.....	.....
St. Louis Division	.....	4	.....	.....	.....	.....
Union Pacific	118½	118⅜	119½	118⅜	119	118⅞
1st mortgage	117	116⅞	117	.....	117	.....
Land Grant 7s	.....	.....	.....	.....	.....	.....
Sinking Fund 8s	.....	123	.....	.....	.....	.....
United States Ex	.....	74	. ...	.....	.....	74¼
Wabash, St. L. & Pac	38⅞	38¼	38⅛	37¼	38⅛	38⅛
Preferred	68⅛	67⅝	67⅜	66⅜	67⅛	68⅛
New mort. 7s	.....	.....	.....	.....	.....	.....
Wells-Fargo Ex	.....	.....	.....	.....	.....	130
Western Pacific b'ds	.....	.....	.....	.....	110⅜	.....
Western Union Tel.	90⅜	90	89⅞	88⅝	90¼	90⅜
7s, S.F conv., 1900	118	.....	.....	.....	118	....
Federal Stocks:—						
U. S. 4s, 1907, reg	.....	.. ..	.....	.....	.....	.....
U. S. 4s, 1907, coup.	120¼	120¼	.....	120⅜	120⅜	.....
U. S. 4½s, 1891, reg.	113⅜	.....	... .	.....	.....	113¼
U. S. 4½s, 1891, coup	... .	.....	.....	.....	.....	.....
U. S. 5s, cont'd at 3⅜	101¼	.....	.....	101¼	101⅜	.....
U. S. 6s cont'd at 3⅜	.....	... .	.....	.....	.....	.....
Dt. of Col. 3-65s, reg	.....	.....	.....	.....	.....	.....
Dt. of Col. 3-65s, coup	.....	.....	.....	.....	.....	... .

Boston Stock Exchange.

Closing Prices for the Week Ending Aug, 9.

	Th.3.	F.4.	Sat.5.	M. 7.	Tu.8.	W. 9.
Atch., Top. & San. Fe.	95⅜	95	95¼	94⅝	94⅞	95⅛
1st mortgage	.....	.....	.....	121	.....	122¼
Land Grant 7s	.....	.....	.....	.....	.....	.....
Boston & Albany	167	.....	167	.....	167	166⅝
Boston and Lowell	.....	.....	.. .	102⅜	103	.....
Boston & Maine	147½	.....	147⅜	147¼	147	.....
Boston & Providence	.....	.....	.....	.....	.....	.....
Bos'n, Hart. & Erie 7s	.....	....	55	.....	.....	55½
Burl. & Mo. R. L. G. 7s	.....	.....	.....	.....	.....	.....
Burl. & Mo. R. in Neb	.....	.....	.....	.....	.....	.....
6s, exempt	.....	.....	.....	.....	.....	.....
4s	.....	.....	.....	.....	.....	.....
Chi., Burl. & Quincy	136¼	136⅝	137⅞	139½	138⅝	140¾
Cin., Sand. & Clev ($50)	28¾	.....	28½	27½	.....	.....
Concord ($50)	....	.....	.....	.....	.....	.....
Connecticut River	.....	.....	.....	.....	.....	.....
Eastern	.....	45	44	44	.....	45
New 4½ Bonds	.....	109⅛	.....	109¼	.....	109⅛
Fitchburg	132¼	.....	132⅞	131⅝	.....	132½
N. Y. & New England	54	.....	54¼	54	53⅛	54⅛
7s	.....	.....	.....	116⅞	117	.....
Northern N. H.	.....	109½	.....	.....	.....	.....
Norwich & Worcester	.....	.....	.....	.....	.....	....
Ogden & Lake Cham	.....	.....	.....	.....	.....	.....
Old Colony	.....	134	134	133	.....	133
Ph., Wil. & Balt. ($50)	.....	.....	.....	.....	.....	.....
Portl'd, Saco & Ports	....	.....	.....	.....	.....	.....
Pueblo & Ark Val 7s	.....	.....	.....	. ...	.....	.....
Pullman Palace Car	129½x	.....	.....	.....	.....	.....
Union Pacific	118	118	.....	116¾	119	119
6s	.....	116⅞	.....	.....	.....	116⅛
Land Grant 7s	....	.....	.....	.....	.....	.....
Sinking Fund 8s	.....	.....	.....	119½	.....	119⅝
Vermont & Mass	.....	.....	.....	.....	.....	.....
Worcester & Nashua	.....	.....	.....	.....	.....	.....
Cambridge (Horse)	.....	.....	.....	.....	.....	100
Metropolitan (Horse)	.....	.....	.....	.....	.....	74¾
Middlesex (Horse)	.....	.....	114¼	.....	.....	.....
Cal. & Hecla Min'g Co	...	248	248	.....	.....	248
Quincy	58	60¾	63	66	63	63

Philadelphia Stock Exchange.

Closing Prices for the Week Ending Aug. 8.

	W.2.	Th.3.	F.4.	Sat.5.	M. 7.	Tu 8.
Allegh'y Val. 7 3-10s	.....	.....	.....	.....	.....	.....
7s, Income	51	....	.....	.....	.....	.....
Buff., Pitts & West.	21¼	21	20¾	20	20¾	20¼
Camd'n & Am. 6s, '83	.....	.....	.....	.....	.....	. ...
6s, 1889	....	.....	.....	.....	.....	.....
Mort. 6s, 1889	.....	.....	.....	.....	.....	113
Camden & Atlantic	.....	.....	.....	.....	.....	.....
Preferred	....	.....	.....	.....	.....	....
1st mortgage	.....	.....	.....	.....	.....	.....
2d mortgage	.....	.....	.....	.....	.....	.....
Catawissa	.....	.....	24¼	.....	.....	.....
Preferred	....	.....	.....	.....	.....	.....
2d pref	.....	.....	54½	.....	.....	.....
7s, new	.....	.....	.....	.....	.....	.....
Del. & Bound Brook	.....	.....	130	.....	.....	.....
7s	.....	.....	.....	.....	.....	.....
Elmira & Williamsp't	.....	.....	.....	.....	.....	.....
Preferred	....	.....	.....	.....	.....	.....
Hunt. & B. Top Mt.	.....	.....	.....	.....	.....	.....
Preferred	.....	.....	... .	.....	.....	.....
2d mortgage	.....	.....	.....	.....	.....	.....
Lehigh Navigation	43¼	43¼	43⅜	43¼	42⅞	43¼
6s, 1884	.....	103¾	103¾	.....	.....	103⅛
Gold Loan	112	... .	.....	.....	.....	.....
Railroad Loan	.....	.....	.....	.....	.....	.....
Conv. Gold Loan	.....	.....	.....	.....	. ...	.....
Consol. Mort, 7s	.....	.....	.....	.....	.....	117
Lehigh Valley	63	63¾	62½	.....	62½	63
1st mort. 6s, coup	.....	.....	.....	.....	.....	.....
1st mort. 6s, reg	.....	.....	.....	.....	.....	.....
2d mort. 7s	.....	.....	.....	.....	.....	.....
Consol mort. 6s	.....	.....	.....	.....	.....	.....
Consol. mtg. 6s, reg	.....	121⅛	.....	.....	.....	....
Little Schuylkill	.....	.....	.....	.....	57¼	57¼
Minehill & Sch. Hav'n	.....	.....	.....	.....	.....	61½
North Pennsylvania	.....	.....	.....	.....	.....	64½
1st mortgage 6s	.....	106¼	.....	.....	. ..	.....
2d mortgage 7s	.....	.....	.....	.....	.....	.....
Genl. mtg. 7s, coup	.....	.....	.....	.....	.....	.....
Genl. mtg. 7s, reg	.....	.....	122	.....	.....	.....
Northern Central	49¼	.....	49¾	.....	49⅝	49⅞
5s	97	97⅜	.....	.....	.....	.....
Northern Pacific	50	50¾	49¾	49⅞	49	50¼
Preferred	91	91½	91⅞	91	89¾	91¾
Pennsylvania R. R.	62	62	61⅞	61¾	61⅝	62⅜
1st mortgage	.....	.....	.....	.....	.....	.....
Gen'l mort	.....	.....	.....	.....	.....	.....
Gen'l mort reg	124	125	125½	.....	.....	...
Consol. mort. 6s	120	120	.....	.....	120	.....
Consol. mort. reg	123	.....	.....	.....	.....	.....
Pa. State 5s, new	.....	.....	117	.....	.....	.....
do 4s, new	.....	.....	.....	.....	.....	113
do 3½s, 1912	.....	.....	.....	.....	.....	.....
Phila. & Reading	30⅞	30⅝	30¼	30	29½	30
1st mortgage 6s	.....	.....	.....	.....	.....	.....
7s of 1893	.....	.....	.....	.....	.....	.....
7s, new convert	76	.....	.....	74½	73	73⅛
Consol. mort. 7s	.....	.....	.....	.....	124½	.....
Consol. mort. reg	....	.....	.....	.....	.....	.....
Gen'l mort. 6s	96	96	.....	95¼	.....	95⅛
Def. Income bonds	.....	.....	.....	.....	.....	.....
Philadelphia & Erie	.....	17¾	18	17	...	.....
1st mortgage 5s	104½	104¾	.....	.....	.....	.....
2d mortgage 7s	...	.....	.....	.....	.....	.....
Pittsb., Cin. & St. L. 7s	.....	118	.....	.....	120	120¼
Pitts., Tit. & Buff. 7s	96	94¾	95¾	.....	.....	....
Schuylkill Navi't'n	. ..	.. ..	.. ..	.....	.....	.....
Preferred	.....	.....	13½	.....	.....	.....
6s, 1895	.....	.....	.....	.....	.....	.....
6s, 1907	.....	.....	.....	90½	.....	.....
United Co. of N. J.	.....	.....	.....	188	188½	.....
Hestonville, (Horse)	.....	.....	.....	.....	.....	.....
Chestnut & Wal. (do)	.....	.....	.....	.....	.....	...

Baltimore Stock Exchange.

Closing Prices for the Week Ending Aug. 8.

	W. 2.	Th. 3.	F. 4.	Sat. 5.	M. 7.	Tu. 8.
Baltimore & Ohio..	.....	195	.....	196	.....	.....
6s, 1885.....	.....	. . .	.....	.....	.....	.....
Central Ohio ($50)..	...	.....	.....	.....	.....	.....
1st mortgage.....	.....	.....	.....	.....	.....	.....
Marietta & Cincin'ti	.....	.....	.....	.....	.....	.....
1st mortgage, 7s..	.....	.....	.....	.....	.....	.....
2d mortgage, 7s..	.....	.....	.....	.....	.....	.....
3d mortgage, 8s..	.....	.....	.....	.....	.....	.....
Northern Cen. ($50)	.....	....	49⅞	.....	50	50
2d mort., 6s 1885..	.....	.....	.....	.....	.....	.....
3d mort., 6s, 1900.	117	117	....	116¾	.....	.....
6s, 1900, gold.....	.....	.....	.....	.....	.....	.....
6s, 1904, gold.....	.....	.....	.....	.....	.....	.....
Pitts.& Connellsv.7s	.....	....	....	.....	.....	.....
Virginia 6s, Consol.	60⅛	60⅛	60⅛	.....	60	60
Consol. coupons..	60¼	60¼	.....	.....	.....	57
10 40 bonds.....	43⅜	43⅜	.....	43½	.....	43⅜
Def'd Certificates.	.....	.....	.....	.....	.....	.....
Western Maryland..	16¾	.....	.....	.....	.....	16
1st M.,end.by Balt	.....	.....	.....	....	.....	.....
2d M. do .	.....	.....	.....	.....	.....	.....
3d M., do .	.....	.....	.....	.....	.....	.....
1st M.,unendors'd	.....	.....	110	.....	.....	.....
2d M.,end.WashCo	118	116	118	.....	.....	.....
2d M., preferred..	.....	.....	.....	.....	.....	.....
City Passenger R R.	....	.....	.....	.....	.....	.....

London Stock Exchange.

	Closing Prices — July 28.		July 21.	
Baltimore & Ohio 5s, 1927.....	106	108	106	108
Central of N. J,, $100 shares....	93	98	93	98
Do. consol. mort.....	111	113	110	112
Do. Income Bonds.....	90	95	90	95
Central Pacific of Cal., $100 shs.	98½	99⅛	97½	98⅛
Do. 1st mort. 6s, 1895-'98.....	118	120	117	119
Det.,G'd Haven & Mil. Equip bds	116	118	115	117
Do.Con.M.5p.c.,till'83aft'r6p.c	113	115	112	114
Illinois Central $100 shares.....	140	142	140	142
Do. S. F. 5s, 1903.....	106	108	106	108
Lehigh Valley Cons. mortgage..	115	119	115	119
Louisville & Nashville mort 6s.	98	100	98	100
Do. capital stock $100 shares.	76	78	73	75
N. Y. Cent. & Hud. R. mt. bds..	132	136	132	135
Do. $100 shares.....	139	140	137½	138½
Do mort. bonds (stg.).....	121	123	121	123
N.Y.,Lake Erie & West.,$100 shs	42	42½	41¾	41¾
Do. 6 p. c. pref. $100 shares ..	82	84	82	84
Do. 1st Con. Mort. bds (Erie) .	130	134	133	138
Do. do. Funded Coupon bds.	129	131	129	131
Do. 2d Consol Mort. bonds...	99	100	99	100
Do. do. Funded Coupon bds..	96	98	96	98
N.Y.,Pa.& Ohio 1st mort. bonds.	49	50	47¾	48¼
Do. Prior Lien bds (sterling)..	103	108	103	108
Pennsylvania, $50 shares.....	63¾	64¼	63¼	63¾
General Mortgage.....	123	125	123	125
Phil.and Erie Gen.mort. 6s, 1920.	117	119	117	119
Philadelphia & Reading $50 shs	31¾	32¼	31¼	31¾
General Consol Mortgage.....	116	118	116	118
Do. Improvement Mortgage..	104	106	103	105
Do.Gen.Mtg.'74,ex-def'd coup.	97	98	97	98
St. L. Bridge 1st mort. gold b'd.	125	127	125	127
Do. 1st pref. stock.....	97	100	97	100
S. P'fic of Cal., 1st mort.6s,1905-6.	108	110	108	110
Union Pacific 1st. mtg	117	122	118	120
Wabash, St. L. & P. $100 shs.....	39	40	27	28
Do. $100 pref. shares.....	70	72	65	67
Do. gen. mort. bonds.....	89	91	87	89

AMERICAN RAILROAD JOURNAL.

Financial and Commercial Review.

THURSDAY EVENING, August 10, 1882.

The quotation for call loans on stocks during the day was 3@3½ per cent; in the last hour it was 2½@3 per cent.

The posted rates for prime bankers' sterling were 4.86 and 4.89½. The actual rates were 4.85¼@⅛ and 4.88⅛@4.89, with cable transfers 4.89⅛@4.90, and prime commercial bills 4.84@¼. The actual rates for Continental bills are as follows; Francs, 5.19¾ and 5.15, Marks, 94⅝@¾ and 95⅛, and Guilders, 40@1-16 and 40¼@5-16.

Judge McCreary, of the United States Circuit Court, has rendered and filed at Jefferson City, Mo., his opinion in the $3,000,000 suit of the Hannibal and St. Joseph Railroad Company against the State of Missouri. The Judge decides that the Company must pay to the State a further sum of money—being the difference in interest on the bonds which it had paid before maturity, and upon the payment of which the State will be enjoined from selling the road. He has also appointed a master to determine what further amount shall be paid by the company in settlement of the interest not yet accrued. The company in paying the bonds before they became due supposed that it would be relieved from any further responsibility in regard to the interest. The Judge holds that the statute of March 26, 1881, which required that whenever there was a surplus in the treasury it should be invested in the optional bonds of the State, or in United States securities, was mandatory, and that the State officers should have invested the money received from the company in accordance with its provisions. It was shown on the trial that if the money had been invested in United States bonds the company would have to pay $122,442.54; and if in Missouri State bonds, $93,694.36. It is said that the officers of the company are greatly rejoiced at the result of the suit, and are prepared to pay promptly any amount the master may find to be due from the company.

The application made on the 11th of July last to have the Compromise Bonds of the State of Tennessee placed on call at the New York Stock Exchange has been acted upon favorable by the Governing Committee, the technical defect in the printing of the bonds having been rectified. The application and actions of the usual committees are given below:

COMMITTEE ON SECURITIES,
NEW YORK STOCK EXCHANGE,
NEW YORK, JULY 11, 1882.

Application is hereby respectfully made to have the "compromise bonds of the State of Tennessee," issued by authority of an act approved May 20, 1882, placed upon the list:

15,000 bonds of $1,000 each, numbered from 1 to 15,000, inclusive.....	$15,000,000
3,500 bonds of $500 each, numbered from 1 to to 3,500, inclusive..	1,750,000
Total issue.....	$16,750,000

The amount of bonds to be issued is put at $16,750,000, to cover all possible contingencies. The total issue, however, may not reach that amount, in which event the Exchange shall be duly notified. Date of bonds, January 1, 1882; maturity of bonds, January 1, 1912; but may be redeemed by the State at any time after January 1, 1887. Coupons payable January and July in New York or in Nashville, Tenn., bonds bear interest as follows:

Three per cent from January 1, 1882, to January 1, 1884.
Four per cent from January 1, 1884, to January 1, 1886.
Five per cent from January 1, 1886, to January 1, 1888.
Six per cent from January 1, 1888, to January 1, 1912.

For the prompt payment of the principal and interest the faith, honor and credit of the State are solemnly pledged. These bonds are now being issued in exchange for certain other bonds of the State now outstanding, for an amount equal to 60 per cent of the principal and interest of the bonds surrendered.

MARSHALL T. POLK, Treasurer.
D. A. NUNN, Secretary of State.
J. N. NOLAN, Comptroller.

The committee reccommend that bonds Nos. 201 to 659, inclusive, $1,000, and Nos. 101 to 207, inclusive, $500, be placed on the regular list.

EDWARD BRANDON, Chairman.

Adopted by authority of the Governing Committee August 4, 1882.

The stock of the Cincinnati and Baltimore Railroad Company represented by the "minority pool" was formally transferred to the Baltimore and Ohio Railroad Company, in Cincinnati, on the 4th inst. The exact amount of shares was 11,772, which, at $55 per share, amounted to $647,460. The transfer expenses to each shareholder were 44 cents per share, $5,179.68 in all. This transfer places all of the stock of the Cincinnati and Baltimore in the hands of the Baltimore and Ohio, with the exception of a few hundred shares. The order for a foreclosure sale of the Marietta and Cincinnati prior to reorganization is expected to be made by the Chillicothe (O.) Court in a few days, as has been stated heretofore.

A dispatch states that the Midland Railway Company of Canada has negotiated on the London market, at 95, £610,800 consolidated mortgage 5 per cent bonds, the interest thereon being guaranteed by the Grand Trunk Railway Company—£456,700 of the loan to meet current liabilities, the balance of £154,100 to be appropriated for building thirty miles of road between Toronto and Ottowa, which is in the direct route for Sault Ste. Marie, and which eventually will connect with the Northern Pacific and Winnipeg Southeastern railways.

The trustees of the Sinking Fund of the City of Cincinnati have concurred in the action of the board of trustees of the Cincinnati Southern Railway, by which $200,000 in bonds from the sum deposited as security by the lessees of the road were released to the lessees of the Cincinnati, New Orleans and Texas Pacific Railroad Company. This was done upon a showing that the lessees had expended more than that sum in betterments on the road.

At a meeting of the stockholders of the Pittsburgh, Youngstown and Chicago Railroad Company in Youngstown, Ohio, on the 5th inst., it was voted to sell their interest in the road between New Castle junction and Akron to the Pittsburgh, Cleveland and Toledo Railroad Company. Subsequently the officials of the latter road decided to issue $2,400,000 of bonds to complete and equip the line.

The capital of the Columbus and Northwestern Railroad Company has been increased from $250,000 to $6,000,000.

The State Fund Commissioners of Ohio have cancelled $300,000 of the bonds of that State recently redeemed.

The total valuation of property for assessment in Boston now amounts to $672,490,100, a gain of $6,935,500 on the previous year. The tax rate has been advanced to $15.10 on the $1,000.

The total amount of duties refunded by the Treasury Department on sugar under the late decision of the Supreme Court up to August 18 was $14,615.25.

A prominent officer of the Philadelphia and Reading Railroad Company is reported to have said that Mr. Gowen has thus far secured about $6,000,000 on account of the deferred bonds, and that the balance of the $10,200,000, which is the total of instalments on the entire loan, is assured. He states further that Mr. Gowen has had an offer of 90 cents on the dollar for $13,000,000 of the consols, but has declined it, and is waiting for better figures. When this $13,000,000 has been placed Mr. Gowen will at once proceed homeward, and steps will be taken to relieve the road of the Receivership.

The decision of the Supreme Court of Vermont in the Vermont Central case, an abstract of which is given in another column, sets at rest the great bone of contention between the opposing parties—whether the management of the property since 1864 has been under the authority of the Court of Chancery or simply by the consent of the parties. Judge Redfield, in behalf of the Supreme Court of the State, says that the management of Governor Smith and his associates is and always has been judicial, and that they hold office by virtue of the appointment of the Chancellor. This being so, the trust indebtedncss is made a first lien upon the corpus of the Vermont Central, and the Vermont and Canada respectively, and the payment of the overdue rent of the Canada is postponed indefinitely unless the equitable mortgage, which the trust indebtedness is held to constitute, is redeemed, which is not at all likely. Several minor questions, in the way of accounting, are still to be settled; but the great issue in the case is now disposed of. All things are said to have termination, and even this litigation, now twenty-seven years old, seems to have got as far at least "as the beginning of the end."

The gross earnings of the New York Elevated Railroad lines for the month of July were $270,890.87, the operating expenses $160,928.78, and the net earnings $109,962.09; from which deduct fixed charges, $50,964.68—leaving a balance of $58,997.41. The gross earnings of the Metropolitan Elevated Railway lines for the same month were $194,726.32, the operating expenses $138,594.61, and the net earnings $56,131.71; showing, after deducting fixed charges of $65,629.02, a deficiency of $9,497.31. The gross earnings of all lines in July were $465,617.19, the operating expenses $299,523.39, and the net earnings $166,093.80; from which deduct aggregate fixed charges, as stated above, $116,593.70—leaving a surplus of $49,500.10. From this must be deducted the proportion of personal and structural taxes assessed under the existing system on the Metropolitan Company, amounting to $16,641, from which it appears that the total deficit of the Metropolitan towards meeting the interest on its bonds and its taxation without touching the stock, amounts to more than $25,000 for the month of July, which is at the rate of $300,000 per annum.

The completion of the Lehigh and Hudson River Railroad from Greycourt, N. Y., to Belvidere, N. J., is announced. Through trains will commence running on the 14th inst., at which time a new time-table will be issued.

The Anglo-Canadian Land Company, which has just been launched on the London money market will, according to its prospectus, have a capital of £500,000, divided into 50,000 shares of £10 each. Half the total stock

only is placed on the market, and of this 12,000 shares are offered for subscription in Canada and the other half in England. The object of the company as set forth in the prospectus is to invest capital on the purchase of real property in Ontario, Manitoba and the Canadian Northwest territories. Lord Erskine is chairman of the Board of Provisional Directors.

The Cleveland, Columbus, Cincinnati and Indianapolis Railway Company has filed a certificate with the Secretary of State of Ohio curing defects in its original articles of incorporation.

The capital of the Columbus and Northwestern Railway Company has been increased from $250,000 to $6,000,000.

The Supreme Court of New York has denied the motion of William Herring and others to compel the New York, Lake Erie and Western Railroad Company to pay the interest on $7,500,000 of bonds of the Atlantic and Great Western Railway Company under a guarantee made by the Erie Railway Company in 1874.

At a meeting of the stockholders of the Iron and Metal Exchange, Limited, held on the 9th inst., it was decided to increase its capital stock to $15,000, divided into 600 shares, the par value of which will be $25 each. There were before only 125 shares. The object of the change is to give more of the patrons of the Exchange than heretofore a voice in its management.

A cable dispatch from London says that the Richmond and Danville Extension Company have placed there $3,000,000 of their Georgia Pacific first mortgage bonds, and then adds: This furnishes all the funds needed to complete the road to Birmingham, Ala., without any further calls upon the stockholders. The road is now almost completed 100 miles west of Atlanta, Ga. The Richmond and West Point Terminal Company owns fifty-one per cent of the Richmond and Danville Extension Company, and thereby controls the Georgia Pacific Railway. The completion of this extension of the Richmond and Danville system to Birmingham will be of immense advantage.

The following quotation of sales of railway and other securities, for the week, are in addition to those given elsewhere in our columns.

New York.—Atchison, Topeka and Santa Fe, 95¼; Am. Dock and Imp. 5s, 94; Atlantic and Pacific 1st, 99½; Boston, Hartford and Erie 1st, 56½; Boston and New York Air Line pref., 77; Cedar Rapids, Iowa Falls and Northern 1st, 108; Chicago and Northwestern S. F. 5s, 101½; Chicago, St. Paul, Minneapolis and Omaha, 52⅛ Cincinnati, Sandusky and Cleveland, 56¾; Columbia and Greenville pref., 74. do. 2d, 88½; Chicago, St. Louis and New Orleans, 80; do. 5s, 104; Chicago and Eastern Illinois 1st, 99½; Cleveland and Toledo 7s, new, 108½; Chesapeake and Ohio cur. 6s, 53½; do. 1st, Series A, 106; Chicago, Milwaukee and St. Paul, Southern Minn. div. 1st, 107¾; do. Chicago and Pacific West div. 1st, 93¾; do. La C. and Dav. 1st, 94; do. Mineral Point div. 1st, 92¼; Columbus, Chicago and Indiana Central inc., 54; Cairo and Fulton 1st, 108½; Central Iowa 1st, 111; Chicago, Burlington and Quincy, Denver div. 4s, 84¾; do. Iowa div. 4s, 87¾; Dubuque and Sioux City, 96; Denver and Rio Grande, 62¾; do. 1st, 115½; do. consol., 101¾; Denver, South Park and Pacific 1st, 101⅝; Delaware and Hudson, Penn. div. 1st, 130; East Tenn., Va. and Ga., 11⅞; do. inc., 47½; do. 5s, 76; Evansville and Terre Haute, 79; do. 1st, 96⅞; Fort Worth and Denver 1st, 98; Green Bay, Winona and St. Paul, 11¼; Gulf, Colorado and Santa Fe 1st, 108¾; Hudson River 2d S. F., 108; Houston and Texas Central 1st, Western div., 106½; do. 1st, Waco and N. W. div., 112; do. genl. mort., 99½; Indiana, Bloomington and Western, 47¼; do. 1st pref., 118¾; do. 2d, 75⅓; do. inc., 60; do. Eastern div. 1st, 95; International and Gt. Northern coup. 6s, 85½; do. 1st, 105½; Indianapolis, Decatur and Springfield 1st, 103; Keokuk and Des Moines, 18; Kansas Pacific 1st consol., 104½; do. 6s, Denver div. ass., 110; Long Island, 58½; do. con. 5s, 97¾; Lake Erie and Western, 41¾; do. 1st, 102; do. inc. 57; Louisville, New Albany and Chicago, 70; Louisville and Nashville, N. O. & M div., 92½; Manhattan Beach, 23; Metropolitan Elevated 2d, 90; Minn. and St. Louis, 33¼; do. pref., 68½; do. 1st, 115¼; Mobile and Ohio, 23½; do. 1st deben., 78; do. 2d deben., 46; do. 1st mort., 79½; Missouri, Kansas and Texas, 41¾; do. gen'l mort. 6s, 86; do. consol. 7s, 107; do. 2d, 69⅝; Missouri Pacific, 107¾; do. 1st consol., 101¼; do. 3d, 111; Memphis and Charleston, 6o: Milwaukee, Lake Shore and Western, 57; do. inc., 79; do. 1st, 101½; Nashville, Chattanooga and St. Louis, 64⅞; New York, Chicago and St. Louis, 15¾; do. pref., 34½; do. 1st, 93¾; New York and New England, 54¾; Northern Pacific 1st, 104; New York, Ontario and Western, 27; do. pref., 90; Norfolk and Western, 20; do. pref., 57; New York City M. and N gen'l mort., 56; New Orleans Pacific 1st, 92½; Ohio and Mississippi, Springfield div. 1st, 120; Ohio Central, 18¾; do. 1st, 96; do. inc., 42; Ohio Southern, 18½; do. 1st, 84: do. inc., 30½; Oregon Railway and Nav., 152; do. 1st, 107¼; Oregon Transportation, 94¼; Oregon Short Line 6s, 103; Peoria, Decatur and Evansville, 38¼; do. 1st, 104¾; do. Evansville div. inc., 75; Quincy and Toledo 1st, 104½; Rochester and Pittsburgh 27½; Richmond and Alleghany, 23; do. 1st, 89; Richmond and Danville, 121; do. deben., 78; do. 1st, 100; Richmond, Danville and West Point, 63½; Rome, Watertown and Ogdensburg inc., 40; St. Louis, Alton and Terra Haute dividend bonds, 50½; St. Paul and Duluth pref., 89½; St. Paul, Minneapolis and Manitoba, 136; do. 1st, 108; do. Dakota ext. 1st, 108½; South Carolina, 22; do. inc., 57½; do. 1st, 100½; St. Louis, Jacksonville and Chicago 1st, 116½; St. Paul and Sioux City 1st, 111½; Southern Pacific of California 1st, 106; St. Louis, Kansas City and Northern, R. E. 7s, 109; Omaha div. 1st, 112; St. Louis and San Francisco 2d, Class A, 98; do. B, 90; do. C, 98½; St. Louis, Iron Mountain and Southern 5s, 83; do. Cairo, Ark. and Texas 1st, 106½; Texas and Pacific, 52⅞; do. inc., Land Grant, 69; do. Rio Grande div. 1st, 86¼; Texas Central 1st, 108; Virginia Midland, 54; do. inc., 73; Wabash, St. Louis and Pacific, gen'l mort. 6s, 86¼; do. Chicago div, 1st, 84⅞; Alabama, Class A, 80⅛; Arkansas 7s, L. R., P. B. and N. O., 21½; North Carolina 6s, S. T., 3d class, 8; Virginia 6s, old, 35; Colorado Coal and Iron, 48; Consolidation Coal, 32; Cameron Coal, 35¾; Maryland Coal, 18; Homestake Mining, 19; Standard14½.

Boston.—Atlantic and Pacific inc., 30; do. blocks, 108; Boston Land, 8¼; Boston, Clinton, Fitchburg and New Bedford, 62; do. pref., 32½; Chicago and West Michigan, 68½; Connotton Valley, 8¼; do. pref., 22½; do. 5s, 67¾; do. 6s, 71; Connecticut and Passumpsic River 7s, 116; Chicago, Burlington and Quincy 5s, 103; do. 7s, 126¾; do. 4s, old, 86¾, do. 4s, Denver ext., 86¾; California Southern 6s, 83⅛; Chicago, Milwaukee and St. Paul, Dubuque div. 6s, 103¾; Central of Iowa, 2d pref., 50; Connecticut River pref., 158; Detroit, Lansing and Northern 7s, 118; Flint and Pere Marquette pref., 96; Iowa Falls and Sioux City, 91½; Kansas City, Fort Scott and Gulf, 80; do. 7s, 112; Little Rock and Fort Smith, 57; do. 7s, 107½; Mexican Central, 29½: do. 7s, 86¾; do. blocks No, 2, 123¾; do. No. 3, 109¼; Marquette, Houghton and Ontonagon, 76¾; do. pref., 121¼; Massachusetts Central, 4; do. 6s, 41¼; New Mexico and Southern Pacific 7s, 115; New York and New England 6s, 105⅞; Oregon Short Line subs., 121; do. 6s, 103; Ogdensburg and Lake Champlain consol. 6s, 95; Philadelphia, Wilmington and Baltimore 6s, 106; Sonoro 7s, 107¾; Summit Branch, 14; Toledo, Delphos and Burlington, Branch inc., 21¼; Toledo, Cincinnati and St. Louis, 8⅞; do. 6s, 69½; do. Southeast div. 6s, 70; do. Dayton div. 6s, 72; do. Iron Mountain inc., 24; Wisconsin Central, 17½; do. pref., 30; Allouez Mining Company, 2; Brunswick Antimory, 11; Franklin, 15; Huron, 3¾; Harshaw, 2; National, 2¼; Osceola, 32; Phœnix, 1¾; Silver Islet, 16¾; Sullivan, 3.

Philadelphia.—Elmira and Williamsport 1st, 117; Nesquehoning Valley, 55½; Philadelphia and Reading R. R. scrip, 100; Philadelphia City 6s, 1899, 129½; do. 6s, 1903, 132; do. 6s, 1886, 110; Philadelphia, Wilmington and Baltimore 4s, 95; Steubenville and Indiana 6s, M. and N., 103½, Texas and Pacific, consol. mort. 6s, 95¼; do. Rio Grande div, 1st, 85¾; Union and Titusville 7s, 93⅓; Warred and Franklin 7s, 110½; West Jersey and Atlantic 6s, 110½. The latest quotations are: City 6s, 108; @120; do. free of tax, 127@132; do. 4s, new, 108@113; Pennsylvania State 5s, new loan, 116½@117; do. 4s, old, 108@113; do. 4s, new, 116@117; Philadelphia and Reading Railroad, 30½@30¾; do. consol. mort. 7s, reg. 124@126; do. gen'l mort. 6s, coupon, 95@96; do. 7s, 1893, —@122; do. new conv., 73⅛@74½; United New Jersey R. R. and Canal, 188@189; Buffalo, Pittsburg and Western, 20⅞@21⅛; Pittsburgh, Titusville and Buffalo 7s, 94@95; Camden and Amboy mort. 6s, 1889, 112½@113½; Pennsylvania R. R., 62¾@62½; do. general mort. 6s, coupon, 125@126; do. reg., 124@126; do. consol. mort. 6s, reg., 121@122; Little Schuylkill R. R., 57@58; Schuylkill Navigation pref., 13@14; do. 6s, 1882, 90@92; Elmira and Williamsport pref., 58@60; do. 5s, 100¼@101; Lehigh Coal and Navigation, 43½@43¾; do. 6s, 1884, 103@104; do. R. R. loan, 114@117; do. Gold Loan, 112@112½; do. consol. 7s, 116½@117½; Northern Pacific, 51¾@51⅞; do. pref., 93⅞@94; North Pennsylvania, 64@65; do. 6s, 106@107; do. 7s, 122⅛@123½; do. 7s, General mort. reg., 121½@122½; Philadelphia and Erie, 16@18; do. 7s, 114@115; do. 5s, 104@105; Minehill, 61@62; Catawissa 24@24½; do. pref., 55@55½; do. new pref., 54@54½; do. 7s, 1900, 117@—; Lehigh Valley, 62⅞@63; do. 6s, coupon, 123@125; do. reg., 123@125; do. 7s, 134@135; do. consol. mort. 120@122; Fifth and Sixth streets (horse), 160@161; Second and Third, 108@112; Thirteenth and Fifteenth, 65@75; Spruce and Pine, 40@45; Green and Coates, 80@90; Chestnut and Walnut, 90@93; Germantown, 69@70; Union, 110@115; West Philadelphia, 105@115; People's 14@15; Continental, 100@102.

Baltimore.—Atlanta and Charlotte Railroad, 76; Atlantic Coal, 1.10; Baltimore City 6s, 1890, 117; do. 5s, 1894 116; do. 5s, 1916, 125¼; Baltimore and Ohio Railroad 1st pref., 125; Charlotte, Columbia and Augusta, 54¾; Columbia and Greenville 1st, 102½; Canton Co. 6s, 102; Maryland Defense 6s, 106; Marietta and Cincinnati 1st Trust certificates, 129; do. 2d do. 102¾: do. 3d, do. 58¼; Northern Central 5s, series A, 98; B, 97¼; Virginia Midland pref., 125; do. 5th mort., 97; do. inc., 70; Virginia 10-40 coupons, 65¼; Wilmington, Columbia and Augusta, 108¼. The latest quotations are: Atlanta and Charlotte, 75⅛@76½; do. 1st, —@110; Baltimore and Ohio, 194@196½; do. 6s, 1885, 106⅛@—; Baltimore City 6s, 1890, 117@117½; do. 5s, 1894, 116¾@117¾; do. 5s, 1916, 125¾@126; Columbia and Greenville 1st, 102@102¾; Central Ohio 1st, 110⅝@110⅞; Marietta and Cincinnati 1st, 128½@129; do. 2d, 102½@103; do. 3d, 58¼@58½; Northern Central, 49⅝@50½; do. 6s, 1904, gold, —@116¾ do. 5s, Series B, —@97¼; Ohio and Mississippi, Springfield div. 1st, 119¾@120¾; Virginia Midland pref., 120@125; do. 5th mort. 96¾@97; Virginia and Tennessee 6s, 101@102; Virginia consols, 59@60½; do. 10-40s, 42¾@43¾.

At one time the Duke of Bavonia was besieged in his castle and was compelled to surrender. His lady demanded for herself and the other ladies of the castle that they be permitted to go out in safety with all that they could carry on their backs. This was granted, and to the surprise of all, the ladies appeared carrying their husbands on their backs, and for the devotion the Emperor pardoned them all and set them at liberty. There are many women, who by their industry and economy to the shame of the able-bodied men be it said, are carrying their husbands and their whole households either by earning all the money themselves, or by economizing with the little that comes into their fingers, while the husband squanders the earnings in a dissolute or voluptuous life.

Miss Creiger snapped a corset steel at a picnic. Mr. Barnes heard it, and begged to be allowed to make her a pair that would not break. She consented. Being a skilful mechanic, he invented and constructed an improved kind, and she was for three years supplied with them, at the end of which time they married. The question has been before the United States Supreme Court, whether the wearing of the invention by Miss Creiger was such a "public usage allowed by the inventor" as will prevent Barnes from obtaining a patent. The Court decided against Barnes, but Justice Miller dissented. "If the little spring," he says "inserted is a single pair of corsets, and used by only one woman, covered by her outer clothing, and in a position withheld from public observation, is a public use of that piece of steel, I am at a loss to know the line between a public and a private use."

RAILROAD EARNINGS.—MONTHLY.

	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total.
BURL., CEDAR RAP. & NORTHERN:													
1880	184,316	165,170	188,325	141,652	149,504	153,378	143,432	160,160	179,804	204,991	189,330	193,419	2,053,484
1881	167,750	124,510	148,551	184,680	165,630	205,912	174,351	209,112	221,801	221,748	203,880	232,812	2,259,037
1882	252,823	225,631	224,107	178,304	199,278	211,257	108,476	.....	.....	.....	.....	.....	.....
CENTRAL PACIFIC:													
1880	1,200,614	1,070,487	1,373,438	1,356,716	1,778,488	1,724,950	1,840,067	1,973,438	1,964,997	1,120,229	2,199,466	1,905,221	20,508,112
1881	1,602,907	1,454,218	1,709,637	1,872,370	2,091,410	2,159,381	1,899,346	2,059,000	2,293,000	2,514,000	2,267,000	2,110,000	23,947,951
1882	1,876,000	1,702,000	1,987.000	2,052,000	2,353,000	2,239,000	2,020,000	.....	.....	.....	.....	.....	.....
CHESAPEAKE AND OHIO:													
1880	202,335	198,681	222,762	221,559	199,443	214,352	238,236	259,110	247,303	211,820	240,795	218,009	2,674,308
1881	162,540	184,389	228,479	227,343	252,235	241,135	225,096	262,858	247,144	237,303	235,585	203,562	2,702,762
1882	210,455	209,708	208,981	267,454	255,939	260,753	306,831	.....	.....	.....	.....	.....	.....
CHICAGO AND ALTON:													
1880	534,054	497,013	626,473	542,961	616,128	617,524	708,906	761,120	767,349	785,199	696,776	574,695	7,718,198
1881	487,890	461,641	529,915	558,190	548,556	635,860	676,205	771,466	768,897	750,359	680,133	635,307	7,553,988
1882	579,447	530,480	584,483	561,787	553,412	613,886	671,537	.....	.....	.....	.....	.....	.....
CHICAGO AND NORTHWESTERN:													
1880	1,154,632	1,131,683	1,361,725	1,294,573	1,875,608	1,671,177	1,699,686	1,767,938	2,020,245	2,105,217	1,855,671	1,477,902	19,416,007
1881	1,240,667	963,208	1,178,795	1,474,612	1,879,006	2,306,640	1,988,081	2,315,164	2,292,676	2,341,097	2,019,037	1,855,476	21,849,209
1882	1,620,336	1,471,945	1,696,568	1,634,819	2,058,133	2,022,700	2,025,736	.....	.....	.....	.....	.....	.....
CHICAGO, BURLINGTON AND QUINCY:													
1880	1,432,740	1,411,870	1,732,518	1,489,894	1,909,627	1,682,956	1,773,643	1,834,321	1,862,285	1,934,762	1,837,860	1,552,018	20,454,494
1881	1,307,948	1,034,821	1,418,149	1,574,371	1,679,455	2,083,803	1,888,558	2,173,945	2,262,981	2,031,001	1,816,133	1,905,490	21,324,150
1882	1,658,834	1,457,300	1,566,217	1,530,838	1,505,261	1,437,16	.....	.....	.....	.....	.....	.....	.....
CHICAGO, MILWAUKEE AND ST. PAUL:													
1880	764,298	738,749	900,675	871,041	1,134,745	1,037,958	1,026,708	991,297	1,257,677	1,493,620	1,472,037	1,397,308	13,086,119
1881	990,847	682,717	916.989	1,259,946	1,538,491	1,729,811	1,568,706	1,678,000	1,645,000	1,590,000	1,569,000	1,855,000	17,025,462
1882	1,435,000	1,377,000	1,561,000	1,518,000	1,629,000	1,620,000	1,465,000	.....	.....	.....	.....	.....	.....
CHICAGO, ST. PAUL, MINNEAPOLIS AND OMAHA:													
1880	193,827	173,078	259,783	259,208	232,146	218,093	236,995	251,013	300,833	342,052	342,894	312,173	3,122,097
1881	257,786	158,594	251,648	261,211	350,124	494,562	383,202	385,586	363,685	382,714	380,733	391,950	3,981,296
1882	307,498	315,100	405,779	356,558	406,420	363,109	331,480	.....	.....	.....	.....	.....	.....
CINCINNATI, INDIANAPOLIS, ST. LOUIS AND CHICAGO:													
1880	155,697	172,541	198,220	168,199	186,995	200,332	204,138	233,478	343,627	239,881	209,014	198,254	2,412,185
1881	182,523	171,511	191,005	183,710	191,056	192,299	178,861	229,858	219,977	212,606	194,805	192,623	2,296,916
1882	200,042	186,879	208,066	204,269	199,110	195,948	.....	.....	.....	.....	.....	.....	.....
DENVER AND RIO GRANDE:													
1880	124,759	126,922	160,883	164,882	193,925	295,455	373,132	400,133	406,583	473,318	408,562	349,196	3,478,007
1881	307,476	317,681	398,493	433,111	514,767	584,230	548,284	606,193	620,643	665,686	566,819	643,417	6,206,812
1882	491,914	412,987	535,055	559,917	614,298	537,462	495,797	.....	.....	.....	.....	.....	.....
HANNIBAL AND ST. JOSEPH:													
1880	176,079	166,965	216,061	206,735	191,317	179,396	224,312	238,081	233,448	242,214	207,147	279,635	2,561,391
1881	154,401	122,874	176,356	190,812	172,950	190,740	201,899	215,308	202,567	313,433	201,782	180,376	2,230,966
1882	138,284	154,717	168,798	148,913	154,917	155,030	184,347	.....	.....	.....	.....	.....	.....
ILLINOIS CENTRAL:													
1880	595,212	613,806	613,008	535,732	665,120	681,736	724,095	732,755	806,836	880,211	783,120	673,182	8,304,812
1881	631,281	524,499	557,789	662,493	673,259	803,887	720,004	868,407	828,847	815,238	737 218	763,475	8,586,397
1882	728,173	689,387	695,371	674,603	674,749	663,746	752,251	.....	.....	.....	.....	.....	.....
INDIANA, BLOOMINGTON AND WESTERN:													
1880	80,498	89,690	116,185	90,374	85,733	106,954	103,438	116,732	110,622	121,343	96,621	104,619	1,233,079
1881	90,283	83,261	192,085	203,677	200,064	199,846	197,650	117,956	195,307	181,674	160,826	156,697	.....
1882	195,824	175,755	206,235	205,934	182,554	186,133	196,856	.....	.....	.....	.....	.....	.....
LOUISVILLE AND NASHVILLE:													
1880	674,455	575,035	612,593	563,883	655,014	976,229	772,537	827,088	931,910	1,000,326	953,086	949,184	9,491,346
1881	816,960	805,124	947,959	850,862	828,726	1,227,885	817,135	876,192	951,566	1,002,950	1,065,223	1,122,285	11,326,859
1882	950,065	960,036	1,073,745	950,007	946,435	1,187,385	1,038,385	.....	.....	.....	.....	.....	.....
MOBILE AND OHIO:													
1880	250,116	204,094	168,301	140,091	129,249	121,855	131,621	140,593	184,246	264,714	251,368	287,373	2,373,621
1881	224,347	216,768	230,916	163,551	145,803	136,517	136,548	159,348	209,044	252,921	252,434	262,025	2,406,437
1882	161,433	158,154	152,651	145,272	137,645	132,572	136,398	.....	.....	.....	.....	.....	.....
NASHVILLE, CHATTANOOGA AND ST. LOUIS:													
1880	205,633	191,154	169,457	155,466	158,839	144,155	151,594	169,326	167,473	178,266	182,087	175,996	2,049,448
1881	178,143	190,866	207,710	183,525	104,430	154,549	150,430	168,317	179,979	172,121	152,059	173,127	2,075,256
1882	156,994	159,961	161,005	154,155	137,645	119,074	.....	.....	.....	.....	.....	.....	.....
NEW YORK AND NEW ENGLAND:													
1880	164,232	149,907	183,845	179,689	183,701	219,891	205,056	249,885	235,642	215,491	210,856	198 108	2,396,302
1881	189,749	173,614	212,019	216,913	217,185	231,518	246,821	280,524	299,573	261,199	242,412	237,729	2,809,255
1882	213,840	217,261	265,222	263,544	283,244	290,060	308,920	.....	.....	.....	.....	.....	.....
NEW YORK, LAKE ERIE AND WESTERN:													
1879	1,147,173	1,207,391	1,356,780	1,372,755	1,350,574	1,230,419	1,273,533	1,450,223	1,492,497	1,713,697	1,515,835	1,398,224	16,509,127
1880	1,296,381	1,252,218	1,644,958	1,643,151	1,592,544	1,661,812	1,580,976	1,606,874	1,786,417	1,899,910	1,799,338	1,726,788	19,149,361
1881	1,443,437	1,425,765	1,847,261	1,709,057	1,776,891	1,794,982	1,787,081	1,772,895	1,734,200	.....	.....	.....	.....
NORTHERN CENTRAL:													
1880	334,494	330,860	415,325	386,130	329,788	419,193	450,208	453,923	464,093	512,918	459,054	494,310	5,050,387
1881	386,157	382,657	452,906	487,273	465,588	487,287	440,811	498,008	429,565	449,664	487,160	476,622	5,443,697
1882	407,368	413,551	430,194	435,129	482,607	482,762	.....	.....	.....	.....	.....	.....	.....
NORTHERN PACIFIC:													
1880	81,890	77,259	119,357	185,700	217,613	253,105	241,277	223,500	330,300	358,456	300,822	220,993	2,629,710
1881	116,508	78,803	162,984	216,210	312,705	412,024	393,260	411,624	490,096	565,485	428,903	434,331	4,044,576
1882	239,800	269,000	384,000	438,000	568,332	631,342	679,240	.....	.....	.....	.....	.....	.....
PHILADELPHIA AND ERIE:													
1880	224,307	245,372	327,678	334,947	311,470	331,024	308,699	347,532	322,737	367,082	324,966	281,919	3,727,733
1881	224,303	225,501	285,573	293,323	343,792	350,585	291,669	303,849	276,522	292,392	284,078	282,772	3,454,309
1882	252,727	246,246	265,311	277,851	341,415	341,614	.....	.....	.....	.....	.....	.....	.....
ST. LOUIS AND SAN FRANCISCO:													
1880	198,091	195,948	193,146	176,164	167,664	173,607	213,297	259,995	280,873	328,194	290,329	226,063	2,698,371
1881	212,435	178,234	262,050	265,298	283,399	260,254	252,333	286,373	279,064	308,569	284,320	287,914	3,160,245
1882	256,784	244,654	274,959	242,806	253,419	240,177	318,613	.....	.....	.....	.....	.....	.....
ST. LOUIS, ALTON AND TERRE HAUTE:													
1880	153,139	163,737	168,994	155,462	147,928	150,207	191,077	216,759	204,295	221,863	188,773	184,503	2,146,741
1881	175,725	166,012	201,137	197,447	172,177	165,896	165,393	189,295	187 299	179,921	162,544	153,852	2,112,801
1882	168,987	149,619	178,145	157,450	162,842	142,742	192,017	.....	.....	.....	.....	.....	.....
ST. LOUIS, IRON MOUNTAIN AND SOUTHERN:													
1880	555,983	490,195	451,560	408,241	349,053	363,454	432,655	565,869	671,219	688,365	632,052	656,951	6,265,597
1881	570,957	560,791	704,002	548,300	479,075	474,302	533,512	644,386	690,400	719,239	687,280	709 498	7,319,744
1882	516,370	501,127	585,008	581,977	519,120	529,700	515,519	.....	.....	.....	.....	.....	.....
ST. PAUL, MINNEAPOLIS AND MANITOBA:													
1880	180,239	137,645	261,798	333,014	281,899	243,407	272,089	232,579	274,188	345,057	300,675	297,641	3,160,231
1881	254,187	159,482	320,962	425,685	382,642	405,322	387,488	414,954	485,736	605,708	508,530	528,262	4,878,960
1882	395,461	418.358	531,004	570,890	858,902	856,417	853,296	.....	.....	.....	.....	.....	.....
TEXAS AND PACIFIC:													
1880	245,785	219.165	215,070	174,177	141,083	153,066	195,711	226,073	266,570	303,666	312,184	301,858	2,754,408
1881	281,176	260,781	319,928	295,066	281,782	285,105	328,063	354,082	337,117	578,668	357.724	381,218	3,921,569
1882	310,785	255,644	332,911	359,543	409,228	384,713	367,215	.....	.....	.....	.....	.....	.....
UNION PACIFIC RAILWAY:													
1880	1,433,636	1,393,992	1,730,509	1,937,220	2,027,269	1,928,528	1,934,215	1,913.035	2,270,179	2,707,860	2,251.148	1,869,335	23.448,445
1881	1,339,709	1,374,740	1,674,860	1,766,894	2,319,238	2,590,969	2,528,826	2,638,659	2,844,357	3,289 350	2,773,608	2,267,004	27,451,831
1882	1,961,088	1,759,863	2,226,832	2,462,004	2,491,590	2,183,000	2,301,000	.....	.....	.....	.....	.....	.....
WABASH, ST. LOUIS AND PACIFIC:													
1880	776,790	759,451	978,629	892,024	948,773	953,468	1,966,742	1,189,478	1,178,950	1,501,203	1,131,787	1,050,816	12,428,112
1881	811,617	818,922	1,121,592	1,023,482	1,144,660	1,308,993	1,131,752	1,542,838	1,490,027	1,396,300	1,399.555	1,328,278	14,461,570
1882	1,229,965	1,134,768	1,315,776	1,378,194	1,204,864	1,149,632	1,418,837	.....	.....	.....	.....	.....	.....

RAILROAD AND CANAL DIVIDEND STATEMENT.

Showing the amount of Stock Outstanding, the Dividend Periods and the date of last Dividend.

Marked thus(*)are leased roads.	Stock out-standing.	Divide'd Periods.	Last Dividend Payable.
Albany and Susq*...100	2,500,000	semi-an	July '82 2
Ashuelot.....100	210,000	q'arterly	Oct. '81 3½
Atch., Top. and S. Fe100	54,000,000	q'arterly	Aug. '82 1½
Atlanta and W. Point100	1,232 200	semi-an	Jan. '82 6
Atlantic and St. Law*100	5,840,000	semi-an	Mar. '82 3
Augusta and Savan'h100	1,022,900	semi-an	June'81 3½
Avon, Genesee&MtM*100	225,000	semi-an	July '81 3
Baltimore and Ohio..100	14,792,566	semi-an	May '82 5
" " pref.100	5,000,000	semi-an	July '82 3
Washington Br....100	1,650,000	semi-an	Apl. '82 5
Berkshire*.....100	600,000	q'arterly	Apl. '82 1¾
Boston and Albany..100	20,000,000	q'arterly	June'82 2
Bos.&N.Y.AirLine pf.100	2,795,227	q'arterly	June'82 1
Bos.,Cl.,F.&N.B.pref.100	1,750,100	.....	Apl. '82 3½
Bos.,Conc.&Mont.pf*100	800,000	semi-an	May '82 3
Boston and Lowell..500	3,940,000	semi-an	July '82 2
Boston and Maine...100	6,921,274	semi-an	May '82 4
Boston & Providence100	4,000,000	semi-an	May '82 4
Attleborough Br...100	131,700	semi-an	July '82 3½
Bos.,Revere B&Lynn100	419,400	semi-an	July '82 3½
Buffalo,N. Y. & Erie*.100	950,000	semi-an	June'82 3
Camden & Atlantic.. 50	377,400	q'arterly	Apl '80 38
" " pref. 50	880,650	q'arterly	Apl '80 3½s
Camden & Burl. Co...100	381,925	semi-an	July '82 3
Canada Southern....100	15,000,000	.....	Feb. '81 2½
Cape May &Millville* 50	447,000	semi-an	June'81 3
Catawissa*..... 50	1,159,500	annual	Oct.'81 $1½
" pref..... 20	2,200,000	semi-an	May '82 3¾
" new pref.. 50	1,000,000	semi-an	May '82 3½
Cayuga and Susq.*.. 50	589,110	semi-an	July '81 4½
Cedar Rapids&Mo.R*100	6,850,400	q'arterly	Aug. '82 1½
" " pref.100	769,600	semi-an	Aug .'82 3½
Central of Georgia...100	7,500,000	semi-an	June '82 4
Central of New Jersey100	18,563,200	q'arterly	July '76 2½
Central Ohio*..... 50	2,437,950	semi-an	July '82 3
" pref.... 50	411,550	semi-an	July '82 3
Central Pacific.....100	59,275,500	semi-an	Aug. '82 3
Chemung*.....100	380,000	q'arterly	July '81 1½
Cheshire preferred...100	2,155,300	semi-an	July '82 1½
Chicago and Alton...100	11,181,741	semi-an	Sept. '82 4
" " pref 100	2,245,400	semi-an	Sept. '82 4
Chi., Burl. & Quincy.100	55,337,455	q'arterly	June '82 2
Chi., Iowa & Nebras*.100	3,916,200	semi-an	July '82 4
Chi., Mil. & St. Paul.100	20,404,261	semi-an	Apl. '82 3½
" " pref 100	14,401,483	semi-an	Apl. '82 3½
Chi. & N. Western...100	14,988,257	semi-an	June'82 3½
" pref.100	21,525,353	q'arterly	June'82 2
Chi., R. I. & Pacific..100	41,960,000	q'arterly	Aug. '82 1¾
Chi. and West Mich .100	6,151,000	semi-an	Feb. '82 2½
Chi.,St.P.,M.&O.pref.100	10,390,000	q'arterly	July '82 1¾
C., Ind., St. L. & Chi..100	6,000,000	q'arterly	July '82 1½
Cin., Sand. & Clev.pf. 50	429,037	semi-an	May '82 3
Clev. and Mahoning* 50	3,759,200	semi-an	Nov. '81 3½
Clev. and Pittsburg* 50	11,244,336	q'arterly	Sept. '82 1¾
Columbus & Xenia*. 50	1,786,200	q'arterly	June'82 2
Colum.&HockingVal.100	2,500,200	semi-an	Aug.'81 208
Concord 50	1,500,000	semi-an	May '82 5
Concord and Ports.*.100	350,000	semi-an	July '82 3½
Conn.& Passump.Riv100	2,244,400	semi-an	Aug '82 3
Connecticut River ..100	2,100,000	semi-an	July '82 4
Cumberland Valley.. 50	1,292,950	q'arterly	July '82 2½
" 1st pref 50	241,900	semi-an	Apl. '82 4
" 2d pref. 50	243,000	semi-an	Apl. '82 4
Danbury & Norwalk. 50	600,000	.....	Apl. '82 1½
Dayton and Mich.*.. 50	2,402,573	semi-an	Apl. '82 1¾
" " pref. 50	1,211,250	q'arterly	July '82 2
Delaware*..... 25	1,468,940	semi-an	July '82 3
Del. & Bound Brook*100	1,652,000	q'arterly	Aug. '82 1¾
Del., Lack.& Western 50	26,200,000	q'arterly	July 82 2
Denver & Rio Grande.100	29,160,000	q'arterly	Jan. '82 1½
Den.,South P. & Pac.100	3,500,000	.....	Aug.'80 4
Detroit, Lans. & Nor.100	1,825,600	semi-an	Aug.'80 2½
" " pref.100	2,503,380	semi-an	Aug.'82 3½
Dubuque&Sioux C'y*100	5,000,000	semi-an	Apl. '82 3
East Pennsylvania*., 50	1,709 550	semi-an	July '82 3
East Mahanoy*..... 50	392,950	semi-an	July '82 3
Eastern (N. H.).....100	492,500	semi-an	June'82 2½
Eel River.....100	3,000,000	q'arterly	June '82 $1
Elmira.Jef.&Canand*100	500,000	annual	Sep. '80 5
Elmira&Williamsp't* 50	500,000	semi-an	May '82 1½
" " pref. 50	500,000	semi-an	July '82 3½
Erie and Pitsburg*.. 50	1,998,400	q'arterly	June '82 1¾
Evansville & Terre H.100	100,000	semi-an	Nov.'81 2
Fitchburg.....100	4,500,000	semi-an	July '82 3
F. & P. Marquette pf.100	6,500,000	semi-an	July '82 3
Ft.W. & Jackson pref.100	2,000,000	.....	May '82 2
Georgia. 100	4,200,000	q'arterly	July '82 2½
Granite 100	1,250,000	semi-an	July '82 3
Han. & St. Jo. pref .100	5,083,024	semi-an	Aug. '82 3½
Harrisbg&Lancaster 50	1,182,500	semi-an	July '82 3½
Housatonic pref. ...100	1,180,000	q'arterly	July '82 2
Illinois Central.....100	39,000,000	semi-an	Sept.'82 3½
Ia.Falls & Sioux City*100	4,623,500	q'arterly	June'82 1¾
Iowa R. Land Co....100	7,620,000	q'arterly	Aug. '82 1
Jeffersonv. Mad.&Ind100	2,000,000	q'arterly	May '82 1¾
Joliet and Chicago*..100	1,500,000	q'arterly	June'82 1¾
Kan.C.,Ft.S.&Gulf....100	4,000,000	.....	Feb. '82 2
" " pref...100	2,750,000	semi-an	Aug. '82 4
Kentucky Central...100	500,000	semi-an	June'81 1
" " pref..100	5,583,500	semi-an	June'83 1
Lake Shore&Mich.So.100	49,466,500	q'arterly	Aug. '82 2
" (guar.)100	533,500	semi-an	Aug. '82 5
Lawrence*..... 50	450,000	q'arterly	July '82 2
Lehigh al ey..... 50	27,496,895	q'arterly	July '82 1¾
pref. 50	106,300	q'arterly	July '82 1¾
Little Miami..... 50	4,637)300	q'arterly	June'82 2
Little Rock & Ft. S..100	4,096,135	.....	July' 81 108
Little Schuylkill*.. . 50	2,646,100	semi-an.	July '82 3½
Louisville & Nashv...100	19,130,913	semi-an.	Feb. '82 3
Lowell & Andover...100	500,000	semi-an.	Jan. '82 3½
Lykens Valley.....100	600,000	q'rterly.	Oct.' 81 2½
Manchester & Law..100	1,000,000	semi-an.	May '82 5
Manhattan 100	13,000,000	.....	.....
" " 1st pref.100	6,500,000	q'rterly.	July '82 1½
" " 2d pref.100	6,500,000	q'rterly.	July '82 1½
Marietta& Cincinnati 50	1,386,350	.....	.....
" " 1st pref 50	8,105,600	semi-an.	Sep. '66 38
" " 2d pref 50	4,440,000	semi-an.	Sep. '66 38
Marq.Hout.&Ont.pf...100	2,259 026	.....	Aug. '82 4
Massawippi*..... 50	400,000	semi-an.	Aug. '82 3
Michigan Central....100	18,738,204	q'rterly.	Aug. '81 1
Middlesex Central...100	280,000	semi-an.	Aug. '82 3
Mill Creek&Minehill* 50	323,000	semi-an.	July '82 5
M.Hill& Schuyl.Hav* 50	4,022,500	semi-an.	July '82 3½
Missouri Pacific.....100	28,169,800	q'rterly.	July '82 1½
Mobile&Montgomery100	3,022,517	semi-an.	Feb. '80 2½
Mont. & Wells River100	800,000	annual	Feb. '80 2
Morris and Essex.... 50	15,000,000	semi-an.	July '82 3½
Mt Carbon&PtCarbon 50	282,350	semi-an.	July '82 6
Nashua and Lowell..100	800,000	semi-an.	July '82 4
Nashua & Rochester.100	1,305,800	semi-an.	Apl. '82 1½
Nashv. & Decatur...100	1,827,000	semi-an.	June'81 3
Nash.,Chat.&StLouis 25	6,670,325	semi-an.	Apl. '82 1½
Naugatuck.....100	2,000,000	semi-an.	Jan. '82 5
Nesquehoning Val'y* 50	1,300,000	semi-an.	Mar.'82 3
N.Castle&Beaver Val* 50	600,000	q'rterly.	Oct. '81 —
NewLondonNorth'n*100	1,500,000	q'rterly.	July '82 1½
N. Y. Cen. & Hud. R.100	89,428,330	q'rterly.	July '82 2
N. Y. and Harlem....100	7,950,000	q'rterly.	July '82 4
" " pref.100	1,500,000	q'rterly.	July '82 4
" City Line.. —	.....	annual	Apl. '82 3
N.Y.,LakeErie&West.100	77,083,900	.....	.....
" " pref.100	8,156,825	.....	Jan. '82 6
N. Y., N. H. & Hart..100	15,500,000	semi-an.	Jan. '82 5
N. Y., Prov. & Boston100	3,000,000	q'rterly.	Aug. '82 2
Niag.Bridg&Canand*100	1,000,000	semi-an.	July '81 3
North Carolina*.....100	3,000,000	semi-an.	Sep. '81 3
" " pref.100	1,000,000	semi-an.	Sep. '81 3
N. Eastern (S.C.) pref100	86,000	semi-an.	May '81 4
Norfolk & Western pref.	15,000,000	q'rterly.	June '82 $1
North Pennsylvania. 50	4,527,150	q'rterly.	Aug. '82 1¾
Northern Central.... 50	6,142,000	semi-an.	July '82 3
Northern N. Hampsh100	3,068,400	semi-an.	June'82 3
Northern N. Jersey*.100	1,000,000	semi-an.	July '80 2½
Norwich&Worcester*100	2,604,400	semi-an.	July '82 5
Ohio 100	18,500,000	.....	.....
Ohio and Miss. pref..100	4,030,000	semi-an.	Mar.'75 3½
Old Colony.....100	7,333,800	semi-an.	July '82 3½
Oregon R'way&Nav.100	6,000,000	q'rterly.	Aug. '82 2
Oswego & Syracuse..100	1,320,400	semi-an.	Aug.'81 4½
Panama..... 100	7,000,000	.....	July '82 6½
Paterson & Hudson*.100	630,000	semi-an.	July '82 4
Paterson & Ramapo.100	248,000	semi-an.	July '82 4
Pember.&Hightst'n*. 50	342,150	semi-an.	Jan. '82 3
Pennsylvania..... 50	77,672,750	semi-an.	May '82 4
Pennsylvania Co..... 50	20,000,000	semi-an.	June'81 2½
Peoria & Bureau Val*100	1,200,000	semi-an.	Feb. '82 4
Philadelphia & Erie*. 50	7,013,700	semi-an.	.....
" " pfd 50	2,400,000	semi-an.	Jan. '75 4
Phil,Ger.&Norrist'n* 50	2,231,900	q'rterly.	June'82 3
Phil. and Reading... 50	32,726,375	q'rterly.	Jan. '76 2½
" " pref. 50	1,551,800	q'rterly.	July '76 3½
Phila. and Trenton..100	1,259,100	q'rterly.	July'82 2½
Phila., Wil. and Balt. 50	11,585,750	semi-an.	July '82 4
Pittsb.,Ft. W. & Chi.*100	19,714,285	q'rterly.	July'82 1¾
" Special Imp.100	6,770,900	q'rterly.	July'82 1¾
Pittsfield&N.Adams..100	450,000	semi-an.	July '82 2½
Portl., Saco & Portsm100	1,500,000	semi-an.	July '82 3
Providence &Worces.100	2,000,000	semi-an.	July '82 3
Rensselaer&Saratog.*100	7,000,000	semi-an.	July '82 4
Rhode Island& Mass.100	100,000	.....	Jan. '81 3
Richmond& Danv...100	3,866,000	q'rterly.	Aug. '82 2
Richmond & Petersb100	1,009,300	semi-an.	Jan. '81 3
Roch.&Genesee Val.*100	555,200	semi-an.	July '82 3
Rome,Watert.& Ogd..100	5,293,900	semi-an.	July '75 1½
Rutland preferred.. 100	4,000,000	semi-an.	Sept. '82 1
St.L.,Alt. & T.Haute.100	2,300,000	.....	.....
" " pref.100	2,468,406	.....	May '82 3
St.L.&S.Fran.1st pref100	4,500,000	.....	Aug. '82 3½
St.L.,I.Mt.&South'n.100	21,459,921	semi-an.	Feb. '74 3
St. P. & Duluth pref.100	4,705,000	q'rterly.	June'82 1¾
St. P., Minn. & Man..100	15,000,000	semi-an.	Aug.'82 3½
Schuylkill Valley*... 50	576,050	semi-an.	July '82 2½
Seaboard & Roanoke.100	1,229,600	semi-an.	May '82 5
Shamokin V.&Pottsv 50	669,450	semi-an.	Feb.'82 3
Shore Line*.....100	1,000,000	semi-an.	July '82 4
Sioux C.&Pacific pref100	169,000	semi-an.	Apl. '82 3½
South Br. (N. J.)*....100	438,300	semi-an.	Jan. '82 3
South Western (Ga.)*100	3,892,300	semi-an.	Dec. '81 3½
Stockbridge&Pitts.*. 100	448,700	semi-an.	Oct. '81 1½
Summit Branch*.... 50	4,010,150	semi-an.	Feb. '76 3
Syr.,Bingham&N.Y.*100	2,500,000	semi-an.	Feb. '81 2
Terre Haute & Ind...100	1,988,150	semi-an.	Aug. '82 4
Troy and Boston....100	1,609,000	semi-an.	Feb. '80 2
Union Pacific. 100	61,000,000	q'rterly.	July '82 1¾
United Cos of N. J.*.100	20,490,000	q'rterly.	July '82 2½
Utica, Shenango&S V100	4,000,000	semi-an.	Nov.'81 3
Utica and Black Riv.100	1,772,000	semi-an.	Mar. '82 2
Vermont and Mass...100	3,050,000	semi-an.	Apl. '82 3
Wab. St.L.&Pac.pref.100	22,615,100	q'rterly.	Nov.'81 1½
Ware River*.....100	750,000	semi-an.	July '82 3½
Warren (N. J.).....100	1,800,000	semi-an.	Apl. '82 3½
Warwick Valley.....100	340,000	semi-an.	July '82 2½
Westchest&Phil.pref100	821,300	semi-an.	July '80 2
West Jersey.....100	1,359,750	semi-an.	Apl. '83 38
Wilmingt'n&Weld'n.100	1,456,200	semi-an.	July '82 3
Wil., Col., & Aug 100	960,000	semi-an.	July '82 3
Winchester&Poto'c.*100	180,000	semi-an.	July '82 3
Winchester&Strasb.*100	74,700	semi-an.	July '82 3
Worcester & Nashua. 75	1,789,800	semi-an.	July '82 1½
HORSE-POWER R. R.			
Albany City.....100	200,000	annual	.....'80 5½
Baltimore City..... 25	1,000,000	semi-an.	July '82 3
Balt.,Cat.&El. Mills...100	....	semi-an.	July '82 2
BleeckerSt.&Ful.F'y.100	900,000	semi-an.	July '81 ¾
Boston&Chelsea pref. 50	110,000	semi-an.	Apl. '82 3
Broadway (Brooklyn)100	250,000	q'arterly	Oct. '81 3
B'way&7th Av,(N.Y.)100	2,100,000	q'arterly	Oct, '81 2
B'klyn&Hunter's Pt.100	400,000	semi-an.	Apl. '79 3
Brooklyn City.....100	2,000,000	q'arterly	Dec.'81 3½
Bushwick (Brooklyn)100	309,000	semi-an.	July '81 2½
Cambridge.....100	908,000	q'arterly	Apl. '82 4½
Cen.Park,N.& E.Riv.100	1,800,000	q'rterly.	July '82 2
Christoph'r&TenthSt100	650,000	semi-an.	Aug.'81 2½
Citizens' (Phil.)..... 50	192,500	q'rterly.	Jan. '82 2½
Citizens' (Pbg.)..... 50	200,000	annual..	.....'80 14½
Coney Island&Bklyn100	500,000	semi-an.	Oct. '80 5
Continental (Phil.) .. 50	580,000	semi-an.	July '82 6
D.Dock,E.B'way&Bat100	1,200,000	q'arterly	Nov.'81 4
Eighth Av. (N. Y.)....100	1,000,000	q'rterly.	Oct. '81 3
42d St. & G. St. Ferry100	747,000	semi-an.	Nov.'81 6
Frankf.&Southw (Ph) 50	600,000	q'rterly.	Jan. '82 6
Germantown, (Ph.).. 50	572,800	q'rterly.	July '82 2½
Girard College (Ph.) . 50	500,000	semi-an.	July '71 3
Grand St. & Newton..100	170,091	semi-an.	July '81 2½
Green&Coates St.(Ph) 50	150,000	q'rterly.	July '82 3
Heston,Mantau&F'm 50	299,381	semi-an.	Jan. '75 4
Highland.....100	600,000	semi-an.	July '82 4
Lomb.&SouthSts(Ph) 25	195,000	semi-an.	Oct. '75 4
Lynn and Boston....100	200,000	semi-an.	May '82 4
Malden and Melrose.100	165,000	.....	..... .
Metropolitan (Bost.). 50	1,500,000	semi-an.	July '82 4
Middlesex (Boston)..100	650,000	semi-an.	May '82 3½
N.Y.,Bay Ridge&Jam100	150,000	..... .	Oct. '78 7
Ninth Av. (N.Y.)....100	797,320	....	.....
Orange &Newark....100	282,555	....	....
People's (Phila.) pref. 25	124,744	..... .	July '82 2
Philadelphia City... 50	475,000	semi-an.	July '82 4
Phila. and Darby.... 20	200,000	semi-an.	July '81 3½
Phila.&Grey's Ferry. 50	308,000	semi-an.	Jan. '82 6
Pbg,Alleg.&Manches. 50	300,000	q'rterly.	Oct. '81 3
Ridge Avenue (Ph.).. 50	420,000	semi-an.	Oct. '81 11
Second Avenue (N.Y.)100	1,199,500	semi-an.	July '81 2½
Second&ThirdSt.(Ph) 50	771,076	q'rterly.	Jan. '82 4½
17th &19th sts (Ph.).. 50	250,000	semi-an.	July '81 3
Sixth Avenue (N. Y.)100	750,000	semi-an.	Oct. '81 5
Somerville (Boston).100	113,000	semi-an.	May '82 3
South Boston..... 50	600,000	semi-an.	July '82 4
Third Avenue, N. Y..100	2,000,000	q'rterly.	Nov.'81 5
13th and 15th sts.,Ph 50	334,529	q'rterly.	Jan. '82 4
23d street, N. Y.....100	600,000	semi-an.	Aug.'81 4
Union, Boston.....100	374,300	semi-an.	Jan. '82 4
Union, Phila..... 50	1,005,000	semi-an.	Jan. '82 7
West Philadelphia... 50	750,000	semi-an.	July '77 10
CANALS.			
Chesapeake and Dela 50	2,078,038	semi-an.	June'75 2
Delaware Division... 50	1,633,350	semi-an.	Feb. '82 $1
Delawa. and Hudson100	20,000,000	q'rterly.	June'82 1¾
Delaware & Raritan*.100	5,847,400	q'rterly.	July '82 2½
Lehigh Coal and Nav 50	11,204,250	semi-an	June'82 2
Monongahela Nav... 50	1,004,500	semi-an.	July '82$3
Morris, consolidated.100	1,025,000	semi-an.	Feb. '81 2
" preferred....100	1,175,000	semi-an.	Feb. '81 5
Pennsylvania..... 50	4,501,200	.....	.....
Schuyl. Nav., com.*. 50	859,100	annual..	Au. '81 500.
" " pref... 50	3,200,000	annual..	Aug. '81 $1
MISCELLANEOUS.			
Adams Express.....100	12,000,000	q'rterly.	June'82 2
American Express... 50	18,000,000	semi-an.	July '82 3
Amoskeag Manuf.Co.100	3,000,000	semi-an.	June'81 5
Calumet&HeclaMin'g —	100,000 S.	q'rterly.	Aug. '82 $5
Central Mining Co...100	.....	semi-an.	Feb. '82 2½
Consolidation Coal..100	10,250,000	semi-an.	Jan. '82 2
George's Creek C.&I.100	....	semi-an.	Jan. '82 3
Maryland Coal.....100	4,400,000	semi-an.	Feb. '76 1½
Mariposa L. &Mining100	10,000,000	..... .	.....
" pref100	5,000,000	..... .	.....
Missouri Val.LandCo100	200,000	semi-an.	July '82 12
National Tube Works100	1,000,000	q'rterly.	July '82 3
Pac. Mail Steamship.100	20,000,000	q'rterly.	Sept.'69 3
Pennsylvania Coal... 50	5,000,000	q'rterly	Aug. '82 3
Pullman Palace Car..100	10,032,800	q'rterly.	Aug. '82 2
Quicksilver, com....100	5,708,700	..... .	May '82 0.4
" pref....100	4,291,300	..... .	May '82 6
Quincy Mining Co... 25	40,000 shs	semi-an.	Aug. '82 $5
Quincy R. R. Bridge.100	1,750,000	semi-an.	July '82 5
SiouxC.&I.F.L.&L.Co100	500,000	semi-an.	June '82 5
Spring Mt. Coal.....100	1,500,000	semi-an.	June '82 3½
Topeka Equip'nt Co.100	255,500	semi-an.	Apl. '82 5
United States Ex....100	7,000,000	q'rterly.	Aug. '82 1
Wells-Fargo & Co. Ex100	6,250,000	semi-an.	July '82 4
Western Union Tel..100	80,000,000	q'rterly.	July '82 1½

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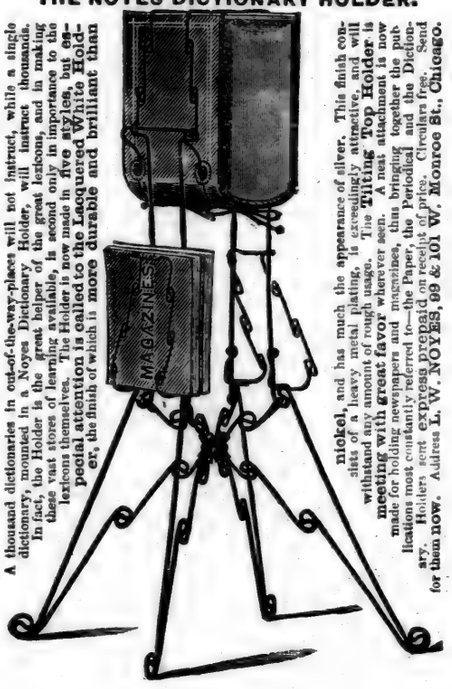
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NEW YORK, AUG. 2, 1882.

THE FORTIETH SEMI-ANNUAL CASH DIVIDEND of the ILLINOIS CENTRAL RAILROAD COMPANY, being three and a-half (3½) per cent on its capital stock, will be paid by the undersigned September 1, 1882, to shareholders as registered at the close of business on the 12th of August, after which and until the 5th day of September the transfer-books will be closed.

L. V. F. RANDOLPH, Treasurer.

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TREASURER'S OFFICE, GRAND CENTRAL DEPOT,
NEW YORK, June 27, 1882.

The Board of Directors of this company have this day declared a QUARTERLY DIVIDEND of TWO PER CENT upon its capital stock, payable on Tuesday, the first day of August next, at this office.

The transfer-books will be closed at 3 o'clock P. M. on MONDAY the THIRD DAY of JULY next, and will be re-opened on the morning of Friday, the fourth day of August next

E. D. WORCESTER, Treasurer.

CORRESPONDENCE.

[We pay no attention to communications unless the name and address of the writer are given, though the same will not be published if so requested. We assume no responsibility for statements made by correspondents, and we do not necessarily endorse ideas advanced by them. Under these conditions we think it of value to our readers to devote a liberal space to the free discussion by others—whose opinions may be at variance with our own—of subjects pertinent to our department of journalism.]

Editor American Railroad Journal:

In your issue of July 29th, you print a letter from a subscriber asking for information about the Denver, Western and Pacific Railroad, and the Colorado Central, and you call on any reader of the Journal to answer. Since receiving the above, a gentleman who has traveled much over Colorado roads and taken an interest in them, has sent me the following: "The Denver, Western and Pacific Railroad is now the South Park division of the Union Pacific Railway, and runs from Denver to Leadville. It is a narrow-gauge road and is operated by the Union Pacific. The Colorado Central runs from Denver to Cheyenne, W. T., through Boulder, Longmont and Fort Collins. It is also controlled by the Union Pacific, and is a standard-gauge road." If the Denver, Western and Pacific is operated by the Union Pacific without a guaranteed income to the bondholders, which the secretary of the Union Pacific would certainly know of, if such was the case, the outlook for returns would seem to be small. Yours truly, W. C. Tyler.

Boston, August 8th, 1882.

All About Smoke.

Editor American Railroad Journal:

There is nothing so conducive to the comfort of traveling as to see a regard of each individual for the pleasure and comfort of his or her neighbor; and yet there is one practice which robs many of all pleasure in traveling, especially in summer. On Tuesday, the 11th of July, I went from New York to Boston by the Fall River route. Taking my place in line to get to the office, one man in front and another behind me, each armed with his cigar and pipe, were continually puffing this abominable smoke of tobacco in the faces of other passengers, and when spoken to were quite indignant.

Now, for the comfort on that hot day on deck: There are two promenade decks, both dedicated to smoke. I changed my place three times, and from headache and nausea, caused by tobacco smoke, was obliged to go into the saloon, where no smoking is permitted, and yet where the air is saturated with it blown in from the deck. As I sat down a lady remarked: "It is a fine thing in name to go out of the city for fresh air on such magnificent steamers, and yet no one but smokers have any rights."

Now I appeal to those inviting people to take this or that line of steamers, if it is not time to go back a few years, and have a law on the boats that those who smoke shall do it in places set apart for that purpose, and then when they get through they can come among ladies and gentlemen. It is a perfect outrage on the rights of decent people that they can go on no pleasure excursion on account of this vile habit.

Now let me say a word on the same subject in relation to railroads. Is there any good reason why the most respectable of their patrons must be annoyed by having the smoking-car on front of the train and not in the rear, where this abominable stench may blow off.

I am a commuter on the Central Railroad of New Jersey. A fine country air we have going to and from the city. We start in the morning with one and two smokers on front. *They* of course must have air, so the front and rear doors are open. Now the others must forego a breeze, or, having the front door open, at every stop there is an accumulation of tobacco smoke, and as soon as the cars start the whole train is fumigated. Either let them have the rear door of the smoking car kept shut and oblige smokers to get in at the front, or have the smoking-car in the rear.

Then again, the waiting-rooms. Take the one foot of Liberty street. Where can you find so foul a place. Ladies and gentlemen, to get to the room where no smoking is allowed, have to pass through one of the most abominable places in the country—a perfect fog of tobacco smoke. Especially just before the boat starts or the gate is open, a fog of tobacco is poured down the throats of passengers by men and boys, from the strongest pipes to the fine cigars of *gentlemen* (save the mark). So it is in winter along the road in the waiting-rooms, so that decent people who do not smoke, but pay for their accommodations, are driven out. Is there no remedy? S.

Railway Changes.

Mr. Garrett's reference to the benefits Pittsburgh has derived from the Pennsylvania Railroad Company, reminds us of the extraordinary changes time has wrought in a generation. Nothing is more remarkable than the changes made in the programmes of railway projectors identified with the railway system of our own State, the record of which really reads like a romance.

To begin with, when the Baltimore and Ohio Railroad was projected, the people of Philadelphia strenuously opposed granting right of way across Pennsylvania, down the Monongahela to Pittsburgh, and the manner in which the road was compelled to hug the southwest corner of the State and seek a terminus and sustenance from some point west of Pittsburgh was accounted a very smart piece of work. In consequence of this opposition the projectors of the Baltimore and Ohio Railroad found it to their interest to appeal to the strong southern sentiment which then prevailed, and as the result of the opposition in Philadelphia to the passage of the road through this State, the Parkersburg branch road, beginning at Grafton, and designed to hit Cincinnati, was constructed; an enterprise that proved exceedingly costly and unprofitable. Indeed, we are not sure that it pays at the present time. The country traversed is rough, sparsely settled, and altogether presented poor prospects of yielding local traffic justifying the venture.

The history of the Hempfield Railroad, however, presents the sharpest contrasts. The project owed its origin to the ambitious Wheeling folks, who thereby sought to make themselves independent of Baltimore, tap the Pennsylvania Railroad at Greensburg, and leave Pittsburgh in the cold, illustrating reversals of judgment that challenge attention.

It never entered into the calculations of the managers of the Baltimore and Ohio Railroad that this territory would one day be a source of wealth and traffic that would excite the sharpest competition. In those days Wheeling's claim to be considered the head of navigation was the staple argument. The Ohio between Pittsburgh was pictured in much worse language than John Randolph employed. Randolph merely said it was frozen one-half the year and dry the other half. The Wheeling argument was, from that point to this port the river was a sand bar. The Wheeling bridge was projected as part and parcel of the programme to shut off Pittsburgh. It was declared a post road, and the greatest legal talent in the country was engaged in a case that ranks among famous cases, a struggle in which Stanton, who subsequently became the war secretary, achieved his greatest legal victory.

Now, after the lapse of many years, we find the President of the Baltimore and Ohio Railroad desirous of securing a portion of the traffic which has sprung up in the regions passed by when the rival roads regarded the Ohio river as the first end and object. They never dreamed that the conditions of commerce would undergo such a metamorphosis as to substitute the locomotive for the steamboat, disregarding the claims of the water-courses. But that was the practical result, a result foreseen long before the rails linked the Pacific to the Atlantic.

The tremendous growth of the coke trade has wrought the change in the aims of the managers of the railways. We find President Garrett now appealing to the people of Wheeling to avail themselves of the benefits to be derived from the Hempfield extension of the Baltimore line. In the meantime, the Pennsylvania Company and its branches have been foremost in developing unsuspected resources, opening up regions which will continue to add great riches to the State. To this extent we will admit that so much of Mr. Garrett's assertion that "the interests of the Pennsylvania Company are directly identified with Pittsburgh," may be true, but that the results we have hastily reviewed were in any manner foreseen, we do not believe were foreseen by anybody.—*Pittsburgh Chronicle, Aug. 5.*

The Muney Creek Railway, extending from Halls to Bernice, Penn., 36 miles, was sold on the 9th inst., under mortgage, and purchased by the bondholders for $5,000.

At the semi-annual meeting of the Board of Directors of the Allen Paper Car Wheel Company, held at their office, 240 Broadway, N. Y., August 9th, a dividend of 5 per cent was declared from the profits of the past six months, payable upon the 21st inst. The business of the Company was reported as being in a most flourishing condition. Large orders from new roads are continually coming in, and old patrons increasing their orders. Material additions have been made to their plants, and still others authorized, which, when completed, will enable them to turn out 20,000 to 25,000 wheels per annum.

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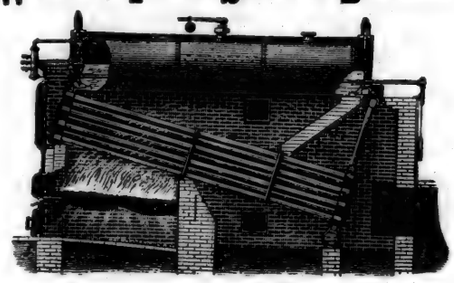
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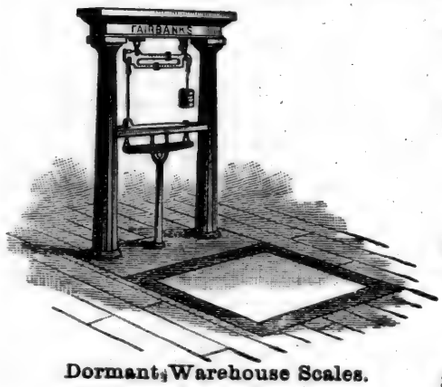
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OUR BOSTON LETTER.

Being a Review of Events.

[From Our Special Correspondent.]

THE APPROACHING CONSOLIDATION.

In heading this topic the writer uses the word "approaching" on the principle that the consolidation of the Eastern and Boston and Maine railroads is approaching the same as the end of the world or the millenium is. That is to say that each year this much repeated and worn out rumor perambulates in our midst while the real cause of it is doubtless as far off as it ever was. In fact, it has never even got so near as the end of the world, for Old Mother Shipton set a date for that event, and not even the most sanguine has dared to name the time when these two roads should be operated as one. The Eastern has been for years almost under water financially, although at the present time it is flourishing. Yet, owing to bad management and bad luck in years past, it is in debt to the extent of over fourteen million of dollars, while the Boston and Maine, which has always had good management and no bad accidents, only pays interest on a little over three million. If the reader wishes to see the difference in the value of the stock of the two roads he can examine the stock columns of the JOURNAL, as that of the Eastern fluctuates so much with the varying rumors that no scribe would dare write about it four days ahead. Each year this venerable skeleton is dug up, rejuvenated and set down in our midst, and has been for the last six going about crying "consolidation." The effect of it has been to run up Eastern stock, to the joy of the holders thereof and the sorrow of those who forgot to buy any when the annual time for the resuscitation of the rumor drew near. The idea is a cause of much worry and torment to the stockholders of both roads, *i. e.*: the holders of Eastern worry for fear that they won't consolidate and the holders of Maine worry for fear that they will. The way in which the public mind has been treated by the press of this city in this matter would drive a man who was waiting to see what the papers said before he invested insane, and if it is carried much further the press of Boston will lose that reputation for veracity for which all newspapers are famous. On a certain day, not long since, the Boston *Journal* says: "Owing to differences which cannot be adjusted, it is probable that no plan of consolidation will be arrived at." The *Traveller* says: "The prospective consolidation is practically agreed upon, only a few details remaining to be adjusted," and the *Herald* says: "The directors of the Eastern have submitted a proposition to the directors of the Boston and Maine, which they have amended and sent back for acceptance; matters are thus at a standstill," or words to the above effects. After a man has read the above he don't know so much about it as he did before. The JOURNAL man called upon Mr. J. T. Furber, the general superintendent of the Boston and Maine, to obtain the real bottom facts, and he got them as far as they went, and he came away feeling refreshed that the fog which had before obscured his vision, as it were, had vanished. What Mr. Furber said was this: "You newspaper men have printed a lot of stuff about the consolidation, but there has not one word of truth been printed yet." In view of the fact that, as has been mentioned, the different city papers had said "That they would," "That they wouldn't," and "That they hadn't decided," a mere mustard seed of obscurity still remains in your correspondent's mind, but he thought it his duty to give the facts to the readers of the JOURNAL that they might know how and where to invest their money with a feeling of security that a good return might come from it.

To have overwhelming and disastrous defeat overtake a man just when he is flushed with victory and on the point of congratulating himself on his marvelous ability to overcome adverse circumstances, is one of the hardest things which we are called upon to bear in this world of trials. The other night a train on the Fitchburg Railroad was just starting, when a man entered the farther end of the depot who wanted to take it. He saw at a glance that the time for action had come, so he let himself out and came down the platform at a three minute pace, gaining rapidly on the train. As its speed increased, however, he made a final effort, and coming up with it, jumped onto the last platform and cast an exultant glance at the customary crowd who always watch such things. Just at this moment one of them ran forward and picked up something laying in the man's track on the platform and held it up, giving at the same time a yell to attract his attention. The man who had caught the train recognized it as his pocket-book and threw himself from the cars, nearly going end over end in the operation, came back and took it with many salaams to the finder, and mournfully set himself down to wait an hour for the next train. Which led the JOURNAL man to reflect upon the unstability of things mundane.

The Massachusetts Central trains are still running, but are composed of the cars of various roads, who lend them rolling stock. A new time-table is to go into effect soon, and fewer trains will be run.

General Traffic Manager Hayden, of the New York Central, is spending his vacation at Nahant, one of our beach resorts.

On the 3d inst. 1,000 more poor children were carried free to Lake Walden. The fund for this purpose now amounts to $3,168.59. Some of the little fellows who got left by the train, walked along the Fitchburg Railroad track to the grove, a distance of 20 miles. Thirteen cars were required last week to transport them.

An announcement says "that the Revere Beach Narrow-Gauge Theatre is to be reopened at once." Does this mean that it will not be up to the "standard" and that it will not be conducted on "broad" business principles. The gauging of the different theatres on their merits is a difficult job for any but an expert.

Pressure is being brought to bear on the roads running trains to the mountains to get them to put on sleeping-car trains, so that Boston's business men can run up and spend Sunday with their families without taking unreasonable time from their stores and offices.

Mr. Fred. R. Page of Boston is surveying for the Pennsylvania Coal Company a short route from their coal fields to the Eastern States.

Loaded cars to the number of 4,558 came East through the Hoosac Tunnel during July.

Mr. H. F. Magee, of Boston, who has been in the steamship business for the last 25 years, most of the time with the Warrens, has just been appointed New England Agent of the Monarch line of steamers.

The Boston, Revere Beach and Lynn Railroad, our most popular beach road, is doing a tremendous business this summer. On Sunday, the 6th inst., they carried no less than 18,000 passengers, running some 80 trains both ways.

The Boston and Albany Railroad brought a Grand Army excursion from Worcester to go fishing on the Empire State. They made up a purse of $200 for the person who should catch the largest fish. The writer has not yet learned who the lucky individual was.

The Massachusetts Central Railroad now has a newly organized board of directors, who meet almost daily to see what can be done. No result that they have arrived at has yet been made public. The question now arises, How long can they stand it to remain in this vacillating state? CURTIS.

The Coal Trade.

THE leading coal-carrying companies make the following reports of their tonnage for the week ending July 29, and for the year to that date, compared with their respective amounts carried to the same time last year:—

	Week.	1882.	1881.
Reading Railroad	196,768	5,047,484	4,828,190
Schuylkill Canal	16,253	201,111	280,397
Lehigh Valley	130,551	3,905,009	3,562,908
Delaware, Lackawanna and Western	101,842	2,413,309	2,309,334
Shamokin	26,535	598,700	597,887
Central R. R. of New Jersey	147,144	2,418,302	2,268,714
United R. R. of New Jersey	36,359	948,763	867,444
Pennsylvania Coal	36,208	720,666	710,267
Delaware and Hudson Canal	84,393	1,854,238	1,954,837
Huntingdon and Broad Top Mountain	6,957	241,883	288,310
Penn. and New York	28,828	938,552	928,685
Clearfield, Pa.	53,836	1,662,096	1,376,522

The total tonnage of anthracite coal from all the regions for the week ending July 29, as reported by the several carrying companies, amounted to 672,192 tons, against 656,907 tons in the corresponding week last year, an increase of 15,285 tons. The total amount of anthracite mined for the year is 15,327,695 tons, against 14,851,843 tons for the same period last year, an increase of 475,252 tons. The quantity of bituminous coal sent to market for the week amounted to 71,166 tons, against 102,612 tons in the corresponding week last year, a decrease of 31,446 tons. The total amount of bituminous mined for the year is 2,375,160 tons, against 2,789,589 tons for the corresponding period last year, a decrease of 414,429 tons. The total tonnage of all kinds of coal for the week is 743,358 tons, against 759,519 tons in corresponding week last year, a decrease of 16,161 tons, and the total tonnage for the coal year is 17,702,255 tons, against 17,641,432 tons to same date last year, an increase of 60,823 tons. The quantity of coal and coke carried over the Pennsylvania Railroad for the week ending August 4 was 207,739 tons, of which 163,858 tons were coal and 43,881 tons coke. The total tonnage for the year thus far has been 6,308,672 tons, of which 4,614,593 tons were coal and 1,689,097 tons coke. These figures embrace all the coal and coke carried over the road, east and west. The shipments of bituminous coal from the mines of the Cumberland coal region for the week ended July 29 were 10,387 tons, and for the year to that date 567,343 tons, a decrease of 571,269 tons as compared with the corresponding period of last year. The shipments were: To the Baltimore and Ohio Railroad—For the week, 7,372 tons; year, 469,835 tons; decrease as compared with 1881, 288,880 tons. Chesapeake and Ohio Canal—Week, 3,014 tons; year, 18,834 tons; decrease as compared with 1881, 217,607 tons. Pennsylvania Railroad — Week, none; year, 74,842 tons; decrease as compared with 1881, 68,243 tons. The Reading Railroad shipment for last week, ending August 5 was about 188,000 tons, of which 62,000 tons were sent to and 54,000 tons shipped from Port Richmond, and 6,800 tons sent to and 7,200 tons shipped from Elizabethport.—*Philadelphia Ledger, Aug. 7.*

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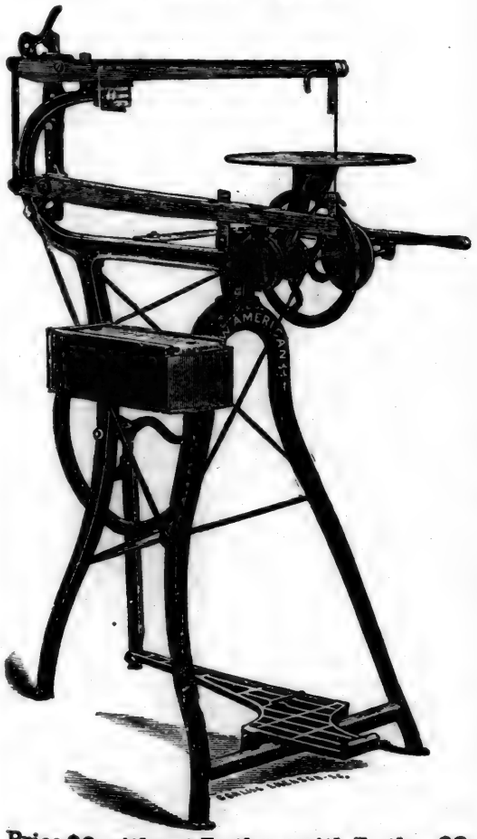
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List of Patents for Inventions Relating to Railway Interests.

[Reported expressly for the AM. RAILROAD JOURNAL.]

Bearing date of August 8, 1882.

262,346. Car Coupling Tool: T. BARRETT, Boston, Mass.
262,378. Car Brake: L. D. DAWLEY, Ada, Minn.
262,537. Machine for removing snow from railway cuts: W. DUTZ, Spafford, Wis.
262,384. Tubular Railway Rail: J. ELMER, Biloxi, Miss.
262,288. Extinguishing Fires on Railway Trains: A. M. GRANGER, Medford, Mass.
262,289. Car Coupling: L. GRANNAN, Philadelphia, Pa.
262,222. Car Coupling: W. E. GRISHAM, Selma, Ark.
262,292. Railway Gate: P. HAUSEMAN, Speedwell, Va.
262,426. Car Truck: R. E. ISMOND, New York, N. Y.
262,230. Car Starter: E. A. JARVIS, Hamilton, Ont. Canada.
262,438. Railway Rail Joint: F. LIGHTFOOT, Media, Penn.
262,449. Car Coupling: M. J. MCCRONE, Louisville, Ky.
262,454. Freight Car: E. MCMANUS, Randolph, N. Y.
262,329. Sleeping Car Berth: H. A. STONE, Brooklyn, N. Y.
262,501. Car Coupling: W. H. SWINFORD, Cherokee, Ala.
262,550. Car Coupling: P. ZEHNER, Indianapolis, Ind.

Henry's Velocimeter.

A SPECIAL train consisting of an engine and one coach made a run of about fifteen miles out from Kansas City and return, over the Fort Scott and Gulf Railroad on the 29th ult, for the purpose of testing an invention of the train dispatcher of that road, John C. Henry, destined to gauge and register the speed at which a train is running. The following gentlemen were on the car: Superintendent Barnes, of the Lawrence and Southern Kansas, Superintendent Clinton, of the Fort Scott and Gulf, Superintendent of Machinery McCrumb, of the Fort Scott and Gulf, Mr. McKinzie, superintendent of machinery of the Union Pacific, Superintendent Brinkerhoff, of the Kansas Pacific, and Mr. Griffith, representing the general superintendent of the Union Pacific. One of the machines was placed on the engine and one in the car. It consists of a dial like that of a steam gauge, with an index which marks the increase or decrease of speed and a registering instrument something like the anemometer used by the signal service for registering the velocity and direction of the wind. This register is furnished with a coil of paper divided into squares by lines, those running lengthwise, sixty in number, showing the height of speed and the tranverse lines dividing the record off into miles. Mr. Henry claims for the instrument that it affords a complete check on the actions of train men, and shows the officials how near they come to complying to the rules and instructions. The indicator affords the engineer the means to handle his engine with great regularity and smoothness. Heretofore in running a train it has been done by guess. It is conceded by scientific railroad engineers that the greater portion of the wear and tear of track and rolling-stock is caused by carelessness of train men and unnecessary high rate of speed with heavy freight trains. To prevent this and let the engineer know without any guess-work just what he is doing is the object of the indicator.

During the trial trip the train ran at various rates of speed to test the velocimeter. The gentlemen who watched its workings were greatly pleased with it, and pronounce it a valuable invention.

Mud Volcanoes in Sicily.

Two eruptions of mud in places remote from each other, and offering different and remarkable characteristics, are under observation in Sicily. One is taking place in the interior of the island, about eight miles north of Girgenti. It proceeds from a mountain about three hundred feet high, called Macaluba, the flattened summit of which is dotted with small cones, each containing a tunnel-shaped crater, from the bottom of which a bubble of mud rises and bursts every minute. The other eruption is near Paterno, on the western side of the lower region of Ætna, nearly forty miles west of Macaluba, and takes place in openings and small cones on the level of the surface. It is considerably more violent than that of Maculuba. The mud spurts out in jets several yards high, and forms a large fuming lake, which runs into the bed of the River Sinet. The eruption has been renewed three times within a year, and is at present accompanied with deep subterranean rumblings and strong tremors of the earth, some of which are perceptible several miles away. The mud that issues from these volcanoes is saline and petroleum-bearing. A kind of scum of petroleum may be seen on the edges of the craters of Macaluba. The gases escaping from them contain from 34 to 36 per cent of carburetted hydrogen, with sulphuretted hydrogen and carbonic acid. The soil around Paterno, in which the center of the second eruption is situated, is calcareous, and abounds in springs containing carbonic acid. The waters, infiltrating the soil, raise its temperature and form a kind of veined alabaster, which is much esteemed. The eruptions are occasioned by the passage of carburetted hydrogen, which is formed by the decomposition of organic matters within the earth, in seeking its way to the surface through beds of clay which have been washed down into the crevices. Mud volcanoes of another kind, of which those of New Zealand and Iceland afford examples are formed by vapors of water proceeding from ordinary volcanoes, and are distinguished by the high temperature of the mud and the absence of carburetted hydrogen.

THE Pennsylvania Railroad Company has added to the Frederick (Md.) Division the Perryville Branch, which consists of about four and three tenths miles of road, extending from Port Deposit, Md., to Perryville, Md., opposite Havre de Grace. The trains on the Columbia and Port Deposit Railroad will run through to Perryville, instead of making Port Deposit the terminus.

A Submerged Water-Wheel.

WE mentioned about two months ago the invention by H. S. Holder, of Macon, of a water-wheel which would run any depth under water or half way out of it. We had not seen the wheel at that time, and Mr. Holder carefully guarded his secret until yesterday. He had just returned from Washington, where he went to consult with his attorneys, Payne and Ladd, and comes back bringing the news that a patent is certain, and that he can now go ahead with the manufacture. We have thoroughly examined the wheel, and find it to be all that is claimed for it by the inventor. It is very simple in construction, yet it can be put in any stream of water either one or twenty feet deep, and runs at any speed desired. By a simple contrivance it can be stopped readily from any story of the mill or factory.

The wheel is intended solely for streams, particularly rivers. It will be made from five to one hundred and fifty horse power, and will furnish the motive power for any kind of manufactory. Among its many great advantages may be mentioned that neither high nor low water affects it, and it will run just as well during a freshet as when the stream is in its normal condition.

Mr. Holder says he commenced work on it about a year ago. In seeing the waters of the Ocomulgee rushing by he began to study out a plan by which they could be utilized. He studied over the matter day after day, and finally hit upon the wheel. After perfecting the wheel it took months to devise a way to stop it while running. This he has overcome, and now the wheel will be used in every stream in the country.

While in Washington Mr. Holder found that among the thousand water-wheel models in the patent office, there was but one that possessed anything like his principle, and that one could not be stopped. Macon, therefore, has the bulge on the world.—*Macon (Ga.) Messenger, July* 31.

A BLUE book, containing the railway returns of the United Kingdom for the year 1881, has just appeared. The total capital paid up and raised by loans and debentures is set down at £745,528,162, in addition to which there is a sum of £27,909,453 set down as "subscriptions to other companies." The total length of line o penon the 31st of December last was 18,175 miles, of which 8,302 miles were of single line. The number of passengers conveyed was 623,-047,787, exclusive of season and periodical ticket-holders, and consisted of 37,993,944 first-class, 64,474,717 second-class, and 526,579,126 third-class passengers. The holders of season or periodical tickets numbered 538,542. The number of miles traveled by passengers, mixed goods, and mineral trains was 248,467,374. From passenger traffic the receipts amounted to £27,461,645; from goods traffic, £36,446,592; and from miscellaneous sources, £2,649,205; a total revenue of £66,557,442. The total amount of the working expenditure was £34,502,616, leaving the net receipts at £31,954,826; the proportion of expenditure to receipts being 52 per cent. There were 13,727 locomotives and 444,958 carriages and trucks in use on the several railways of the Kingdom on the 31st of December last.

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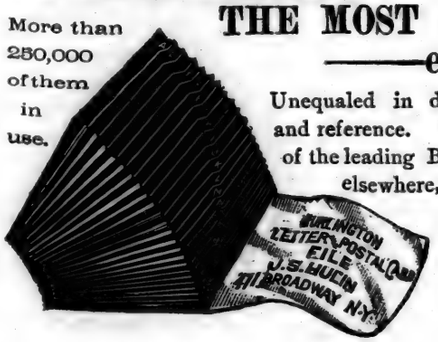
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N. B.—Send for Stock List

Foreign Commerce of the United States.

From a statement issued by the Chief of the Bureau of Statistics at Washington, on the 7th inst., we learn that the total value of the foreign commerce of the United States during the fiscal year ended June 30, 1882, embracing both imports and exports of merchandise and specie, amounted to $1,566,859,456, as against $1,675,024.018 during the preceding fiscal year, showing a falling off of $108,164,862. The value of the exports of domestic merchandise from the United States during the fiscal year ended June 30, 1882, amounted to $733,073,937, as against $883,925,947 during the preceding year, a falling off of $150,852,010. The only commodity the value of the exports of which exhibited an increase of any considerable magnitude was petroleum. During the eleven months ended May 31, 1882, the value of the exports of petroleum amounted to $46,563,142, as against $34,762,341 during the corresponding months of the preceding fiscal year, showing an increase of $11,800,801.

The value of the imports of merchandise into the United States during the year ended June 30, 1882, was larger than during any previous year in the history of the country. It amounted to $724,623,318, as against $642,664,628 during the preceding fiscal year, showing an increase of $81,958,689, or 12.7 per cent.

The value of the exports of merchandise from the United States during the last fiscal year exceeded the value of imports of merchandise into the United States by the sum of $25,727,856. This excess of the value of exports over that of the imports of merchandise was less than during any preceding year since the year ended June 30, 1875.

During the fiscal year ended June 30, 1882, the value of the exports of gold and silver coin and bullion amounted to $49,412,576, as against $49,406,847 during the preceding year—an increase of $30,005,729, and the imports thereof amounted to $42,472,390, as against $110,575,497 during the preceding year—a falling off of $68,103,107.

There was during the fiscal year just closed an excess of exports over imports of gold and silver coin and bullion amounting to $6,940,186, as against an excess of imports over exports during the preceding year of $91,168,650.

Stock-Yards at Weehawken.

A portion of the new stock-yards, covering about 15 acres, at Weehawken, N. J., owned by the New York, Lake Erie and Western Railroad Company, will be ready for use, according to A. S. Baldwin, the live stock agent of the company, in the early part of next month. The company has 30 acres of ground at that place, and stock-yards, and, perhaps, abattoirs, will cover them all. The New York, Lake Erie and Western Railroad Company's tracks now run to the yards. The New York, West Shore and Buffalo Railroad, constructing on the west side of the Hudson River, will be completed, it is believed, by the 1st of January, and with the Delaware, Lackawanna and Western Railroad, will also be connected with the stock-yards. The situation of the new yards, it is conceded by railroad men, cattle-dealers, and others, is most excellent. The ground is sloping and admirably suited for the purposes of such yards, a proper drainage being a very important feature. When the yards at present to be constructed on the 15 acres of the property shall be completed there will be daily accommodations for from 4,000 to 5,000 head of cattle. Belgian pavement is to be laid in the yards, and a large sewer is to have an outlet in the Hudson River. The yards are to be covered with sheds, and every improvement for which experience has shown the necessity will be made. An office for the superintendent of the yards and for the use of the railroad people is to be erected in the center of the yards upon an elevation. There will be a passageway under this building. The projectors of the enterprise believe that in the course of time the amount of business transacted there will be enormous. The New York, Lake Erie and Western, the Delaware, Lackawanna and Western, and the New York, West Shore and Buffalo Railroad will work harmoniously together in carrying cattle to these yards. The yards are easily accessible to Hoboken, being about 20 minutes' ride in the street cars from that city, and are about a mile north of the Elysian Fields. They are directly opposite the ferry-house at Thirty-fourth street, New York, and a ferry between the yards and Sixtieth street is to be put in operation. Mr. Baldwin says that the possibilities of the future are great, but that it would be premature at this time to disclose many of the plans which have been suggested to his company for the purpose of making the new stock-yards the great and only market near this city.

Reorganization of the Railway Mail Service.

The Postmaster-General at Washington has promulgated his arrangements for the reorganization of the Railway Mail Service in accordance with the recent Act of Congress. Postal cars will hereafter be known as railway post-offices, and their employes as railway postal clerks, of whom there shall be five classes, with salaries at $800, $900, $1,000, $1,200 and $1,400 annually. On lines with but one clerk to a car the salary shall be $1,000; and if the distance run is less than 100 miles and not less than 90 a day, the clerk will be of the $900 class, with a gradation of $10 a mile annually for each mile run, where the run is less than 90 miles a day. Where there are two clerks one shall receive $1,300 and the other $1,150 annually. If three clerks are in a car, their salaries shall be $1,300, $1,150 and $1,000, and if four, the same salaries for three clerks and $900 for the fourth. Where there are more than four clerks in a car the additional ones shall receive $800 or $900 a year, except where two distributing ones are run on the same train, when the salaries of the additional clerks may be of one grade higher rank. Helpers will be paid at the rate of the clerks to whom they are helpers. Clerks on steamboat lines will receive $720 per annum, salary to be determined by amount of work performed. Local agents have been abolished, but superintendents may detail clerks at rank not above $1,150 per annum to do the work of handling mails at junctions, etc. Those who will be paid the highest salaries, $1,400, will be designated as "chief clerks." All new appointments will be probationary at a salary of $800, and if, at the expiration of his six months' probation, he has a satisfactory record, the appointment will be made permanent and his assignment made.

Superintendents of railway mail service are ordered to effect the reorganization at once. The number of higher paid clerks is slightly increased by this reorganization, but the gradation pays the lower ranks less, so that the aggregate is thought to be about the former cost of service.

Suez Canal Route.

The following table of distances affords evidence of the value of the Suez Canal as a much nearer route to India than the passage by the Cape of Good Hope:

	Miles.
London to Bombay via Cape	10,595
London to Bombay via Canal	6,330
In favor of Canal route	4,265
London to Calcutta via Cape	11,450
London to Calcutta via Canal	7,950
In favor of the Canal route	3,500

It appears that for the Australian trade there exists a growing tendency in favor of utilizing the Canal. In this case, also, the difference in favor of the Canal is marked:

	Miles.
London to Sydney, N. S. W., via the Cape	12,044
London to Sydney, N. S. W., via the Canal	10,840
In favor of the Canal	1,204

The Union Street Railway Company of Pittsburgh, Penn., have purchased nine mules. It is the intention to use the gentle creatures as motive power for the short line cars.

The Roanoke, Norfolk and Baltimore Steamboat Company, Robert Tyson, agent, have contracted with Neafie & Levy of Philadelphia for an iron propeller 178 feet long, 24 feet beam and 10 feet depth of hold. She will be fitted with a single engine, having a stroke of 28 by 36, and will be completed in December and at once placed on the line.

"I don't see how I'd git along without Mary, nohow," Mrs. Blucher observed, pausing to wipe the perspiration from her aged features and put another ladle of soft soap into the steaming suds, while her daughter's voice at the piano could be distinctly recognized, floating out from the adjoining parlor. "I don't see how I'd git along without that gal, nohow. Al'ays on these days when I hev the tiringest work she just picks out her nicest pieces, like 'Sweet rest, by and by,' and 'Mother's growing old,' and sings 'em fur me afore she goes out on the lawn to play croquet with the other young folks. 'Taint every gal as ud be so thoughtful, I kin tell you. Now, most on 'em ud bang away with 'Jordan is a hard road to travel,' or 'Whoop 'em up, Eliza Jane,' but she aint none o' that sort. She's a pile o' comfort to me—a pile o' comfort," and Mrs. Blucher fanned herself vigorously with her soiled apron, preparatory to running the clothes through the second water.

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Rosewood and Mohogany.

Rosewood has been the leading wood to veneer piano-fortes for the last thirty or forty years. The best comes from Rio Janeiro, some of which is very rich, but varies considerably in different places where it is cut. Bahia rosewood is generally longer, heavier and harder to work, but some of it is handsomely cross-figured. As people generally demand dark-colored rosewood, it has led to staining the light wood very often, which may be known when legs and arms, etc., of furniture and piano-fortes look unnaturally dark. At one time manufacturers used to cut rosewood veneers in ribbons to veneer picture frames, but soon rosewood was imitated to such perfection by staining that the demand for rosewood veneers for picture frames ceased altogether.

It is impossible to imitate mahogany by staining so as to deceive, or to mend bad places in the wood, as is done in other kinds of wood. The wood is rich in color, close grained, heavy and durable, and, unlike rosewood and many other woods, does not fade, but gains colors by time and grows darker. The best mahogany known grows in the Island of St. Domingo, and the finest of all on the south side of that island.

A piece of furniture veneered with handsome mottle-headed St. Domingo mahogany looks as if it were full of life as you move before it, and shades every way, while a piece of furniture veneered with fully as handsome a veneer of Cuba mahogany will not shade every way as the other will, but shows best if you look at it from certain positions. Cuba mahogany also is much more apt to have dark or black marks or stains in it, which, when they occur, greatly lessen its value.

Iron as a Building Material.

The chief obstacle to the use of iron for building purposes is perishability. Keep the air from iron, and there is no apparent limit to its durability. But that is the problem—how to keep the air from it. Paint soon scales off, and the cost of galvanizing iron on a large scale puts methods of that kind for the present out of the question. It is true that iron work exists which is certainly about a thousand years old, and may possibly be older. The iron beams in the portico before the Pantheon at Rome are of unknown age. An iron pillar remains in Northern India, while the great structures of stone erected by the same monarch for whom it was cast have been destroyed from top to bottom. But these solid pieces are in all probability made of better iron than that which we can get for modern buildings, and they do not present the bolt-holes and small coigns of vantage where the destruction of iron beams and pillars by rust usually begins. What is wanted, then, to place iron before all other materials for architecture, is a comparatively inexpensive method of treating the outer skin so that it becomes practically indestructible to the acids contained in rain water or damp earths. The method must be so searching that it guards the iron, particularly in fine cracks, bolt-holes, and out-of-the-way places, where vigilance is of no use. It must, in fact, be applicable to complicated machinery—to plates for iron ships. It must make secure from corrosion the finest threads of two screws, so that when one is in place within the other the acids of sea-water that may penetrate shall have no corrosive power. A plating of another metal, even if cheap, is not likely to follow with absolute fidelity the microscopic indentations of the iron. The iron itself will have to be chemically changed.

Several inventors have claimed to be able to affect iron in this manner, but none have given to the public a demonstration that it can be done cheaply on a large scale. In England an approach to it has been made by Professor Barff. It is said, however, that his experiments are merely repetitions of those by American inventors, and that he has not hit the true solution of the problem. He is groping in their footsteps. The accomplishment of the feat, which is one of the miracles of modern science, and, if sound in every part, will make possible the most extraordinary advances in land and marine architecture, is said to have been satisfactorily performed a year or two ago in the Navy Yard at Washington. The inventors are about to make public demonstration of their system, and we are to have at last a cheap and effectual protection of iron from corrosives. Architecture in iron, should this prove to be true, will then take another leap forward, and the wooden house in our large cities will become as rare as wooden vessels in the navies of Europe.—*N. Y. Times.*

English and American Railroads.

George P. Neele, superintendent of the London and Northwestern Railroad, was a member of the party which accompanied the Duke of Sutherland to this country. Since his return to England he has written a book about what he saw while here. In commenting on the characteristics of railroads here, he says:

"There is in each State a railroad commissioner, to whom appeals can be made by the public as to rates, fares, train connections, etc. Some States have one individual filling this position; others have a court of three men, but they are not men of railroad experience—a newspaper proprietor, a retired General, a farmer, or occasionally a civil engineer. The State of Massachusetts has a regular railroad bureau as a part of its State organization, and it is spoken of as being far ahead of the other States in its actions on behalf of the public in connection with the railroad interests. On the older lines some very insecure structures in the shape of trestle-bridges exist, and the trains have to pass over at a walking pace. The lines have been constructed on the American motto of obtaining the 'mostest railroad for the leastest money!' At all these wooden bridges, and along all the wooden viaducts, a number of vats full of water were placed at intervals as security against fire, and a man appointed to walk over the line after the passage of any train."

Mr. Neele says: "Some of the expressions used in America in connection with railroad appliances are peculiar." In showing the "peculiarity" alluded to he at the same time furnishes the corresponding English term for the same meaning, as follows:

"A railroad station is called a depot—properly pronounced deep-o.

"A bank engine is called a 'helper' or 'pusher.'

"Diamond crossings are called 'frogs.' Sleepers are called 'ties.'

"An engine-driver is called an 'engineer.'

"The marshaling of trains is spoken of as 'switching.'

"A level crossing is called a 'crossing at grade.'

"The gauger of plate layers is called the 'track foreman.'

"The expressions 'bogle' and 'cow catcher' are not American. The former is called the 'truck' and the latter the 'pilot.'

"The extent to which puffing announcements are made by the railroads is remarkable. The American time tables, in the shape called 'folders,' are to be met with at all hotels, containing exaggerated notifications of the advantages of each line, some calling attention to the excellencies of their roads, some to the beauty of the scenery; one especially directs attention to the liberal supply of their dining car tables, announcing that 'the squarest of square meals can be obtained on the line."

The traveler entering the Broad street station of the Pennsylvania Railroad at night either from New York or the South witnesses a sight which never fails to rivet his attention, and frequently excites exclamations of wonder and delight. On the broad net-work of tracks stretching in every direction are myriads of twinkling lights. Through these countless lanterns the engines dart with lightning speed. Wherever there is a switch or a crossing track there are two or three of these little lights, a red spark warning the engineer that there is danger ahead, that a switch is misplaced or some derangement of the track, and a white light that all is right. There are more than three thousand of them between the bridge and the straight tracks beyond Gray's Ferry on the south and the Zoological Gardens. They are a part of the great system of safety adopted by the Pennsylvania Railroad Company to insure the safety of the two hundred and fifty passenger trains which daily pass in and out of the Broad street station.

A meeting of the Board of Managers of the American Iron and Steel Association was held at Cressen Springs, Penn., on the 25th ult., at which the following resolution was unanimously adopted: "That a National convention of all the iron ore producers and the manufacturers of iron and steel in the United States, and of all who seek to establish in our country the manufacture of tin plate, be held at the Mountain House, at Cresson, at 12 o'clock on Tuesday, September 12, 1882, to consider the whole question of duties on iron ore, iron and steel in their various forms, and tin plate, and to adopt a schedule of duties thereon to be submitted to the Tariff Commission for its consideration." In the meantime it is recommended that the various local iron and steel organizations in the country meet and consider the duties in which they are respectively interested.

AMERICAN Railroad Journal.

ESTABLISHED 1831.

Steam Navigation, Commerce, Finance, Banking, Machinery, Mining, Manufactures.

SECOND QUARTO SERIES.—VOL. XXXVIII., No. 32.] NEW YORK, AUGUST 19, 1882. [WHOLE No. 2,417.—VOL. LV.

INCORPORATION.

THE International Land and Immigrant Union of New York has been incorporated, with a capital of $250,000.

A COMPANY has been organized, with a capital of $1,000,000, to bridge the Missouri River at Blair, Nebraska.

THE Brooklyn District Telegraph Company of Brooklyn, N. Y., filed a preliminary certificate of incorporation at Albany on the 10th inst. Its capital is to be $125,000.

THE North American Construction and Improvement Company of New York, capital $1,000,000, has filed articles of incorporation with the Secretary of State at Albany.

THE Gay Machine and Tool Company, Boston, Mass., has been incorporated. Wm. P. Gay, president; Herbert W. Kimball, treasurer; capital $10,000—one hundred shares.

A CHARTER was granted at Harrisburg, Penn., on the 14th inst., to the Bradford Bridge Company, of Pittsburgh, which proposes to erect a bridge across the Youghiogheny River at Bradford, Fayette county. The capital stock is $100,000.

THE Foster Coal and Iron Company, of Indiana county, Penn., with a capital of $200,000, has been granted a charter. The office of the company is to be in Philadelphia. The stockholders are B. K. Jamison, W. W. Stewart, Frank R. Snowden, A. G. Plumer, and W. L. Nevin.

THE Northwestern Manufacturing and Car Company, Stillwater, Minn., was organized May 2, 1882, with a capital of $5,000,000, purchasing the business of Seymour, Sabin & Co. They employ 1,200 hands, and make, besides threshers and farm engines, freight and passenger cars.

A CERTIFICATE of incorporation was filed in the office of the Secretary of State at Albany, on the 10th inst., of the Standard Oil Company of New York; capital, $5,000,000. The incorporators are: William Rockafellar, J. A. Bostwick, Benjamin Brewster, O. B. Jennings and Charles Pratt.

THE new Indianapolis Board of Trade, which was incorporated on the 10th inst., is a consolidation of the former Board of Trade, the Merchants' Exchange, Mercantile and Produce Exchange; and the Association starts under the most favorable circumstances, with a fund of $15,000 in the treasury.

A CERTIFICATE has been issued to the Greenbrier, West Va., Stock Yard Company, for the purpose of establishing, managing and carrying on stock yards and pens, where live stock of all kinds can be loaded, unloaded and fed, rested, watered and cared for, and where live stock can be bought, sold and otherwise disposed of.

THE Genesee Valley Terminal Railroad Company was incorporated on the 14th inst. The company is to continue 99 years. The road is to be constructed from or near a point in the center of the line of the Genesee Valley Canal Railroad in the town of Chili, Monroe county, New York, and thence by the most direct route taking in the towns of Chili and Gates, to a point on the line of the New York Central and Hudson River Railroad, abou 800 feet west of the intersection of that road with the Buffalo Railroad in the town of Gates. The capital is $500,000.

CONSOLIDATION.

AT a meeting of the directors in Wabash, Ind., on the 10th inst., the Cincinnati, Wabash and Michigan and the Elkhart, Niles and Lake Michigan railroad companies were consolidated under the name of the "Cincinnati, Wabash and Michigan Railroad Company." The Elkhart, Niles and Lake Michigan is the extension north of the Cincinnati, Wabash and Michigan, organized under the Michigan laws.

THE scheme for the amalgamation of the Great Western and Grand Trunk railway companies of Canada was confirmed at the extraordinary meetings of the shareholders of both companies held for that purpose in London, England, on the 10th inst. In the poll on the question of amalgamation the majority of the Great Western shares in favor of the scheme was 111,435. All the books of both companies were closed in Canada at midnight of the 11th inst., and new ones opened in the name of the amalgamated roads. The formal transfer of the Great Western to the Grand Trunk took place on the 12th inst., Messrs. Hickson, Wainwright, and other Grand Trunk officers being present in Hamilton on that day for that purpose. The united line will be known as the "Grand Trunk Railway Company of Canada." The new through route from the west to the east is expected to be by Sarnia, then by the Sarnia branch to London, thence to Paris, and then to Buffalo. This will shorten the trip from New York to Chicago some 50 miles over the present Great Western and Grand Trunk route.

ORGANIZATION.

THE Amalgamated Iron Workers' Association at Chicago on the 10th inst. elected John Jarrett, president; William Martin, secretary; Samuel S. Wainwright, William Weihle and Edward Rodgers, trustees, and George W. Perry, treasurer. The association then adjourned to meet next year at Philadelphia.

AT the recent annual meeting of the stockholders of the Portsmouth and Dover Railroad Company, the following gentlemen were elected directors for the ensuing year: Frank Jones, Daniel Marcy, Joseph A. Walker, John S. Treat, of Portsmouth; Charles H. Sawyer, Frank A. Christie, Charles M. Murphy, of Dover. At a subsequent meeting of the directors Frank Jones was elected president, George L. Treadwell, treasurer, and Calvin Paige, clerk.

AT the annual meeting of the stockholders of the Boston, Hoosac Tunnel and Western Railroad Company, held at Saratoga on the 16th inst., the following directors were elected unanimously: Robert Minturn, Lewis May, Augustus Kountze, Cyrus J. Lawrence, George J. Forrest and W. H. Hollister, of New York; Ginery Twitchell, of Brookline, Mass.; Frederick L. Ames, of North Easton, Mass.; Elisha Atkins, of Boston; David B. Hatch, of Brooklyn, Conn.; Josiah Case, of Vernon, N. Y.; Estes Howe, of Cambridge, Mass., and W. V. Reynolds, of Schaghticoke, N. Y.

AT the annual meeting of the St. Johnsbury and Lake Champlain Railroad Company, held at St. Johnsbury, Vt., on the 9th inst., the following gentlemen were elected directors for the ensuing year: Horace Fairbanks, Franklin Fairbanks, George W. Hendee, Thos. Coggeshall, Bradley Barlow, A. B. Jewett, Henry D. Hyde, A. B. Harris, Wm. P. Fairbanks. The directors organized by the choice of Horace Fairbanks, president; Franklin Fairbanks, vice-president; William P. Fairbanks, secretary and treasurer; Horace Fairbanks, Bradley Barlow, executive committee.

THE stockholders of the Green Bay, Steven's Point and Northern Railway Company met at Green Bay, Wis., on the 15th inst., and elected the following directors: John I. Blair, Walter C. Larned, John D. Vail, Timothy Case, Theodore T. Case, W. J. Abrams, F. E. Teetshorn, W. R. Hancock, and J. E. Rawlings. At a sub-

sequent meeting of the directors the following officers were elected: John I. Blair, of Blairstown, N. J., president; Timothy Case, of Green Bay, vice-president; W. J. Adams, of Green Bay, secretary; Theodore Sturges, of New York, assistant secretary and treasurer; Timothy Case, treasurer. At the same meeting the Green Bay, Steven's Point and Northern Railroad was leased to the Green Bay, Winona and St. Paul Company.

CONSTRUCTION.

THE Ohio Central Railroad was completed to Corning on the 10th inst.

THE Wheeling and Lake Erie Railway was formally opened to travel on the 17th inst.

THE Oregon and California Railroad was completed to Myrtle Creek, Oregon, on the 2d inst.

WORK on the Canadian Pacific Railway construction has now reached 347 miles west of Winnipeg, and rails are being laid at the rate of three miles a day.

THE Clark's Forks division of the Northern Pacific Railroad was opened for freight and passenger business to Noxon, 493 miles east of Portland, Oregon, on the 1st inst.

THE Oregon Short Line Railroad, a new road building by the Union Pacific Railway Company, starts at Granger, Wyoming, and is now in operation to Cokeville, Idaho, 85 miles.

SURVEYORS in the employ of the Long Island Railroad Company are engaged surveying a route for the extension of the Montauk Railroad from Sag Harbor to Fort Pond Harbor, Montauk.

THE completion of the Council Bluffs division of the Chicago, Milwaukee and St. Paul Railway makes the entire length of the St. Paul system of roads 4,350 miles. It is operated in 16 divisions.

THE Pensacola and Atlantic Railroad Bridge over the Escambia Bay, Florida, 2¼ miles long, was finished on the 15th inst, and trains passed over it. Forty-seven miles of the road are now open for transportation.

THE Toluca Division of the Mexican National Railway, extending from the City of Mexico to the city of Toluca, was approved by the Government on the 9th inst., and the road is now opened to public traffic.

A NEW railroad is projected from Toledo to Grand Haven, Michigan, about 180 miles, to be called the Ohio and Michigan Railroad. Arrangements are to be made to utilize the dockage of the Ohio Central Railroad at Toledo.

THE Northern Pacific Railroad Company has completed two additional sections of its road. Commissioners will soon be appointed to examine the work. One of the completed sections is in Idaho and the other in Montana. The two sections cover about 140 miles.

THE Buffalo extension of the Buffalo, Pittsburgh and Western Railroad will be in running order by September 1st. The rails are laid to the Erie crossing in Buffalo. The cars will enter the Buffalo, New York and Philadelphia depot, corner of Louisiana and Exchange streets.

TRACK-LAYING on the new line of the Wisconsin Central—the Milwaukee and Lake Winnebago Railway—has commenced at Schleissingerville. The contractors expect to have the road completed from Milwaukee to Oshkosh by September 15, and ballasted and otherwise in full running order by October 15.

THE second track of the New York and Long Branch Railroad, on which work was begun three months ago, is completed. The rails of the old track are being replaced, as fast as worn out, with the finest quality of steel rails. The guard rails and string beam-guards on the bridges of the road are also completed.

THE construction of the Canadian Pacific north of Lake Superior will be begun this week from Prince Arthur's Landing to Nepigon. Five or six engineering parties are exploring along the north shore of Lake Superior, and contracts for construction of the whole section from Nepigon to Lake Nipissing will be let early next year.

THE Southern Pacific Railroad has been opened for traffic to Lozier, 358 miles east of El Paso and 29 miles from the Pecos crossing. The connection with the Galveston and San Antonio will be made at the latter point about October 1; less than 15 miles of track remaining to be laid, grading on which is well advanced. Over 5,000 men are employed on the two approaching tracks.

THE Utah extension of the Denver and Rio Grande Railway has been completed to Cimarron, 330 miles from Denver and 407 from Salt Lake City. As the company has now in operation about 108 miles of road extending eastward from Salt Lake City, less than 300 miles remains to be built to complete connection in this link. The grading is nearly finished and the preparations made for rapid track-laying indicate that this new through line will be opened by December 31.

A CIRCULAR will soon be issued inviting subscriptions for the building of the Topeka, Salina and Western Railroad of Kansas, of which C. G. Patterson, late of the Connotton Valley Railroad is contractor. The directory is E. P. Phillips, Charles A. Rogers, S. D. Loring and J. Otis Wetherbee, of Boston; Josiah B. French, of Lowell; Jacob Safford, D. W. Stormont and M. Bosworth, of Topeka; C. E. Foulkner and O. P. Hamilton, of Salina; Weston Arnold and M. A. Shamleffer, of Council Grove, and T. C. Henry, of Abiline.

A DISPATCH dated City of Mexico, August 10, says: The Tehuantepec Railroad Company having forfeited its charter, the Mexican Government has resolved to complete the road as soon as possible. The company will be paid for the work done and the material on hand. The work will be continued under the charge of General Porfirio Diaz, as Governor of Oaxaca. Delfino Sanchez, ex-superintendent of the Morelas Railroad, has been appointed purchasing agent. He will soon start for the United States and Europe to buy rails and rolling-stock.

VICE-PRESIDENT HOPKINS, of the Wabash, St. Louis and Pacific Railway Company, has given orders for the completion of the line from Albia to Des Moines. Work upon this line has been in practical suspension during the summer. When completed it will have excellent terminal accommodations in Des Moines and a new line will come into existence between the capital of Iowa and St. Louis. Directions have also been given by Mr. Hopkins for the completion of the air-line to Shenandoah. This line is now the joint enterprise of the Wabash and the Chicago, Burlington and Quincy. When finished to Shenandoah it will be used by the Wabash as the main route between Chicago and Council Bluffs.

Paris as a Seaport.

THE French Society of Civil Engineers have recently had under consideration a project of M. Bouquet de la Grye, hydrographer to the navy, for rendering Paris accessible to ships with a draught of six or seven metres (say 23 feet). He proposes to deepen the Seine bed by dredging and to lower the water level between Rouen and Poissy, so forming a maritime basin about 103 miles long and 150 feet in width, twice the width of the Suez Canal. The excavation would progressively reach a depth of about 53 feet below the present bottom at Poissy, and the water level would be lowered about 40 feet. The quantity of matter to be removed is estimated at the enormous figure of 75,000,000 cubic metres. Only the sharper curves of the river should be avoided; bridges should be raised or rendered movable. At Poissy vessels should rise by a "cascade" of locks, about 110 feet in the forest of Saint Germain, to an upper canal, fed with water from the Seine by means of turbines driven by the fall of Seine water at the locks of Poissy. This canal would extend to Aubervilliers, passing above the Seine and the railways; its level would be nearly that of the canal of La Villette. There should be two harbors, a lower and an upper, at the borders of the forest of Saint Germain, and ships going to the higher canal should not interfere with those at the lower port, whence transatlantic merchandise should be sent straight to the Rhine Valley. The expense of the lower canal between Rouen and Poissy is estimated at 150,000,000 francs, that of the upper about 100,000,000 francs. The scheme has been vigorously discussed, and some eminent engineers have taken grave objection to it. Among other points the new behavior of the water of the Seine at low water and in times of flood, the maintenance of the new bed, the expense of execution (thought to be underestimated), are noted as presenting difficulty. The problem of the bridges between Rouen and Poissy is not regarded as easily soluble. It is asked, How will the regime of rivers or streams entering the Seine between Rouen and Poissy be affected? How are their mouths to be treated so as to maintain their water level and avoid damage to property on their banks? What of the strong drainage of land along the Seine, with resultant injury to cultivation from lowering the level of the river? Will not the waterfalls at works, the foundations of houses, wells, springs, in a word, property generally, be gravely compromised?

THE Cairo *Argus-Journal* of the 11th inst., says that the new Cairo and Texas Narrow-Gauge Railroad is likely to be well supplied with locomotives. Two more went through for it on the Wabash yesterday.

Central American Progress.

THE industrial development of the Central American republics is of increasing commercial interest to the people of the United States. The five republics, Guatemala, Salvador, Honduras, Nicaragua and Costa Rica comprise the territory that lies between the ninth degree and the sixteenth, north latitude—between the Isthmus of Panama and Mexico. In richness of soil, in mineral deposits and in climate on the plateaus this region surpasses almost all other parts of the continent.

COSTA RICA.

Costa Rica, the smallest of these states, has a white population of 250,000; it annually exports 15,000 tons, chiefly coffee, valued at $3,000,000; it annually imports about 15,000 tons, valued at $2,500,000. The Costa Rica Railroad was planned for an interoceanic route between Port Lucian (10 degrees north latitude) on the Atlantic to Punta Arenas (9 degrees 50 seconds north latitude) on the Pacific, a total distance of 173 miles. It was built by the Government and is under the control of the Government. It is divided into three divisions, to wit: The Atlantic Division, 100 miles; the Central Division, 27 miles; the Pacific division, 46 miles. Of the Atlantic Division 73 miles are in good running order. Then 27 miles of well built carriage road connect with the Central Division at the capital, San Jose. The Central Division, 27 miles, which had been running since 1873, connects the four principal towns on the mountains, and is chiefly a passenger line. The Pacific Division has twelve miles in running order from Punta Arenas, Gulf of Nicoya, eastward to Esparta. The gauge of the Costa Rica road is three feet six inches and the greater part of it is laid with English steel rails and native hard-wood ties. Its maximum grade is 210 feet per mile and its maximum curvature 32 feet. The rolling-stock is of American manufacture. The cost per mile has been from $70,000 to $80,000, on account of the extremely difficult ground and the number of costly bridges.

The road, according to an agreement lately entered into with the British bondholders, will be turned over to their management for 99 years, under obligation on their part to finish the rail connection between the Atlantic and Central divisions at an estimated cost of $4,000,000. In this agreement is included a settlement of Costa Rica's foreign debt in England of some £3,000,000, reducing the interest from 6 and 7 per cent to 3½ per cent per annum, and the Government engaging to pay, outside the railroad settlement, about £100,000 per annum. The combined railroad and carriage road of the Atlantic Division carries at present most of the imports and the exports of the country at an average cost of $35 per ton. The traffic of Costa Rica may be fairly estimated to-day at 24,000 tons to and from the Atlantic port, and 6,000 tons to and from the Pacific port.

NICARAGUA.

The Republic of Nicaragua has two natural outlets, one over the lakes and San Juan River to the old port of San Juan del Norte, or Greytown, which, however, since 1862, has been completely sanded up and at present can be called only an open roadstead, and the other to the two ports on the Pacific, San Juan del Sur and Corinto.

Of the 600,000 inhabitants the most are colored and live on the Pacific slope. The export trade, principally hides, rubber, coffee, sugar and dye-woods, amounts to about 10,000 tons, valued at $2,500,000, and the import of foreign goods to about 10,000 tons, valued at $2,000,000. One-third of the trade goes to the Atlantic and two-thirds to the Pacific ports.

The Nicaragua Railroad is building by the Government. It is to connect the port of Corinto, via Chinandega and Leon, with the Lake of Managua at Moabita, a distance of fifty-six miles, on extremely favorable ground. Thirty miles of it are finished and in running order, well constructed and equipped, at a cost of about $20,000 per mile. It is three feet six inches gauge, laid with English steel rails; maximum grade 60 feet per mile, with very easy curvature. The rolling-stock is of American manufacture. The bridges of this road, one of them 1,400 feet long, have been built from American plans and specifications in Germany. Nicaragua is the principal cattle-raising country of Central America and partly provides Costa Rica and Salvador with cattle.

HONDURAS.

This state should have its natural outlet towards the Atlantic, for only a small part of its territory borders on the Pacific and has Amapala as a port, but the greater part of its imports, 6,000 tons annually, and its exports, 9,000 tons (coffee, hides and dyewoods), goes by the latter port. Honduras has a mixed population of about 600,000. This is the poorest of the Central American republics, but it is developing fast under a good Government. The country is rich in silver mines, which, however, are not yet worked. Although more than £4,000,000 were signed and contracted for in London towards the building of an interoceanic railroad, the State of Honduras claims never to have received a dollar of the loan, except indirectly through a small section of railroad (43 miles from Port Cortez, on the Caribbean Sea, towards the interior). On this the loan of about $1,500,000 was spent by the British contractors, Messrs. Waring Brothers, and their work ceased. According to the latest news the present Government has made an arrangement with the English bondholders by which the repairing and construction of the railroad will be taken up again. The road as originally laid out is of three feet gauge, 470 feet maximum grade and 30 feet curvature. The distance is 265 miles, and it is estimated that the road will cost $50,000 per mile.

SALVADOR.

This is at present the most prosperous and the wealthiest state of Central America. A greater part of the territory is under cultivation, and it has a greater variety of exportable products than the other states, whose chief exportable product is coffee. The low price of coffee during the last two years has caused heavy losses to the planters and to many of the importers. Salvador is the only state of Central America that has no Atlantic coast-line. Its whole area lies on the Pacific slope; and its three ports are Port Union on the Fonseca Bay, Port Libertad and Port Acajutla. Its population, of 750,000, consists mostly of Indians, but they are peaceful and industrious. The value of the exports is about $5,000,000, and of the imports from $2,500,000 to $3,000,000. The former consists principally of coffee, sugar, indigo, tobacco, balsam, hides, dyewoods, rubber, deerskins and silver ore.

A railroad from Port Acajutla in favorable railroad ground, has been built 15 miles by native capital at a cost of $22,000 per mile equipped. It has English steel rails and American rolling-stock, and has this month been opened for traffic. The company enjoys a Government guarantee of 12 per cent per annum on $400,000 for 25 years. The same company holds a commission for an extension of its present line from its upper terminus at Sansonate to the city of Santa Ana, a distance of about 40 miles, at an estimated cost of about $30,000 per mile. For this the greater part of the capital has been subscribed at home under a Government guarantee of 8 per cent. The gauge of this Salvador road is the three-feet gauge, or standard American narrow-gauge. Another commission has been given to a native company, under 8 per cent guarantee upon $1,000,000, for a railroad from Port Libertad to the capital of San Salvador, distance 25 miles, heavy ground, with steep grades and small curvature. A third commission, approved by this year's Congress, also for a narrow-gauge road, has been given to a New York capitalist, and embraces a central line through the republic from Port Union to the frontier of Guatemala, distant about 200 miles. The Government subsidizes this commission with $10,000 per mile and guarantees for 25 years a net earning annually of $1,000 per mile. The probable cost of this line equipped may be about $30,000 per mile. No surveys, however, have yet been made.

The last road may eventually be the most important of all, for it will be an outlet for the whole country towards the best part of Central America. And the enormous pier and shipping expenses of the other ports will be avoided by it. The idea is to connect eventually this central line with the Guatemala and Mexican roads.

GUATEMALA.

This state is the largest of the Central American republics and has developed considerably during the last decade, through its increasing coffee culture. The same effect of the extremely low prices of this article has been felt there as in the other states. Coffee which sold five and ten years ago for $15 to $18 per hundred-weight on the plantations has been sold during the last year for from $7 to $8—a price which barely covers the cost of production. Guatemala has about 1,500,000 inhabitants. Most of the people live on the Pacific slope. The imports and exports almost entirely go through the two open roadsteads, San Jose and Champerico, on the Pacific. The exports and the imports are each about 15,000 tons. There are in Guatemala very extensive sugar estates, which could provide California easily with 15,000 or 20,000 tons of sugar per annum. On account, however, of the Sandwich Islands treaty the sugar export from Central American States is out of the question. This is certainly a great drawback to the general development of these republics.

The first railroad built in this State, from Port San Jose to Escuintla (half-way up to the capital), a distance of 30 miles, was opened in June, 1880, and the dividend-declared upon the earnings of the first five months of this year was 9 per cent on the capital of $1,000,000. The gauge is the metre gauge, 39⅜ inches; maximum grade, 4 per cent; smallest curve, 24 degrees. It has rails and American rolling-stock. The original cost of the road equipped was $22,000 per mile. Another concession was given to the owner of the lower line for the extension to the capital, a distance of 38 miles, now in the course of construction. The Government subsidizes this extension with $125,000 per annum for 25 years, and advances to the construction company $500,000 of this subsidy. This enterprise has just been sold out to a New York company. Another concession has been granted to a syndicate of California capitalists for a road from Port Champerico to the foothills at Retaluleu, and work has been begun. It is subsidized by the Government similarly to the San Jose Guatemala road.

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CONSCIENCE.

THE above word has been defined by theologians to mean that quality possessed by human beings that decides between right and wrong. It is supposed to be the power within a man, when implicitly obeyed, that keeps him from doing wrong and leads him to do right. How far this is true, we are not prepared to state; but we are ready to admit that in many cases it is not true. We have historical record of many acts performed which the perpetrators did from a good conscience, as they supposed, but the results plainly indicate that such were the works of the Evil One, and radically false and wrong. We need not be very well read to know of such results. The Bible has one very notable instance, that of Paul persecuting the Christians. When he became converted he claimed that he persecuted them out of a good conscience, verily thinking that he was doing God service. He did not offer this explanation as an excuse for so doing, but simply as a reason. Now we all know that Paul's persecution of the Christians was a wrong thing to do, even though his conscience told him it was the right thing. Paul's subsequent life proves that he came to look upon this persecution as the very opposite of right, and yet, when he was engaged in it, he was ready to lay down his life to prove that he was right, his conscience approving the act. There may be some who deny that the story of Paul and his persecuting the Christians is true, and claim that it has no more foundation in fact than any other work of fiction. This article will lose nothing by granting this claim, any more than the advocates of the universality of sin lose anything by parties denying the literalness of the scene in the Garden of Eden. That scene may be mythical, but it conveys a fact of which every person is conscious, that sin reigns in the human body to the loss of happiness to the human being. So this story of Paul and his persecuting labors may be mythical; but the truth conveyed remains the same—that we may do things from a good conscience, and the acts so done be radically and entirely wrong. We say the truth remains the same, because we claim that each man has his own individual experience confirming it. We remember a church where they disciplined the members guilty of dancing, looking upon this recreation as one of the Devil's arts to lead souls astray. We have no question that many have been thus led astray, but this is no excuse for punishing those who can indulge in it to their own profit and pleasure without experiencing harm. Now men have been excommunicated for dancing whose lives were far more blameless than the parties engaged in casting them out, yet these latter considered they were doing God service and were acting from a good conscience. Some years ago a church cast a great and good man out of its fold for singing religious songs. There is no question but what the church acted from a good conscience, and so did the man who sang the hymns. The great world outside of the church looking on did not take long to decide which conscience seemed the best and nearest right. To-day we are talking about the slack attendance of our churches and the spread of infidelity, and many reasons are assigned to account for these conditions.

One reason will cover the whole ground. One intolerant, bigoted church member, acting from a good conscience, will do more to empty a church and make infidels than can be done by the grossest immorality.

But let us take our personal experiences of acting from a good conscience. One man does not hesitate to throw dice and play cards any day in the week, but refuses to do so on Sunday. Yet the same man will go fishing on Sunday and think he is doing no harm. Another man will sit at the table with a party of men and raffle for drinks, cigars and turkeys, and will not raffle for a quarter of a dollar. If he loses when raffling for drinks, cigars or turkeys, he will lose more money than if he raffled for twenty-five cents and lost. He engages in the first on the plea of sociability and enjoyment, and declines the latter because he considers it gambling. A man will play croquet until he is so excited that he can hardly refrain from cheating, and then condemns the billiard table as a thing to be shunned with holy horror. A woman is careful to tell the truth when she speaks, and yet considers it no harm to lie with false hair, which she passes off as her own, with paste stones in ear-rings, which she hopes people will believe to be diamonds, with imitation lace on her dress, which she expects people to accept as real.

One more illustration. A man who would die sooner than take a dollar as a thief, or have a bill presented to him the second time, does not have any pangs of conscience when he lends his name to raising funds for building a railroad, which may end as it began, on paper. He may by this course impoverish more people than any thief ever did or could, and get more money into his own pocket than it is possible for a thief to do, yet his conscience does not rebuke him as it would were he to steal or defraud, as such terms are defined by law.

What shall we then claim for conscience? We cannot claim that it is an inward monitor deciding questions of right or wrong, for we all know of many cases where it has proved an

entire failure. The most we can do for it is to divest the word of all meanings theologians have given to it, and return to its first meaning —self-knowledge. This is all it really means, and if we accept this definition we can readily embrace the doctrine that conscience was given to us as a guide to our own actions, and not to control or judge the actions of others. It then becomes our duty to train the conscience to decide from a knowledge of the facts as they exist, and not from a knowledge of our desires and feelings. When something is brought before us that we are not in sympathy with, we must have a conscience trained to that degree of perfectness that we shall not cast the thing aside until the facts warrant us in so doing. We shall find many times that the facts, as they exist, are opposite to our desires and feelings.

The Grand Trunk Fusion.

THE Grand Trunk Railway and Great Western of Canada were at midnight united in the iron bonds of matrimony, and this morning start upon the wedding tour, it is to be hoped, to prosperity, usefulness, and fair dealing with the Canadian public. The shareholders have themselves tied the knot, and the management of the household will be in the hands of the better half of the pair, the Grand Trunk Railway. The public has had ample warning of the fusion of these railways and the result has been forecast in all sorts of colors. The public, will, of course, be likely to lose in competition with local points, principally in Ontario, and can be squeezed unmercifully if the new partners so elect. A strong public opinion must be exercised, therefore, in such localities and any undue interference with the trade of the country checked at once.

The system of the Grand Trunk Railway, now that it has absorbed the Great Western, covers 3,330 miles of line. The old Grand Trunk, 1,511¾. The Great Western and affiliated lines, 822¼; Midland of Canada, 471; Chicago and Grand Trunk, 335; Detroit, Grand Haven and Milwaukee Railway, 189. The question of this fusion has been held before the public for a good many years, and when application was made to Parliament for an act of amalgamation twenty years ago, Parliament rejected it.

Orders having been issued last evening by the Grand Trunk Railway to that effect, the employes of the Company along the line made up their accounts to midnight as the old Grand Trunk, and commenced under the new marriage or fusion contract from the expiration of that hour. There had been no further orders issued at that time, but doubtless some radical changes will be experienced along the line of the companies West, especially as to the number of employes. As the Canadian Pacific progresses very rapidly there will be probably openings enough for those who may in the exigencies of the case be dropped from the service roll of either railway.—*Montreal Witness, Aug.* 12.

Boston and New York Air Line Lease.

THE Boston and New York Air Line Railroad, extending from New Haven, through Middletown to Willimantic, Conn., where it connects with the New York and New England Railroad Company's lines to Boston and Providence, is now run under a 99 years' contract to the New York, New Haven and Hartford Railroad Company. By the terms of the contract, as originally made, the Boston and New York Air Railroad Company was to receive for the use of its road 6 per cent of the gross earnings of the New York, New Haven and Hartford Railroad Compony and its branches, in lieu of any other rental. The terms of this contract, made in 1878, were to be subject to revision once in five years; and at the end of two years, at the request of the New York, New Haven at Hart- Railroad Company, a revision of the contract was had. This new contract gave to the Air Line Co. 5 per cent of the gross earnings, in lieu of 6 per cent. This reduction was not made without considerable opposition on the part of some of the stockholders of the Air Line Company, who claimed that it was an unjust one, and that the earning power of their road entitled them to more liberal terms. It was ascertained, however, that no better terms could then be made with the New York, New Haven and Hartford Company, and the new contract at 5 per cent was closed, a provision being made that it could be terminated by either road on suitable notice. Such notice was given the New York, New Haven and Hartford Company some time ago, and in place of this contract an agreement has now been prepared by the directors of the Air Line Company to lease its road and rolling-stock to the New York, New Haven and Hartford Company. This lease has been submitted to and accepted by the board of directors of the New York, New Haven and Hartford Company. Before the lease can be perfected, however, it must be accepted, in accordance with the laws of the State of Connecticut, by the stockholders of both the parties to the lease. The stockholders of the New York, New Haven and Hartford Railroad Company will hold their annual meeting and consider this lease at New Haven, Conn., on September 6, and the stockholders of the Boston and New York Air Line Railroad Company will hold their meeting at Middletown, Conn., and pass upon the lease on September 13.

By the terms of the lease, the New York, New Haven and Hartford Company agrees to pay an annual rental of $120,000, in two instalments of $60,000 each, payable in April and October of each year, beginning in April, 1883. This is virtually paying 4 per cent interest to the preferred stockholders of the Air Line Company. This stock amounts to $3,000,000. The lessee also agrees to keep the property of the lessor in as good condition as when delivered to it, and to restore it to the lessor in equally good condition at the termination of the lease, in 99 years from Sept. 30, 1882. It also agrees to pay all taxes and assessments, all running expenses, and expenses incidental to necessary repairs and improvements. It further agrees to pay the interest on the $500,000 of first mortgage bonds and on the $25,000 guaranteed mortgage bonds issued for the construction of the Colchester branch of the road, or the interest on any bonds issued in their stead, providing that such interest shall not exceed $26,750 per annum. Should the terms of this lease be ratified, it will virtually operate to convert the preferred stock of the Air Line Company into a 99-year bond bearing 4 per cent interest. Under the existing contract the Air Line Company has been able to pay a 4 per cent dividend after paying the interest on the bonds and the operating expenses, and has had a surplus left, which has been used in improving the road-bed and providing rolling-stock, rails, etc. The directors and many of the preferred stockholders preferred, however, to have a lease with a 4 per cent dividend guaranteed rather than to trust to securing such a dividend upon the terms of a contract liable to alteration once in five years. It is asserted by railroad men that the New York, New Haven and Hartford Company will be very willing to obtain the road upon such favorable terms, even if it is not run so as to satisfy the demands of local traffic, and thus made a paying investment. The reason for this assertion is that it will place under their control a road which might become a dangerous and powerful factor in establishing a rival route between New York, Providence, Boston, and other points east. That control they can well afford to pay a couple of hundred thousand dollars a year to retain.

The Canada Northwest Land Company.

M. LE RUEY has communicated to the *Ontario Free Press* the following particulars of this company, which has been commonly spoken of as the "Duke of Manchester's Company." The capital, he says, is £3,000,000, in shares of £10 each, of which it is not anticipated to call up more than £5 per share at present, the balance of the purchase money of the lands being proposed to be raised by debentures of the company secured on the lands of the company and on its unpaid capital. The Duke of Manchester is the chairman, and the Canadian directors are D. A. Smith of Montreal, Alexander G. Ramsay of the Canada Life Insurance Company, Hamilton, G. B. Osler and W. B. Scarth, of Toronto, the two latter of whom are to be managing directors in Canada. It is stated in the prospectus that 5,000,000 acres of the Canadian Pacific Railway Company's lands in the Northwest Territory are to be acquired, together with half the railway company's interest in the sites of all the towns and villages located during construction, or within a year thereafter. It is proposed to offer to the Land Corporation of Canada one-twelfth interest in the land so to be acquired at cost. The net price paid by the company for the farming lands is stated to be about $2.73 per acre. The town and village sites upon the railway company's land grant are to be acquired at the same rate. The prospectus also states that the railway company has suspended its sales of lands in quantity, and has expressed its intention to confine its future sales to individual purchasers in small holdings.

TRAIN up a child, and away it 'ill go.

The Stock Exchanges and Money Market.

New York Stock Exchange.

Closing Prices for the week ending Aug. 16.

	Th.10.	F.11.	Sat.12.	M.14.	Tu.15.	W.16.
Adams Express	140¾	140	.....	140	.....	140
Albany and Susq	.....	.....	.....	.....	.....	.....
1st mortgage	.....	.....	.....	.....	.....	.....
2d mortgage	.....	.....	.....	.....	.....	.....
American Express	.....	95¼	.....	94¾	.....	94¾
Burl., C. R. & Nor	.....	.....	.....	.....	.....	.....
1st mortgage 58	102¾	102½	102	102½	.....	102½
Canada Southern	63¾	63¾	63	63¼	63⅞	65
1st mortgage guar	.....	93¼	.....	.....	.....	93
Central of N. Jersey	79¾	79¼	78⅜	79½	79½	79⅜
1st mort. 1890	.....	.....	.....	.....	.....	.....
7s, consol. ass	.....	.....	.....	.....	.....	.....
7s, convertible ass.	.....	111⅛	111⅛	111½	.....	111⅛
7s, Income	.....	.....	.....	.....	.....	.....
Adjustment	.....	107	.....	.....	107⅛	.....
Central Pacific	94⅞	94	93⅞	94¾	94⅛	94⅛
6s, gold	.....	.....	116	.....	.....	.....
1st M. (San Joaq)	.....	.....	.....	.....	.....	.....
1st M. (Cal. & Or.)	.....	.....	.....	.....	.....	.....
Land grant 6s	.....	106⅜	106¼	.....	.....	.....
Chesapeake & Ohio	.....	25	.....	25	.....	24⅛
1st pref	39⅝	38⅞	38¼	38⅝	38⅝	38
2d pref	.....	27¼	.....	.....	.....	.....
1st mort., series B	85	85¼	.....	86	.....	.....
Chicago and Alton	145	144¾	144¾	145	145	145½
Preferred	.....	.....	.....	.....	.....	.....
1st mortgage	.....	.....	.....	122	.....	.....
Sinking Fund	.....	114	.....	.....	.....	.....
Chi,, Bur. & Quincy	139	138¼	137½	137¾	137⅛	137⅛
7s, Consol. 1903	.....	.....	.....	.....	128¼	.....
Chi., Mil. & St. Paul	123¾	123¾	123½	124¾	124	123⅞
Preferred	137⅛	137¼	137⅜	138¼	138⅜	138½
1st mortgage, 8s	.....	.....	.....	.....	.....	.....
2d mort., 7 3-10s	.....	.....	.....	.....	.....	.....
7s, gold	.....	.....	.....	.....	.....	.....
1st M. (La. C. div)	122	.....	.....	121	.....	.....
1st M. I. & M. div.)	.....	.....	.....	.....	.....	.....
1st.M. (I. & D. ext.)	.....	.....	.....	.....	.....	.....
1st M. (H.&D. div.)	.....	118	.....	.....	.....	.....
1st M.(C. & M.div.)	.....	.....	.....	.....	.....	.....
Consolidated S. F.	.....	.....	.....	.....	124	124
Chi. & Northwestern	143⅜	144⅛	144½	148⅛	148¼	149
Preferred	165	166	165	173⅜	170½	175
1st mortgage	.....	.....	102½	.....	.....	.....
Sinking Fund 6s	.....	.....	.....	.....	.....	.....
Consolidated 7s	.....	131	.....	.....	.....	.....
Consol. Gold bo'ds	.....	125	.....	125	124⅞	.....
Do. reg	.....	.....	.....	.....	.....	.....
Chi., R. Isl. & Pac.	138¼	139	139	138¾	139¼	138¼
6s, 1917, c	..	.....	.....	.....	.....	.....
Clev.,Col.,Cin.&Ind.	87½	.....	.....	.....	.....	84
1st mortgage	123½	.....	.....	.....	.....	.....
Clev. & Pittsburg gr.	139	.....	.....	.....	.....	.....
7s, Consolidated	.....	.....	.....	.....	.....	.....
4th mortgage	.....	.....	.....	.....	.....	.....
Col.,Chi.,& Ind. Cent	13¾	14¼	13¾	14¼	.....	.....
1st mortgage	.....	.....	.....	.....	.....	.....
2d mortgage	.....	.....	.....	.....	.....	.....
Del. & Hud Canal.	117½	117½	117	118	118¼	118¼
Reg. 7s, 1891	.....	.....	116	.....	.....	.....
Reg. 7s, 1884	.....	106	.....	.....	.....	.....
7s, 1894	.....	118¼	.....	.....	.....	.....
Del.,Lack.& Western	143⅛	143⅜	143¼	146½	147¼	148¾
2d mortgage 7s	.....	.....	.....	.....	.....	.....
Consol. 1907	.....	.....	.....	.....	.....	.....
Erie Railway	.....	.....	.....	.....	.....	.....
1st mortgage	.....	.....	.....	.....	.....	.....
2d mort. 5s, ext.	.....	.....	.....	.....	.....	.....
3d mortgage	105	.....	.....	.....	.....	.....
4th mort. 5s, ext.	.....	.....	.....	109	.....	.....
5th mortgage	.....	.....	.....	.....	.....	.....
7s, Consol. gold	.....	.....	.....	.....	129¼	.....
Great West. 1st mort	.....	105	.....	.....	.....	105
2d mortgage	.....	.....	103½	.....	.....	103½
Hannibal & St. Jo	.....	.....	.....	.....	.....	.....
Preferred	95⅛	95	94½	96	96	95
8s, Convertible	.....	.....	.....	.....	.....	.....
Houston & Tex. Cen	.....	.....	.....	.....	.....	.....
1st mortgage	.....	112¼	.....	.....	.....	114⅛
2d mortgage	.....	.....	.....	.....	.....	.....
Illinois Central	141½	141½	138x	138⅜	138	137⅜
LakeShore&MichSo	115⅜	115¼	115⅜	115⅞	115½	115½
Consol. 7s	.....	.....	.....	125	.....	.....
Consol. 7s, reg	.....	.....	.....	.....	.....	.....
2d Consolidated	.....	.....	.....	.....	.....	.....
Leh. & W. B. con.ass	.....	.....	.....	.....	.....	.....
Long Dock bonds	.....	.....	.....	.....	.....	.....
Louisville & Nash.	74⅞	74¾	75¾	76	75⅝	75¼
7s, Consolidated	.....	.....	.....	118	.....	118
Manhattan	55	57	56	.....	55	56¼
1st pref	89¾	.....	.....	.....	.....	.....
Met. Elevated	83	.....	85	.....	.....	83¾
1st mortgage	99	98⅜	98¾	99⅞	99⅝	.....
Michigan Central	100¼	100	99¾	100⅛	100⅜	99¾
7s, 1902	.....	.....	.....	124¼	125	.....
Morris & Essex	127	.....	.....	126½	127⅛	127½
1st mortgage	.....	.....	.....	.....	.....	.....
2d mortgage	.....	.....	.....	.....	112¾	.....
7s of 1871	.....	.....	.....	.....	.....	.....
7s, Convertible	.....	.....	.....	.....	.....	.....
7s, Consolidated	.....	124¼	.....	.....	124	.....
N.Y. Gen. & Hud. R.	136¾	137½	136¾	136¼	136¾	137¼
6s, S. F. 1883	.....	.....	.....	.....	.....	.....
6s, S. F., 1887	.....	.....	.....	.....	108¾	.....
1st mortgage	133	.....	.....	.....	.....	132
1st mortgage, reg.	.....	.....	.....	.....	.....	.....
N. Y. Elevated	.....	.....	.....	.....	.....	.....
1st mortgage	115	.....	.....	.....	.....	.....
N. Y. & Harlem	.....	205	.....	.....	.....	.....
Preferred	.....	.....	.....	.....	.....	.....
1st mortgage	.....	.....	.....	.....	.....	.....
1st mortgage, reg	.....	.....	.....	131	.....	.....
N. Y., Lake Erie & W	40⅜	40¼	39⅞	40⅛	40	39⅜
Preferred	80¾	.....	80⅛	80½	.....	80¾
2d Consolidated	.....	98	98¾	.....	.....	97⅛
New 2d 5s fund	97¾	.....	.....	94	.....	94
N.Y.,N.Hav'n&Hart	.....	.....	.....	.....	.....	.....
North Mo. 1st mort	.....	.....	.....	.....	.....	.....
Northern Pacific	51⅛	51⅝	51	51⅛	51¾	51⅛
Preferred	94	95¾	94¼	95⅛	95¾	95¾
Ohio & Mississippi.	39¼	38⅛	39	39¼	.....	37⅜
Preferred	.....	.....	.....	.....	.....	.....
2d mortgage	.....	.....	.....	.....	.....	.....
Consolidated 7s	.....	.....	.....	.....	.....	.....
Consol. S. Fund.	.....	117	.....	.....	.....	.....
Pacific Mail S. S. Co	46½	45⅞	45⅛	45¾	45⅞	45⅛
Pacific R. R. of Mo.	.....	.....	.....	.....	.....	.....
1st mortgage	.....	.....	.....	.....	.....	105⅞
2d mortgage	.....	.....	.....	.....	.....	.....
Panama	.....	.....	.....	.....	.....	.....
Phila. & Reading	59¼	59	58¾	60¼	61	63
Pitts,Ft.W.&Chi.gtd	.....	.....	134	.....	136	.....
1st mortgage	.....	.....	.....	.....	.....	.....
2d mortgage	.....	.....	.....	.....	.....	.....
3d mortgage	.....	.....	.....	.....	.....	.....
Pullman Palace Car	128¼	.....	.....	129	132⅞	134
Quicksil'r Min'g Co	10	.....	.....	.....	.....	.....
Preferred	.....	.....	.....	.....	.....	.....
St. Louis & San Fran	42¼	42	41¾	42	.....	.....
Preferred	60¼	.....	60	60¾	61	61
1st Preferred	98⅛	98⅛	.....	.....	.....	.....
St. L., Alt'n & T. H.	41¼	40	.....	40⅛	42	.....
Preferred	87	.....	.....	.....	89	87
1st mortgage	122	.....	.....	.....	.....	.....
2d mort. pref.	.....	.....	.....	.....	.....	.....
Income bonds	.....	.....	.....	.....	.....	.....
St. L., Iron Mt. & S	.....	.....	.....	.....	.....	.....
1st mortgage	.....	.....	.....	.....	.....	.....
2d mortgage	.....	.....	.....	.....	.....	.....
Toledo and Wabash	.....	.....	.....	.....	.....	.....
1st mortgage	.....	.....	.....	.....	.....	.....
2d mortgage	.....	.....	.....	.....	.....	.....
7s, Consolidated	.....	.....	.....	.....	.....	.....
St. Louis Division	.....	.....	104	.....	.....	.....
Union Pacific	118	117½	117¼	118	117½	116¾
1st mortgage	.....	.....	.....	.....	116	.....
Land Grant 7s	.....	114⅛	.....	.....	.....	.....
Sinking Fund 8s	.....	.....	.....	123	.....	.....
United States Ex	75	.....	.....	.....	.....	.....
Wabash, St. L.& Pac	37⅛	37¼	36⅞	38	37⅜	37⅜
Preferred	66⅞	66½	66	67	66	66
New mort. 7s	.....	.....	.....	.....	.....	.....
Wells-Fargo Ex	130¾	.....	.....	131¼	.....	.....
Western Pacific b'ds	.....	.....	.....	.....	.....	.....
Western Union Tel.	89⅜	89⅛	88¾	89⅛	89⅜	89¼
7s., S.F conv., 1900	.....	.....	.....	.....	118	.....
FEDERAL STOCKS :—						
U. S. 4s, 1907, reg	120	.. ..	119¾	.....	.....	.....
U. S. 4s, 1907, coup.	119⅞	119¾	119⅝	119¾	119¾	.....
U. S. 4½s, 1891, reg.	113⅞	.....	.....	.....	.....	.....
U. S. 4½s, 1891, coup	.....	.....	.....	.....	.....	.....
U. S. 5s, cont'd at 3½	.....	.....	.....	.....	.....	101¼
U. S. 6s cont'd at 3½	.....	.....	.....	.....	.....	.....
Dt. of Col. 3-65s, reg	.....	.....	.....	.....	.....	.....
Dt. of Col. 3-65s, coup	.....	.....	.....	.....	.....	.....

Boston Stock Exchange.

Closing Prices for the Week Ending Aug, 16.

	Th.10.	F.11.	Sat.12.	M.14.	Tu.15.	W.16
Atch.,Top.&San.Fe.	95	94¾	94⅞	94⅜	94⅝	95¼
1st mortgage	.....	.....	.....	.....	.....	.....
Land Grant 7s	.....	.....	.....	.....	.....	.....
Boston & Albany	167	.....	167½	.....	.....	167¾
Boston and Lowell	.....	.....	103	.....	103	.....
Boston & Maine	147	.....	.....	.....	.....	147
Boston& Providence	.....	159	159	.....	159	.....
Bos'n,Hart.& Erie7s	.....	.....	.....	.....	.....	.....
Burl.& Mo.R.L.G.7s	.....	.....	.....	.....	.....	.....
Burl.& Mo.R.in Neb	.....	.....	.....	.....	.....	.....
6s, exempt	.....	.....	.....	.....	.....	112
4s	.....	.....	.....	.....	.....	83¾
Chi.,Burl. & Quincy	139¼	138⅜	137⅝	138	137½	137¾
Cin.,Sand&Clev($50)	28	27⅞	.....	.....	.....	.....
Concord ($50)	.....	.....	.....	.....	.....	.....
Connecticut River	.....	.....	.....	.....	.....	.....
Eastern	45	.....	44	.....	.....	44
New 4½ Bonds	109½	109½	109⅝	109½	110⅜	.....
Fitchburg	132	132	.....	.....	.....	131½
N.Y. & New England	54⅜	54	54	54½	53	52½
7s	116¾	117	117	.....	116¾	.....
Northern N. H	.....	.....	110	.....	.....	.....
Norwich&Worcester	.....	.....	.....	.....	.....	.....
Ogden & Lake Cham	.....	.....	.....	.....	.....	.....
Old Colony	133	.....	133½	.....	133	.....
Ph.,Wil.&Balt.($50)	.....	.....	.....	.....	.....	.....
Portl'd,Saco & Ports	....	.....	.....	.....	.....	.....
Pueblo & Ark Val 7s	.....	114¼	.....	114	.....	.....
Pullman Palace Car	.....	129½	.....	.....	130	134
Union Pacific	.....	118	.....	117	.....	115¾
6s	.....	.....	.....	.....	.....	116
Land Grant 7s	.....	.....	.....	.....	.....	.....
Sinking Fund 8s	.....	119¼	.....	.....	.....	.....
Vermont & Mass	.....	.....	.....	.....	.....	.....
Worcester & Nashua	.....	.....	.....	.....	.....	.....
Cambridge (Horse)	.....	.....	.....	.....	.....	.....
Metropolitan(Horse)	.....	.....	.....	.....	.....	74⅞
Middlesex (Horse)	.....	.....	.....	.....	.....	.....
Cal.&Hecla Min'gCo	248	.....	248	248	.....	250
Quincy	62	61¼	61¼	64	63¼	63¼

Philadelphia Stock Exchange.

Closing Prices for the Week Ending Aug. 15.

	W.9.	Th.10.	F.11.	Sat.12.	M.14.	Tu 15.
Allegh'y Val. 7 3-10s	.....	.....	.....	.....	.....	.....
7s, Income	.....	.....	.....	.....	.....	.....
Buff., Pitts & West.	20⅞	20⅞	20⅞	20⅞	20¾	21
Camd'n & Am. 6s, '83	.....	101	101	.....	.....	.....
6s, 1889	.....	.....	.....	.....	.....	.....
Mort. 6s, 1889	113	.....	113	.....	.....	.....
Camden & Atlantic	.....	.....	.....	.....	.....	.....
Preferred	.....	.....	.....	.....	.....	.....
1st mortgage	.....	43	.....	.....	.....	.....
2d mortgage	.....	.....	.....	.....	.....	.....
Catawissa	.....	.....	.....	.....	.....	.....
Preferred	.....	.....	.....	.....	.....	.....
2d pref	.....	.....	.....	54½	.....	.....
7s, new	.....	.....	.....	.....	.....	.....
Del. & Bound Brook	.....	.....	.....	.....	.....	.....
7s	.....	.....	.....	.....	.....	.....
Elmira&Williamsp't	.....	.....	.....	.....	.....	.....
Preferred	.....	.....	.....	.....	.....	.....
Hunt. & B. Top Mt.	.....	14½	.....	.....	.....	.....
Preferred	....	...	.....	.....	.....	.....
2d mortgage	.....	.....	.....	.....	.....	.....
Lehigh Navigation	43¼	43¼	.....	43¼	43¼	44¼
6s, 1884	.....	.....	.....	.....	.....	.....
Gold Loan	.....	.....	113½	.....	114	113½
Railroad Loan	.....	.....	.....	.....	.....	.....
Conv. Gold Loan	.....	.....	.....	.....	.....	.....
Consol. Mort, 7s	.....	117	.....	.....	.....	.....
Lehigh Valley	63	62¾	62¾	63	62¾	62½
1st mort. 6s, coup	.....	.....	.....	.....	.....	.....
1st mort. 6s, reg	122	.....	.....	123	.....	.....
2d mort. 7s	.....	.....	.....	.....	.....	.....
Consol mort. 6s	121	.....	.....	.....	.....	.....
Consol.mtg.6s,reg	.....	121½	.....	121½	.....	.....
Little Schuylkill	.....	57	57	.....	.....	.....
Minehill&Sch.Hav'n	.....	.....	.....	.....	.....	.....
North Pennsylvania	.....	63½x	63¾	63¾	.....	.....
1st mortgage 6s	.....	.....	.....	.....	.....	.....
2d mortgage 7s	.....	.....	.....	.....	.....	.....
Genl. mtg.7s,coup	.....	.....	.....	.....	.....	.....
Genl. mtg. 7s, reg	.....	.....	.....	.....	.....	.....
Northern Central	.....	.....	49¾	49¾	.....	49¾
5s	.....	.....	.....	.....	.....	.....
Northern Pacific	51⅞	51½	51½	51	51½	51¾
Preferred	93⅛	94	95	94½	95	95¾
Pennsylvania R. R.	62¼	62⅜	62	62¼	62½	62⅛
1st mortgage	.....	.....	.....	.....	.....	.....
Gen'l mort	.....	.....	.....	.....	.....	125
Gen'l mort reg	.....	.....	.....	.....	.....	.....
Consol. mort. 6s	.....	.....	.....	.....	.....	.....
Consol. mort. reg	.....	.....	.....	.....	.....	.....
Pa. State 5s, new	117	.....	.....	.....	.....	.....
do 4s, new	.....	.....	.....	.....	.....	.....
do 3½s, 1912	.....	.....	.....	.....	.....	.....
Phila. & Reading	30¼	29¾	29⅜	29¾	30	30⅛
1st mortgage 6s	.....	.....	.....	.....	.....	.....
7s of 1893	.....	.....	.....	124	.....	.....
7s, new convert	74	.....	74⅜	75	75	75
Consol. mort. 7s	124½	.....	.....	.....	.....	.....
Consol. mort. reg	.....	.....	.....	.....	.....	.....
Gen'l mort. 6s	.....	95¼	95	95	.....	95¼
Def.Income bonds	.....	.....	.....	29½	.....	.....
Philadelphia & Erie	.....	.....	.....	.....	17½	.....
1st mortgage 5s	.....	.....	.....	104½	.....	.....
2d mortgage 7s	.....	.....	.....	.....	.....	.....
Pittsb.,Cin.&St.L.7s	.....	.....	.....	.....	.....	.....
Pitts.,Tit.&Buff. 7s,	.....	.....	.....	.....	.....	.....
Schuylkill Navi't'n	..	.. ..	.....	.....	.....	.....
Preferred	.....	.....	13½	.....	.....	13½
6s, 1895	.....	.....	.....	.....	.....	.....
6s, 1907	.....	.....	.....	91½	90	90
United Co. of N. J.	.....	183½	188½	188½	.....	.....
Hestonville, (Horse)	.....	.....	.....	.....	.....	.....
Chestnut&Wal.(do)	.....	.....	.....	.....	.....	.....

Baltimore Stock Exchange.

Closing Prices for the Week Ending Aug. 15.

	W.9.	Th.10.	F.11.	Sat.12.	M.14.	Tu.15.
Baltimore & Ohio..	.....	194½	.....	.....	.....	.....
6s, 1885.....	.....	. . .	.....	107¼	107½	....
Central Ohio ($50)..	...	.....	.....	.....	.....	.....
1st mortgage.....	110¾	.....	.....	111	.....	.....
Marietta & Cincin'ti	.....	.....	.....	.....	.....	.....
1st mortgage, 7s..	.....	.....	.....	.....	.....	.....
2d mortgage, 7s..	.....	.....	.....	.....	.....	.....
3d mortgage, 8s..	.....	.....	.....	.....	.....	.....
Northern Cen. ($50)	50	50	.....	.....	.....	49⅞
2d mort., 6s 1885..	.....	.....	.....	.....	.....	.....
3d mort., 6s, 1900.	.....	.....	.....	.....	.....	.....
6s, 1900, gold.....	.....	116¾	.....	.....	116¾	116¾
6s, 1904, gold.....	.....	.....	.....	.....	.....	.....
Pitts.& Connellsv.7s	.....	....	....	.....	.....	.....
Virginia 6s, Consol.	.....	59⅛	.....	59⅛	58¾	58¾
Consol. coupons..	58	59⅛	.....	.....	.....	.....
10 40 bonds.....	.....	....	42¾	.....	42¾	42¾
Def'd Certificates.	.....	.....	.....	.....	.....	.....
Western Maryland..	16½	.....	.....	.....	.....	16½
1st M.,end.by Balt	.....	.....	.....	.....	.....	.....
2d M. do .	.....	.....	.....	.....	.....	.....
3d M., do .	.....	.....	.....	.....	.....	.....
1st M.,unendors'd	.....	.....	.....	.....	.....	.....
2d M.,end.WashCo	.....	.....	.....	.....	.....	.....
2d M., preferred..	.....	.....	.....	.....	.....	.....
City Passenger R R.	....	.....	.....	.....	.....	.....

London Stock Exchange.

	Closing Prices July 28.		Aug. 4.	
Baltimore & Ohio 5s, 1927.....106	108		106	108
Central of N. J.,, $100 shares.... 93	98		93	98
Do. consol. mort.....111	113		112	114
Do. Income Bonds..... 90	95		92	96
Central Pacific of Cal., $100 shs. 98¼	99½		98	99
Do. 1st mort. 6s, 1895-'98.....118	120		118	120
Det.,G'd Haven & Mil. Equip bds116	118		116	118
Do.Con.M.5p.c.,till'83aft'r6p.c113	115		113	115
Illinois Central $100 shares.....140	142		142	144
Do. S. F. 5s, 1903.....106	108		106	108
Lehigh Valley Cons. mortgage..115	119		115	119
Louisville & Nashville mort 6s. 98	100		98	100
Do. capital stock $100 shares. 76	78		76	78
N. Y. Cent. & Hud. R. mt. bds..132	136		132	136
Do. $100 shares.....139	140		139½	140½
Do mort. bonds (stg.).....121	123		121	123
N.Y.,Lake Erie & West.,$100 shs 42	42½		41¾	42¼
Do. 6 p. c. pref. $100 shares .. 82	84		82	84
Do. 1st Con. Mort. bds (Erie) .130	134		130	134
Do. do. Funded Coupon bds.129	131		129	131
Do. 2d Consol Mort. bonds... 99	100		99	100
Do. do. Funded Coupon bds.. 96	98		96	98
N.Y.,Pa.& Ohio 1st mort. bonds. 49	50		48	49
Do. Prior Lien bds (sterling)..103	108		103	108
Pennsylvania, $50 shares..... 63¾	64¼		63⅛	64
General Mortgage.....123	125		123	125
Phil.and Erie Gen.mort. 6s, 1920.117	119		117	119
Philadelphia & Reading $50 shs 31¾	32¼		31	31⅛
General Consol Mortgage.....116	118		116	118
Do. Improvement Mortgage..104	106		103	105
Do.Gen.Mtg.'74,ex-def'd coup. 97	98		97	98
St. L. Bridge 1st mort. gold b'd.125	127		125	127
Do. 1st pref. stock..... 97	100		97	100
S. P'fic of Cal., 1st mort.6s,1905-6.108	110		108	110
Union Pacific 1st mtg. 6s,1896-9.117	122		118	120
Wabash, St. L. & P. $100 shs..... 39	40		39⅛	40⅛
Do. $100 pref. shares..... 70	72		69½	70½
Do. gen. mort. bonds..... 89	91		88	90

AMERICAN RAILROAD JOURNAL.

Financial and Commercial Review.

THURSDAY EVENING, August 17, 1882.

The rate for call loans on stocks in the morning hours was 4@5 per cent, in the afternoon it was 4½ per cent, and in the last hour 3@4 per cent.

The posted rate for prime bankers' demand bills was 4.90, and for 60-day sterling 4.86. The actual rates for prime bankers' sterling were 4.85@⅛ and 4.88¾@4.89¼, with cable transfers 4.89¾@4.90⅛, and for prime commercial bills 4.83¾@4.84¼. The actual rates for Continental bills are as follows; Francs, 5.19¾@5.18¾ and 5.15; Marks, 94¾ and 95⅛, and Guilders, 40@1-16 and 40¼@5-16.

The Solicitor of the United States Treasury at Washington has given an opinion that freight on imported goods consigned to an inland city cannot be collected at the port of arrival, and can only be collected at the point of destination. He holds that the collector at the port of arrival has no right to demand payment of freight charges.

The amount of 3½ per cent bonds outstanding on the 1st of August was about $417,000,000, and it was estimated that about one-half of them would be exchanged for the new 3 per cents. That this estimate was not excessive is evidenced by the fact that $150,000,000 of them have already been surrendered by the National Banks alone, and there is every reason to believe that the amount received from these banks will aggregate nearly $180,000,000.

Paducah, Ky., has voted $100,000 in aid of the Shawneetown Railroad, which will extend from the latter place to a point opposite Paducah, where a transfer landing will be built. As the intention is to build a road parallel with the river as far as it goes, naturally it should be extended to Evansville one way and to Cairo the other. At each of these points it would obtain several important connections, and thus be made a paying road.

It was announced in Ottawa that $8,500,000 of the $100,000,000 of Canadian Pacific Railway bonds have been taken up. The Duke of Manchester's Company took $5,000,000, $360,000 were taken up in Toronto, and the remaining $3,000,000 disposed of in Canada.

An opinion of very great interest to managers of trust funds has just been handed down by the Supreme Court of Connecticut, in the case of Brinley *et al.*, Trustees, vs. Grow *et al.* The trustees held a large lot of stock of an insurance company as part of a fund. The capital of the insurance company was increased, and the stockholders had the privilege of taking the new stock at par, and, as the stock was paying heavy dividends, this privilege commanded a premium. The trustees sold part of their privileges and received in payment an amount sufficient to purchase 47 shares of the new stock. The heirs claimed that this was an increase in the income of the trust fund and should be transferred to them. The court holds that it is part of the principal of the fund, not having been set off by the company in the nature of a dividend or a division of profits or accumulated surplus.

For several months past there has been a decided and steady increase in the fund held by the United States Treasury for the redemption of the notes of National Banks that have either failed, passed into liquidation, or are reducing circulation. Considerable alarm has consequently been created in financial circles, and numerous inquiries have been made at the Department to ascertain the extent to which contraction has taken place, and the cause therefor. In order that the public may be guarded against misapprehension of the facts, and protected against imposition, we give place to the following figures and facts, which have been obtained from the records of the Treasurer at Washington:

On the 1st of January, 1881, the redemption fund alluded to amounted to $20,852,000, and on the 1st of February of that year the amount was $20,697,000. It was during February, 1881, that Congress passed the three per cent refunding bill, some sections of which were obnoxious to the banks, and in consequence many of them surrendered their circulating notes, for the purpose of withdrawing the five and six per cent bonds deposited with the United States Treasurer as security for those notes. The amount of United States notes thus surrendered, from the middle of February to April 1, was over $17,000,000, the aggregate of the redemption fund on the date last named being nearly $38,000,000. The veto of the obnoxious bill by the President, and the adjournment of Congress on the 4th of March, arrested the panic among the banks, and some of them at once proceeding to take back the circulating notes surrendered.

The books of the Treasurer show a steady decrease in the monthly aggregate of this redemption fund down to April 1, 1882, when the amount held was $29,103,929, a decrease of $8,600,000, as compared with April 1, 1881, at which date the fund reached the highest point. Since the 1st day of April last, however, there has been a steady increase each month. For April the increase was $900,000; May, $2,500,000; June, $2,100,000; July, $1,000,000, making an aggregate increase for the four months of $8,500,000.

No reason can be assigned at the Treasury Department for this increase in the redemption fund, so far as the financial and commercial business of the country is concerned, and the fact that inquiries are made from financial centers as to the cause of the supposed contraction of the currency is evidence that, whatever the cause, it is not produced by any known changes in the ordinary channels of business. An examination of the figures shows that the redemption fund on August 1, 1882, was only $100,000 short of its highest point, on April 1, 1881, when it was $37,707,937; and inquiry into the cause for the increase shows that it is attributable to legislation by Congress, as it was the cause for decrease fifteen months ago.

Prior to the passage of the act to enable National banks to extend their corporate existence, those banking associations whose charters were about expiring were unable to await the slow and uncertain action of Congress, and, in order to secure themselves against any contingency, surrendered their circulating notes. On the other hand, the delay of Congress in passing the Enabling act prevented the organization of new banking associations, thus furnishing two sources for increasing the redemption fund. Provision having been made for the extension of old banking associations and the organization of new ones, it is believed this fund will at once begin to decline in amount.

But while it is true that, compared with August 1, 1881, there is now in circulation $5,000,000 less of United States notes, it must not be assumed that the currency has been contracted to that amount, because this decrease in United States notes has been more than doubly supplied by the issue of silver certificates. On August 1, 1881, the amount of silver certificates outstanding was $40,802,892, and on August 1, 1882, the amount was $54,757,720, an increase of $13,954,828 during the twelve months.

At the annual meeting of the stockholders of the Cincinnati, Hamilton and Dayton Railroad Company, held in Cincinnati on the 16th inst., it was voted to increase the capital stock of the company $1,000,000, by the issue of that amount of preferred stock in shares of $100 each, the proceeds of which will be used in extending the double track, and improving the equipment and terminal facilities—it being the determination of President Jewett to put the road in first-class condition. It is through this road and the New York, Pennsylvania and Ohio, that the New York, Lake Erie and Western has its Cincinnati connection.

The governors of the New York Stock Exchange have admitted to dealings at the Board the following securities: Chicago, Milwaukee and St. Paul Railway Company—An additional $2,040,000 of the Chicago and Pacific Western division first mortgage 5 per cent gold bonds, issued on twenty-seven miles of additional completed road and $1,500,169 for additional rolling-stock Denver and Rio Grande Railway Company—An additional $1,050,000 of consolidated 7 per cent bonds, issued at the rate of $15,000 per mile on seventy miles of additional road. St. Paul, Minneapolis and Manitoba Railroad Company, an additional $720,000 first mortgage 6 per cent gold bonds issued upon an additional completed and equipped sixty miles of road.

At the annual meeting of the St. Johnsbury and Lake Champlain Railroad Company, held at St. Johnsbury, Vt., on the 9th inst., the report of the directors was presented, from which we learn that the income from freight department was $165,829 77; from passenger department, $64,114.16; miscellaneous, $12,718.56—total income, $242,662.48; add balance of earnings from last year after the payment of interest, $32,290.34, making a total of $274,952.83; from which deduct operating expenses for the year, $199,496.91, leaving balance of income $75,455.92; less the interest and losses paid during the year, $46,108.71, making the balance of the income June 30, 1882, $35,347.21. The company voted to lease the Canada Junction Railroad jointly with the Montreal, Portland and Boston Railway Company, which thus assumes all liability. The Canada Junction Railroad is eleven miles long, and is now in process of construction. It connects at Sheldon Junction with the St. Johnsbury and Lake Champlain Railroad, and at its other terminus with the Montreal, Portland and Boston Railroad, which is already operated as a part of the southeastern system of roads. It will be valuable as affording the southeastern system a connection with Montreal independent of the Passumpsic, and to the St. Johnsbury and Lake Champlain Railroad as a feeder from connecting lines. The Canada Junction Railroad is a portion of the original plan for connection with Montreal when the Portland and Odgensburg Railroad was first projected.

The first and second mortgages on the New York and Sea Beach Railroad, which runs from Bay Ridge, L. I., to Coney Island, have been foreclosed. The first mortgage on the road was for $218,549,75, and the second mortgage for $215,899.91. The trustees for the mortgages, James W. Smith and George S. Bowdoin, being unable to collect any interest, brought suit in the Kings County Supreme Court to foreclose the mortgages. The suit was successful, and Judge Barnard has just signed the order. Joseph Bartlett has been appointed trustee

to sell the property. The date of the sale is not yet fixed. The road has been operated for the past two years but it has failed to pay at any time.

The following quotation of sales of railway and other securities, for the week, are in addition to those given elsewhere in our columns.

New York.—Am. Dock and Imp. 5s, 94½; Atlantic and Pacific 1st, 98¾; Atchison, Colorado and Pacific 1st, 92; Boston and New York Air Line pref., 76⅞; Boston, Hartford and Erie 1st, 55; Chicago and Northwestern S. F. 5s, 101½; Chicago, St. Paul, Minneapolis and Omaha, 54⅜; do. pref., 112¼; do. consol., 105½; Chicago, St. Louis and New Orleans, 79; do. 5s, 104¾; Cincinnati, Sandusky and Cleveland, 55; Chesapeake and Ohio cur. 6s, 54; do. 1st, Series A, 108⅛; do. 6s, 1911, 102; Columbus, Chicago and Indiana Central inc., 52; Chicago, Milwaukee and St. Paul, Southern Minn. div. 1st, 108¾; do. Chicago and Pacific div. 108; do. Chicago and Pacific West. div. 1st, 93⅝; Cleveland, Painsville and Ashtabula 1st, 109; Cleveland and Toledo S. F., 107¾; Central Iowa 1st, 111½; Cairo and Fulton 1st, 108½; Cincinnati, Lafayette and Chicago 1st, 110; Chicago, St. Paul and Minneapolis 1st, 112; Chicago, Burlington and Quincy, Denver div. 4s, 88; Denver and Rio Grande, 61¾; do. 1st, 114½; do. consol., 99½; Dubuque and Sioux City, 95; East Tennessee, Virginia and Georgia, 117⅞; do. pref., 19½; do. income, 46¼; Fort Worth and Denver 1st, 98¾; Green Bay, Winona and St. Paul, 8½; do. inc., 26; do. 1st, 84; Gulf, Colorado and Santa Fe 1st, 108; Houston and Texas Central genl. mort., 99½; do. 1st, Waco and N. W. div. 112; Hannibal and St. Joseph 6s, consol., 106¼; Indiana, Bloomington and Western, 46½; do. inc., 59; do. 2d, 76½; do. Eastern div. 6s, 95; International and Gt. Northern 1st, 105½; do. coup. 6s, 87; Indianapolis, Decatur and Springfield 1st, 103¾; Keokuk and Des Moines, 18; Kansas Pacific 1st consol., 104½; do. 6s, Denver div. ass., 110½; do. 6s, 1896, 110; Louisville and Nashville genl. mort. 6s, 95¾; do. 2d, 102; Long Island, 58; do. con. 5s, 97¾; Lake Erie and Western, 41; do. inc. 57; do. 1st, 102; do. Sandusky div. inc., 49; Louisville, New Albany and Chicago, 72; do. 1st, 104; Lafayette, Bloomington and Muncie 1st, 101; Lehigh and Wilkesbarre inc., 85; Manhattan Beach, 26; Minn. and St. Louis, 34; do. pref., 68½; do. Iowa ext. 1st, 111½; Missouri, Kansas and Texas, 38⅝; do. consol. 7s, 106½; do. 2d, 69; Missouri Pacific, 106⅞; Memphis and Charleston, 62¼: Milwaukee, Lake Shore and Western, 57⅛; do. 1st, 101⅜; do. inc., 81½; Mobile and Ohio, 23; do. 1st deben., 79; do. 1st mort., 108½; Michigan Central 5s, 102; Milwaukee and Madison 1st, 112; New York, Chicago and St. Louis, 15¾; do. pref., 33⅞; do. 1st, 93¾; New York, Ontario and Western, 25⅜; Norfolk and Western pref., 56; do. do. genl. mort., 102; New York and New England, 53½; Nashville, Chattanooga and St. Louis, 64; do. 1st, 114½; New Orleans Pacific 1st, 91⅞; Northern Pacific 1st, 103¼; Ohio Central, 17½; do. inc., 30; do. 1st, 93; Oregon Railway and Nav., 154; do. 1st, 107½; Oregon Transportation, 92¾; Oregon Short Line 6s, 103; Ohio Southern, 19; do. 1st, 85: do. inc., 30¾; Peoria, Decatur and Evansville, 36¼; Pennsylvania Company 4½s, 96½; Rome, Watertown and Ogdensburg 1st, 110; Rochester and Pittsburgh Railroad, 27⅝; do. 1st, 104½; do. inc., 43¾; Richmond and Danville, 120¾; do. debentures, 80; do. 1st, 100¼; Richmond, Danville and West Point, 64¾; Richmond and Alleghany, 23; do. 1st, 89; St. Louis and San Francisco 2d, Class A, 98; do. B, 91; do. C, 90¾, St. Paul and Duluth, 34; pref., 89; St. Paul, Minneapolis and Manitoba, 144½; do. 1st. 108; South Carolina, 25; do. 1st, 101⅞; do. inc., 60; do. 2d, 90; St. Louis, Kansas City and Northern, R. E. 7s, 108¾; do Omaha div. 1st, 112; Southern Pacific of California 1st, 106½; St. Paul and Sioux City 1st, 111; St. Louis, Iron Mountain and Southern 5s, 82¼; do. Cairo, Ark. and Texas 1st, 107½; Scioto Valley 1st, 95½; Texas and Pacific, 51⅞; do. inc. Land Grant, 68; do. Rio Grande div. 1st, 84¾; Toledo, Peoria and Western 1st, 110; Toledo, Delphos and Burlington 1st, 83; Virginia Midland, 53; do. inc., 74; Wabash, St. Louis and Pacific, gen'l mort. 6s, 84¾; do. Chicago div. 1st, 85; Arkansas 7s, L. R. and Fort Smith, 28; do. M. W. and R. R., 28; do. P. B. and N. O., 30; do. M. and L. R., 30; Alabama, Class A, 81; Missouri 6s, 1886, 105½; do. 6s, 1887, 107; North Carolina 4s, consol., 8c; Tennessee 6s, 56; Virginia 6s, old, 40; Colorado Coal and Iron, 46; do. 6s, 87½; Maryland Coal, 20; New Central Coal, 17; American District Telegraph, 54; Ontario, 40; Standard, 11.

Boston.—Atlantic and Pacific blocks, 107⅞; do. inc.s 29½; Atchison, Topeka and Santa Fe 5s, 98; do. 1st, Dutch stamp, 121; Boston Land, 8⅜; Boston Water Power, 4¼; Boston, Clinton, Fitchburg and New Bedford, 61; do. pref., 132½; Burlington and Missouri River in Neb. 6s, non-exempt, 103¾; Chicago, Burlington and Quincy 5s, 103; do. 4s, Denver ext., 85; Connotton Valley, 8⅛; do. pref., 10⅓; do. 6s, 70; Cincinnati, Sandusky and Cleveland 7s, 104⅞; California Southern. 22; do. 6s, 83⅓; Connecticut and Passumpsic Rivers R.R., 93; Central of Iowa, 2d pref., 50; Flint and Pere Marquette pref., 95; Iowa Falls and Sioux City, 94; Louisiana and Missouri River R.R., 15; do. pref., 29; Little Rock and Fort Smith, 54; do. 7s, 108; Kansas City, Fort Scott and Gulf, 84; do. pref., 125; Mexican Central, 28; do. 7s, 85⅝; do. blocks No. 2, 123; Massachusetts Central 6s, 41½; Marquette, Houghton and Ontonagon, 75; do. pref., 120; Milwaukee and Lake Shore pref., 56⅝; New York and New England 6s, 105¾; New Mexico and Southern Pacific 7s, 114¾; Oregon Short Line subs., 102½; do. 6s, 103; Rutland pref., 25¾; do. 6s, 100; Summit Branch, 14; Sonora 7s, 106⅞; Toledo, Cincinnati and St. Louis, 8¾; do. 6s, 69½; Toledo, Delphos and Burlington, Dayton div. inc., 21; do. Branch inc., 20; Wisconsin Central, 16⅞; do. pref., 30½; do. 7s, 1st series, 77; do. 2d series, 47½; Allouez Mining Company, 2¾; Atlantic, 15½; Brunswick Antimony, 12; Franklin, 15; Huron, 3¾; Osceola, 34¾; Pewabic, 10½; Silver Islet, 19½; Sullivan, 3.

Philadelphia.—American Steamship Co., 22; Cincinnati 7-30s, J. and J., 129½; Central Transp., 34; East Pennsylvania, 65; Nesquehoning Valley, 55¼; Philadelphia, Wilmington and Baltimore 4s, 95¼; Philadelphia and Reading R. R. scrip, 100; Philadelphia City 6s, 1903, 131; do. 1900, 130; do. 1892, 120; do. 1891, 118; Texas and Pacific, consol. mort. 6s, 95¾; Western Pennsylvania 6s, Pittsburgh Branch, 108; West Jersey 1st, 120. The latest quotations are: City 6s, 108@120; do. free of tax, 127@132; do. 4s, new, 108@113; Pennsylvania State 5s, new loan, 116⅛@117⅛; do. 4s, old, 108@113; do. 4s, new, 116@117; Philadelphia and Reading Railroad, 31⅜@31½; do. consol. mort. 7s, reg. 124@126; do. gen'l mort. 6s, coupon, 96@96; do. 7s, 1893, 120@125; do. new conv., 75@76; United New Jersey R. R. and Canal, 188@189; Buffalo, Pittsburg and Western, 21⅛@21¾; Pittsburgh, Titusville and Buffalo 7s, 93@94; Camden and Amboy mort. 6s, 1889, 113@113½; Pennsylvania R. R., 62⅛@62¾: do. general mort. 6s, coupon, 125@125¾; do. reg., 124@125; do. consol. mort. 6s, reg., 121@122; Little Schuylkill R. R., 57@57½; Schuylkill Navigation pref., 13@14; do. 6s, 1882, 90@90½; Elmira and Williamsport pref., 58@60; do. 5s, 100@101; Lehigh Coal and Navigation, 44@44¾; do. 6s, 1884, 103⅛@104; do. R. R. loan, 112@116; do. Gold Loan, 113@114; do. consol. 7s, 116@117; Northern Pacific, 51⅛@51⅝; do. pref., 96@96½; North Pennsylvania, 63@64; do. 6s, 106¾@107½; do. 7s, 120@123; do. 7s, General mort. reg., 122@123; Philadelphia and Erie, 17@18; do. 7s, 114@115; do. 5s, 104½@105; Minehill, 61@62; Catawissa 24@24½; do. pref., 55@56; do. new pref., 54@54½; do. 7s, 1900, 117@—; Lehigh Valley, —@63; do. 6s, coupon, 122@124; do. reg., 122@124; do. 7s, 135@136; do. consol. mort. 121@122; Fifth and Sixth streets (horse), 160@161; Second and Third, 110@112; Thirteenth and Fifteenth, 65@75; Spruce and Pine, 40@45; Green and Coates, 80@90; Chestnut and Walnut, 90@93; Germantown, 70@71; Union, 109@110; West Philadelphia, 105@115; People's 15@16; Continental, 100@102.

Baltimore.—Atlanta and Charlotte Railroad, 76½; do. 1st, 109¼; Baltimore City 6s, 1890, 117; do. 6s, 1916, 125½; do. 5s, 1900, 118; do. 5s, 1916, 125½; Canton Co. 6s, 102½; Charlotte, Columbia and Augusta, 56; do. 2d, 100¾; Maryland Defense 6s, 105¾; Marietta and Cincinnati 1st Trust certificates, 128½; do. 2d do., 102¾; do. 3d do., 57⅞ Northern Central 5s, series A, 98¾; Ohio and Mississippi, Springfield div. 1st, 120½; Virginia Peeler coupons, 38; do. 10-40 coupons, 65⅝; Virginia Midland pref., 125; do. 5th mort., 97; do. inc., 73¾; Wilmington, Columbia and Augusta, 109. The latest quotations are: Atlanta and Charlotte, 76⅛@77; do. 1st, 109@110; Baltimore and Ohio, 194@200; Baltimore City 6s, 1886, 109@—; do. 6s, 1890, 117@117¾; do. 5s, 1900, —@118½; do. 5s, 1916, 125⅛@126; Canton Co. 6s, 102@—; Columbia and Greenville 1st, 102¾@103; Marietta and Cincinnati 1st, 128¾@128¾; do. 2d, 102¾@102¾; do. 3d, 57¾@58; Northern Central, 49⅞@50¼; do. 6s, 1885, 106@—; do. 5s, Series A, —@98½; do. B, 97@97½; North Carolina consol. 4s, 79@81; Virginia and Tennessee 2d, 101¼@101¾; Virginia Midland inc., 73¼@75; Virginia consols, 58½@59¾; do. 10-40s, 42½@43.

Among the large number of orders received by the Allen Paper Car Wheel Company this month are two from California—one to Messrs. Huntington, Hopkins & Co., supply agents for the Southern California Railroad; the other to Messrs. Carter Bros., extensive car manufacturers on the Pacific coast. And thus the paper car wheel goes rolling on into favor.

The population of Russia has, according to the latest census, increased by 14½ millions within the last twelve years. It is now 75,067,788 for Russia in Europe, 7,219,077 for Poland, 2,028,021 for Finland, and 15,186,456 for Siberia, the Caucasus and Central Asia—making a general total of 100,038,348 as compared to 85,570,546 at the census of 1870. The population of Poland alone has increased within the last sixty-five years from 2,717,287 to 7,219,077.

The New York, Lake Erie and Western Railroad Company is making ever effort to improve its equipment and add to the comfort of the traveling public. A change from soft to hard coal will soon take place, making cinders a rarity. Within the past few months 25 first-class passenger coaches have been added to the rolling-stock, twenty of which were built by the Pullmans and five by Jackson, Sharpe & Co. The road is also to have 7,000 new freight cars, 5,000 of which have been delivered.

It is reported that the recent decision of Judge Baxter in the United States Circuit Court against the Pennsylvania Company will be made the basis of suits affecting other trunk lines. The decision was a denial of the right of a railroad company to be discriminative in rates in favor of large shippers. People with excellent sources of information say that this decision is of more importance to railroad corporations than any since the famous granger decisions, and they anticipate important developments.

A Philadelphia iron broker, being recently interviewed, is reported to have said that he did not believe there was an iron mill or furnace in Philadelphia that was not working to its fullest capacity. The orders upon which they are engaged are for the home market and for eastern demand. The strike in the West and Pittsburgh has thrown a large volume of business east of the Alleghanies. Some of it has come to Philadelphia, but the larger portion of it is absorbed by the mills within a radius of one hundred miles of this city. This increase in orders east of the Alleghanies has not advanced the schedule of prices, but has had a good moral effect upon the market, and the view of some of the most prominent manufacturers are that the position of the trade is more favorable than for some time past. The unprecedentedly large crops will require additional facilities of transportation, and indications at this time point to an activity in the trade that will certainly last until next spring.

RAILROAD EARNINGS—MONTHLY.

	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total.
BURL., CEDAR RAP. & NORTHERN:													
1880	184,316	165,170	188,325	141,652	149,504	153,378	143,432	160,160	179,804	204,991	189,330	193,419	2,053,484
1881	167,750	124,510	148,551	184,680	165,630	205,912	174,351	209,112	221,801	221,748	203,880	232,812	2,259,037
1882	252,823	225,631	224,107	178,304	199,278	211,257	198,276	.....	.....	.....	.....	.....	.....
CENTRAL PACIFIC:													
1880	1,200,614	1,070,487	1,373,438	1,356,716	1,778,488	1,724,950	1,840,067	1,973,438	1,964,997	1,120,229	2,199,466	1,905,221	20,508,112
1881	1,602,907	1,454,218	1,709,637	1,872,370	2,091,410	2,159,381	1,899,346	2,059,000	2,293,000	2,514,000	2,267,000	2,110,000	23,947,951
1882	1,876,000	1,702,000	1,987.000	2,052,000	2,353,000	2,239,000	2,020,000	.....	.....	.....	.....	.....	.....
CHESAPEAKE AND OHIO:													
1880	202,335	198,681	222,762	221,559	199,443	214,352	238,236	259,110	247,303	211,820	240,795	218,009	2,674,308
1881	162,540	184,389	228,479	227,343	252,235	241,135	225,096	262,858	247,144	237,303	235,585	203,562	2,702,762
1882	210,455	209,708	208,981	267,454	255,939	260,753	306,831	.....	.....	.....	.....	.....	.....
CHICAGO AND ALTON:													
1880	534,054	497,013	626,473	542,961	616,128	617,524	708,906	761,120	767,349	785,199	696,776	574,695	7,718,198
1881	487,890	461,641	529,915	558,190	548,556	635,860	676,205	771,466	768,897	750,359	680,133	635,307	7,553,988
1882	579,447	530,480	584,483	561,787	553,412	613,886	671,537	.....	.....	.....	.....	.....	.....
CHICAGO AND NORTHWESTERN:													
1880	1,154,632	1,131,683	1,361,725	1,294,573	1,875,608	1,671,177	1,699,686	1,767,938	2,020,245	2,105,217	1,855,671	1,477,902	19,416,007
1881	1,240,667	963,208	1,178,795	1,474,612	1,879,006	2,306,640	1,938,031	2,315,164	2,292,676	2,341,097	2,019,037	1,855,476	21,849,209
1882	1,620,336	1,471,945	1,696,568	1,634,819	2,058,133	2,022,700	2,025,736	.....	.....	.....	.....	.....	.....
CHICAGO, BURLINGTON AND QUINCY:													
1880	1,432,740	1,411,870	1,732,518	1,489,894	1,909,627	1,682,956	1,773,643	1,834,321	1,862,285	1,934,762	1,837,860	1,552,018	20,454,494
1881	1,307,948	1,034,821	1,418,149	1,574,371	1,679,455	2,083,803	1,888,558	2,173,945	2,262,981	2,031,001	1,816,133	1,905,490	21,324,150
1882	1,658,834	1,457,300	1,566,217	1,530,838	1,505,261	1,437,164	.....	.....	.....	.....	.....	.....	.....
CHICAGO, MILWAUKEE AND ST. PAUL:													
1880	764,298	738,749	900,675	871,041	1,134,745	1,037,958	1,026,708	991,297	1,257,677	1,493,620	1,472,037	1,397,308	13,086,119
1881	990,847	682,717	916.989	1,259,946	1,538,491	1,729,811	1,568,706	1,678,000	1,645,000	1,590,000	1,569,000	1,855,000	17,025,462
1882	1,435,000	1,377,000	1,561,000	1,518,000	1,629,000	1,620,000	1,465,000	.....	.....	.....	.....	.....	.....
CHICAGO, ST. PAUL, MINNEAPOLIS AND OMAHA:													
1880	193,827	173,078	259,783	259,208	232,146	218,093	236,995	251,013	300,833	342,052	342,894	312,173	3,122,097
1881	257,786	158,594	251,648	261,211	350,124	404,562	383,202	385,586	363,685	382,714	380,733	391,950	3,981,296
1882	307,498	315,100	405,779	356,558	406,420	363,109	331,480	.....	.....	.....	.....	.....	.....
CINCINNATI, INDIANAPOLIS, ST. LOUIS AND CHICAGO:													
1880	155,697	172,541	198,220	168,199	186,995	200,332	204,138	233,478	343,627	239,881	209,014	198,254	2,412,185
1881	182,523	171,511	191,005	183,710	191,056	192,299	177,161	229,858	219,977	212,606	194,805	192,623	2,296,916
1882	200,042	186,879	208,066	204,269	199,110	195,948	209,564	.....	.....	.....	.....	.....	.....
DENVER AND RIO GRANDE:													
1880	124,759	126,922	160,883	164,882	193,925	295,455	373,132	400,133	406,583	473,318	408,562	349,196	3,478,007
1881	307,476	317,681	398,493	433,111	514,767	584,230	548,284	606,193	620,643	665,686	566,819	643,417	6,206,812
1882	491,914	412,987	535,055	559,917	614,298	537,462	495,797	.....	.....	.....	.....	.....	.....
HANNIBAL AND ST. JOSEPH:													
1880	176,079	166,965	216,061	206,735	191,317	179,396	224,312	238,081	233,448	242,214	207,147	279,635	2,561,391
1881	154,401	122,874	176,356	190,812	172,950	190,740	201,899	215,308	202,567	313,433	201,782	180,376	2,230,966
1882	138,284	154,717	168,798	148,913	154,917	155,030	184,347	.....	.....	.....	.....	.....	.....
ILLINOIS CENTRAL:													
1880	595,212	613,806	613,008	535,732	665,120	681,736	724,095	732,755	806,836	880,211	783,120	673,182	8,304,812
1881	631,281	524,499	557,789	662,493	673,259	803,887	720,004	808,407	828,847	815,238	737 218	763,475	8,586,397
1882	728,173	689,387	695,371	674,603	674,749	663,746	752,251	.....	.....	.....	.....	.....	.....
INDIANA, BLOOMINGTON AND WESTERN:													
1880	80,498	89,690	116,185	90,374	85,733	106,954	103,438	116,732	110,622	121,343	96,621	104,619	1,233,079
1881	90,283	83,261	192,085	203,677	200,064	199,846	190,125	117,956	195,307	181,674	160,826	156,697	.....
1882	195,824	175,755	206,235	205,934	182,554	186,133	206,072	.....	.....	.....	.....	.....	.....
LOUISVILLE AND NASHVILLE:													
1880	674,455	575,035	612,593	563,883	655,014	976,229	772,537	827,088	931,910	1,000,326	953,086	949,184	9,491,346
1881	816,960	805,124	947,959	850,862	828,726	1,227,885	817,135	876,192	951,566	1,002,950	1,065,223	1,122,285	11,326,859
1882	950,065	960,036	1,073,745	950,007	946,435	1,187,385	1,038,385	.....	.....	.....	.....	.....	.....
MOBILE AND OHIO:													
1880	250,116	204,094	168,301	140,091	129,249	121,855	131,621	140,593	184,246	264,714	251,368	287,373	2,373,621
1881	224,347	216,768	230,916	163,551	145,803	136,517	135,548	159,348	209,044	252,921	252,434	262,025	2,406,437
1882	161,433	158,154	152,651	145,272	137,645	132,572	136,398	.....	.....	.....	.....	.....	.....
NASHVILLE, CHATTANOOGA AND ST. LOUIS:													
1880	205,633	191,154	169,457	155,466	158,839	144,155	151,594	169,326	167,473	178,266	182,087	175,996	2,049,448
1881	178,143	190,866	207,710	183,525	104,430	154,549	150,430	168,317	179,979	172,121	152,059	173,127	2,075,256
1882	156,994	159,961	161,005	154,155	137,645	119,074	.....	.....	.....	.....	.....	.....	.....
NEW YORK AND NEW ENGLAND:													
1880	164,232	149,907	183,845	179,689	183,701	219,891	205,056	249,885	235,642	215,491	210,856	198 108	2,396,302
1881	189,749	173,614	212,019	216,913	217,185	231,518	246,821	280,524	299,573	261,199	242,412	237,729	2,809,255
1882	213,840	217,261	265,222	263,544	283,244	290,060	308,920	.....	.....	.....	.....	.....	.....
NEW YORK, LAKE ERIE AND WESTERN:													
1879	1,147,173	1,207,391	1,356,780	1,372,755	1,350,574	1,230,419	1,273,533	1,450,223	1,492,497	1,713,697	1,515,835	1,398,224	16,509,127
1880	1,296,381	1,252,218	1,644,958	1,643,151	1,592,544	1,661,812	1,580,976	1,606,874	1,786,417	1,899,910	1,799,338	1,726,788	19,149,361
1881	1,443,437	1,425,765	1,847,261	1,709,057	1,776,891	1,794,982	1,787,081	1,772,895	1,734,200	.....	.....	.....	.....
NORTHERN CENTRAL:													
1880	334,494	330,860	415,325	386,130	329,788	419,193	450,298	453,923	464,093	512,918	459,054	494,310	5,050,387
1881	386,157	382,657	452,906	487,273	465,588	487,287	440,811	498,008	429,565	449,664	487,160	476,622	5,443,697
1882	407,368	413,551	430,194	435,129	482,607	482,752	.....	.....	.....	.....	.....	.....	.....
NORTHERN PACIFIC:													
1880	81,390	77,259	119,357	185,700	217,613	253,105	241,277	223,500	330,300	358,456	300,822	220,993	2,629,710
1881	116,508	78,803	162,984	216,210	312,705	412,024	393,260	411,624	490,096	565,485	428,903	434,331	4,044,576
1882	239,800	269,000	384,000	438,000	568,332	631,342	679,240	.....	.....	.....	.....	.....	.....
PHILADELPHIA AND ERIE:													
1880	224,307	245,372	327,678	334,947	311,470	331,024	308,699	347,532	322,737	367,082	324,966	281,919	3,727,733
1881	224,303	225,501	285,573	293,323	343,792	350,585	291,669	303,849	276,522	292,392	284,078	282,772	3,454,309
1882	252,727	246,246	265,311	277,851	341,415	341,614	.....	.....	.....	.....	.....	.....	.....
ST. LOUIS AND SAN FRANCISCO:													
1880	198,091	195,948	193,146	176,164	167,664	173,607	213,297	259,995	280,873	328,194	290,329	226,063	2,698,371
1881	212,435	178,234	262,050	265,298	283,399	260,254	252,333	286,373	279,064	308,569	284,320	287,914	3,160,245
1882	256,784	244,654	274,959	242,866	253,419	240,177	318,613	.....	.....	.....	.....	.....	.....
ST. LOUIS, ALTON AND TERRE HAUTE:													
1880	153,139	163,737	168,994	155,462	147,928	150,207	191,077	216,759	204,295	221,863	188,773	184,503	2,146,741
1881	175,725	166,012	201,137	197,447	172,177	165,896	165,393	189,295	187 299	179,921	162,544	153,852	2,112,801
1882	168,987	149,619	178,145	157,450	162,842	142,742	192,017	.....	.....	.....	.....	.....	.....
ST. LOUIS, IRON MOUNTAIN AND SOUTHERN:													
1880	555,983	490,195	451,560	408,241	349,053	363,454	432,655	565,869	671,219	688,365	632,052	656,951	6,265,597
1881	570,957	560,791	704,002	548,300	479,075	474,302	533,512	644,386	690,400	719,239	687,280	709 498	7,319,744
1882	516,370	501,127	585,008	581,977	519,120	529,760	515,519	.....	.....	.....	.....	.....	.....
ST. PAUL, MINNEAPOLIS AND MANITOBA:													
1880	180,239	137,645	261,798	333,014	281,899	243,407	272,089	232,579	274,188	345,057	300,675	297,641	3,160,231
1881	254,187	159,482	320,962	425,685	382,642	405,322	387,488	414,954	485,736	605,708	508,530	528,262	4,878,960
1882	395,461	418 358	531,004	570,890	858,902	856,417	853,296	.....	.....	.....	.....	.....	.....
TEXAS AND PACIFIC:													
1880	245,785	219.165	215,070	174,177	141,083	153,066	195,711	226,073	266,570	303,666	312,184	301,858	2,754,408
1881	281,176	260,781	319,928	295,066	281,782	285,405	328,063	354,082	337,117	578,668	357,724	381,218	3,921,569
1882	310,785	255,644	332,911	359,543	409,228	384,713	367,215	.....	.....	.....	.....	.....	.....
UNION PACIFIC RAILWAY:													
1880	1,433,636	1,393,992	1,730,509	1,937,220	2,027,269	1,928,528	1,934,215	1,913.035	2,270,179	2,707,860	2,251.148	1,869,335	23,448,445
1881	1,339.799	1,374,740	1,674,860	1,766,894	2,319,238	2,884,774	2.528,826	2,638,659	2,844,357	3,289 350	2,773,608	2,267,004	27,451,831
1882	1,961,088	1,759,863	2,226,832	2,462,004	2,491,590	2,508,453	2,301,000	.....	.....	.....	.....	.....	.....
WABASH, ST. LOUIS AND PACIFIC:													
1880	776,790	759,451	978,629	892,024	948,773	953,468	1,966,742	1,189,478	1,178,950	1,501,203	1,131,787	1,050,816	12,428,112
1881	811,617	818,922	1,121,592	1,023,482	1,144,660	1,308,993	1,131,752	1,542,838	1,490,027	1,396,300	1,399.555	1,328,278	14,461,570
1882	1,229,965	1,134,768	1,315,776	1,378,194	1,204,864	1,149,682	1,418,837	.....	.....	.....	.....	.....	.....

RAILROAD AND CANAL DIVIDEND STATEMENT.

Showing the amount of Stock Outstanding, the Dividend Periods and the date of last Dividend.

Marked thus(*)are leased roads.	Stock out-standing.	Divide'd Periods.	Last Dividend Payable.
Albany and Susq*...100	2,500,000	semi-an	July '82 2
Ashuelot.....100	210,000	q'arterly	Oct. '81 3½
Atch., Top. and S. Fe100	54,000,000	q'arterly	Aug. '82 1½
Atlanta and W. Point100	1,232 200	semi-an	Jan. '82 6
Atlantic and St. Law*100	5,840,000	semi-an	Mar. '82 3
Augusta and Savan'h100	1,022,900	semi-an	June'81 3½
Avon,Geneseo&MtM*100	225,000	semi-an	July '81 3
Baltimore and Ohio.100	14,792,566	semi-an	May '82 5
" " pref.100	5,000,000	semi-an	July '82 3
Washington Br....100	1,650,000	semi-an	Apl. '82 5
Berkshire*.....100	600,000	q'arterly	Apl. '82 1¾
Boston and Albany..100	20,000,000	q'arterly	June'82 2
Bos.&N.Y.AirLine pf.100	2,795,227	q'arterly	June'82 1
Bos.,Cl.,F.&N.B.pref.100	1,750,100	.....	Apl. '82 3½
Bos.,Conc.&Mont.pf*100	800,000	semi-an	May '82 3
Boston and Lowell..500	3,940,000	semi-an	July '82 2
Boston and Maine...100	6,921,274	semi-an	May '82 4
Boston & Providence100	4,000,000	semi-an	May '82 4
Attleborough Br...100	131,700	semi-an	July '82 3½
Bos.,Revere B&Lynn100	419,400	semi-an	July '82 3½
Buffalo,N. Y. & Erie*.100	950,000	semi-an	June'82 3
Camden & Atlantic.. 50	377,400	q'arterly	Apl '80 38
" " pref. 50	880,650	q'arterly	Apl '80 3½38
Camden & Burl. Co..100	381,925	semi-an	July '82 3
Canada Southern....100	15,000,000	.....	Feb. '81 2½
Cape May &Millville* 50	447,000	semi-an	June'81 3
Catawissa*..... 50	1,159,500	annual	Oct.'81 $1½
" pref..... 20	2,200,000	semi-an	May '82 3½
" new pref.. 50	1,000,000	semi-an	May '82 3½
Cayuga and Susq.*.. 50	589,110	semi-an	July '81 4½
Cedar Rapids&Mo.R*100	6,850,400	q'arterly	Aug. '82 1½
" " pref.100	769,600	semi-an	Aug .'82 3½
Central of Georgia...100	7,500,000	semi-an	June '82 4
Central of New Jersey100	18,563,200	q'arterly	July '76 2½
Central Ohio*..... 50	2,437,950	semi-an	July '82 3
" pref.... 50	411,550	semi-an	July '82 3
Central Pacific 100	59,275,500	semi-an	Aug. '82 3
Chemung*.....100	380,000	q'arterly	July '81 1½
Cheshire preferred ..100	2,155,300	semi-an	July '82 1½
Chicago and Alton...100	11,181,741	semi-an	Sept. '82 4
" " pref 100	2,245,400	semi-an	Sept. '82 4
Chi., Burl. & Quincy.100	55,337,455	q'arterly	June '82 2
Chi., Iowa & Nebras*.100	3,916,200	semi-an	July '82 4
Chi., Mil. & St. Paul.100	20,404,261	semi-an	Apl. '82 3½
" " pref 100	14,401,483	semi-an	Apl. '82 3½
Chi. & N. Western...100	14,988,257	semi-an	June'82 3½
" pref.100	21,525,353	q'arterly	June'82 2
Chi., R. I. & Pacific..100	41,960,000	q'arterly	Aug. '82 1¾
Chi. and West Mich .100	6,151,000	semi-an	Feb. '82 2½
Chi.,St.P.,M.&O.pref.100	10,390,000	q'arterly	July '82 1¾
C., Ind., St. L. & Chi..100	6,000,000	q'arterly	July '82 1½
Cin., Sand. & Clev.pf. 50	429,037	semi-an	May '82 3
Clev. and Mahoning* 50	3,759,200	semi-an	Nov. '81 3½
Clev. and Pittsburg* 50	11,244,336	q'arterly	Sept. '82 1¾
Columbus & Xenia*. 50	1,786,200	q'arterly	June'82 2
Colum.&HockingVal.100	2,500,200	semi-an	Aug. '81 208
Concord 50	1,500,000	semi-an	May '82 5
Concord and Ports.*.100	350,000	semi-an	July '82 3½
Conn.& Passump.Riv100	2,244,400	semi-an	Aug '82 3
Connecticut River ..100	2,100,000	semi-an	July '82 4
Cumberland Valley.. 50	1,292,950	q'arterly	July '82 2½
" 1st pref 50	241,900	semi-an	Apl. '82 4
" 2d pref. 50	243,000	semi-an	Apl. '82 4
Danbury & Norwalk. 50	600,000	.....	Apl. '82 1½
Dayton and Mich.*.. 50	2,402,573	semi-an	Apl. '82 1¾
" " pref. 50	1,211,250	q'arterly	July '82 2
Delaware*..... 25	1,468,940	semi-an	July '82 3
Del. & Bound Brook*100	1,652,000	q'arterly	Aug. '82 1¾
Del., Lack.& Western 50	26,200,000	q'arterly	July 82 2
Denver & Rio Grande.100	29,160,000	q'arterly	Jan. '82 1½
Den.,South P. & Pac.100	3,500,000	.....	Aug.'80 4
Detroit, Lans. & Nor.100	1,825,600	semi-an	Aug.'80 2½
" " pref.100	2,503,380	semi-an	Aug. '82 3½
Dubuque&Sioux C'y*100	5,000,000	semi-an	Apl. '82 3
East Pennsylvania*., 50	1,709.550	semi-an	July '82 3
East Mahanoy*..... 50	392,950	semi-an	July '82 3
Eastern (N. H.).....100	492,500	semi-an	June'82 2½
Eel River.....100	3,000,000	q'arterly	June '82 $1
Elmira.Jef.&Canand*100	500,000	annual	Sep. '80 5
Elmira&Williamsp't* 50	500,000	semi-an	May '82 1½
" " pref. 50	500,000	semi-an	July '82 3½
Erie and Pitsburg*.. 50	1,998,400	q'arterly	June '82 1¾
Evansville & Terre H.100	100,000	semi-an	Nov. '81 2
Fitchburg.....100	4,500,000	semi-an	July '82 3
F. & P. Marquette pf.100	6,500,000	semi-an	July '82 3
Ft.W. & Jackson pref.100	2,000,000	.....	May '82 2
Georgia. 100	4,200,000	q'arterly	July '82 2½
Granite 100	1,250,000	semi-an	July '82 3
Han. & St. Jo. pref .100	5,083,024	semi-an	Aug. '82 3½
Harrisbg&Lancaster 50	1,182,500	semi-an	July '82 3½
Housatonic pref. ...100	1,180,000	q'arterly	July '82 2
Illinois Central.....100	39,000,000	semi-an	Sept. '82 3½
Ia.Falls & Sioux City*100	4,623,500	q'arterly	June'82 1½
Iowa R. Land Co....100	7,620,000	q'arterly	Aug. '82 1
Jefferson v. Mad.&Ind100	2,000,000	q'arterly	May '82 1¾
Joliet and Chicago*..100	1,500,000	q'arterly	June'82 1¾
Kan.C.,Ft.S.&Gulf...100	4,000,000	.....	Feb. '82 2
" " pref..100	2,750,000	semi-an	Aug. '82 4
Kentucky Central...100	500,000	semi-an	June'81 1
" " pref..100	5,583,500	semi-an	June'83 1
Lake Shore&Mich.So.100	49,466,500	q'arterly	Aug. '82 2
" (guar.)100	533,500	semi-an	Aug. '82 5
Lawrence*..... 50	450,000	q'arterly	July '82 2
Lehigh Valley..... 50	27,496,895	q'arterly	July '82 1½
pref. 50	106,300	q'arterly	July '82 1½
Little Miami..... 50	4,637)300	q'arterly	June'82 2
Little Rock & Ft. S..100	4,096,135	.....	July' 81 108
Little Schuylkill*.. . 50	2,646,100	semi-an.	July '82 3½
Louisville & Nashv...100	19,130,913	semi-an.	Feb. '82 3
Lowell & Andover...100	500,000	semi-an.	Jan. '82 3½
Lykens Valley.....100	600,000	q'rterly.	Oct.' 81 2½
Manchester & Law..100	1,000,000	semi-an.	May '82 5
Manhattan 100	13,000,000	.....	.....
" " 1st pref.100	6,500,000	q'rterly.	July '82 1½
" " 2d pref.100	6,500,000	q'rterly.	July '82 1½
Marietta& Cincinnati 50	1,386,350	.....	.....
" " 1st pref 50	8,105,600	semi-an.	Sep. '66 38
" " 2d pref 50	4,440,000	semi-an.	Sep. '66 38
Marq.Hout.&Ont.pf...100	2,259 026	.....	Aug. '82 4
Massawippi*.....100	400,000	semi-an.	Aug. '82 3
Michigan Central....100	18,738,204	q'rterly.	Aug.'81 1
Middlesex Central...100	280,000	semi-an.	Aug.'82 3
Mill Creek&Minehill* 50	323,000	semi-an.	July '82 5
M.Hill& Schuyl.Hav* 50	4,022,500	semi-an.	July '82 3½
Missouri Pacific.....100	28,169,800	q'rterly.	July '82 1½
Mobile&Montgomery100	3,022,517	semi-an.	Feb. '80 2½
Mont. & Wells River100	800,000	annual	Feb. '80 2
Morris and Essex.... 50	15,000,000	semi-an.	July '82 3½
Mt Carbon&PtCarbon 50	282,350	semi-an.	July '82 6
Nashua and Lowell..100	800,000	semi-an.	July '82 4
Nashua & Rochester.100	1,305,800	semi-an.	Apl. '82 1½
Nashv. & Decatur...100	1,827,000	semi-an.	June'81 3
Nash.,Chat.&StLouis 25	6,670,325	semi-an.	Apl. '82 1½
Naugatuck.....100	2,000,000	semi-an.	Jan. '82 5
Nesquehoning Val'y* 50	1,300,000	semi-an.	Mar.'82 3
N.Castle&Beaver Val* 50	600,000	q'rterly.	Oct. '81 —
NewLondonNorth'n*100	1,500,000	q'rterly.	July '82 1½
N. Y. Cen. & Hud. R.100	89,428,330	q'rterly.	July '82 2
N. Y. and Harlem....100	7,950,000	q'rterly.	July '82 4
" " pref.100	1,500,000	q'rterly.	July '82 4
" City Line.. —	.....	annual	Apl. '82 3
N.Y.,LakeErie&West.100	77,083,900	.....	.....
" " pref.100	8,156,825	.....	Jan. '82 6
N. Y., N. H. & Hart..100	15,500,000	semi-an.	Jan. '82 5
N. Y., Prov. & Boston100	3,000,000	q'rterly.	Aug. '82 2
Niag.Bridg&Canand*100	1,000,000	semi-an.	July '81 3
North Carolina*.....100	3,000,000	semi-an.	Sep. '81 3
" " pref.100	1,000,000	semi-an.	Sep. '81 3
N. Eastern (S.C.) pref100	86,000	semi-an.	May '81 4
Norfolk & Western pref.	15,000,000	q'rterly.	June '82 $1
North Pennsylvania. 50	4,527,150	q'rterly.	Aug. '82 1¾
Northern Central.... 50	6,142,000	semi-an.	July '82 3
Northern N. Hampsh100	3,068,400	semi-an.	June'82 3
Northern N. Jersey*.100	1,000,000	semi-an.	July '80 2½
Norwich&Worcester*100	2,604,400	semi-an.	July '82 5
Ohio 100	18,500,000	.....	.....
Ohio and Miss. pref..100	4,030,000	semi-an.	Mar.'75 3½
Old Colony.....100	7,333,800	semi-an.	July '82 3½
Oregon R'way&Nav.100	6,000,000	q'rterly.	Aug. '82 2
Oswego & Syracuse..100	1,320,400	semi-an.	Aug. '81 4½
Panama.....100	7,000,000	.....	July '82 6½
Paterson & Hudson*.100	630,000	semi-an.	July '82 4
Paterson & Ramapo.100	248,000	semi-an.	July '82 4
Pember.&Highst'n*. 50	342,150	semi-an.	Jan. '82 3
Pennsylvania..... 50	77,672,750	semi-an.	May '82 4
Pennsylvania Co.... 50	20,000,000	semi-an.	June'81 2½
Peoria & Bureau Val*100	1,200,000	semi-an.	Feb. '82 4
Philadelphia & Erie*. 50	7,013,700	semi-an.	.....
" " pfd 50	2,400,000	semi-an.	Jan. '75 4
Phil,Ger.&Norrist'n* 50	2,231,900	q'rterly.	June'82 3
Phil. and Reading... 50	32,726,375	q'rterly.	Jan. '76 2½
" " pref. 50	1,551,800	q'rterly.	July '76 3½
Phila. and Trenton...100	1,250,100	q'rterly.	July'82 2½
Phila., Wil. and Balt. 50	11,585,750	semi-an.	July '82 4
Pittsb.,Ft. W. & Chi.*100	19,714,285	q'rterly.	July'82 1¾
" Special Imp.100	6,770,900	q'rterly.	July'82 1¾
Pittsfield&N.Adams..100	450,000	semi-an.	July '82 2½
Portl., Saco & Portsm100	1,500,000	semi-an.	July '82 3
Providence &Worces.100	2,000,000	semi-an.	July '82 3
Rensselaer&Saratog.*100	7,000,000	semi-an.	July '82 4
Rhode Island& Mass. 100	100,000	.....	Jan. '81 3
Richmond& Danv...100	3,866,000	q'rterly.	Aug. '82 2
Richmond & Petersb100	1,009,300	semi-an.	Jan. '81 3
Roch.&Genesee Val.*100	555,200	semi-an.	July '82 3
Rome,Watert.& Ogd..100	5,293,900	semi-an.	July '75 1½
Rutland preferred.. 100	4,000,000	semi-an.	Sept. '82 1
St.L.,Alt. & T.Haute.100	2,300,000	.....	.....
" " pref.100	2,468,406	.....	May '82 3
St.L.&S.Fran.1st pref100	4,500,000	.....	Aug. '82 3½
St.L.,I.Mt.&South'n.100	21,459,921	semi-an.	Feb. '74 3
St. P. & Duluth pref.100	4,705,050	q'rterly.	June'82 1¾
St. P., Minn. & Man..100	15,000,000	semi-an.	Aug. '82 3½
Schuylkill Valley*... 50	576,050	semi-an.	July '82 2½
Seaboard & Roanoke.100	1,229,600	semi-an.	May '82 5
Shamokin V.&Pottsv 50	669,450	semi-an.	Feb. '82 3
Shore Line*.....100	1,000,000	semi-an.	July '82 4
Sioux C.&Pacific pref100	169,000	semi-an.	Apl. '82 3½
South Br. (N. J.)*....100	438,300	semi-an.	Jan. '82 3
South Western (Ga.)*100	3,892,300	semi-an.	Dec. '81 3½
Stockbridge&Pitts.*. 100	448,700	semi-an.	Oct. '81 1½
Summit Branch*.... 50	4,010,150	semi-an.	Feb. '76 3
Syr.,Bingham&N.Y.*100	2,500,000	semi-an.	Feb. '81 2
Terre Haute & Ind...100	1,988,150	semi-an.	Aug. '82 4
Troy and Boston....100	1,609,000	semi-an.	Feb. '80 2
Union Pacific. 100	61,000,000	q'rterly.	July '82 1¾
United Cos of N. J.*.100	20,490,000	q'rterly.	July '82 2½
Utica, Shenango&S V100	4,000,000	semi-an.	Nov.'81 3
Utica and Black Riv.100	1,772,000	semi-an.	Mar. '82 2
Vermont and Mass..100	3,050,000	semi-an.	Apl. '82 3
Wab. St.L.& Pac.pref.100	22,615,100	q'rterly.	Nov.'81 1½
Ware River*.....100	750,000	semi-an.	July '82 3½
Warren (N. J.).....100	1,800,000	semi-an.	Apl. '82 3½
Warwick Valley.....100	340,000	semi-an.	July '82 2½
Westchest&Phil.pref100	821,300	semi-an.	July '80 2
West Jersey.....100	1,359,750	semi-an.	Apl. '83 38
Wilmingt'n&Weld'n.100	1,456,200	semi-an.	July '82 3
Wil., Col., & Aug 100	960,000	semi-an.	July '82 3
Winchester&Poto'c.*100	180,000	semi-an.	July '82 3
Winchester&Strasb.*100	74,700	semi-an.	July '82 3
Worcester & Nashua. 75	1,789,800	semi-an.	July '82 1½
HORSE-POWER R. R.			
Albany City.....100	200,000	annual	.....'80 5½
Baltimore City..... 25	1,000,000	semi-an.	July '82 3
Balt.,Cat.&El. Mills..100	....	semi-an.	July '82 2
BleeckerSt.&Ful.F'y.100	900,000	semi-an.	July '81 3¾
Boston&Chelsea pref. 50	110,000	semi-an.	Apl. '82 3
Broadway (Brooklyn)100	250,000	q'arterly	Oct. '81 3
B'way&7th Av,(N.Y.)100	2,100,000	q'arterly	Oct, '81 2
B'klyn&Hunter's Pt.100	400,000	semi-an.	Apl. '79 3
Brooklyn City.....100	2,000,000	q'arterly	Dec.'81 3½
Bushwick (Brooklyn)100	300,000	semi-an.	July '81 2½
Cambridge.....100	908,000	q'arterly	Apl. '82 4½
Cen.Park,N.& E.Riv.100	1,800,000	q'rterly.	July '82 2
Christoph'r&TenthSt100	650,000	semi-an.	Aug.'81 2½
Citizens' (Phil.)..... 50	192,500	q'rterly.	Jan. '82 2½
Citizens' (Pbg.)..... 50	200,000	annual..	....'80 14½
Coney Island&Bklyn100	500,000	semi-an.	Oct. '80 5
Continental (Phil.) .. 50	580,000	semi-an.	July '82 6
D.Dock,E.B'way&Bat100	1,200,000	q'arterly	Nov.'81 4
Eighth Av. (N. Y.)...100	1,000,000	q'rterly.	Oct. '81 3
42d St. & G. St. Ferry100	747,000	semi-an.	Nov.'81 6
Frankf.&Southw (Ph) 50	600,000	q'rterly.	Jan. '82 6
Germantown, (Ph.).. 50	572,800	q'rterly.	July '82 2½
Girard College (Ph.) . 50	500,000	semi-an.	July '71 3
Grand St. & Newton.100	170,091	semi-an.	July '81 2½
Green&Coates St.(Ph) 50	150,000	q'rterly.	July '82 3
Heston,Mantau&F'm 50	299,381	semi-an.	Jan. '75 4
Highland.....100	600,000	semi-an.	July '82 4
Lomb.&SouthSts(Ph) 25	195,000	semi-an.	Oct. '75 4
Lynn and Boston....100	200,000	semi-an.	May '82 4
Malden and Melrose.100	165,000	.....	.....
Metropolitan (Bost.). 50	1,500,000	semi-an.	July '82 4
Middlesex (Boston)..100	650,000	semi-an.	May '82 3½
N.Y.,Bay Ridge&Jam100	150,000	..... .	Oct. '78 7
Ninth Av. (N. Y.)....100	797,320	....	.....
Orange &Newark....100	282,555	.....	.....
People's (Phila.) pref. 25	124,744	..... .	July '82 2
Philadelphia City... 50	475,000	semi-an.	July '82 4
Phila. and Darby.... 20	200,000	semi-an.	July '81 3½
Phila.&Grey's Ferry. 50	308,000	semi-an.	Jan. '82 6
Pbg,Alleg.&Manches. 50	300,000	q'rterly.	Oct. '81 3
Ridge Avenue (Ph.).. 50	420,000	semi-an.	Oct. '81 11
Second Avenue (N.Y.)100	1,199,500	semi-an.	July '81 2½
Second&ThirdSt.(Ph) 50	771,076	q'rterly.	Jan. '82 4½
17th &19th sts (Ph.).. 50	250,000	semi-an.	July '81 3
Sixth Avenue (N. Y.)100	750,000	semi-an.	Oct. '81 5
Somerville (Boston).100	113,000	semi-an.	May '82 3
South Boston..... 50	600,000	semi-an.	July '82 4
Third Avenue, N. Y..100	2,000,000	q'rterly.	Nov.'81 5
13th and 15th sts.,Ph 50	334,529	q'rterly.	Jan. '82 4
23d street, N. Y.....100	600,000	semi-an.	Aug.'81 4
Union, Boston.....100	374,300	semi-an.	Jan. '82 4
Union, Phila..... 50	1,005,000	semi-an.	Jan. '82 7
West Philadelphia... 50	750,000	semi-an.	July '77 10
CANALS.			
Chesapeake and Dela 50	2,078,038	semi-an.	June'75 2
Delaware Division... 50	1,633,350	semi-an.	Aug. '82 $1
Delawa. and Hudson100	20,000,000	q'rterly.	June'82 1¾
Delaware & Raritan*.100	5,847,400	q'rterly.	July '82 2½
Lehigh Coal and Nav 50	11,204,250	semi-an	June'82 2
Monongahela Nav... 50	1,004,500	semi-an.	July '82$3
Morris, consolidated.100	1,025,000	semi-an.	Feb. '81 2
" preferred....100	1,175,000	semi-an.	Feb. '81 5
Pennsylvania..... 50	4,501,200	....	.....
Schuyl. Nav., com.*. 50	859,100	annual..	Au. '81 50c.
" " pref.. 50	3,200,000	annual..	Aug. '81 $1
MISCELLANEOUS.			
Adams Express.....100	12,000,000	q'rterly.	Sept.'82 2
American Express... 50	18,000,000	semi-an.	July '82 3
Amoskeag Manuf.Co.100	3,000,000	semi-an.	June'81 5
Calumet&HeclaMin'g —	100,000 S.	q'rterly.	Aug. '82 $5
Central Mining Co...100	.....	semi-an.	Feb.'82 2½
Consolidation Coal..100	10,250,000	semi-an.	Jan. '82 2
George's Creek C.&I.100	....	semi-an.	Jan. '82 3
Maryland Coal.....100	4,400,000	semi-an.	Feb. '76 1½
Mariposa L. &Mining100	10,000,000	..... .	.....
" pref100	5,000,000	..... .	.....
Missouri Val.LandCo100	200,000	semi-an.	July '82 12
National Tube Works100	1,000,000	q'rterly.	July '82 3
Pac. Mail Steamship.100	20,000,000	q'rterly.	Sept.'69 3
Pennsylvania Coal... 50	5,000,000	q'rterly	Aug. '82 3
Pullman Palace Car..100	10,032,800	q'rterly.	Aug. '82 2
Quicksilver, com....100	5,708,700	..... .	May '82 0.4
" pref....100	4,291,300	..... .	May '82 6
Quincy Mining Co... 25	40,000 shs	semi-an.	Aug. '82 $5
Quincy R. R. Bridge.100	1,750,000	semi-an.	July '82 5
SiouxC.&I.F.L.&L.Co100	500,000	semi-an.	June '82 5
Spring Mt. Coal.....100	1,500,000	semi-an.	June '82 3½
Topeka Equip'nt Co.100	255,500	semi-an.	Apl. '82 5
United States Ex....100	7,000,000	q'rterly.	Aug. '82 1
Wells-Fargo & Co. Ex100	6,250,000	semi-an.	July '82 4
Western Union Tel..100	80,000,000	q'rterly.	July '82 1½

THE use of steam on the Fulton Avenue Railroad from the Howard House, East New York, to Cypress Hills Cemetery, has been discontinued and horse cars substituted therefor.

ACCORDING to the official returns the output of coal from the Nova Scotia mines for the quarter ended June 4 was 325,182 tons, an increase over that for the same period last year of 57,778 tons.

MACHINES are now made which will cut from a roll of wire pins of the right length, head them, point them, polish them, sort them out with points all one way and stick them into papers, or rolls, faster than one can count.

ONE of the odd industries of the country has its home in Newberne, N. C., a wooden platter, plate and tray manufactory, that turns out 100,000 plates per day. Another curious enterprise is the sassafras oil distilleries of Buckingham county, Va., forty in number. Each mill gives employment to three hands. They use about 2,000 pounds of root a day for each mill, and produce from one to one and one-half gallons of oil, weighing ten pounds to the gallon. Thus the forty distilleries consume daily 86,000 pounds of sassafras root, make about fifty gallons of oil, worth about $4.50 a gallon, and thus earn $225 per day.

AN American engineer, who, being engaged in the construction of a railway in China, has had unusually favorable opportunities of examining the famous Great Wall, built to obstruct the incursions of the Tartars, gives the following account of this wonderful work: The wall is 1,728 miles long, 18 feet wide and 15 feet thick at the top. The foundation throughout is of solid granite, the remainder of compact masonry. At intervals of between 200 and 300 yards towers rise up 25 to 30 feet high and 24 feet in diameter. On the top of the wall and on both sides of it are masonry parapets, to enable the defenders to pass unseen from one tower to another. The wall itself is carried from point to point in a perfectly straight line, across valleys and plains and over hills, without the slightest regard to the configuration of the ground, sometimes plunging down into abysses 1,000 feet deep. Brooks and rivers are bridged over by the wall, while on both banks of larger streams strong flanking towers are placed.

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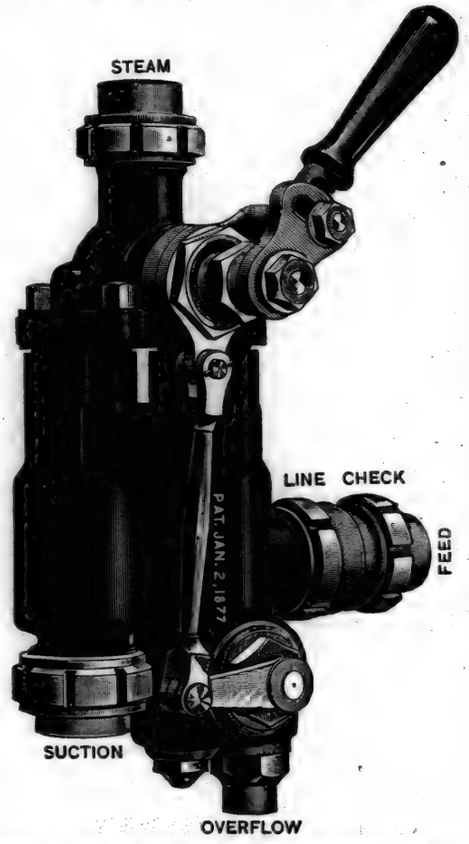
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NEW YORK, AUG. 2, 1882.

THE FORTIETH SEMI-ANNUAL CASH DIVIDEND of the ILLINOIS CENTRAL RAILROAD COMPANY, being three and a-half (3½) per cent on its capital stock, will be paid by the undersigned September 1, 1882, to shareholders as registered at the close of business on the 12th of August, after which and until the 5th day of September the transfer-books will be closed.

L. V. F. RANDOLPH, Treasurer.

THE LAKE SHORE AND MICHIGAN SOUTHERN RAILWAY CO.

TREASURER'S OFFICE, GRAND CENTRAL DEPOT,
NEW YORK, June 27, 1882.

The Board of Directors of this company have this day declared a QUARTERLY DIVIDEND of TWO PER CENT upon its capital stock, payable on Tuesday, the first day of August next, at this office.

The transfer-books will be closed at 3 o'clock P. M. on MONDAY the THIRD DAY of JULY next, and will be re-opened on the morning of Friday, the fourth day of August next

E. D. WORCESTER, Treasurer.

CORRESPONDENCE.

Examination of Locomotive Engineers.

[We pay no attention to communications unless the name and address of the writer are given, though the same will not be published if so requested. We assume no responsibility for statements made by correspondents, and we do not necessarily endorse ideas advanced by them. Under these conditions we think it of value to our readers to devote a liberal space to the free discussion by others—whose opinions may be at variance with our own—of subjects pertinent to our department of journalism.]

Editor American Railroad Journal:

Having taken the ground that a locomotive engineer should be found free not only from defects of sight and hearing, but also from organic disease of the heart, lungs and large blood vessels, I necessarily hold that the examination must be made by a medical man. For ordinary cases a general practitioner would be competent, with some special instruction from one who has had considerable experience. Cases would arise where the examiner might find himself doubtful or desirous of counsel, as frequently happens in the practice of medicine in its various branches. A specialist or expert would here be needed, and such a referee should be engaged to decide important or difficult cases. Every man found deficient by the ordinary examiner should have appeal to the expert, particularly with reference to defects of sight and hearing.

Wherever shops are located, or engines and train-men are shifted, there will be a local surgeon competent to make ordinary examinations. The surgeon-in-chief will be available for counsel, whenever occasion requires, and the specialist at the nearest large city will be the final referee.

The Pennsylvania Railroad carries out the details of examination by non-medical officers, with a specialist for general director and referee; but the examination there does not extend beyond tests of sight and hearing. If it be thought of any consequence that train-men should have sound hearts and lungs, and no liability to epileptic seizures, a well qualified medical practitioner must be the examiner. No well-organized railroad company will be much longer without a relief service, the medical officers of which will be available for whatever system of examinations may be adopted, with very little additional expense.

The advantages of examination of men for responsible railroad positions are manifold, but not altogether self-evident, and consequently the subject needs elucidation. They may be classified as (1) beneficial to the public, (2) to the companies, and (3) to the men themselves. Under the first head the case is too plain for demonstration, and this should be enough to settle the question, on the principal of "*salus populi suprema est lex*;" but it is not necessary to invoke "the higher law." Secondly, the advantage to the company lies in an additional safeguard against accidents, which destroy their property, and render them liable for damages always compensatory, and sometimes exemplary. In addition to direct losses follows the incidental one of loss of business from damaged reputation, which better managed companies know how to take advantage of. Thirdly, the advantage to employes is not so apparent, but readily demonstrable. Take for instance locomotive engineers, as the most important class. I hold that conditions which tend to raise their qualifications will at the same time increase their respectability and their emoluments. This is exemplified in the marine engineers of the United States Navy. They undergo a course of education at the Naval Academy, after graduation are commissioned as officers, and are recognized as gentlemen practicing an honorable profession—not as men following a trade. But the first step in the course is to pass a physical examination of a searching character.

It is only a few centuries since the surgeons have been able to separate themselves from barbers, as members of the same calling. The elevation of the former was gradual, and was accomplished by voluntary pursuit of study and submission to tests of higher proficiency than that possessed by the latter. When we consider that the oldest medical school in this country dates back little more than a century, and that schools of civil engineering are more recent, we may reasonably expect that industrial schools for the practical teaching of the mechanic arts are neither utopian nor far in the future. Among the first of craftsmen requiring a technical education are railroad engineers, and people now living may in time find them, if not instructed in "the seven liberal arts and sciences," at least fairly proficient in chemistry and physics, and capable of building an engine as well as driving one.

Can any reasonable person question whether the situation of a skilled mechanic be preferable to that of a botch-workman, or that the same rule holds with the class as with the individual? In like manner, if every individual of a certain class is known to be free of important physical defects, the whole body is recognized as *elite*—becomes more respectable; their services become more valuable and command better pay. It is clear then that the true interest of the class would lead them to elevate their standard in every way, but especially where it would soonest be appreciated by the public; and that would be in the direction of the public safety.

The importance of this subject, I think, should commend it to the earnest attention of the Brotherhood of Locomotive Engineers, one of the largest and best organized guilds in the world. A movement for reform and elevation of standard within the organization itself would be praiseworthy and command the approval and encouragement of the public and of railroad companies; although a natural consequence would be an irresistible demand for better pay and more permanent engagements. On the other hand, it would be discreditable to resist any suitably presented proposition from others looking to higher efficiency and respectability, whether coming in the shape of legal enactments or corporate rules. It is true that legislation and regulations of employers, even when urged as salutary reforms, are apt to be regarded by those affected as useless oppression, and the instinct of self-preservation revolts. This is the explanation of the opposition of railroad engineers to any new tests of competency. Their reasoning is not sound, but they will not be convinced in favor of abrupt reform which brings hardship to a few and even slight inconvenience to all. The law of nature, which achieves the elevation of the race by the "survival of the fittest," inflexibly eliminates the weak, who have to endure the extreme hardship of extinction; but we must not find fault with nature.

I am therefore clearly of opinion that it would be wise for the Brotherhood of Locomotive Engineers to aim at advancing their proficiency and gradually elevating their standard from that of a skilled craft to a profession. The first important step, to gain the confidence of the public and as a proof of the sincerity of their intentions, would be to give evidence of exemption from all physical defects which could impair their efficiency or imperil the lives put in their trust. This might be by an internal regulation, providing for an examination as the first step to admission to their ranks, or by inviting railroad companies to apply the test to those seeking employment. Either proposition would be honorable, would inspire confidence, and would lead to progressive elevation of the standard. A resolution adopted by that association in approval of physical examination of their members, and transfer of those found defective from the locomotive foot-board to some suitable duty, would probably meet a favorable response from railroad managers, and lead to satisfactory adjustment of what is regarded by those best informed on the subject as a great desideratum, albeit met by serious obstacles.

I purpose to continue by suggesting a plan for a technical school for the graduation of locomotive engineers, but must reserve it for a future communication. S. S. H.

New Orleans, August 8, 1882.

Editor American Railroad Journal:

I long since noticed that the weak and defective part of a railroad track was the joint, and that the appliances used to make amends for it fell more or less short of the object in view.

After many devices of greater or less merit, the idea of the scarf joint made by rolling or stamping aside occurred to me; so that, retaining at least its full amount of metal and more than its original *vertical* strength, each rail should slide by the other so as to admit of bolting (with one or more bolts) one rail to the other and *covering* and *compensating* for the vacancy made by contraction.

I had a model of this joint made and submitted to several steel rail manufacturers, most of whom gave it as their judgment that it was "the strongest joint ever devised or that they had yet seen."

Eminent railroad engineers of high standing in the profession have given this joint this testimony: "With a slight modification in form this joint is unexceptionable."

It was not only *strength* I aimed at, but *smoothness*, durability and perfection, with simplicity, besides avoiding unnecessary clatter of wheels and cold hammering of rail and rolling gear—numerous breaks of both having been attributed to crystallization of metal by "cold hammering," in jumping the vacancies in the rails. My joint, I am sure, will correct all these evils to a large extent, simplify and cheapen construction and after-care, and contribute to the confidence, comfort and safety of travelers, diminish wear and tear, and lessen the burden and responsibility of railroad management.

This is the last thing that can be done for a joint itself, but it must have a *bridging* underneath the ties before it shall have attained its full perfection, according to the judgment of yours truly, Frank Lightfoot.

Media, Pa., Aug. 15, 1882.

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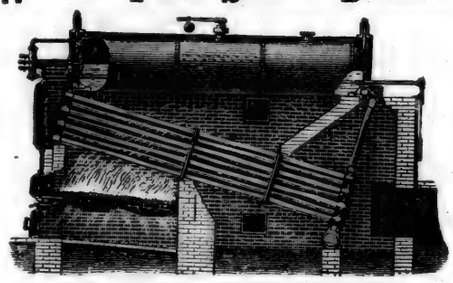
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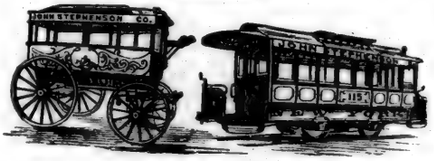
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[From our Special Correspondent.]

OUR CINCINNATI LETTER.

Work was begun on the 7th inst. on the Killbuck Valley road, from Wooster, Ohio, to the New York, Pennsylvania and Ohio road, near Burbank. The requisite amount of stock is nearly all subscribed, and it is proposed by the directors to push work and have the road-bed from Wooster to Burbank built before the commencement of the winter season. Bidders for construction are notified that plans and specifications of the road will be ready for inspection on and after the 20th inst. This new outlet will doubtless be of considerable advantage to the inhabitants of Wooster and vicinity.

Superintendent Fleming is laboring assiduously in placing the "block system" on the Cincinnati, New Orleans and Texas Pacific Railroad, and hopes to have it in operation at an early date, as its use will tend in a great degree towards lessening the dangers of collisions and other accidents.

Messrs. Grier and Roberts, trustees for the Pennsylvania Railroad bondholders in the Cleveland, Mount Vernon and Delaware Railroad, filed a cross-petition at Akron, Ohio, on the 8th inst., in the case of Fred'k W. Owel, *et al.* vs. the said Company, setting forth the manner of the recent sale of the road and their exceptions thereto. The cross-petition is somewhat bulky, covering over 200 pages.

The annual report of Railroad Commissioner Sabine will be published shortly, and it is said, will be of unusual value and interest. A leading feature therein will be the report of the commissioner appointed last year to inspect all railroads of Ohio. All the plates and cuts used in Van Nostrand's Magazine have been turned over to the commissioner for the illustration of the report, which will conduce greatly to the value of the work.

Just now, as the farmers refuse to sell their wheat at ruling prices, there is some stagnation in the grain-hauling business. One dollar per bushel is wanted by the agriculturists, being from 10 to 12 cents above the market quotations. A short time, however, will probably settle the question of price, after which the railroads will come in for their share of business in carrying the grain East.

The extension of the Chesapeake and Ohio Railroad from Newport News to Fortress Monroe is rapidly progressing, and it is stated that the track will, in a few days, be completed as far as Hampton, and that trains will probably be running by the 1st prox. Permission to extend the line down to the Point has not yet been secured, and the depot *pro tem.* will be about half a mile from the Hygeia Hotel.

At the recent meeting of the General Baggage Agents' Association at Cleveland, Ohio, the question was brought up as to the adoption of some feasible means of abolishing the pernicious practice of exchanging checks, and the committee appointed in the matter presented a form of receipt to be substituted therefor, and urgently recommend its adoption by all lines.

After a discussion upon the subject of the recently adopted system of charging storage on unclaimed baggage, the following resolution was adopted: Whereas, the practice of collecting storage charges has been introduced by most of the lines represented in this association, with very satisfactory results, be it Resolved, That we recommend and urge its general adoption, as a means of intelligently determining the proper amount of baggage to be allowed free on a single passenger ticket.

It was then decided that each member should weigh baggage at one or more stations on his line for one month or more, and obtain a general average, to be reported at the next convention.

And the important resolution, as follows, was likewise adopted: Whereas, the practice of receiving baggage up to the last minute prior to the departure of each train necessitates undue hurry, which is productive of errors and confusion, and also opens the door for imposition on the part of commercial travelers, be it *Resolved*, that we unanimously urge upon our respective managements the advisability of notifying the public that the railroad company is resolved to hold baggage unless presented and checked a certain time prior to the departure of the train for which it is delivered, the length of this time to be determined by each individual road.

Upon motion a committee was appointed to investigate the advisability of reporting all railroad checks from the hands of all baggage, transfer and express companies, and report some feasible method of effecting their arrangement.

It was also decided that each member should consult the management of his own line as to the advisability of refusing to carry any single pieces of baggage weighing over 300 pounds, and the results to be reported for action to the next meeting, which will be held in February next, at the Grand Central Hotel in New York.

Messrs. Lamprecht, Hayes & Co., of Cleveland, Ohio, were the successful bidders on the 11th inst., for Marion county 5 per cent road bonds, issued to the amount of $110,700, at a premium of $553.50; bonds and currency deliverable and exchangeable at Marion. Several bids were received, and the sale is considered a successful one, inasmuch as the bonds were for a short time only, viz: Six months to five years, in equal proportions.

The pool now existing between the Cincinnati, Hamilton and Indianapolis, and the Cincinnati, Indianapolis, St. Louis and Chicago roads expires on the 1st of September next by limitation. It is probable that the same will not be renewed on the former basis, inasmuch as the first-named road will not submit again to the old percentages.

The Wheeling and Lake Erie Railroad Company has nearly finished its track from the west end of the Maumee bridge as far as Cherry street, Toledo, via the old Miami and Erie canal bed, which will give valuable terminal facilities in the heart of that city.

Three of the new cars recently constructed for the Cincinnati, Hamilton and Dayton Railroad, by the Pullman Company, were on exhibition on the 13th inst. at the depot on 6th and Hoadly streets. Each car is provided with separate saloons and lavatories for ladies and gentlemen. No better constructed car can be found on any road in the country.

The president of the Toledo and Indianapolis Air Line Railroad was in Bowling Green, Ohio, a few days since, paying up the road's indebtedness. The contractors have resumed work with a large force, and it is stated that the road will be graded and ironed from Toledo to Findlay within 60 days. If cars are running by January, it is probable that $50,000 in subscriptions will be forthcoming from the towns along the road.

The Cincinnati Northern Railroad is to be newly equipped immediately with 60 box and stock cars, to carry 60,000 pounds apiece, 12 passenger coaches and 4 locomotives. The cost of such equipment will be about $120,000.

The annual meeting of the Employers' Mutual Benefit Association, of the Cincinnati, Hamilton and Dayton lines will be held on the 12th prox., in this city. "A."

Cincinnati, August 15, 1882.

List of Patents for Inventions Relating to Railway Interests.

[Reported expressly for the Am. Railroad Journal.]

Bearing date of August 14, 1882.

262,643. Inclined Plane Railway: R. Collins, Chicago, Ill.

262,722. Safety Signal for Railway Trains: Jno. Arbuckle, Brooklyn, N. Y.

262,636. Automatic Car Brake: August J. Bergh, Chicago, Ill.

262,751. Railway Crossing: Edw. E. Dwight, Toledo, Ohio.

262,662. Car Ventilator: Henry A. Gagne, New York, N. Y.

262,759. Railway Safety Switch: James H. Gamble, Nebo, Ill.

262,659. Car Coupling: Ezra E. Franz, N. Manchester, Ind.

262,800. Car Brake: P. Lord, Montreal, Canada.

262,802. Railway Gate: Richard W. Maffitt, Philadelphia, Pa.

262,808. Car Coupling: Thos. F. McNair, Dawson, Ga.

262,099. Car Wheel: Geo. W. Miltimore, Chicago, Ill.

262,910. Making Car Wheels: Geo. W. Miltimore, Chicago, Ill.

562,825. Car Starter: Thos. Owens, Yonkers, N. Y.

262,856. Car Heater: Jas. M. Thayer, Randolph, Mass.

262,707. Stock Car: Stephen P. Tallman, Dunellin, N. J.

262,839. Railway Jack: Is. Shondy, Jr., Paw Paw Grove, Ill.

262,633. Elevated Railroad: Levi J. Wing, New York, N. Y.

262,880. Car Coupling: D. W. Woods, St. Louis, Mo.

Nearly every day brings its accounts of men, women and children killed while walking on the tracks, and even while using them as lounging places. It may be useless work to point or print the moral, but many people seem to need its application. It is to keep off the path of the iron horse, unless you must cross it—then stop, look, listen, and if there is no near sign of danger, get over and away from the track in the quickest feasible way.

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SOUTHWEST.

6.00 P.M. PACIFIC EXPRESS.

The only line running a through sleeping car *via* Buffalo and Detroit without change, arriving at Chicago at 8.00 A.M. second morning, making sure connections with through Express Trains for Iowa, Nebraska, Kansas, Colorado, the Pacific Coast, Wisconsin, Minnesota and all points in the

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Artificial Leather.

THE old proverb, "There is nothing like leather," was true in the past, but is no longer so, as an article is now made which for many purposes is better than leather, and which can hardly be distinguished from the real article. Several years ago Mr. Charles A. Evans, of Salem, N. H., commenced a series of experiments, and after a large outlay of time and money, and after many discouraging failures, achieved complete success. The various processes were patented, special machinery obtained, a large brick factory erected at Salem, N. H., a stock company formed, and for the last four years the inventor has been reaping his reward for his patient labor.

THE EVANS ARTIFICIAL LEATHER

is very largely used by the boot and shoe manufacturers of Lynn, Haverhill and Brockton, as from the ability to make the leather in any shade of color from black to white –blue, pink, red, yellow, purple, gold, silver, or bronze—and its great *cheapness*, it serves them better than real leather. It is adapted to use for boot tops, piping, side-stays and linings, and is made in imitation of goat-skin, sheep-skin, or in fact of any kind of leather, by the use of rollers which emboss it with the grain of *any* leather, while preserving a fine, clear, bright surface, and in no way impairing its strength. Horse-hide and goat-skin are as fully imitated as sheep-skin, and its capabilities in that line are without limit. But its use for shoes is but a small part of its adaptability. It is also largely used in the manufacture of trunks and satchels, jewelry, and fancy boxes, and by upholsterers, carriage makers, car builders, bookbinders, etc., and is made in colors, weights and widths especially adapted for the different purposes. For lambrequins it has all the essential qualities, and can be made in any color of the most delicate shade; and from the fact that it can be stamped and gilded, it is being used largely. The surface admits of its being used as a panel and painted in any reproduction of hunting, fishing or landscape scenes. Its pliability admits of its being worked into rosettes or festoons, and all forms of decoration.

At the Company's office and sales room, No. 92 Pearl street, Boston, the writer was ushered into a room of which the walls were made up of pictures painted on the artificial leather, while the ceiling was formed by folds of the same material, in more than the colors of the rainbow. The chairs were upholstered in the artificial leather of various colors, and almost everything in the room was "leather."

A visitor to the office and salesroom of the Company, located as above, will be surprised at the number of colors and shades, and can there see boots, shoes, boxes, music rolls, tables, chairs, lambrequins, ceilings, walls, and all sorts of things made of artificial leather, and will feel almost as if natural products had been outdone by human invention. As Mr. Walter N. Dole, the general agent, puts it: "It looks and feels like leather, and is stronger and more durable that many kinds of leather, while it is unaffected by heat or cold, and is impervious to oil or water. It won't stick, crack or peel off, and it only costs about one-half the price of real leather."

Value of a First-Class Express Train.

A RAILROAD official recently gave some interesting figures as to the value of the mid-day express train from New York, west, which was a fair respresentative of the fast express trains on the leading American railroads. There were, he said, an engine, tender and eight cars. The engine and tender, which are considered together, were valued at $10,500; the baggage car, 1,000; the postal car, $2,000; the smoking car, $5,000; the two ordinary passenger cars, $10,000 each; and three palace cars, $15,000 each—total $83,000. This is a low rather than an excessive estimate for one of the fast expresses, as some of them, with more cars, are worth $100,000 at least. The palace cars, put down at $15,000, are in many cases worth an average of $18,000. These cars came into use soon after the sleeping-coaches, the first being used in 1863. In some instances these cars have cost as high as $25,000 and $30,000, where the interior workmanship was very elaborate. It is an interesting reflection that the safety of one of these costly trains, to say nothing of the passengers, devolves almost wholly upon one man—the engineer. There are other men, the conductor, baggage master, fireman, and three or four brakemen, but the hand upon the lever and the brain directing it have an immense responsibility.

The Mound-Builders.

DR. DANIEL G. BRINTON has sought to answer the question, Who were the mound-builders? by inquiring whether and to what extent the tribes who inhabited the Mississippi Valley and the Atlantic slope were accustomed to make works similar to the mounds. It is clear, from several accounts, that the Iroquois were accustomed to construct burial-mounds, and their neighbors the various Algonquin tribes, occasionally raised heaps of soil. The Cherokees do not appear to have been real mound-builders, but they appreciated the convenience of mounds, and put their more important buildings upon them when they had them at hand. The tribes among whom we can look for the descendents of the mound-builders with the greatest probability of success are the tribes of the great Chahta-Muskokee family, which includes the Choctaws, Chickasaws, Creeks, Seminoles and Natchez. They "seem to have been a building race, and to have reared tumuli not contemptible in comparison even with the mightiest of the Ohio Valley." Cabeza de Vaca, who accompanied the expedition of Pamfilo de Narvaez in 1527, mentions a place where the natives were accustomed to erect their dwellings on a steep hill, and dig a ditch around its base as a means of defence. All the accounts of those who participated in Ferdinand de Soto's expedition describe the Southern tribes as constructing artificial mounds, using earthworks for defence, excavating ditches and canals, etc. Thus La Vega tells how the caciques in Florida formed earth into a kind of platform "two or three pikes in height, the summit of which is large enough to give room for twelve, fifteen or twenty houses to lodge the cacique and his attendants. At the foot of this elevation they mark out a square place, according to the size of the village, around which the leading men have their houses." Biedma says that the caciques of a certain region "were accustomed to erect near the house very high mounds (*tertres tres-elevees*), and there were some who placed their houses on the top of the mounds." The Huguenots who attempted to settle in Florida described similar structures as marking the sites of the houses of the chief. William Bartram, the botanist, who visited the Creeks in the last century, found that they had "chunk-yards" surrounded by low mounds of earth, at one end of which, sometimes on a moderate artificial elevation, was the chief's dwelling, and at the other end the public council-house. Large burial-mounds are also spoken of as being made by these tribes. Many of the mounds in the Gulf States are very large. One in the Etowah Valley, Georgia, has a capacity of 1,000,000 cubic feet. The Messier mound, near the Chattahoochee River, contains about 700,000 cubic feet, and is twice as large as the great mound near Miamisburg, Ohio. Dr. Brinton's views are parallel, if not identical, with those worked out by the late Lewis H. Morgan in his "Houses and House-Life of the American Aborigines."

A Fish Ship.

A SPLENDID iron steamship is now in course of construction at the ship-yards of Pusey, Jones & Co., Wilmington, Del., for the United States Government. It will cost nearly $200,000, and is to be used expressly for the Fish Commission, to gather and preserve sea fish. The vessel will be sent to London with millions of specimens of small fish and sea bugs, to be exhibited at the great Fish Exposition to be held there in May next. She is to be christened the Albatross; is 200 feet long, 27 feet 7 inches beam, 16 feet 9 inches depth of hold, and of 800 tons burthen. She will be supplied with a deep-sea dredge with eight miles of wire rope, for the purpose of fishing up specimens of animal life which may be found miles below the surface of the ocean. Past Assistant Engineer G. W. Baird is superintending the construction of the ship, which will be launched in about four months. The Albatross will be under the direction of United States Fish Commissioner Baird, who will go with her to the London Exposition, which will be the greatest fish show ever seen in the world. There will be on exhibition there every kind of animal known to exist in the seas and rivers of the world, from a whale to a tadpole. All the leading fish culturists and dealers in the United States will send exhibits, which, in addition to the millions of preserved exhibits sent by the Government, will probably make the display the most complete of any on exhibition. The largest number of the Government exhibits will be microscopic specimens, but thousands of curious and valuable specimens preserved in liquor, and now at the Smithsonian Institution, will be put on board the Albatross and sent over.

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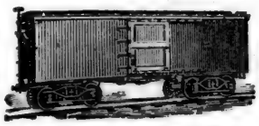
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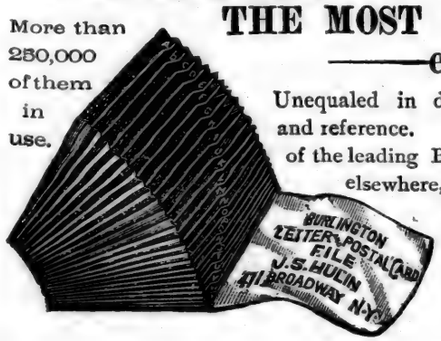
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N. B.—Send for Stock List

A Patent to Check Vibrations in Elevated Railroads.

On July 25th a patent was issued to Mr. Thomas Coates, of Waterville, N. Y., for an invention to check vibration in elevated railroads and in buildings, which is simple and inexpensive, and yet promises to secure the desired result. It is a subject in which many of our readers, as well as the public generally, are interested, and as from a personal examination of the model, and an explanation of the principle of its action, we believe it will supply a long desired remedy for the deafening noise we are in this city subjected to all along the line of the elevated railroads, we copy the following from the specifications of the patent, regretting that no cuts have been made to fully illustrate the invention :—

"This invention consists in the combination with the stringers, transverse girders and the columns of an elevated railroad, of iron bars extended into the ground, whereby the vibrations caused by a passing train are checked and conducted to the ground; and also in the mode of checking vibration in elevated railroads and other structures, by connecting iron bars with the frame of the structure, and then extending the bars into the ground."

This invention is not confined in its application to elevated railroads alone, but can be used with equal advantage in churches and other public buildings upon which bells are suspended, to prevent the occupants of the buildings from being annoyed by the vibration when the bells are rung. In this case a rod will be attached to the frame on each side of the bell and carried on over the roof to line of wall, and continued down on face of wall or in a channel of a little greater depth than the thickness of the rod cut in face of wall until it reaches the lower floor in basement and then enters the ground. This has been tried in several instances by the inventor, and found to act as a complete check to the vibrations, and cannot fail to be appreciated by the public generally. A large model can be seen at the office of H. T. Coates & Co., 125 Pearl street, New York, and we think all interested in matters of this kind will feel repaid for a visit.

The Coal Trade.

The leading coal-carrying companies make the following reports of their tonnage for the week ending August 5, and for the year to that date, compared with their respective amounts carried to the same time last year :—

	Week.	1882.	1881.
Reading Railroad	184,848	5,232,332	4,994,451
Schuylkill Canal	18,211	219,322	302,453
Lehigh Valley	128,616	4,033,574	3,681,228
Delaware, Lackawanna and Western	110,636	2,523,946	2,401,214
Shamokin	25,000	611,720	615,009
Central R. R. of New Jersey	66,178	2,484,480	2,447,756
United R. R. of New Jersey	35,754	984,518	897,236
Pennsylvania Coal	37,712	758,378	741,799
Delaware and Hudson Canal	80,590	1,934,828	2,015,406
Huntingdon and Broad Top Mountain	6,971	248,855	300,124
Penn. and New York	27,168	965,721	964,957
Clearfield, Pa.	56,050	1,678,146	1,428,889

The total tonnage of anthracite coal from all the regions for the week ending Aug. 5, as reported by the several carrying companies, amounted to 622,676 tons, against 544,178 tons in the corresponding week last year, an increase of 78,498 tons. The total amount of anthracite mined for the year is 15,984,889 tons, against 15,411,923 tons for the same period last year, an increase of 572,966 tons. The quantity of bituminous coal sent to market for the week amounted to 69,728 tons, against 103,996 tons in the corresponding week last year, a decrease of 34,268 tons. The total amount of bituminous mined for the year is 2,448,579 tons, against 2,893,584 tons for the corresponding period last year, a decrease of 445,005 tons. The total tonnage of all kinds of coal for the week is 692,404 tons, against 648,174 tons in corresponding week last year, an increase of 44,230 tons, and the total tonnage for the coal year is 18,433,468 tons, against 18,305,507 tons to same date last year, an increase of 127,961 tons. The quantity of coal and coke carried over the Pennsylvania Railroad for the week ending August 5 was 190,064 tons, of which 145,077 tons were coal and 44,987 tons coke. The total tonnage for the year thus far has been 6,493,736 tons, of which 4,759,370 tons were coal and 1,734,066 tons coke. These figures embrace all the coal and coke carried over the road, east and west. The shipments of bituminous coal from the mines of the Cumberland coal region for the week ended Aug. 5 were 16,200 tons, and for the year to that date 583,543 tons, a decrease of 605,587 tons as compared with the corresponding period of last year. The shipments were: To the Baltimore and Ohio Railroad—For the week, 13,499 tons; year, 483,324 tons; decrease as compared with 1881, 300,345 tons. Chesapeake and Ohio Canal—Week, 2,700 tons; year, 21,535 tons; decrease as compared with 1881, 231,780 tons. Pennsylvania Railroad — Week, none; year, 74,842 tons; decrease as compared with 1881, 76,873 tons. The Reading Railroad shipment for last week, ending August 12 was about 188,500 tons, of which 62,000 tons were sent to and 54,000 tons shipped from Port Richmond, and 11,900 tons sent to and 11,500 tons shipped from Elizabethport.—*Philadelphia Ledger, Aug.* 14.

Illinois Central Railroad.

During the month of July, 1882, the traffic on the lines operated by this Company was (estimated):—

In Illinois	$618,478 00
In Iowa (leased lines)	133,773 00
Total	$752,251 00

The traffic for the same month in 1881, on the same mileage, was (actual):—

In Illinois	$548,317 52
In Iowa (leased lines)	171,686 24
Total	$720,003 76

During July, 1882, the land sales were 560.58 acres for $3,400.65, and the cash collected on land contracts was $4,203.57.

L. A. Catlin, *Secretary.*

Anthracite Coal Tonnage.

The following is an official statement of the anthracite coal tonnage for the month of July, 1882, compared with the same month in 1881 :—

	1882.	1881.
Philadelphia and Reading Railroad	653,499	639,579
Lehigh Valley Railroad	548,743	492,033
Central Railroad of New Jersey	416,072	378,635
Delaware, Lackawanna and Western	441,135	381,509
Delaware and Hudson Co.	296,932	285,804
Pennsylvania Railroad	218,489	206,517
Pennsylvania Coal Co.	151,503	148,290
New York, Lake Erie and Western Railroad	30,876	47,732
Total	2,757,249	2,572,099

The total production up to July 31, 1882, was 15,325,100 tons, against 15,039,596 tons at the same time last year, an increase of 285,504 tons. The stock of coal on hand at tide-water shipping points, July 31, 1882, was 575,532 tons, against 583,936 tons at the same time last year, a decrease of 8,404 tons.

The bridge across the Missouri River at Blair, Neb., which is to cost $1,000,000, will connect the Blair system of railways in Iowa and Nebraska, and give the Chicago and Northwestern Railway access to its allied connections west of the Missouri.

The Wisconsin Central Railway Company is making important additions to its rolling-stock.

Five complete railway trains, consisting of twelve carriages each, have been purchased in England for use in Egypt.

The superstructure of the bridge to be erected by the Delaware, Lackawanna and Western Railroad over the Lackawanna River at Scranton, Penn., will be commenced on the 19th inst.

The Supreme Court of Iowa rules that a police officer is guilty of manslaughter if he strikes a prisoner a fatal blow with a club, to defeat an attempt to escape, unless the officer has reason to believe that he is in danger of great bodily harm or loss of life.

The seventeenth annual exposition of the Mechanics' Institute, San Francisco, was opened on the 15th inst., in the new pavilion. The opening address was made by President P. B. Cornwall. The display is very creditable. The exposition will continue for one month.

A new brake, the invention of Mr. Tremaine, a conductor, has, after careful trial, been adopted by the Chicago, Milwaukee and St. Paul Railway Company. The brake is an ingenious contrivance, of such construction as to make it unnecessary to remove the wheels upon which the brake acts more than once during six or eight months. It is reported that Mr. Tremaine has been offered by George M. Pullman $40,000 for the right to use the patent on his sleeping-cars.

At a meeting of the McLeod Air Railroad Signal Company, held in Hartford, Conn., on the 8th inst., it was reported that the stock was being rapidly subscribed for, and is readily selling at par—$100. There are 10,000 shares. The following is a list of officers: C. A. Loud, president, Boston; Thos. R. Sharp, vice-president and general manager, New York; J. G. Stewart, treasurer, Boston; J. S. McLeod, superintendent, Boston; H. B. Freeman, attorney, secretary and assistant treasurer, Hartford; C. P. Gorely, assistant secretary and attorney, Boston.

The gentleman mentioned in the following paragraph appears to be fully as popular in St. Thomas as he was during his residence in the Forest City, and he is a genial, whole-souled man, who enjoys the high esteem of the employes generally. The *Journal* says: "Mr. Wm. Chambers, locomotive foreman of what used to be the Great Western Railway shops in this city, but now the Grand Trunk, came out from England with the first locomotive purchased by the former company, and was in the service of the Great Western all the time that company was in operation—27 years. To-day is his first day's service with the Grand Trunk, and he appears to be capable of serving that company for a good many years. He is the heaviest and one of the best men the Grand Trunk gets by the fusion; he weighs 287."—*London (Ont.) Free Press, Aug.* 12.

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One new 3ft. Gauge Passenger Engine, 22 tons, prompt delivery.
Six new 4ft. 8½ Gauge Locomotives, cylinders 17x24, weight 35 tons. August and September delivery.
One new 3ft. Gauge Saddle Tank Engine, delivery this month.
Cars—Passenger and Freight Cars of all descriptions for early delivery.
Three Second-hand Passenger Coaches in good order.
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PATENTED MAY 23, 1882.

☞Railroad and manufacturing companies, or parties able to co-operate with patentee in their manufactur and introduction, are invited to correspond with

WM. C. SCHULTZE,
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A Natural Copper-Plating Bath.

Two years ago, at a mine operated by William Utter, at Campo Seco, near Milton, water came in and work stopped. To keep the large iron-bound and iron-baled bucket used to hoist rock from drying up and falling to pieces it was let down into the water. Next season, when it was drawn up, lo, a miracle! It was copper-bound and copper-baled. From this has sprung quite an industry, and the mine has been sustaining itself from ore water ever since. The water contains an acid which has the property of taking into solution the particles of iron thrust into it, and it has also copper in solution which is let go, particle by particle, as the iron is picked up. It is a simple chemical exchange, and this mine may make another profit still if it will get another chemical into the water which will make the acid lay down the iron, which, as a black flood, the water carries down into the Stanislaus River. The copper industry consists in taking bundles of scrap iron and old tin to the mine, where it is thrust into vats of water caught up, in which the metals are soon changed to copper, the residue of the iron taking the form of a black stream and flowing away. To make sure of making the water swap all its copper for iron, which it is glad to do without boot, one vat is placed below another down the bank to the river, and when the water escapes it has eaten its fill of iron and left pay for its meal in genuine copper.—*Stockton (Cal.) Mail.*

Robert Burdette's Counsel to His Son.

My son, when you hear a man growling and scolding because Moody gets $200 a week for preaching Christianity, you will perceive that he never worries a minute because Ingersoll gets $200 a night for preaching atheism. You will observe that the man who is utterly shocked because Francis Murphy is paid $150 a week for temperance work seems to think it is all right when the barkeeper takes in twice so much money in a single day. The laborer is worthy of his hire, my boy, and he is just as worthy of it in the pulpit as he is upon the stump. Is the man who is honestly trying to save your immortal soul worth less than the man who is only trying his level best to go to Congress? Isn't Moody doing as good work as Ingersoll? Isn't John B. Gough as much the friend of humanity and society as the bartender? Do you want to get all the good in the world for nothing, so that you may be able to pay a high price for the bad? Remember, my boy, the good things in the world are always the cheapest. Spring water costs less than corn whisky; a box of cigars will buy two or three Bibles; a gallon of old brandy costs more than a barrel of flour; a "full hand" at poker often costs a man more in twenty minutes than his church subscriptions amount to in three years; a State election costs more than a revival of religion; you can sleep in church every Sunday morning for nothing, if you're mean enough to dead-beat your lodgings in that way, but a nap in a Pullman car costs you two dollars every time; fifty cents for the circus and a penny for the little ones to put in the missionary box; one dollar for the theatre, and a pair of old trousers, frayed at the ends, baggy as to the knees and utterly bursted as to the dome, for the Michigan sufferers; the dancing lady who tries to wear the skirt of her dress under her arms and the waist around her knees and kicks her slipper clear over the orchestra chairs every night gets $600 a week, and the city missionary gets $500 a year; the horse race scoops in $2,000 the first day, and the church fair lasts a week, works twenty-five or thirty of the best women in America nearly to death, and comes out $40 in debt—why, my boy, if you ever find yourself sneering or scoffing because once in a while you hear of a preacher getting a living, or even a luxurious salary, or a temperance worker making money, go out in the dark and feel ashamed of yourself, and if you don't feel above kicking a mean man, kick yourself. Precious little does religion and charity cost the old world, my boy, and when the money it does get is flung into its face, like a bone to a dog, the doner is not benefitted by the gift, and the receiver is not, and certainly should not, be grateful.—*Burlington Hawkeye.*

The Brooklyn Bridge.

The total weight of metal in the Brooklyn bridge in round numbers is 1,000 tons. Of this 1,858,279 pounds are wrought iron, 82,092 pounds steel, 27,440 pounds steel pins and 146,891 pounds cast iron. Following are the principal dimensions of the bridge:—

Construction commenced on January 2, 1870.

Size of New York caisson, 172x102 feet.

Size of Brooklyn caisson, 168x102 feet.

Timber and iron in caisson, 5,253 cubic yards.

Concrete in well-holes, chambers, etc., 5,669 cubic feet.

Weight of New York caisson, about 7,000 tons.

Weight of concrete filling, 8,000 tons.

New York tower contains 46,945 cubic yards masonry.

Brooklyn tower contains 38,213 cubic yards masonry.

Length of river span, 1,595 feet 6 inches.

Length of each land span, 930 feet, 1,860 feet.

Length of Brooklyn approach, 971 feet.

Length of New York approach, 1,562 feet, 6 inches.

Total length of bridge, 5,989 feet.

Width of bridge, 85 feet.

Number of cables, 4.

Diameter of each cable, 15¾ inches.

First wire was run out May 29, 1877.

Cable making really commenced, June 11, 1877.

Length of each single wire in cables, 3,578 feet 6 inches.

Ultimate strength of each cable, 12,200 tons.

Weight of wire, 12 feet per pound.

Each cable contains 5,296 parallel (not twisted) galvanized steel, oil-coated wires, closely wrapped to a solid cylinder, 15¾ inches in diameter.

Depth of tower foundation below high water, Brooklyn, 45 feet.

Depth of tower foundation below high water, New York, 78 feet.

Size of towers at high water line, 140x59 feet.

Size of towers at roof course, 136x53 feet.

Total height of towers above high water, 278 feet.

Clear height of bridge in center of river span above high water, at 90 degrees Fahrenheit, 135 feet.

Height of floor at towers above high water, 119 feet 3 inches.

Grade of roadway, 3¼ feet in 100 feet.

Height of towers above roadway, 159 feet.

Size of anchorages at base, 129x119 feet.

Size of anchorages at top, 117x104 feet.

Heights of anchorages, 89 feet front, 85 feet rear.

Weight of each anchor plate, 23 tons.

Engineer, Colonel W. A. Roebling.

—*Scientific American.*

Singular Recovery of a Watch.

The Charlottesville, Va., correspondent of the Richmond *Dispatch* says that the Chesapeake and Ohio Railway Company have two bridges east of that place, just at the foot of Monticello Mountain— one is over the Rivanna, the other over Moore's Creek. The company has a watchman employed to follow all trains over these bridges and keep a general surveillance over them. This watchman, when not thus engaged, sometimes catches fish from the river and sometimes goes to hunt squirrels on the north side of Monticello. During one of these latter trips in the spring of last year he had the misfortune to lose his watch. This was very inconvenient for him, for it was a good one, and a good watch costs money, and is hard for a poor man to get; besides, he was deprived of all means of knowing just at what time to be on duty, except when he was at his house or contiguous thereto. One day in the fall thereafter, as he was going down the road towards the second bridge, from which a good view of the mountain can be had, and thinking about his lost watch, he cast his eyes over on the mountain side and saw something glistening in the rays of the autumn sun. It struck him that this might be his watch. He went back to his house, returned with his wife, and finding again the glistening object directed her to watch it and guide his foot-steps by her voice —the leaves were off the trees and a man could be easily seen way up the mountain-side—and started for the object. His wife, faithful to her part of the work, directed to the exact spot, where he found his watch, intact and practically uninjured.

There is an engineer by the name of Meyers on the St. Louis and Cairo Narrow-Gauge Railroad who has had a variety of experience. He has run locomotives in Russia, Cuba and South America, and in most all parts of North America. He introduced the first American locomotives in Brazil, and the Emperor, Dom Pedro, having a turn for mechanics, treated him splendidly, and made him some fine presents upon his departure from that country to return home. Mr. Meyers is said to be a very careful and trustworthy engineer. Much of his foreign experience is due to the fact that formerly he was in the employ of the Baldwin Locomotive Works, and was sent out to other countries frequently to set up their locomotives.

AMERICAN Railroad Journal.

ESTABLISHED 1831.

Steam Navigation, Commerce, Finance, Banking, Machinery, Mining, Manufactures.

SECOND QUARTO SERIES.—VOL. XXXVIII., No. 33.] NEW YORK, AUGUST 26, 1882. [WHOLE No. 2,418.—VOL. LV.

ORGANIZATION.

THE directors of the St. Paul, Minneapolis and Manitoba Railway Company, recently elected, are: George Stephen, Donald A. Smith, James J. Hill, R. B. Angus, John S. Kennedy, D. Willis James, and R. B. Galusha. The officers are: James J. Hill, of St. Paul, late vice-president, president; John S. Kennedy, of New York, vice-president; Edward Sawyer, secretary and treasurer; and W. R. Nicholas, assistant secretary.

CONSTRUCTION.

RAILROAD building is being vigorously pushed in Sonora, Mexico.

SURVEYING parties are out to locate a railroad line from Puyallup to Seattle, W. T.

THE Brazilian Government promises that the Madeira and Mamore Railroad shall be completed.

ANOTHER year the railroad up the Catskills is to be extended to the lawn of the mammoth Hotel Kaaterskill.

THE great bridge over the Missouri River at Bismark, D. T., will be 1,300 feet long, 75 feet high and will cost $1,000,000.

THE most active work in Baltimore just now is street-railway building, the development of which this season has been remarkable.

THE right of way has been secured by the Pennsylvania Railroad Company nearly the entire distance between Frazer and Phœnixville.

FORTY-SEVEN miles of the Pensacola and Atlantic Railroad are in operation, and by November 1 the road will be finished to Chattahoochee.

THE Shamokin, Sunbury and Lewisburg Railroad will be completed in December at a cost of $1,080,000. The length of the road will be 137.3 miles.

THE trustees of the Fall Brook Coal Company, at Corning, N. Y., have decided to extend the Corning, Cowanesque and Antrim Railroad from Elkland to Harrison Valley.

THOMAS COLLINS, of Philadelphia, has a contract to build a line of railroad from the Jersey Shore and Pine Creek Railroad along Beach Creek to the Snow Shoe coal fields.

THE track of the Houston and Texas Central, northeast extension, has been laid into Terrell, and the line from Garrett to Teviall will be completed by September 1, and pushed rapidly to Texarkana.

CONTRACTS have been awarded for the grading, bridging and "tieing" of nearly 100 miles of the Wisconsin, Iowa and Nebraska Railroad. On other portions of the route the surveys are well under way.

PRESIDENT CUMMINGS, of the New York, Chicago and St. Louis Railroad, states that the road will be completed to its Illinois Central connection into Chicago by September 1, and that trains will be running between that point and Buffalo October 1.

THE question of building a branch line of railroad from Frederick, Md., to Middletown is being agitated. At the instance of a number of citizens of Frederick, the superintendent of the Frederick division of the Pennsylvania Railroad has, it is understood, consented to go over the suggested route.

THE contractors on the New Orleans and Northeastern Railroad, which is part of the Cincinnati, New Orleans and Texas Pacific system, extending it from Meridian, Mississippi, to New Orleans, recently engaged one thousand additional men for the purpose of pushing through the contracts. The road will probably be completed by the 1st of December.

THE contract for building the West Penn and Shenango Connecting Railroad, the extension of the Shenango and Alleghany Railroad to Butler, has been let to W. W. Reed, of Erie. This extension will be 22 miles long, and when completed it will be operated by the latter company, either by consolidation or lease. The road is to be completed and turned out by the contractors by July 1, 1883, when a new short cut to the East will have been effected by connections with the Pennsylvania Railroad.

THE Wheeling and Lake Erie Railroad is rapidly approaching completion. Its line will be from Toledo southeast to Massillon, nearly half way across the State, and from there one branch to Marietta and one to Wheeling, giving it two termini on the Ohio River, each about 250 miles from Toledo. The line from Toledo to Marietta is pretty well finished up by the completion of the track from the west end of the Maumee bridge by way of the old Miami and Erie Canal bed.

THE Sonsonate and Acajutla Railroad has been opened to the public. The official proceeding were followed by private and public rejoicings, which were participated in by the people for hundreds of miles around. A large number of public dignitaries went by rail from Sonsonate to Acajutla, and on their return assisted to the number of 300 at a grand banquet given by the railroad company. At night a ball took place lasting until 4 o'clock in the morning. The festivities were kept up for a week.

CONCERNING the report that the New York, Chicago and St. Louis Railroad Company contemplates a Michigan branch, President Cummings says that contracts have already been let for a branch 150 miles inland from Toledo to Allegan, Michigan, connecting at Allegan with the Chicago and Western Michigan Railroad, and giving access to Grand Haven and other Michigan lake ports. When completed, it will be operated in connection with the Ohio Central, affording an outlet northward for Ohio coal, and southward for Michigan lumber. It is the purpose of the syndicate to build next year from Marshall, Michigan, to the junction with the Detroit, Marquette and Mackinaw Railroad, in the iron ore region. Mr. Cummings says the money for the first 15 miles has been already subscribed.

THE Nilometer used for the purpose of measuring the height of the Nile is situated on the Island of Roda, opposite Old Cairo. It consists of a square well or chamber, in the center of which is a graduated pillar divided into seventeen cubits, each about 21 7-16 inches long. Owing to the elevation of the bed of the Nile the relative proportion of the rise of water has been altered, and it now passes about one cubit and two-thirds above the highest part of the column. The state of the stream is proclaimed in the streets of Cairo during the inundation every day by several criers, to each of whom a particular district is allotted. From twenty-four feet to twenty-six feet may be taken as the ordinary maximum of the rise at Cairo.

THE HARLAN & HOLLINGSWORTH CO., Wilmington, Del., were honored on the 16th inst. by a brief visit from Secretary Chandler of the Navy, Constructor Wilson of the Bureau of Construction and Repairs, Chief Engineer Shock of the Bureau of Steam Engineering, and other distinguished naval officers. After making a tour of inspection through the shipyards, accompanied by the officers of the company, they thoroughly examined and inspected the iron monitor, Amphitrite, which is lying on the stocks in an unfinished condition, it being the desire of the Secretary to thoroughly familiarize himself with the condition of these monitors, which have been the subject of so much contention during the past session of Congress.

The Tehuantepec Railroad.

In regard to the announcement recently made that the Tehuantepec Railroad Company had forfeited its charter, and that the Mexican Government proposes to confiscate the work already accomplished, we learn that Mr. Edward Learned, organizer and president of the Tehuantepec Company, engaged in the enterprise in full faith that it would be a great commercial benefit and remunerative to the investors in the project. The trouble seems to have resulted from the fact that only two years' time was secured in the charter to complete the work, and unforeseen difficulties were found. Mr. Learned, from his own pocket or from the treasury of the company, has invested upward of $400,000. Thirty miles of the railroad have been built and twenty more prepared for the rails. The railroad is 150 miles long, but beyond the point reached there is prairie, and easy and cheap work. The first 12 miles was in a swamp, where piles 60 feet long had to be driven to get a way for the track. After this came excavations in a soil so poisonous to handle that from ten to fifteen dead men were found among the laborers every morning. The cost of everything required for the job was enormous, having to be carried from New York, and supplies for the boarding of 1,000 men were tremendously dear. The native agriculture supplies only beans, corn and rice, and the meals were only obtainable by hunting parties or in canned goods from this country. Engineers, and others who wanted an occasional delicacy, paid 90 cents a box for sardines. After the two years' charter had expired an extension of two months was granted by the Government, but of course that was insufficient to complete the road. The Government paid its promised bonus of $12,000 a mile, and it was with this money that the latter part of the operations was carried on. Finally, the job seems to have been a greater one than the capital available could complete, and what has been invested, about $750,000, it is said, has been lost.

The population of England and Wales is 25,968,286; Ireland, 5,159,839; Scotland, 3,734,441—total, 34,862,566.

Prof. S. W. Robinson, of the Ohio State University, in his recent work on Railroad Economies, estimated the cost of stopping a train at $1.77.

Having gone on a trial trip with a hotel car, the London *Globe* declares that "once more English people are indebted to Yankee ingenuity for an idea."

A paper has been discovered in the archives of Venezuela, dated 1780, which gives an historical summary of early projects for piercing the Isthmus of Panama. The first goes back to the reign of Philip II. of Spain, who, at the instigation of the Viceroy of the Indies, sent certain Flemish engineers to investigate on the spot the feasibility of the undertaking. Their report was altogether adverse; and thereupon Philip II. threatened the penalty of death against whoever should bring up the project.

List of Patents for Inventions Relating to Railway Interests.

[Reported expressly for the Am. Railroad Journal.]

Bearing date of August 22, 1882.

263,083. Car Brake: O. C. Woolson, Newark, N. J.

263,243. Circular Railway or Roundabout: W. Sturm, Galveston, Texas.

263,077. Railway Jack: D. E. Teal, Oneida Castle, N. Y.

263,263. Apparatus for Heating Cars (3 Patents): M. J. Walsh, New York, N. Y.

263,078. Safety Railway Tie: F. Tunica, Omaha, Neb.

263,227. Car for Cable Railways: H. Root, San Francisco, Cal.

263,241. Car Coupling: J. J. Stopple, Belleville, Texas.

263,213. Car Coupling: A. A. Porter, Griffin, Ga.

263,215. Car Coupling: B. M. Pulliam, Tolona, Ill.

263,052. Car Brake: A. H. Marden, Cambridge, Mass.

263,202. Machine for Loading Cars: J. H. Norton, New Orleans, La.

263,189. Car Coupling: O. D. D. Martin, Augusta, Ga.

262,940. Compound Railway Rail: G. H. Everson, Scottdale, Pa.

263,088. Elevated Railway Construction: N. Allen: Rockaway Beach, N. Y.

262,936. Car Coupling: J. A. Dickinson, Mobile, Ala.

Sir John Rose owns one-fifth of the Canadian Pacific Railway.

The Boston Public Library, including all its branches, now owns 405,221 volumes, having gained 13,239 volumes during the past year.

The appearance of the Highland regiments which England is now hurrying up to the front from both sides of Egypt at once will doubtless be as great a surprise to the Bedouins of Arabi Pasha as to their grandfathers in 1798. When the Highlanders of Sir Ralph Abercombie's army landed at Alexandria in that year, the Arabs of the town, after a wonderful survey of the stalwart Celts, ran to announce to their friends the arrival of a host of giants, so huge that the clothes which they wore were all too short for them. In the Sepoy mutiny of 1857 the Highland regiments did priceless service both at Lucknow and Cawnpore, storming on one occasion a high-walled garden defended by five times their number of Sepoys, and literally annihilating the whole garrison. When Nana Sahib's soldiers first caught sight of the plaids and kilts they exclaimed joyfully that all the English soldiers must have been killed, and that the Sirkar (Government) had to call out the women. But after their first taste of a Highland bayonet charge they abandoned this belief once for all, and fell back upon the theory that these terrible fighters had deliberately adopted this female garb in order to remind them of the wrong which they came to revenge, viz., the massacre of the English ladies by Nana Sahib.

Fifty-two years ago there were twenty-three miles of railroad reported in the United States. In 1850, or at the end of twenty years of steady growth, there were a little over nine thousand miles. That twenty years of work is nearly equalled now in a single year; 7,174 miles being reported as having been built in 1880, and 9,358 miles in 1881. It is expected that quite as many if not more miles will be constructed this year, for six thousand miles are already about completed. The total at the close of each ten years since 1850 are stated as follows: 1860, 30,635 miles; 1870, 52,914 miles; 1880, 93,671. At the close of last year there were, according to Poor's Manual, over a hundred thousand miles of track in operation in the United States.

In a communication sent from Suez to the Swiss Geographical Society, Dr. Keller gives some interesting information about the migration of fish through the canal. Although during the twelve years that elapsed since the opening of the canal the interchange of marine life between the Mediterranean and the Indian Ocean has not reached the dimensions at first anticipated, still a number of small fish have found their way from the Mediterranean to the Red Sea. A greater desire to travel in that direction than in the opposite one seems to prevail. A very interesting fact has, however, been established, that the real pearl oyster is traveling through the canal—not a few straggling outposts, but large trains moving regularly along. As they have not yet reached Timsah Lake, it will be one or two decades before they will be established in the Mediterranean.

There is now in successful operation a miniature railway which unites the village of Westerstede in East Frisia with the station of Ocholt, on the Oldenburg and Leer line. It is solely due to the enterprise of the thinly scattered population of the districts, and carries their cattle and other produce to market, bringing them back their few requirements. The soil is marshy, so that a good deal of drainage work had to be done, and it was necessary to carry the line above the level of the frequent floods. Notwithstanding this the cost of construction was only £2,103 7s. 6d. per mile; and the cost of working (including wages, fuel and every expense) amounts to the insignificant sum of £1 7s. 6d. per diem. The buildings, according to the London *Engineering*, from which the above was obtained, consist of a shed at each end of the line; the terminus is the courtyard of the principal inn at Westerstede, and the single station—half way along the line—is the house of a gentleman, who hospitably entertains the passengers while they are waiting for the train. The road is five miles in length. The rolling-stock comprises two small four-wheeled tank locomotives, weighing (when in working order) 7½ tons each; three carriages of the American type, with a door at each end; two open goods trucks and two covered. A train consists of the engine and two vehicles, between which the guard sits. There are no turn-tables, so that the locomotive is at the hinder end of the train in returning. The fuel employed is turf, which is abundant in the district. The receipts of this tiny railway are steadily increasing.

Journal of Railroad Law.

LIMITED RAILROAD TICKET, WHEN USED.

NEW YORK COURT OF APPEALS, APRIL, 1882.

AUERBACH VS. NEW YORK CENTRAL AND HUDSON RIVER RAILROAD COMPANY.

Plaintiff purchased at St. Louis of the Ohio and Mississippi Railway Company, acting as agent for other companies, a ticket to New York over connecting lines mentioned in coupons attached. The ticket was conditioned to be good only for one continuous passage from point to point named on coupon attached, and was to be "used on or before" the 26th of September. A coupon for passage over the New York Central and Hudson River Railroad was for passage from Buffalo to New York. Plaintiff entered a train on the latter going from Buffalo to New York at Rochester, an intermediate station, and presented it to the conductor, who received it and punched it as a regular ticket. While on the journey the 26th expired, and when the train reached Hudson, a station between Rochester and New York, about four o'clock A. M., September 27, plaintiff was ejected from the car by the conductor, on the ground that the time the ticket had to run was expired. *Held*, that the ejection was wrongful. When the ticket was accepted from plaintiff after he entered the train at Rochester, it was "used," and plaintiff was entitled to passage to New York.

Action for damages for being ejected from defendant's train while riding as a passenger. The opinion states the case.

EARL, J. This action was brought by the plaintiff to recover damages for being ejected from one of the defendant's cars while he was riding therein as a passenger. He was nonsuited at the trial, and the judgment entered upon the nonsuit was affirmed at the General Term. The material facts of the case are as follows:—

The plaintiff being in St. Louis on the 21st day of September, 1877, purchased of the Ohio and Mississippi Railway Company a ticket for a passage from St. Louis, over the several railroads mentioned in coupons annexed to the ticket, to the city of New York. It was specified on the ticket that it was "good" for one continuous passage to point named "in coupon attached;" that in selling the ticket for passage over other roads, the company making the sale acted only as agent for such other roads and assumed no responsibility beyond its own line; that the holder of the ticket agreed with the respective companies over whose roads he was to be carried to use the same on or before the 26th day of September then instant, and that if he failed to comply with such agreement, either of the companies might refuse to accept the ticket or any coupon thereof, and demand the full regular fare which he agreed to pay. He left St. Louis on the day he bought the ticket, and rode to Cincinnati and there stopped a day. He then rode to Cleveland and staid there a few hours, and then rode to Buffalo, reaching there on the 24th, and stopped there a day. Before reaching Buffalo he had used all the coupons except the one entitling him to a passage over the defendant's road from Buffalo to New York. The material part of the language upon that coupon is as follows: "Issued by Ohio and Mississippi Railway on account of New York Central and Hudson River Railroad, one first-class passage, Buffalo to New York."

Being desirous of stopping at Rochester the plaintiff purchased a ticket over the defendant's road from Buffalo to Rochester, and upon that ticket rode to Rochester on the 25th, reaching there in the afternoon. He remained there about a day, and in the afternoon of the 26th of September he entered one of the cars upon the defendant's road to complete his passage to the city of New York. He presented his ticket with the one coupon attached to the conductor, and it was accepted by him and was recognized as a proper ticket, and punched several times until the plaintiff reached Hudson, about three or four o'clock A. M., September 27, when the conductor in charge of the train declined to recognize the ticket on the ground that the time had run out, and demanded three dollars fare to the city of New York, which the plaintiff declined to pay. The conductor, with some force, then ejected him from the car.

The trial judge nonsuited the plaintiff on the ground that the ticket entitled him to a continuous passage from Buffalo to New York, and not from any intermediate point to New York. The General Term affirmed the nonsuit upon the ground that although the plaintiff commenced his passage upon the 26th of September, he could not continue it after that date on that ticket.

We are of opinion that the plaintiff was improperly nonsuited. The contract at St. Louis evidenced by the ticket and coupons there sold was not a contract by any one company, or by all the companies named in the coupons jointly, for a continuous passage from St. Louis to New York. A separate contract was made for a continuous passage over each of the roads mentioned in the several coupons. Each company, through the agent selling the ticket, made a contract for a passage over its roads, and each company assumed a responsibility for the passenger only over its road. No company was liable for any accident or default upon any road but its own. This was so by the very terms of the agreement printed upon the ticket. Hence the defendant is not in a position to claim that the plaintiff was bound to a continuous passage from St. Louis to New York, and it cannot complain of the stoppages at Cincinnati and Cleveland (Hutchinson on Carriers, § 579; *Brooks* vs. *Railway*, 15 Mich. 332).

But the plaintiff was bound to a continuous passage over the defendant's road; that is, the plaintiff could not enter one train of the defendant's cars and then leave it, and subsequently take another train and complete his journey. He was not, however, bound to commence his passage at Buffalo. He could commence it at Rochester or Albany, or any other point between Buffalo and New York, and there make it continuous. The language of the contract, and the purpose which may be supposed to have influenced the making of it, does not require a construction which makes it imperative upon a passenger to enter a train at Buffalo. No possible harm or inconvenience could come to the defendant if the passenger should forego his right to ride from Buffalo and ride only from Rochester or Albany. The purpose was only to secure a continuous passage after the passenger had once entered upon a train. On the 26th of September, the plaintiff having the right to enter a train at Buffalo, it cannot be perceived why he could not, with the same ticket, rightfully enter a train upon the same line at any point nearer to the place of destination.

When the plaintiff entered the train at Rochester on the afternoon of the 26th of September and presented his ticket, and it was accepted and punched, it was then used within the meaning of the contract. It could then have been taken up. So far as the plaintiff was concerned it had then performed its office. It was thereafter left with him, not for his convenience, but under regulations of the defendant for its convenience, that it might know that his passage had been paid for. The contract did not specify t t the passage should be completed on or before the 26th, but that the ticket should be used on or before that day, and that it was so used it seems to us too clear for dispute.

The language printed on the ticket must be regarded as the language of the defendant, and if it is of doubtful import the doubt should not be solved to the detriment of the passenger. If it had been intended by the defendant that the passage should be continuous from St. Louis to New York, or that it should actually commence at Buffalo and be continuous to the city of New York, or that the passage should be completed on or before the 26th of September, such intention should have been plainly expressed and not left in such doubt as might and naturally would mislead the passenger.

We have carefully examined the authorities to which the learned counsel for the defendant has called our attention, and it is sufficient to say that none of them are in conflict with the views above expressed.

The judgment should be reversed and a new trial granted, costs to abide the event.

All concur; Andrews, C. J., in result; Tracy, J., absent.

THE population of France is shown by the official census to be 37,672,048.

MR. GEORGE DEXTER of Albany, 84 years old, is the sole survivor of 50 passengers on the first trip of Fulton's steamboat, the Clermont, from Albany to New York.

THE Railway Mail Service Division of the Post Office Department is busily engaged in the work of readjusting the mail service of the Department, so that it may comply with the provisions of the recent order of the Postmaster-General for the regulation of the railway mail service. The work will be completed about September 1.

THE Texas Legislature passed a law requiring all railroads in the State to charge for passenger fare not more than 3 cents a mile. The law went into operation August 4. One company's passenger fare schedule reads thus. "All tickets at the rate of 3 cents a mile. No half-fare tickets shall be sold. Children of 5 years and over shall pay full fare; under 5 years they go free. Exact change is to be made in the sale of tickets, and to accomplish this the road will place coppers in circulation of the denomination of 1, 2 and 3 cents. All half-fare, mileage, and local excursion tickets are to be called in, and no more passes issued."

American Railroad Journal.

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Subscribers are requested to report to our office any irregularity in receiving the JOURNAL.

Contributed articles relating to Railroad matters generally, Mining interests, Banking and Financial items, Agricultural development, and Manufacturing news, by those who are familiar with these subjects, are especially desired.

Entered at the Post Office at New York City as Second-Class Mail Matter.

New York, Saturday, August 26, 1882.

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Denver, Western and Pacific Railway.

IN our issue of July 29th, appeared the following:

We are in receipt of a letter addressed to our President, of which the following is a copy:—

GEORGE F. SWAIN, ESQ.,

DEAR SIR: I have tried in various ways to obtain some information regarding the "Denver, Western and Pacific Railway." Sidney Dillon is president. The interest on the bonds has not been paid for six months, and the Union Pacific Railroad, whose stockholders own a majority of the stock, states (by their secretary) that no earnings have been reported out of which to pay the interest. As I am much cramped on account of this failure to pay the coupons, I write to you in the hope that you will obtain information of the condition of the road, and give the same in your JOURNAL, which I read. It is rumored that this road is to be amalgamated with the "Colorado Central Railway." I would like to know if you think these bonds will ever be worth anything. Yours truly, *

JULY 14, 1882.

We submit the above letter to our subscribers and the readers of the JOURNAL, in hopes that some one among them may impart the desired information. We fail to find such a railway as the "Denver, Western and Pacific" in "Poor's Railroad Manual," and the slight investigation we have been able to make leads us to imagine it to be a railroad only on paper.

In our issue of August 12th, the following letter, in reply, was published in our Correspondence column, and we now republish it here, thinking it may have escaped the attention of some of our readers.

Editor AMERICAN RAILROAD JOURNAL:

In your issue of July 29th, you print a letter from a subscriber asking for information about the Denver, Western and Pacific Railroad, and the Colorado Central, and you call on any reader of the JOURNAL to answer. Since receiving the above, a gentleman who has traveled much over Colorado roads and taken an interest in them, has sent me the following: "The Denver, Western and Pacific Railroad is now the South Park division of the Union Pacific Railway, and runs from Denver to Leadville. It is a narrow-gauge road and is operated by the Union Pacific. The Colorado Central runs from Denver to Cheyenne, W. T., through Boulder, Longmont and Fort Collins. It is also controlled by the Union Pacific, and is a standard-gauge road." If the Denver, Western and Pacific is operated by the Union Pacific without a guaranteed income to the bondholders, which the secretary of the Union Pacific would certainly know of if such was the case, the outlook for returns would seem to be small. Yours truly. W. C. TYLER.

BOSTON, August 8th, 1882.

Since then we are in receipt of a letter from Denver, under date of July 16th, reading as follows:

DENVER, COL., JULY 16, 1882.

DEAR SIR:

In reply to your inquiry of 12th inst. I cannot give you any definite or encouraging information. It is understood here that the Union Pacific Railway Company is heir to the wreck of the Denver, Western and Pacific. It is supposed that in due time, when creditors and claimants against the latter have worn out the pursuit, the Union Pacific will put the track in repair and connect it with the line hence to Boulder, making thereby a very material cut off. I do not know where or how anything can be realized upon claims vs. the Western. It has a deposit of $50,000, I believe, in the District Court here, dependent upon a condemnation suit for right of way, etc. to the suburbs of this place.

I do not think the road ever earned a dollar. It has twelve or fourteen miles of rails down, but does not reach the coal. Some may have been hauled to its terminus by wagons, but I think not. I presume your report that it was carrying large amounts of coal grew out of the fact that the Denver, Utah and Pacific is carrying coal. They are parallel lines and were built at the same time. The public constantly confounds them. The Utah is a Denver concern in management, and is working its own coal mines, twenty-three miles out, and shipping the product to Denver.

I would suggest an inquiry of the Union Pacific people in your city. The Western has always been known here as "The Mysterious Road." Your truly, *

In addition to the above letter, we copy from the *Daily News*, published in Denver, under date of July 19th, the following:

The management of the *alleged* railroad known as the Denver, Western and Pacific Railway, of which the rolling-stock was sold on Monday to the Union Pacific for $8,500, announces that the entire road-bed, which is some sixty-two miles in length, will be sold shortly. It is claimed that the Union Pacific now owns, or at least holds, large liens on the property and will undoubtedly be the purchaser. The sale is looked forward to with much interest by railroad men.

We shall be glad to hear from others on this subject, as we are very desirous of knowing whether the bonds of this company are good for anything, as some of our readers have invested their earnings in them.

NEGLECTED OPENING FOR TRUNK LINE RAILROAD.

THE first great railroads of America were lines designed to connect the ocean navigation with that of the lakes, and the Ohio valley. They have so demonstrated their value that railroads have paralleled the lakes and Ohio River, and now they aspire to unite the Atlantic with the Pacific Ocean across the broadest part of the continent. The original impetus of population keeps up its western march long after its causes have diminished. We have now the spectacle of two competing roads between the Missouri and the Pacific coast, and four others approaching completion—the Sonora, the Atlantic and Pacific, the Northern and the Canadian.

Further East the multiplication of East and West lines goes on with even greater rapidity. Between the great lakes and the Rocky Mountains are several duplicating systems, such as the Chicago, Milwaukee and St. Paul, the Chicago, Rock Island and Pacific, the Chicago, Burlington and Quincy, the Wabash, St. Louis and Pacific and the Missouri Pacific. Further East, again, between the Atlantic ports and the West, we have a series of competing trunk lines—the Grand Trunk, the New York Central and Hudson River, the New York, Lake Erie and Western, the Pennsylvania, the Baltimore and Ohio, and the Chesapeake and Ohio—all reaching the great cities of the western basin. To these must soon be added the New York, Ontario and Western, the New York, West Shore and Buffalo, the Delaware, Lackawanna and Western, the New York, Chicago and St. Louis and the Continental, which are all under construction and, with the exception of the latter, all to be completed within a few months.

No mention need be made of the Baltimore and Cincinnati, since it is as yet a mere project; but either the Philadelphia and Reading or the Lehigh Valley are liable to be extended to Pittsburgh in the course of time.

While all this effort and money have been concentrated on the western trunk lines, the North and South, or transverse lines, have been comparatively neglected. To this day there is but a single line of road connecting Baltimore with Philadelphia, places of a third of a million and a million of inhabitants respectively, and of great industrial productiveness, which have no direct water-communication. Again, there is but a single line between New York and Boston, connecting the busy population of New England with the metropolis. True, there is very direct and generally available water transportation between the two cities, but by combinations between the steamboat and railroad men it results in upholding the supremacy of the single line of railroad. Besides, the time has passed when the steamboat, however colossal or palatial soever, can become a complete substitute for the railroad train. High winds, fogs, snow-storms, together with the risks of explosion, collision and grounding, with all the peril of drowning, are too much for the traveling public to incur except in the nicest of summer weather.

The best opening for railroad capital in this country at the present time, is for a trunk line of road from Boston to Washington, by the way of New York City. It is the line which would reach the largest population and the most frequented route of travel for its entire length on the whole continent; it presents no insuperable obstacles of construction, and could hardly fail to return good dividends as compared with its heavily capitalized neighbors. That such a line has not been built before is due to the opposition presented in the local Legislatures and Courts of the older monopoly companies. This furnishes good ground for the duplication. There are double lines from New Haven and Hartford to Boston, but all unite in a single stem to enter New York. There are also alternate lines between New York and Philadelphia, and between Baltimore and Washington, but they are worked as parts of the Pennsylvania and Baltimore and Ohio western trunk lines. Mr. Garrett is believed to be at work on a second line between Philadelphia and Baltimore; but, unfortunately for him, his antecedents do not permit the hope that his through line will be a first-class road run for the public convenience. There is still room for another. Two separate bills were considered at the last Congress, and one of them favorable reported, looking to the construction of a double-track road from Washington to New York under National authority. The project was referred to an improper committee, and was so shaped as to cripple the undertaking. A new departure will doubtless be made at the next session, and to be successful and popular it should seek a charter all the way from Boston to Washington, or still better, to Richmond, and be distinct from either of the existing lines between those points. In order to obviate the very great difficulty of obtaining terminal grounds on the Hudson River it might be well to allow an arrangement with the Lehigh Valley Company's franchises across New Jersey, and water-front at Jersey City, the only adequate grounds now remaining unoccupied for that purpose.

The distance from New York to Boston is, as run, 240 miles; that to Washington is about the same. A shorter line could be run between the two places, ferrying across the Hudson at Washington Heights, in 450 miles; and the whole cost of such a road, exclusive of New York water-front property, ought not to exceed $45,000,000. To Richmond or vicinity the extension need not cost over $5,000,000 additional. An ex-Governor of Connecticut very nearly succeeded in procuring the necessary charter from that State last winter; the monopoly company fighting hard, in its own peculiar way, to prevent it. Now let Gov. Hawley broaden his plan, taking in new men, and solicit subscriptions of capital from the residents along the route, and especially the much suffering holders of commuters' tickets; let him go to Congress with a feasible plan, and he will find both chambers and executive ready to grant him a charter. If Congress has the power, as is claimed, to regulate "inter-state commerce," so as to fix rates and fares, here would be an excellent place to begin by doing something beneficent instead of mischievous. Such an important highway is too vital to the Government and the public to remain under the control of a single corporation in any of its links, and the companies concerned, as well as the local legislatures, will show their wisdom by cheerfully accepting that inevitable decree of destiny. They may waste their means in fighting it off, but come it must before long.

Iron manufacturers are complaining of the scarcity of good hematite ores. They state that the soil of Pennsylvania has been worked for the best of these ores until it now produces nothing but the leaner specimens, which do not pay. There are some fair specimens of hematite ore in Center county, but they are not rich enough to warrant manufacturers in this section to pay freight on. The best magnetic ores used in Pennsylvania now are brought from Spain and Africa. They contend that the superior richness of these ores warrants the increased prices they pay in the freights.

New York, West Shore and Buffalo Railroad.

The public scarcely realizes the extraordinary degree of energy which the New York, West Shore and Buffalo Railroad Co. is displaying in the pushing of its great enterprise through New York State. Taking into account the extent of the work now under contract, and the extraordinary character of much of it, in the tunneling, excavating and bridging required to complete the road-bed at many points, it may safely be said that no work of equal magnitude was ever before pushed as this is being pushed, either in this country or in the world. It still remains a mystery to the general public where the capital for the undertaking comes from; and it is altogether a mystery what its affiliations are to be when completed. Whatever its source, the capital thus far has been steadily forthcoming, under circumstances which leave little for doubt that those behind the road not only mean to complete it, but to subsequently own and manage it. Some idea of the great cost of the undertaking can be imagined from the fact that the right of way for the road is costing more than was ever paid before in this country for the right of way for an equal distance. The road runs the whole distance through populous and valuable lands, and through the heart of numerous cities and villages. To secure a right of way under such circumstances is a very different undertaking from that entered upon by the projectors of new railroads in the western country, or by the New York Central at the time of its construction. That the West Shore will be the most expensive road ever constructed over a similar distance may be safely taken for granted. The compensation lies in the fact that immediately upon its completion it will enter upon the fruits of a business, both through and local, already built for its enjoyment—equal, in all probability, to that of any of its long-established rivals. Notwithstanding this fact, there are careful students of such problems who express doubt whether such a road can earn enough at prevailing freight rates to make fair returns upon the enormous cost of construction. There can be no question that there is room for more trunk roads than this country now possesses for the movement of western products to the seaboard. The West Shore will have its full quota of business without affecting that of other roads. Within ten years the same thing might safely be said regarding two or three new trunk roads, so rapid is the development of the country. But every year the cost of the right of way for such enterprises increases, and this element promises to prove a bar to the speedy duplication of an enterprise like the New York, West Shore and Buffalo Railroad.—*Utica Herald.*

Sales were perfected at Milwaukee, Wis., on the 16th inst., of fifty thousand acres of the Chicago, Milwaukee and St. Paul Railway lands in Lincoln, Jackson, Martin, Farribault and Freeport counties, Minnesota, to A. Boysen, Danish Vice-Consul at Milwaukee, who has fifty families on the way from Denmark to settle on the lands. The price is understood to be $4.25 per acre.

The Stock Exchanges and Money Market.

New York Stock Exchange.

Closing Prices for the week ending Aug. 23.

	Th.17.	F.18.	Sat.19.	M.21.	Tu.22.	W.23.
Adams Express	.....	.....	.....	.....	.....	140
Albany and Susq	.....	.....	.....	.....	.....	.....
1st mortgage	113	.....	.....	.....	.....	.....
2d mortgage	.....	.....	107½	.....	.....	.....
American Express	95	96	96	.....	95¾	95½
Burl., C. R. & Nor	.....	.....	.....	.....	.....	.....
1st mortgage 5s	.....	102½	.....	.....	102½	.....
Canada Southern	64¾	64	64¾	65	64¾	63¾
1st mortgage guar	93¾	.....	.....	93½	93½	.....
Central of N. Jersey	79	78¾	78½	79	78¾	78½
1st mort. 1890	.....	.....	.....	.....	116	.....
7s, consol. ass	111½	.....	110¾	110½	.....	110½
7s, convertible ass	111½	.....	.....	.....	.....	.....
7s, Income	.....	.....	.....	.....	.....	.....
Adjustment	.....	.....	.....	.....	.....	.....
Central Pacific	93¾	93½	93¾	93½	93¾	92¾
6s, gold	116	.....	.....	.....	.....	.....
1st M. (San Joaq)	.....	.....	.....	.....	.....	.....
1st M. (Cal. & Or.)	.....	.....	.....	.....	.....	.....
Land grant 6s	.....	106¾	.....	.....	.....	.....
Chesapeake & Ohio	24½	.....	24	.....	.....	.....
1st pref	38	37¾	.....	38	.....	36
2d pref	.....	.....	.....	.....	.....	.....
1st mort., series B	85¾	85¾	85⅝	85¾	85¾	85¾
Chicago and Alton	.....	140	.....	141	139½	.....
Preferred	.....	.....	.....	.....	146	.....
1st mortgage	.....	.....	.....	.....	.....	.....
Sinking Fund	.....	.....	.....	.....	.....	.....
Chi,, Bur. & Quincy	136¾	136¼	136¾	136	136¾	135¾
7s, Consol. 1903	.....	127	.....	.....	127½	.....
Chi., Mil. & St. Paul	123¼	123¼	123¾	123½	123¾	122⅞
Preferred	138½	137	.....	137½	136⅞	137
1st mortgage, 8s	.....	.....	.....	.....	.....	.....
2d mort., 7 3-10s	.....	.....	.....	.....	.....	.....
7s, gold	.....	.....	.....	.....	.....	.....
1st M. (La. C. div)	.....	.....	.....	.....	.....	.....
1st M. I. & M. div.)	.....	.....	.....	.....	122	.....
1st.M. (I. & D. ext.)	.....	.....	123	122½	122¼	.....
1st M. (H.&D. div.)	.....	.....	.....	.....	.....	.....
1st M.(C. & M.div.)	.....	.....	.....	125	.....	.....
Consolidated S. F.	.....	124¾	124	124	124	125
Chi. & Northwestern	147⅝	145¾	146¼	145	145¼	145⅛
Preferred	169¾	169	167¼	.....	166¾	.....
1st mortgage	.....	.....	.....	.....	.....	106½
Sinking Fund 6s	.....	101½	.....	101¾	.....	101¾
Consolidated 7s	.....	.....	.....	131	.....	.....
Consol. Gold bo'ds	.....	124¾	.....	124¼	.....	.....
Do. reg	.....	.....	.....	.....	.....	.....
Chi., R. Isl. & Pac.	138	137	137	137	136	135¾
6s, 1917, c	.....	.....	.....	.....	.....	.....
Clev.,Col.,Cin.&Ind.	81	.....	80	80	79¾	80
1st mortgage	.....	.....	124½	.....	.....	.....
Clev. & Pittsburg gr.	.....	.....	.....	.....	.....	137
7s, Consolidated	.....	.....	.....	.....	.....	.....
4th mortgage	.....	.....	.....	.....	.....	.....
Col.,Chi.,& Ind. Cent	12⅛	13	.....	12⅛	12¾	12
1st mortgage	.....	.....	.....	.....	.....	.....
2d mortgage	.....	.....	.....	.....	.....	.....
Del. & Hud Canal.	118½	117¼	118⅜	117⅛	118¼	116⅜
Reg. 7s, 1891	.....	.....	.....	.....	.....	117
Reg. 7s, 1884	.....	.....	.....	.....	.....	.....
7s, 1894	.....	.....	.....	.....	.....	.....
Del.,Lack.& Western	147⅞	146¼	146⅞	146	144⅝	142⅝
2d mortgage 7s	.....	.....	.....	.....	.....	.....
Consol. 1907	.....	.....	.....	.....	.....	.....
Erie Railway	.....	.....	.....	.....	.....	.....
1st mortgage	.....	.....	.....	.....	.....	.....
2d mort. 5s, ext	.....	.....	.....	.....	.....	.....
3d mortgage	.....	.....	.....	.....	.....	104¾
4th mort. 5s, ext	.....	109	.....	.....	.....	109
5th mortgage	.....	.....	.....	.....	.....	.....
7s, Consol. gold	130	129	129	.....	129	130¼
Great West. 1st mort	.....	.....	.....	.....	.....	.....
2d mortgage	.....	.....	.....	.....	.....	.....
Hannibal & St. Jo	.....	.....	.....	.....	.....	.....
Preferred	95½	94⅞	95	95¼	94¼	93¼
8s, Convertible	108¾	.....	.....	.....	.....	.....
Houston & Tex. Cen	.....	80½	.....	85	.....	86
1st mortgage	.....	.....	.....	.....	.....	.....
2d mortgage	.....	.....	.....	.....	.....	.....
Illinois Central	137⅝	137	136¼	136¾	136¼	136¼
LakeShore&MichSo	115½	114¼	114⅝	113¾	114½	113¼
Consol. 7s	.....	.....	.....	.....	125½	.....
Consol. 7s, reg	.....	.....	.....	.....	.....	.....
2d Consolidated	.....	.....	.....	123	124	.....
Leh. & W. B. con.ass	106¾	107	107	.....	107	.....
Long Dock bonds	.....	.....	.....	.....	.....	.....
Louisville & Nash.	74¾	74½	.....	74½	.....	73¾
7s, Consolidated	.....	.....	.....	.....	.....	118
Manhattan	53¼	.....	52¾	54¾	.....	54
1st pref	.....	90	89	90	.....	.....
Met. Elevated	.....	.....	85	.....	90	90
1st mortgage	99	99¾	99½	.....	.....	99¾
Michigan Central	100	99⅛	99¾	99¾	99½	98
7s, 1902	.....	.....	.....	.....	.....	.....
Morris & Essex	.....	.....	.....	.....	126	124¾
1st mortgage	.....	130	.....	.....	.....	.....
2d mortgage	.....	.....	112¾	.....	.....	.....
7s of 1871	.....	.....	.....	.....	.....	.....
7s, Convertible	.....	.....	.....	.....	.....	.....
7s, Consolidated	.....	.....	.....	.....	.....	.....
N.Y. Cen. & Hud. R.	136½	135⅝	136	135¾	135⅞	138⅞
6s, S. F. 1883	.....	.....	.....	102½	.....	102½
6s, S. F., 1887	.....	.....	.....	.....	.....	.....
1st mortgage	.....	.....	.....	.....	132	.....
1st mortgage, reg.	.....	.....	.....	.....	.....	.....
N. Y. Elevated	.....	.....	.....	.....	.....	.....
1st mortgage	.....	.....	.....	.....	115¾	.....
N. Y. & Harlem	.....	.....	.....	.....	.....	.....
Preferred	.....	.....	.....	.....	.....	.....
1st mortgage	.....	.....	.....	.....	.....	.....
1st mortgage, reg	.....	.....	.....	.....	.....	.....
N. Y., Lake Erie & W	39¼	38⅝	38⅞	39	39½	38⅝
Preferred	.....	.....	79	78	79½	79⅝	78⅛
2d Consolidated	97½	97⅛	97⅛	97⅞	97⅜	98
New 2d 5s fund	.....	.....	93½	.....	.....	.....
N.Y.,N.Hav'n&Hart	.....	.....	.....	.....	181	.....
North Mo. 1st mort	.....	.....	.....	.....	.....	.....
Northern Pacific	50¾	50⅜	50⅝	50½	49⅝	49¼
Preferred	93¾	93	93⅝	93¼	92⅝	91⅜
Ohio & Mississippi	38	37½	38	.....	38	.....
Preferred	.....	.....	.....	.....	.....	.....
2d mortgage	.....	.....	.....	.....	.....	.....
Consolidated 7s	.....	.....	.....	.....	.....	.....
Consol. S. Fund	.....	.....	.....	.....	.....	.....
Pacific Mail S. S. Co	45¼	45	44½	45	44⅜	44⅛
Pacific R. R. of Mo.	.....	.....	.....	.....	.....	.....
1st mortgage	.....	.....	.....	.....	106	.....
2d mortgage	111	.....	.....	112	.....	.....
Panama	.....	.....	.....	.....	.....	.....
Phila. & Reading	61⅛	60⅞	61⅛	61⅛	61⅜	60¼
Pitts,Ft.W.&Chi.gtd	130	.....	.....	.....	.....	.....
1st mortgage	.....	.....	.....	.....	.....	.....
2d mortgage	.....	.....	.....	.....	.....	.....
3d mortgage	.....	.....	.....	123	.....	.....
Pullman Palace Car	134	133	131¾	131⅛	.....	131½
Quicksil'r Min'g Co	10	.....	.....	10	.....	.....
Preferred	45½	.....	.....	.....	45½	.....
St. Louis & San Fran	.....	41	40⅜	.....	.....	40½
Preferred	60	59¼	.....	59	.....	59
1st Preferred	.....	.....	97½	.....	.....	.....
St. L., Alt'n & T. H.	.....	40	.....	.....	.....	.....
Preferred	87	86	84¼	.....	.....	.....
1st mortgage	.....	.....	.....	112	.....	.....
2d mort. pref	.....	.....	.....	.....	.....	.....
Income bonds	.....	.....	.....	.....	.....	.....
St. L., Iron Mt. & S	.....	.....	.....	.....	.....	.....
1st mortgage	.....	.....	114	.....	114	.....
2d mortgage	.....	.....	.....	.....	.....	108
Toledo and Wabash	.....	.....	.....	.....	.....	.....
1st mortgage	107	.....	.....	.....	.....	.....
2d mortgage	.....	.....	.....	.....	.....	.....
7s, Consolidated	.....	.....	.....	.....	.....	.....
St. Louis Division	.....	.....	.....	.....	.....	.....
Union Pacific	.....	.....	116½	116⅝	116⅜	116	115⅛
1st mortgage	116½	.....	116½	116¼	117	116⅜
Land Grant 7s	117⅞	.....	115	.....	.....	.....
Sinking Fund 8s	.....	121	.....	123	.....	123
United States Ex	.....	.....	.....	74	.....	.....
Wabash, St. L.& Pac	36⅝	36¼	36½	36½	36	35⅛
Preferred	65⅞	65	64¾	65⅛	65¼	64⅜
New mort. 7s	.....	.....	.....	.....	.....	.....
Wells-Fargo Ex	131	130	.....	.....	131	.....
Western Pacific b'ds	.....	.....	.....	.....	110	.....
Western Union Tel.	88⅞	88⅞	89¼	89⅜	89⅜	89¼
7s., S.F conv., 1900	.....	.....	.....	.....	.....	.....
Federal Stocks:—						
U. S. 4s, 1907, reg	.....	.....	.....	.....	.....	.....
U. S. 4s, 1907, coup	.....	119⅜	119⅜	119¾	119¾	119¾
U. S. 4½s, 1891, reg	.....	.....	.....	.....	.....	113½
U. S. 4½s, 1891, coup	114⅜	.....	.....	.....	.....	114⅞
U. S. 5s, cont'd at 3½	.....	.....	.....	.....	.....	.....
U. S. 6s cont'd at 3½	.....	.....	.....	.....	.....	.....
Dt. of Col. 3-65s, reg	108	.....	.....	109	.....	.....
Dt. of Col. 3-65s, coup	.....	.....	.....	.....	.....	.....

Boston Stock Exchange.

Closing Prices for the Week Ending Aug, 23.

	Th.17.	F.18.	Sat.19.	M.21.	Tu.22.	W.23.
Atch.,Top.&San.Fe.	95¼	94¾	94¼	94½	94	94½
1st mortgage	.....	.....	.....	.....	.....	.....
Land Grant 7s	.....	.....	.....	.....	.....	.....
Boston & Albany	.....	170	.....	169¾	.....	170
Boston and Lowell	.....	.....	102¼	.....	.....	.....
Boston & Maine	147	147	.....	147	147	.....
Boston& Providence	.....	159	.....	.....	159	.....
Bos'n,Hart.& Erie7s	.....	.....	.....	.....	.....	.....
Burl.& Mo.R.L.G.7s	.....	.....	.....	.....	.....	.....
Burl.& Mo.R.in Neb	.....	.....	.....	.....	.....	.....
6s, exempt	112¼	.....	.....	.....	112¾	.....
4s	.....	.....	.....	.....	.....	.....
Chi.,Burl. & Quincy	.....	137½	.....	136¼	136¾	136½
Cin.,Sand&Clev($50)	.....	.....	.....	.....	.....	.....
Concord ($50)	.....	.....	.....	.....	.....	.....
Connecticut River	.....	.....	.....	.....	.....	.....
Eastern	44½	.....	.....	43½	42¾	.....
New 4½ Bonds	109	.....	.....	.....	110	108¾
Fitchburg	.....	.....	.....	.....	131½	.....
N.Y. & New England	52⅛	52½	52¾	53	52¼	52½
7s	.....	.....	.....	116¾	.....	.....
Northern N. H	.....	.....	111	.....	111	.....
Norwich&Worcester	.....	.....	.....	.....	.....	.....
Ogden & Lake Cham	.....	.....	.....	.....	.....	.....
Old Colony	133¾	133	.....	133¼	.....	133
Ph.,Wil.&Balt.($50)	.....	.....	.....	.....	.....	.....
Portl'd,Saco & Ports	.....	.....	.....	.....	113¾	.....
Pueblo & Ark Val 7s	.....	.....	.....	.....	114¾	114¾
Pullman Palace Car	135	.....	.....	132¾	131	131¼
Union Pacific	117	.....	.....	.....	116¼	116½
6s	.....	.....	.....	.....	.....	115¾
Land Grant 7s	.....	.....	.....	.....	.....	.....
Sinking Fund 8s	.....	.....	.....	.....	.....	.....
Vermont & Mass	.....	.....	.....	.....	.....	.....
Worcester & Nashua	.....	.....	.....	.....	.....	.....
Cambridge (Horse)	.....	.....	.....	.....	.....	.....
Metropolitan(Horse)	.....	.....	.....	.....	.....	.....
Middlesex (Horse)	.....	.....	.....	.....	.....	.....
Cal.&Hecla Min'gCo	251	251	.....	252	.....	251
Quincy	63¼	63	63	62¾	62¼	63

Philadelphia Stock Exchange.

Closing Prices for the Week Ending Aug. 22.

	W.16.	Th.17.	F.18.	Sat.19.	M.21.	Tu 22.
Allegh'y Val. 7 3-10s	.....	.....	.....	.....	.....	.....
7s, Income	.....	51¼	.....	.....	.....	.....
Buff., Pitts & West.	21⅜	21¼	21½	21⅝	21⅜	21⅛
Camd'n & Am. 6s, '83	.....	.....	.....	.....	.....	.....
6s, 1889	.....	.....	.....	.....	.....	.....
Mort. 6s, 1889	.....	.....	.....	.....	.....	.....
Camden & Atlantic	.....	.....	.....	.....	.....	.....
Preferred	.....	.....	.....	.....	.....	.....
1st mortgage	.....	.....	.....	.....	.....	.....
2d mortgage	.....	.....	.....	.....	.....	.....
Catawissa	.....	.....	.....	.....	.....	.....
Preferred	.....	.....	55	55	55	.....
2d pref	.....	.....	.....	.....	.....	.....
7s, new	.....	.....	.....	.....	.....	.....
Del. & Bound Brook	128¼x	.....	.....	.....	.....	129
7s	.....	.....	.....	.....	.....	.....
Elmira&Williamsp't	.....	.....	.....	.....	.....	.....
Preferred	.....	.....	.....	.....	.....	.....
Hunt. & B. Top Mt.	.....	.....	.....	.....	.....	14½
Preferred	.....	.....	.....	27	27½	28
2d mortgage	.....	.....	.....	.....	.....	.....
Lehigh Navigation	44	43⅞	43¾	43½	43½	43⅛
6s, 1884	.....	.....	.....	.....	43	.....
Gold Loan	.....	.....	.....	.....	.....	.....
Railroad Loan	.....	.....	.....	.....	.....	.....
Conv. Gold Loan	.....	.....	.....	.....	.....	.....
Consol. Mort, 7s	.....	.....	.....	.....	.....	.....
Lehigh Valley	.....	62¼	62	.....	62	63
1st mort. 6s, coup	.....	.....	.....	.....	.....	.....
1st mort. 6s, reg	.....	.....	123	122½	.....	.....
2d mort. 7s	.....	.....	.....	.....	.....	.....
Consol mort. 6s	.....	.....	.....	121	121	.....
Consol.mtg.6s,reg	.....	.....	.....	.....	.....	.....
Little Schuylkill	57	.....	.....	.....	.....	.....
Minehill&Sch.Hav'n	61½	.....	.....	.....	63¾	.....
North Pennsylvania	.....	.....	.....	.....	.....	.....
1st mortgage 6s	.....	.....	.....	.....	.....	.....
2d mortgage 7s	.....	.....	.....	.....	.....	.....
Genl. mtg.7s,coup	.....	.....	.....	.....	.....	.....
Genl. mtg. 7s, reg	.....	.....	.....	.....	.....	.....
Northern Central	50	.....	.....	50¼	50¾	51
5s	.....	.....	.....	.....	.....	.....
Northern Pacific	51¾	50¾	50	50¾	50¼	49¾
Preferred	96	93¾	93¼	93¼	92¾	92¾
Pennsylvania R. R.	62¼	62¼	62	62	62	62½
1st mortgage	.....	.....	.....	.....	.....	.....
Gen'l mort	.....	.....	125½	.....	.....	.....
Gen'l mort reg	.....	.....	.....	.....	.....	.....
Consol. mort. 6s	.....	.....	.....	.....	.....	.....
Consol. mort. reg	.....	.....	.....	.....	.....	.....
Pa. State 5s, new	116½	.....	.....	.....	.....	.....
do 4s, new	.....	.....	.....	.....	.....	.....
do 3½s, 1912	.....	.....	.....	.....	.....	.....
Phila. & Reading	31⅜	31	30⅜	30⅜	30⅜	30⅞
1st mortgage 6s	.....	.....	.....	120	.....	.....
7s of 1893	.....	.....	.....	.....	.....	.....
7s, new convert	75	75	.....	.....	.....	.....
Consol. mort. 7s	.....	124½	.....	124½	.....	.....
Consol. mort. reg	.....	.....	.....	.....	.....	124½
Gen'l mort. 6s	.....	.....	95¼	95¼	95⅜	.....
Def.Income bonds	.....	.....	.....	.....	.....	.....
Philadelphia & Erie	.....	.....	.....	.....	.....	.....
1st mortgage 5s	.....	104½	.....	.....	.....	.....
2d mortgage 7s	.....	.....	.....	.....	.....	.....
Pittsb.,Cin.&St.L.7s	.....	.....	.....	.....	.....	.....
Pitts.,Tit.&Buff. 7s,	.....	.....	93¾	.....	.....	.....
Schuylkill Navi't'n	.....	.....	.....	.....	.....	.....
Preferred	.....	.....	.....	.....	.....	.....
6s, 1895	.....	.....	.....	.....	.....	.....
6s, 1907	.....	90	.....	90¾	.....	91
United Co. of N. J.	188½	183½	.....	189	.....	189½
Hestonville, (Horse)	.....	.....	.....	.....	.....	.....
Chestnut&Wal.(do)	.....	.....	.....	.....	.....	.....

Baltimore Stock Exchange.

Closing Prices for the Week Ending Aug. 22.

	W. 16.	Th. 17.	F. 18.	Sat. 19.	M. 21.	Tu. 22.
Baltimore $ Ohio	.....	.....	.....	194⅛	.....	.....
6s, 1885	.....	.....	.....	.....	.....	107¼
Central Ohio ($50)	46	.....	.....	.....	.....	.....
1st mortgage	111	.....	.....	.....	111	.....
Marietta & Cincin'ti.	.....	.....	.....	.....	.....	.....
1st mortgage, 7s	.....	.....	.....	.....	.....	.....
2d mortgage, 7s	.....	.....	.....	.....	.....	.....
3d mortgage, 8s	.....	58	.....	.....	.....	.....
Northern Cen. ($50)	50	50	50	.....	50⅛	51
2d mort. 6s, 1885	.....	.....	106	.....	.....	106
3d mort. 6s, 1900	.....	.....	.....	.....	.....	.....
6s, 1900, gold	.....	.....	.....	.....	117	.....
6s, 1904, gold	.....	.....	.....	.....	.....	.....
Pitts. & Connelsv. 7s	.....	.....	120	121	.....	.....
Virginia 6s, Consol	.....	.....	59	.....	.....	58¾
Consol. coupons	.....	.....	.....	.....	.....	.....
10-40 bonds	42¾	.....	.....	.....	.....	42¾
Def'd Certificates	.....	.....	.....	.....	.....	.....
Western Maryland	16¼	16¼	.....	.....	.....	.....
1st M., end, by Balt	.....	.....	.....	.....	.....	.....
2d M., do.	.....	.....	.....	.....	.....	.....
3d M., do.	.....	.....	.....	.....	.....	.....
1st M., unendorsed	....	.....	.....	...	.....	.....
2d M., end. Wash Co	.....	.....	.....	.....	.....	.....
2d M., preferred	.....	.....	.....	.....	.....	.....
City Passenger R. R.	.....	.....	.....	42	.....	.....

London Stock Exchange.

	Closing Prices Aug. 11.		Aug 4.	
Baltimore and Ohio 5s, 1927	106	108	106	108
Central of N. J., $100 shares	93	99	93	98
Do. consol. mort	112	114	112	114
Do. Income Bonds	92	96	92	96
Central Pacific of Cal., $100 shs	96⅛	97⅛	98	99
Do. 1st mort. 6s, 1895-'98	118	120	118	120
Det., G'd Haven & Mil. Equip bds.	116	118	116	118
Do. Con. M. sp. c., till '83 after 6p. c.	114	116	113	115
Illinois Central $100 shares	143	145	142	144
Do. S. F. 5s, 1903	106	108	106	108
Lehigh Valley Cons. mort. 1923	115	119	115	119
Louisville and Nashville mort. 6s	98	100	98	100
Do. capital stock $100 shares	75	78	76	78
N. Y. Cen. & Hud. R. mort. bonds.	132	136	132	136
Do. $100 shares	139	140	139⅛	140⅛
Do. mort. bonds (stg.)	121	123	121	123
N. Y. Lake Erie & West. $100 shs.	41	41½	41¾	42¼
Do. 6 p. c, pref. $100 shares	81	83	82	84
Do. 1st Con. Mort. bonds (Erie).	130	134	130	134
Do. do. Funded Coupon bonds.	129	131	129	131
Do. 2d Consol. Mort. bonds	99	101	99	100
Do. do. Funded Coupon bonds.	96	98	96	98
N. Y., Pa. & Ohio 1st mort. bonds.	48	49	48	49
Do. Prior Lien bonds (sterling).	103	108	103	108
Pennsylvania $50 shares	63¼	63¾	63¼	64
General Mortgage	123	125	123	125
Phil. & Erie Gen. mort. 6s, 1920	117	119	117	119
Philadelphia & Reading $50 shs.	30¼	30¾	31	31½
General Consol Mortgage	116	118	116	118
Do. Improvement Mortgage	103	105	103	105
Do. Gen. Mtg. '74, ex-def'd coup.	97	98	97	98
St. L. Bridge 1st mort. gold bond.	125	127	125	127
Do. 1st. pref. stock	97	100	97	100
S. P'fic of Cal., 1st mort 6s, 1905-6.	108	110	108	110
Union Pacific 1st mtg. 6s, 1896-9.	118	120	118	120
Wabash, St. L. & P. $100 shares	38	39	39⅛	40½
Do. $100 pref. shares	68	69	69½	70⅛
Do. gen. mort. bonds	87	89	88	90

AMERICAN RAILROAD JOURNAL.

Financial and Commercial Review.

THURSDAY EVENING, August 24, 1882.

The quotation for call loans on stocks this morning was 4 per cent, and on United States bonds 3 per cent. The ruling rate for time loans on stocks was 6 per cent. Prime mercantile paper was 5½@6½ per cent. In the afternoon the rate for call loans at the Stock Exchange was 4½ per cent. Early in the last hour the rate fell to 3 per cent, but later advanced to 5 per cent. The fair ruling quotation for the day was 4@4½ per cent.

The posted rates for prime bankers' sterling were 4.86 and 4.90; the actual rates were 4.85@½ and 4.88¾@4.89¾, with cable transfers 4.89¾@4.90¼, and prime commercial bills 4.84@¼; The actual rates for Continental bills are as follows: Francs, 5.19¾@5.18¾ and 5.15; Marks, 94¾ and 95½, and Guilders, 40 and 40¼.

At a meeting of the directors of the Cincinnati, Hamilton and Dayton Railroad Company, held in Cincinnati on the 23d inst., there were present Hugh J. Jewett president, C. C. Waite vice-president, and directors Ferguson, La Ralde, Carlisle and Short. The board created the office of Auditor, and appointed C. B. Marsh to that office. The board then ordered the issue of $500,000 of the $1,000,000 of preferred stock authorized at a meeting of the stockholders held on the 16th, and appointed President Jewett a committee of one to negotiate the sale of the same and to report to the directors for ratification by a vote of a majority of that body. The board further ordered the manager of the Construction Department to complete a double track to Hamilton; that contracts for the same be concluded at once, and that 300 box cars, 150 gondolas and 50 flat cars be immediately built.

In the hearing of the Marietta and Cincinnati Railway case at Cincinnati on the 23d inst. the Court said that it was not satisfied with the degree of evidence that the requisite two-thirds of the stockholders and secured creditors had consented to the plan of capitalization and reorganization, and that it would appoint a special master to take evidence and report on this point, but that in the mean time the hearing of other issues in the case would continue.

The stockholders of the Memphis and Charleston Railroad Company, at a meeting recently held in Huntsville, Ala., unanimously rejected the proposition to consolidate with the East Tennessee, Virginia and Georgia Railroad, and authorized the directors to appoint a committee to meet the directors of the latter with a view to negotiations for the termination of the lease. Vice-President Baxter and Col. A. S. Colyer, both said they had been assured by President Thomas, of the East Tennessee, that a proposition from the Memphis and Charleston to pay $400,000 to end the lease would be accepted. The stockholders unanimously authorized the directors to issue additional stock as common stock, making the present shares preferred to the extent of 6 per cent and not issuing the common stock to an amount exceeding the preferred. Any surplus after the common receives 6 per cent is to be divided equally between common and preferred, and present holders are to have the first chance to subscribe for the new stock. The directors were also authorized to issue $478,000 seven per cent first mortgage bonds (provided for under the terms governing the $1,264,000 outstanding) to liquidate "a certain debt" to the former amount. In the event of a cancellation of the East Tennessee's lease the directors were instructed to effect other arrangements for an interchange of business. The "certain debt" referred to is believed to include the $400,000 said to be asked by the East Tennessee to give up the lease.

The exports of domestic provisions, tallow and dairy products from the twelve principal customs districts during July, 1882, were $8,754,524; in July, 1881, $11,546,504; in the seven months ended July, 1882, $59,462,714; in the corresponding period in 1881, $82,711,841. The exports of provisions and tallow, for the nine months ended July 31, 1882, were $71,401,745; for the corresponding period in 1881, $95,901,965. The exports of dairy products for the three months ended July 31, 1882, were $5,107,279, and for the corresponding period in 1881, $7,764,456.

The gross earnings of the Northern Central Railway for July were $509,682.92, the expenses, $286,897.46, and the net earnings, $222,785.46, being an increase as compared with the same month last year of $159,522.40. This increase is made up of an increase in gross earnings of $68,871.47, and a decrease in expenses of $90,650.93. The net earnings for the seven months of 1882 were $1,100,106,28, being a decrease, as compared with the corresponding period of last year, of $3,708.38. The extraordinary expenses for July embodied in this statement show a decrease of $66,058.96.

At a special meeting of the stockholders of the Boston and Albany Railroad Company, held in Boston on the 22d inst., the privilege accorded to it by the last Legislature of Massachusetts of exchanging its 5 per cent bonds, having twenty years to run, for the Commonwealth's holding in the capital stock of the company of 24,115 shares, the price to be paid for the stock to be $160 per share, was accepted. Within a few days the exchange named has been made, the railroad company handing over to the treasury of the Commonwealth $3,858,000 in face value of its 5 per cent twenty years bonds, and receiving in exchange 24,115 shares of the company's capital stock. The railroad company also paid the State $400 in money, to equalize the exchange. The interest on the bonds is payable October 1 and April 1. By this exchange the interest which the State has always held in the directory of the railroad ceases and the five State directors lose their positions. This leaves the board with only eight directors, and as it is not proposed to fill the vacancies until the annual meeting in February, the present board will necessarily have to act unanimously upon any questions submitted to them, since the by-laws of the company provide that eight directors shall constitute a quorum. With this transaction closes the active but profitable connection between the railroad and the State which began nearly half a century ago, when the State aided in the construction of the Western Railroad, now a portion of the Boston and Albany Railroad.

The statement of the business of all lines of the Pennsylvania Railroad Company east of Pittsburgh and Erie for July shows an increase in gross earnings of $368,732, an increase in expenses of $212,610, and an increase in net earnings of $156,122. The seven months of 1882, as compared with the same period of 1881, show an increase in gross earnings of $1,465,741, an increase in expenses of $2,116,651, and a decrease in net earnings of $650,910. All lines west of Pittsburgh and Erie for the seven months of 1882 show a surplus over all liabilities of $215,690, being a decrease as compared with the same period in 1881 of $1,543,181.

The value of the exports from the United States of domestic breadstuffs in July, 1882, was $16,294,474, and in July, 1881, $19,076,967. For seven months ended July 31, 1882, $81,150,715, and for same period in the previous year $131,957,684.

The gross earnings of the Norfolk and Western Railroad Company for July were $191,534.73, the expenses, including estimated proportion of yearly taxes, $106,793.02, and the net earnings, $84,741.71, being an increase as compared with July, 1881, of $3,880.01. The gross earnings for the seven months of 1882 were $1,216,494.27, the expenses, $727,292.16, and the net earnings, $489,202.11, being a decrease as compared with the corresponding period of last year of $25,631.67.

It is stated that the daily receipts into the United States Treasury at Washington average a million and a half, and were it not that the special appropriations made by Congress for private claims, deficiencies, etc., pouring in, the debt reduction for the month would be the largest in the history of the last twenty years. It is thought that the receipts for the month will amount to nearly fifty millions. From this is to be taken as one item $9,500,000 for pensions alone, besides current expenses and the special warrants above mentioned. Ever since Congress adjourned on the 8th of the month there have been from 240 to 300 of these claims, under deficiency bills and private acts, put through each day, and from this source it is estimated that the disbursements will not fall much short of a million dollars a day. This class of drafts on the Treasury will soon fall off, however, for usually during the month after Congress adjourns every claim provided for in the appropriation bills is presented. While the debt reduction may not be so great this month it is not unlikely that next month's surplus will require another call for three and a-half per cents, to dispose of it.

The gross receipts of the Philadelphia and Reading Railroad for July were $2,026,459.33, derived from the following sources: Railroad traffic, $1,888,442.75; canal traffic, $90,004.34; steam colliers, $42,155.14; Richmond coal barges, $5,857.10; the expenses, excluding rentals and interest, were $1,031,827.32, and the net earnings, $994,632.01. The gross receipts of the Philadelphia and Reading Coal and Iron Company for July were $1,422,330.95, the expenses, excluding interest, $1,308,655.93, and the net earnings $113,675.02. The gross receipts of both companies for July were $3,448,790.28, the expenses, $2,340,483.25, and the profit, $1,108,307.03, being an increase as compared with the corresponding month last year, of $1,724,617. The profit of both companies for the year to July 31, was $6,119,921.76, being a gain, as compared with the corresponding period of last year, of $340,329.27.

The Missouri authorities have purchased $1,399,000 United States 4 per cent bonds, and have called in $1,426,000 of the 5-20 option bonds for payment on 1st September next. The payments are to be made out of funds received by the State from the Hannibal and St. Joseph Railroad Company, and which the authorities have been directed to invest by the United States Court.

A very important decree has just been promulgated in Paris, which allows commercial, educational and financial associations authorized in the United States to have legal status in France, and full exercise of their rights in all French Courts.

At the recent annual meeting of the St. Paul, Minneap-

olis and Manitoba Railway Company a most gratifying showing of the position and prospects of the company was made. The surplus net revenue for the past fiscal year, after paying the fixed charges and dividends on the stock, is $985,000. The directors recommend that in future dividends on the stock be paid quarterly.

There has been recorded in the office of the County Clerk of Hickman county, Ky., a mortgage upon the Paducah and Memphis division of the Chesapeake and Ohio Railroad to secure a loan of $400,000 with which to build the cut off from Tennessee River to Mayfield, and the extension from Paducah to a point on the Ohio River opposite Cairo, Ills. It is said these will both be built in a short time.

The Committee on Stock List has added to the list at the Exchange $900,000 additional first mortgage bonds of the Gulf, Colorado and Santa Fe Railway, on seventy five miles of additional completed road.

The following quotation of sales of railway and other securities, for the week, are in addition to those given elsewhere in our columns.

New York.—Atchison, Colorado and Pacific 1st, 92; Boston and New York Air Line pref., 76⅞; Boston, Hartford and Erie 1st, 54½; Central Iowa 1st, 111; Chicago, Burlington and Quincy 5s, S. F., 105; do. Iowa div. 4s, 84½; Chicago, St. Paul, Minneapolis and Omaha, 53¾; do. pref., 112½; do. consol., 105⅜; Chicago, St. Louis and New Orleans, 76; do. 5s, 105; Cedar Falls and Minnesota, 22; Chicago, St. Paul and Minneapolis 1st, 112; Chicago, Milwaukee and St. Paul, Mineral Point div. 1st, 92; do. Chicago and Pacific West div. 1st, 93⅜; do. La Crosse and Dav. div. 1st, 94; Cairo and Fulton 1st, 108; Chesapeake and Ohio cur. 6s, 52½; do. 6s, 1911, 102; do. 1st, Series A, 108; Columbus, Chicago and Indiana Central inc., 52; Chicago, Burlington and Quincy, Iowa div. 4s, 87⅛; Denver and Rio Grande, 61; do. 1st, 113¾; do. consol., 99½; Denver, South Park and Pacific 1st, 101; Delaware and Hudson 1st, Penn. div., reg., 130; East Tennessee, Virginia and Georgia, 10¾; do. pref., 17¾; do. inc., 43¾; do. 5s, 74; Evansville and Terre Haute, 79; do. 1st, 99⅞; do. consol., 96⅝; Fort Worth and Denver 1st, 98; Gulf, Colorado and Santa Fe 1st, 107¾; Hannibal and St. Joseph consol. 6s, 106; Houston, East and West Texas 1st, 102⅝; Indiana, Bloomington and Western, 44; do. 2d, 76; do. Eastern div. 6s, 95½; Indianapolis, Decatur and Springfield 1st, 104; International and Gt. Northern coup. 6s, 86⅞; do. 1st, 105½; Kansas Pacific 1st consol., 104¾; do. 6s, 1896, 110¼; Louisville and Nashville genl. mort. 6s, 95¼; do. 2d, 102; Louisville, New Albany and Chicago 1st, 104; Long Island, 57½; Lake Erie and Western, 40; do. 6s, 102; Louisiana and Missouri River, 17; Lafayette, Bloomington and Muncie 1st, 101; Lehigh and Wilkesbarre inc., 85; Minn. and St. Louis, 32½; do. pref., 68¼; do. 1st, 115; Missouri, Kansas and Texas, 38½; do. genl. mort. 6s, 85⅝; do. consol. 7s, 106¼; do. 2d, 68¼; Missouri Pacific, 106⅜; do. 3d mort., 112; Memphis and Charleston, 58⅛; Manhattan Beach, 22; do. imp. 7s, 88; Milwaukee, Lake Shore and Western, 57⅝; do. inc., 81½; do. 1st, 101¼; Mobile and Ohio, 22½; do. 1st deben., 78½; do. 1st mort., 108; Michigan Southern S. F., 108; Michigan Central 5s, 102; New York, Chicago and St. Louis, 16¼; do. pref., 34½; do. 1st, 93; Nashville, Chattanooga and St. Louis, 64⅜; New York and New England, 52; New York, Ontario and Western, 26; Norfolk and Western pref., 55½; do. genl. mort., 102½; Northern Pacific 1st, 104; New Orleans Pacific 1st, 91; Ohio Central, 17½; do. 1st, 94; Ohio Southern, 15½; do. 1st, 84; Oregon Railway and Nav., 153½; do. 1st, 108; Oregon Transportation, 89⅝; Oregon ShortLine 6s, 104; Peoria, Decatur and Evansville, 35; do. 1st, 106; Pennsylvania Company 4½s, coup., 96; Rochester and Pittsburgh, 26¼; do. 1st, 104½; Richmond and Danville, 115½; do. deben. 7s, do. 6s, 100; Richmond, Danville and West Point, 62; Richmond and Alleghany, 24; do. 1st, 88⅜; Rome, Watertown and Ogdensburg ext. 5s, 75; St. Paul, Minneapolis and Manitoba, 145½; do. 1st, 108; do. 2d, 111; do. Dakota ext. 1st, 108; St. Paul and Duluth, 33½; do. pref., 90; South Carolina, 29¾; do. inc., 61; do. 1st, 102; St. Louis and San Francisco 2d, Class A, 98⅜; St. Louis, Kansas City and Northern, Omaha div. 1st, 111½; St. Louis, Iron Mountain and Southern 5s, 81⅞; St. Louis, Jacksonville and Chicago 1st, 118; Scioto Valley 1st, 95½; Southern Pacific of California 1st, 106½; Texas and Pacific, 50⅝; do. inc. Land Grant, 66½; do. Rio Grande div. 1st, 84½; Union Pacific, col. trust, 104; Utah Southern genl. mort. 7s, 104½; Virginia Midland, 50; Winona and St. Peter 2d, 120; Wabash, St. Louis and Pacific, gen'l mort. 6s, 85; do. Havana div. 1st, 90; do. Iowa div. 1st, 94; Alabama, Class C, 81½; Arkansas 7s, M. O. & R. R., 28; do. L. R. & Ft. S., 28; do. P. B. & N. O., 28; North Carolina consol. 4s, 77; South Carolina 6s, non-fund., 9; Tennessee Compromise bonds, 62½; Tennessee 6s, 55⅛; American District Telegraph, 51; Mutual Union Telegraph, 27¼; do. 6s, 79; Colorado Coal and Iron, 44; do. 6s, 87½; Consolidation Coal, 32½; Maryland Coal, 20; Homestake Mining, 20; Ontario, 40; Standard, 9.

Boston.—Atchison, Topeka and Santa Fe mort. 5s, 98; Atlantic and Pacific blocks, 108; Boston, Clinton, Fitchburg and New Bedford, 60; do. pref., 132; Boston and Maine 7s, 125¼; Boston Land, 8½; Boston Water Power, 4½; Burlington and Missouri River in Neb. 6s, non-exempt, 103; Chicago, Milwaukee and St. Paul, Dubuque div. 1st, 103¾; Connotton Valley, 7½; do. pref., 11; California Southern 6s, 61; Connecticut and Passumpsic Rivers 95; Chicago, Burlington and Quincy 5s, 1895, 100; do. 4s, old, 86; do. Denver ext. 4s, 84½; Cincinnati, Sandusky and Cleveland 7s, 104; Cheshire R. R. 6s, 110; Flint and Pere Marquette pref., 95; Iowa Falls and Sioux City, 92½; do. 1st, 120¾; Kansas City, Lawrence and Southern 5s, 104¾; Kansas City, Ft. Scott and Gulf, 85; do. pref., 124½; do. 7s, 112; Kansas City, St. Joseph and Council Bluffs 7s, 116; Little Rock and Fort Smith, 53; Maine Central, 73; Massachusetts Central, 4½; do 6s, 41; Mexican Central, 28⅞; do. 7s, 85; do. blocks No. 2, 120; do. No. 3, 108½; Marquette, Houghton and Ontonagon, 74; do. pref., 119; do. 6s, 101½; New Mexico and Southern Pacific 7s, 114½; New York and New England 6s, 105¼; Oregon Short Line subs., 120; do. 6s, 103; Republican Valley 6s, 103; Rutland 3½; do. pref., 24½; Sonora 7s, 106½; Toledo, Delphos and Burlington, Southeast div. 6s, 68½; do. Branch inc., 19¾; do. Dayton div. 6s, 75; Toledo, Cincinnati and St. Louis, 8½; do. 6s, 69⅞; Wisconsin Central, 16¾; do. pref., 30; do. 7s, 1st series, 79; Atlantic Mining, 16; Allouez, 2½; Brunswick Antimony, 11; Franklin, 15⅞; Huron, 3¼; Harshaw, 1½; National, 2¾; Pewabic, 10½; Sullivan, 2½; Silver Islet, 18.

Philadelphia.—American Steamship Co. 6s, 106½; Buffalo, Pittsburgh and Western pref., 25; Huntingdon and Broad Top Mt. consol. 5s, 90; Perkiomen 6s, 105; Pennsylvania and New York Canal 7s, 1896, 122¾; Philadelphia and Reading R. R. scrip, 100; Pennsylvania R. R. consol. mort. 5s, reg., 106½; Pennsylvania Canal 6s, 93; Philadelphia City 6s, 1895, 126; do. 6s, 1899, 130½; do. 1886, 108½; Philadelphia, Wilmington and Baltimore 4s, 95¼; St. Paul and Duluth, 33; Texas and Pacific, consol. mort. 6s, 95¼; West Jersey 1st, 117. The latest quotations are: City 6s, 108@120; do. free of tax, 127@132; do. 4s, new, 108@113; Pennsyvania State 5s, new loan, 113@115; do. 4s, old, 108@112; do. 4s, new, 116@117; Philadelphia and Reading Railroad, 30⅝@30¾; do. consol. mort. 7s, reg. 124@125; do. gen'l mort. 6s, coupon, 95@95¼; do. 7s, 1893, 121@125; do. new conv., 74@76; United New Jersey R. R. and Canal, 189@190; Buffalo, Pittsburg and Western, 21⅝@21¾; Pittsburgh, Titusville and Buffalo 7s, 93⅛@94; Camden and Amboy mort. 6s, 1889, 113@113½; Pennsylvania R. R., 62⅛@62¼; do. general mort. 6s, coupon, 125@125⅜; do. reg., 125@126; do. consol. mort. 6s, reg., 121@122; Little Schuylkill R. R., 56½@57½; Schuylkill Navigation pref., 13@14; do. 6s, 1882, 91@91¼; Elmira and Williamsport pref., 58@60; do. 5s, 100@101; Lehigh Coal and Navigation, 43⅝@43¾; do. 6s, 1884, 103@103¼; do. R. R. loan, 114@116; do. Gold Loan, 113@114; do. consol. 7s, 116@117; Northern Pacific, 49¾@49⅞; do. pref., 93¾@93⅞; North Pennsylvania, 63@64; do. 6s, 106½@107½; do. 7s, 120@123; do. 7s, General mort. reg., 122@123; Philadelphia and Erie, 16½@17½; do. 7s, 114@115; do. 5s, 104@104½; Minehill, 61@62; Catawissa 24@24½; do. pref., 55@56; do. new pref., 54@54½; do. 7s, 1900, 117@—; Lehigh Valley, 62⅝@63; do. 6s, coupon, 122@124; do. reg., 122½@124; do. 7s, 135@136; do. consol. mort., 121@121¼; Fifth and Sixth streets (horse), 160@162; Second and Third, 111@113; Thirteenth and Fifteenth, 70@75; Spruce and Pine, 40@45; Green and Coates, 80@90; Chestnut and Walnut, 90@93; Germantown, 70@71; Union, 109@110; West Philadelphia, 105@115; People's 16@17; Continental, 100@102.

Baltimore.—Atlantic Coal, 1.10, Baltimore City 6s, 1890, 117; do. 5s, 1916, 125; Canton Co. 6s, 102¾; Columbia and Greenville 1st, 102⅜; Charlotte, Columbia and Augusta, 56¼; Maryland Defense 6s, 106¼; Marietta and Cincinnati 1st Trust certificates, 128¼; do. 2d do., 102½; do. 3d do., 58; Ohio and Mississippi, Springfield div. 1st, 120; Richmond and Danville 6s, 1890, 106¾; Virginia Midland, new, 31; 1st pref., 120; do. 2d mort., 110; do. 5th mort., 96; do. inc., 73; Virginia Peelers, 34½; do, coupons, 38. The latest quotations are: Atlanta and Charlotte 1st, 108⅝@110; Baltimore and Ohio, 194@195; do. 6s, 1885, 107@107½; Baltimore City 6s, 1890, 116½@117¼; do. 5s, 1895, 115½@116½; do. 5s, 1916, 125½@126; Cincinnati and Baltimore 7s, 117½@—; Marietta and Cincinnati 1st, 127¾@128¼; do. 2d, 102½@102½; do. 3d, 57⅞@58⅛; Northern Central, 50⅞@51¼; do. 5s, Series B, 96¾@97; Norfolk and Western pref., 55@57; Ohio and Mississippi, Springfield div. 1st, 119¾@120½; Virginia Midland 5s, 96@97; Virginia consols, 59@60; do. consol. coupons, 59@60; Virginia 10-40s, 42½@43; do. 10-40 coupons, 59@60; Western Maryland 2d pref., 106½@108.

The Coal Trade.

THE leading coal-carrying companies make the following reports of their tonnage for the week ending August 12, and for the year to that date, compared with their respective amounts carried to the same time last year:—

	Week.	1882.	1881.
Reading Railroad	193,634	5,425,967	5,183,704
Schuylkill Canal	19,165	238,487	318,779
Lehigh Valley	133,015	4,166,589	3,817,339
Delaware, Lackawanna and Western	108,561	2,632,508	2,493,730
Shamokin	22,526	634,246	633,216
Central R. R. of New Jersey	102,703	2,587,194	2,541,108
United R. R. of New Jersey	33,131	1,017,649	923,823
Pennsylvania Coal	34,946	793,324	776,553
Delaware and Hudson Canal	83,437	2,018,266	2,093,655
Huntingdon and Broad Top Mountain	6,065	254,921	313,057
Penn. and New York	28,520	994,241	1,001,742
Clearfield, Pa.	60,894	1,739,040	1,474,213

The total tonnage of anthracite coal from all the regions for the week ending Aug. 12, as reported by the several carrying companies, amounted to 680,025 tons, against 631,209 tons in the corresponding week last year, an increase of 46,816 tons. The total amount of anthracite mined for the year is 16,652,414 tons, against 16,053,132 tons for the same period last year, an increase of 599,282 tons. The quantity of bituminous coal sent to market for the week amounted to 67,023 tons, against 87,502 tons in the corresponding week last year, a decrease of 20,479 tons. The total amount of bituminous mined for the year is 2,352,088 tons, against 2,853,519 tons for the corresponding period last year, a decrease of 501,431 tons. The total tonnage of all kinds of coal for the week is 747,048 tons, against 718,711 tons in corresponding week last year, an increase of 26,337 tons, and the total tonnage for the coal year is 19,004,502 tons, against 18,906,651 tons to same date last year, an increase of 97,851 tons. The quantity of coal and coke carried over the Pennsylvania Railroad for the week ending August 12 was 199,071 tons, of which 150,469 tons were coal and 48,602 tons coke. The total tonnage for the year thus far has been 6,692,807 tons, of which 4,910,139 tons were coal and 1,782,668 tons coke. These figures embrace all the coal and coke carried over the road, east and west. The shipments of bituminous coal from the mines of the Cumberland coal region for the week ended Aug. 12 were 13,233 tons, and for the year to that date 596,775 tons, a decrease of 638,321 tons as compared with the corresponding period of last year. The shipments were: To the Baltimore and Ohio Railroad—For the week, 10,686 tons; year, 94,020 tons; decrease as compared with 1881, 318,980 tons. Chesapeake and Ohio Canal—Week, 2,546 tons; year, 24,081 tons; decrease as compared with 1881, 248,052 tons. Pennsylvania Railroad—Week, none; year, 74,842 tons; decrease as compared with 1881, 84,651 tons. The Reading Railroad shipment for last week, ending August 19 was about 158,000 tons, of which 46,000 tons were sent to and 47,800 tons shipped from Port Richmond, and 12,000 tons sent to and 10,500 tons shipped from Elizabethport.—*Philadelphia Ledger, Aug.* 21.

ACCORDING to the opinion of the Supreme Court of Alabama, in the case of Shelton vs. Knight, recently delivered, the service rendered by one partner in winding up the partnership affairs will not be paid for except there is a special agreement to that effect.

RAILROAD EARNINGS.—MONTHLY.

	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total.
BURL., CEDAR RAP. & NORTHERN:													
1880	184,316	165,170	188,325	141,652	149,504	153,378	143,432	160,160	179,804	204,991	189,330	193,419	2,053,484
1881	167,750	124,510	148,551	184,680	165,630	205,912	174,351	209,112	221,801	221,748	203,880	232,812	2,259,037
1882	252,823	225,631	224,107	178,304	199,278	211,257	198,276	.....	.....	.....	.....	.....	.....
CENTRAL PACIFIC:													
1880	1,200,614	1,070,487	1,373,438	1,356,716	1,778,488	1,724,950	1,840,067	1,973,438	1,964,997	1,120,229	2,199,466	1,905,221	20,508,112
1881	1,602,907	1,454,218	1,709,637	1,872,370	2,091,410	2,159,381	1,899,346	2,059,000	2,293,000	2,514,000	2,267,000	2,110,000	23,947,951
1882	1,876,000	1,702,000	1,987,000	2,052,000	2,353,000	2,239,000	2,020,000	.....	.....	.....	.....	.....	.....
CHESAPEAKE AND OHIO:													
1880	202,335	198,681	222,762	221,559	199,443	214,352	238,236	259,110	247,303	211,820	240,795	218,009	2,674,308
1881	162,540	184,389	228,479	227,343	252,235	241,135	225,096	262,858	247,144	237,303	235,585	203,562	2,702,762
1882	210,455	209,708	208,981	267,454	255,939	260,753	306,831	.....	.....	.....	.....	.....	.....
CHICAGO AND ALTON:													
1880	534,054	497 013	626,473	542,961	616,128	617,524	708,906	761,120	767,349	785,199	696,776	574,695	7,718,198
1881	487,890	461,641	529,915	558,190	548,556	635,860	676,205	771,466	768,897	750,359	680,133	635,307	7,553,988
1882	570,447	530,465	584,483	561,787	553,412	613,886	671,537	.....	.....	.....	.....	.....	.....
CHICAGO AND NORTHWESTERN:													
1880	1,154,632	1,131,683	1,361,725	1,294,573	1,875,608	1,671,177	1,699,686	1,767,938	2,020,245	2,105,217	1,855,671	1,477,902	19,416,007
1881	1,240,667	963,208	1,178,795	1,474,612	1,879,006	2,306,640	1,983,031	2,315,164	2,292,676	2,341,097	2,019,037	1,855,476	21,849,209
1882	1,620,336	1,471,945	1,696,568	1,634,819	2,058,133	2,022,700	2,025,736	.....	.....	.....	.....	.....	.....
CHICAGO, BURLINGTON AND QUINCY:													
1880	1,432,740	1,411,870	1,732,518	1,489,894	1,909,627	1,682,956	1,773,643	1,834,321	1,862,285	1,934,762	1,837,860	1,552,018	20,454,494
1881	1,307,948	1,034,821	1,418,149	1,574,371	1,679,455	2,083,803	1,888,558	2,173,945	2,262,981	2,031,001	1,816,133	1,905,490	21,324,150
1882	1,658,834	1,457,300	1,566,217	1,530,838	1,505,261	1,437,164	.....	.....	.....	.....	.....	.....	.....
CHICAGO, MILWAUKEE AND ST. PAUL:													
1880	764,298	738,749	900,675	871,041	1,134,745	1,037,958	1,026,708	991,297	1,257,677	1,493,620	1,472,037	1,397,308	13,086,119
1881	990,847	682,717	916,989	1,259,946	1,538,491	1,729,811	1,568,706	1,678,000	1,645,000	1,590,000	1,569,000	1,855,000	17,025,462
1882	1,435,000	1,377,000	1,561,000	1,518,000	1,629,000	1,620,000	1,465,000	.....	.....	.....	.....	.....	.....
CHICAGO, ST. PAUL, MINNEAPOLIS AND OMAHA:													
1880	193,827	173,078	259,783	259,208	232,146	218,093	236,995	251,013	300,833	342,052	342,894	312,173	3,122,097
1881	257,786	158,594	251,648	261,211	350,124	404,562	383,202	385,586	363,685	382,714	380,733	391,950	3,981,296
1882	307,498	315,100	405,779	356,558	406,420	363,109	331,480	.....	.....	.....	.....	.....	.....
CINCINNATI, INDIANAPOLIS, ST. LOUIS AND CHICAGO:													
1880	155,697	172,541	198,220	168,199	186,995	200,332	204,138	233,478	343,627	239,881	209,014	198,254	2,412,185
1881	182,523	171,511	191,005	183,710	191,096	192,299	177,167	229,858	219,977	212,606	194,805	192,623	2,296,916
1882	200,042	186,879	208,066	204,269	199,110	195,948	209,564	.....	.....	.....	.....	.....	.....
DENVER AND RIO GRANDE:													
1880	124,759	126,922	160,883	164,882	193,925	295,455	373,132	400,133	406,583	473,318	408,562	349,196	3,478,007
1881	307,476	317,681	398,493	433,111	514,767	584,230	548,284	606,193	620,643	665,686	566,819	643,417	6,206,812
1882	491,914	412,987	535,055	559,917	614,298	537,462	495,797	.....	.....	.....	.....	.....	.....
HANNIBAL AND ST. JOSEPH:													
1880	176,079	166,965	216,061	206,735	191,317	179,396	224,312	238,081	233,448	242,214	207,147	279,635	2,561,391
1881	154,401	122,874	176,356	190,812	172,950	190,740	201,899	215,308	202,567	313,433	201,782	180,376	2,230,966
1882	138,284	154,717	168,798	148,913	154,917	155,030	184,347	.....	.....	.....	.....	.....	.....
ILLINOIS CENTRAL:													
1880	595,212	613,806	613,008	535,732	665,120	681,736	724,095	732,755	806,836	880,211	783,120	673,182	8,304,812
1881	631,281	524,499	557,789	662,493	673,259	803,887	720,004	868,407	828,847	815,238	737 218	763,475	8,586,397
1882	728,173	689,387	695,371	674,603	674,749	663,746	752,251	.....	.....	.....	.....	.....	.....
INDIANA, BLOOMINGTON AND WESTERN:													
1880	80,498	89,690	116,185	90,374	85,733	106,954	103,438	116,732	110,622	121,343	96,621	104,619	1,233,079
1881	90,283	83,261	192,085	203,677	200,064	199,846	199,125	117,956	195,307	181,674	160,826	156,697	.....
1882	195,824	175,755	206,235	205,934	182,554	186,133	206,072	.....	.....	.....	.....	.....	.....
LOUISVILLE AND NASHVILLE:													
1880	674,455	575,035	612,593	563,883	655,014	976,229	772,537	827,088	931,910	1,000,326	953,086	949,184	9,491,346
1881	816,960	805,124	947,959	850,862	828,726	1,227,885	817,135	876,192	951,566	1,002,950	1,065,223	1,122,285	11,326,859
1882	950,065	960,036	1,073,745	950,007	946,435	1,187,385	1,038,385	.....	.....	.....	.....	.....	.....
MOBILE AND OHIO:													
1880	250,116	204,094	168,301	140,091	129,249	121,855	131,621	140,593	184,246	264,714	251,368	287,373	2,373,621
1881	224,347	216,768	230,916	163,551	145,803	136,517	135,542	159,348	209,044	252,921	252,434	262,025	2,406,437
1882	161,433	158,154	152,651	145,272	137,645	132,572	136,398	.....	.....	.....	.....	.....	.....
NASHVILLE, CHATTANOOGA AND ST. LOUIS:													
1880	205,633	191,154	169,457	155,466	158,839	144,155	151,594	169,326	167,473	178,266	182,087	175,996	2,049,448
1881	178,143	190,866	207,710	183,525	104,430	154,549	150,430	168,317	179,979	172,121	152,059	173,127	2,075,256
1882	156,994	159,961	161,005	154,155	137,645	119,074	.....	.....	.....	.....	.....	.....	.....
NEW YORK AND NEW ENGLAND:													
1880	164,232	149,907	183,845	179,689	183,701	219,891	205,056	249,885	235,642	215,491	210,856	198 108	2,396,302
1881	189,749	173,614	212,019	216,913	217,185	231,518	246,821	280,524	299,573	261,199	242,412	237,729	2,809,255
1882	213,840	217,261	265,222	263,544	283,244	290,060	308,920	.....	.....	.....	.....	.....	.....
NEW YORK, LAKE ERIE AND WESTERN:													
1879	1,147,173	1,207,391	1,356,780	1,372,755	1,350,574	1,230,419	1,273,533	1,450,223	1,492,497	1,713,697	1,515,835	1,398,224	16,509,127
1880	1,296,381	1,252,218	1,644,958	1,643,151	1,592,544	1,661,812	1,580,976	1,606,874	1,786,417	1,899,910	1,799,338	1,726,788	19,149,361
1881	1,443,437	1,425,765	1,847,261	1,709,057	1,776,891	1,794,982	1,787,081	1,772,895	1,734,200	.....	.....	.....	.....
NORTHERN CENTRAL:													
1880	334,494	330,860	415,325	386,130	329,788	419,103	450,298	453,923	464,093	512,918	459,054	494,310	5,050,387
1881	386,157	382,657	452,906	487,273	465,588	487,287	440,811	498,008	429,565	449,664	487,160	476,622	5,443,697
1882	407,368	413,551	430,194	435,129	482,607	482,762	509,683	.....	.....	.....	.....	.....	.....
NORTHERN PACIFIC:													
1880	81,390	77,259	119,357	185,700	217,613	253,105	241,277	223,500	330,300	358,456	300,822	220,993	2,629,710
1881	116,508	78,803	162,984	216,210	312,705	412,024	393,260	411,624	490,096	565,485	428,903	434,331	4,044,576
1882	239,800	269,000	384,000	438,000	568,332	631,342	679,240	.....	.....	.....	.....	.....	.....
PHILADELPHIA AND ERIE:													
1880	224,307	245,372	327,678	334,947	311,470	331,024	308,699	347,532	322,737	367,082	324,966	281,919	3,727,733
1881	224,303	225,501	285,573	293,323	343,792	350,585	291,669	303,849	276,522	292,392	284,078	282,772	3,454,309
1882	252,727	246,246	265,311	277,851	341,415	341,614	.....	.....	.....	.....	.....	.....	.....
ST. LOUIS AND SAN FRANCISCO:													
1880	198,091	195,948	193,146	176,164	167,664	173,607	213,297	259,995	280,873	328,194	290,329	226,063	2,698,371
1881	212,435	178,234	262,050	265,298	283,399	260,254	252,338	286,373	279,064	308,569	284,320	287,914	3,160,245
1882	256,784	244,654	274,959	242,866	253,419	240,177	318,613	.....	.....	.....	.....	.....	.....
ST. LOUIS, ALTON AND TERRE HAUTE:													
1880	153,139	163,737	168,994	155,462	147,928	150,207	191,077	216,759	204,295	221,863	188,773	184,503	2,146,741
1881	175,725	166,012	201,137	197,447	172,177	165,896	165,393	189,295	187 299	179,921	162,544	153,852	2,112,801
1882	168,987	149,619	178,145	157,450	162,842	142,742	192,017	.....	.....	.....	.....	.....	.....
ST. LOUIS, IRON MOUNTAIN AND SOUTHERN:													
1880	555,983	490,195	451,560	408,241	349,053	363,454	432,655	565,869	671,219	688,365	632,052	656,951	6,265,597
1881	570,957	560,791	704,002	548,300	479,075	474,302	533,512	644,386	690,400	719,239	687,280	709 498	7,319,744
1882	516,370	501,127	585,008	581,977	519,120	529,700	515,519	.....	.....	.....	.....	.....	.....
ST. PAUL, MINNEAPOLIS AND MANITOBA:													
1880	180,239	137,645	261,798	333,014	281,899	243,407	272,089	232,579	274,188	345,057	300,675	297,641	3,160,231
1881	254,187	159,482	320,962	425,685	382,642	405,322	387,488	414,954	485,736	605,708	508,530	528,262	4,878,960
1882	395,461	418,358	531,004	570,890	858,902	856,417	853,296	.....	.....	.....	.....	.....	.....
TEXAS AND PACIFIC:													
1880	245,785	219.165	215,070	174,177	141,083	153,066	195,711	226,073	266,570	303,666	312,184	301,858	2,754,408
1881	281,176	260,781	319,928	295,066	281,782	285,105	328,663	354,082	337,117	578,668	357,724	381,218	3,921,569
1882	310,785	255,644	332,911	359,543	409,228	384,713	367,215	.....	.....	.....	.....	.....	.....
UNION PACIFIC RAILWAY:													
1880	1,433,636	1,393,992	1,730,509	1,937,220	2,027,269	1,928,528	1,934,215	1,913,035	2,270,179	2,707,860	2,251.148	1,869,335	23,448,445
1881	1,339,799	1,374,740	1,674,860	1,766,894	2,319,238	2,884,774	2,528,826	2,638,659	2,844,357	3,289 350	2,773,608	2,267,004	27,451,831
1882	1,961,088	1,759,863	2,226,832	2,462,004	2,491,590	2,508,453	2,301,000	.....	.....	.....	.....	.....	.....
WABASH, ST. LOUIS AND PACIFIC:													
1880	776,790	759,451	978,629	892,024	948,773	953,468	1,966,742	1,189,478	1,178,950	1,501,203	1,131,787	1,050,816	12,428,112
1881	811,617	818,922	1,121,592	1,023,482	1,144,660	1,308,993	1,131,752	1,542,838	1,490,027	1,396,300	1,399,555	1,328,278	14,461,579
1882	1,229,965	1,134,768	1,315,776	1,378,194	1,204,864	1,149,682	1,418,837	.....	.....	.....	.....	.....	.....

RAILROAD AND CANAL DIVIDEND STATEMENT.

Showing the amount of Stock Outstanding, the Dividend Periods and the date of last Dividend.

Marked thus(*)are leased roads.	Stock out-standing.	Divide'd Periods.	Last Dividend Payable.
Albany and Susq*...100	2,500,000	semi-an	July '82 2
Ashuelot.....100	210,000	q'arterly	Oct. '81 3½
Atch., Top. and S. Fe100	54,000,000	q'arterly	Aug. '82 1½
Atlanta and W. Point100	1,232 200	semi-an	Jan. '82 6
Atlantic and St. Law*100	5,840,000	semi-an	Mar. '82 3
Augusta and Savan'h100	1,022,900	semi-an	June '81 3½
Avon, Genesee&MtM*100	225,000	semi-an	July '81 3
Baltimore and Ohio.100	14,792,566	semi-an	May '82 5
" " pref.100	5,000,000	semi-an	July '82 3
Washington Br....100	1,650,000	semi-an	Apl. '82 5
Berkshire*.....100	600,000	q'arterly	Apl. '82 1¾
Boston and Albany..100	20,000,000	q'arterly	June '82 2
Bos.&N.Y.AirLine pf.100	2,795,227	q'arterly	June '82 1
Bos.,Cl.,F.&N.B.pref.100	1,750,100	.....	Apl. '82 3½
Bos.,Conc.&Mont.pf*100	800,000	semi-an	May '82 3
Boston and Lowell..500	3,940,000	semi-an	July '82 2
Boston and Maine...100	6,921,274	semi-an	May '82 4
Boston & Providence100	4,000,000	semi-an	May '82 4
Attleborough Br...100	131,700	semi-an	July '82 3½
Bos.,Revere B &Lynn100	419,400	semi-an	July '82 3½
Buffalo,N. Y. & Erie*.100	950,000	semi-an	June '82 3
Camden & Atlantic.. 50	377,400	q'arterly	Apl '80 38
" " pref. 50	880,650	q'arterly	Apl '80 3½8
Camden & Burl. Co...100	381,925	semi-an	July '82 3
Canada Southern....100	15,000,000	.....	Feb. '81 2½
Cape May &Millville* 50	447,000	semi-an	June'81 3
Catawissa*..... 50	1,159,500	annual	Oct. '81 $1½
" pref..... 20	2,200,000	semi-an	May '82 3½
" new pref.. 50	1,000,000	semi-an	May '82 3¾
Cayuga and Susq.*.. 50	589,110	semi-an	July '81 4½
Cedar Rapids&Mo.R*100	6,850,400	q'arterly	Aug. '82 1½
" " pref.100	769,600	semi-an	Aug .'82 3½
Central of Georgia...100	7,500,000	semi-an	June '82 4
Central of New Jersey100	18,563,200	q'arterly	July '76 2½
Central Ohio*..... 50	2,437,950	semi-an	July '82 3
" pref.. . 50	411,550	semi-an	July '82 3
Central Pacific 100	59,275,500	semi-an	Aug. '82 3
Chemung*..... 100	380,000	q'arterly	July '81 1½
Cheshire preferred ..100	2,155,300	semi-an	July '82 1½
Chicago and Alton...100	11,181,741	semi-an	Sept. '82 4
" " pref 100	2,245,400	semi-an	Sept. '82 4
Chi., Burl. & Quincy.100	55,337,455	q'arterly	Sept. '82 2
Chi., Iowa & Nebras*.100	3,916,200	semi-an	July '82 4
Chi., Mil. & St. Paul.100	20,404,261	semi-an	Apl. '82 3½
" pref 100	14,401,483	semi-an	Apl. '82 3½
Chi. & N. Western...100	14,988,257	semi-an	June'82 3½
" pref.100	21,525,353	q'arterly	June'82 2
Chi., R. I. & Pacific..100	41,960,000	q'arterly	Aug. '82 1½
Chi. and West Mich .100	6,151,000	semi-an	Feb. '82 2½
Chi.,St.P.,M.&O.pref.100	10,390,000	q'arterly	July '82 1¾
C., Ind., St. L. & Chi..100	6,000,000	q'arterly	July '82 1½
Cin., Sand. & Clev.pf. 50	429,037	semi-an	May '82 3
Clev. and Mahoning* 50	3,759,200	semi-an	Nov. '81 3½
Clev. and Pittsburg* 50	11,244,336	q'arterly	Sept. '82 1¾
Columbus & Xenia*. 50	1,786,200	q'arterly	June'82 2
Colum.&HockingVal.100	2,500,200	semi-an	Aug. '81 208
Concord 50	1,500,000	semi-an	May '82 5
Concord and Ports.*.100	350,000	semi-an	July '82 3½
Conn.& Passump.Riv100	2,244,400	semi-an	Aug '82 3
Connecticut River ..100	2,100,000	semi-an	July '82 4
Cumberland Valley.. 50	1,292,950	q'arterly	July '82 2½
" 1st pref 50	241,900	semi-an	Apl. '82 4
" 2d pref. 50	243,000	semi-an	Apl. '82 4
Danbury & Norwalk. 50	600,000	.....	Apl. '82 1½
Dayton and Mich.*.. 50	2,402,573	semi-an	Apl. '82 1½
" " pref. 50	1,211,250	q'arterly	July '82 2
Delaware*..... 25	1,468,940	semi-an	July '82 3
Del. & Bound Brook*100	1,652,000	q'arterly	Aug. '82 1¾
Del., Lack.& Western 50	26,200,000	q'arterly	July 82 2
Denver & Rio Grande.100	29,160,000	q'arterly	Jan. '82 1½
Den.,South P. & Pac.100	3,500,000	.....	Aug.'80 4
Detroit, Lans. & Nor.100	1,825,600	semi-an	Aug.'80 2½
" " pref.100	2,503,380	semi-an	Aug. '82 3½
Dubuque&Sioux C'y*100	5,000,000	semi-an	Apl. '82 3
East Pennsylvania*., 50	1,709 550	semi-an	July '82 3
East Mahanoy*..... 50	392,950	semi-an	July '82 3
Eastern (N. H.).....100	492,500	semi-an	June'82 2½
Eel River.....100	3,000,000	q'arterly	June '82 $1
Elmira.Jef.&Canand*100	500,000	annual	Sep. '80 5
Elmira&Williamsp't* 50	500,000	semi-an	May '82 1½
" " pref. 50	500,000	semi-an	July '82 3½
Erie and Pitsburg*.. 50	1,998,400	q'arterly	June '82 1¾
Evansville & Terre H.100	100,000	semi-an	Nov. '81 2
Fitchburg.....100	4,500,000	semi-an	July '82 3
F. & P. Marquette pf.100	6,500,000	semi-an	July '82 3
Ft.W. & Jackson pref.100	2,000,000	.....	May '82 2
Georgia. 100	4,200,000	q'arterly	July '82 2½
Granite 100	1,250,000	semi-an	July '82 3
Han. & St. Jo. pref .100	5,083,024	semi-an	Aug. '82 3½
Harrisbg&Lancaster 50	1,182,500	semi-an	July '82 3½
Housatonic pref. ...100	1,180,000	q'arterly	July '82 2
Illinois Central.....100	39,000,000	semi-an	Sept. '82 3½
Ia.Falls & Sioux City*100	4,623,500	q'arterly	June'82 1½
Iowa R. Land Co....100	7,620,000	q'arterly	Aug. '82 1
Jeffersonv. Mad.&Ind100	2,000,000	q'arterly	May '82 1¾
Joliet and Chicago*..100	1,500,000	q'arterly	June'82 1¾
Kan.C.,Ft.S.&Gulf....100	4,000,000	.....	Feb. '82 2
" " pref ..100	2,750,000	semi-an	Aug. '82 4
Kentucky Central...100	590,000	semi-an	June'81 1
" " pref..100	5,583,500	semi-an	June'83 1
Lake Shore&Mich.So.100	49,466,500	q'arterly	Aug. '82 2
" (guar.)100	533,500	semi-an	Aug. '82 5
Lawrence*..... 50	450,000	q'arterly	July '82 2
Lehigh & Hey..... 50	27,496,895	q'arterly	July '82 1½
pref. 50	106,300	q'arterly	July '82 1½

Marked thus(*)are leased roads.	Stock out-standing.	Divide'd Periods.	Last Dividend Payable.
Little Miami..... 50	4,637)300	q'arterly	June'82 2
Little Rock & Ft. S..100	4,096,135	.....	July' 81 108
Little Schuylkill*.. . 50	2,646,100	semi-an.	July '82 3½
Louisville & Nashv...100	19,130,913	semi-an.	Feb. '82 3
Lowell & Andover...100	500,000	semi-an.	Jan. '82 3½
Lykens Valley.....100	600,000	q'rterly.	Oct.' 81 2½
Manchester & Law...100	1,000,000	semi-an.	May '82 5
Manhattan 100	13,000,000	.....	.....
" " 1st pref.100	6,500,000	q'rterly.	July '82 1½
" " 2d pref.100	6,500,000	q'rterly.	July '82 1½
Marietta& Cincinnati 50	1,386,350	.....	.....
" " 1st pref 50	8,105,600	semi-an.	Sep. '66 38
" " 2d pref 50	4,440,000	semi-an.	Sep. '66 38
Marq.Hout.&Ont.pf...100	2,259 026	.....	Aug. '82 4
Massawippi*.....100	400,000	semi-an.	Aug. '82 3
Michigan Central....100	18,738,204	q'rterly.	Aug. '81 1
Middlesex Central...100	280,000	semi-an.	Aug. '82 3
Mill Creek&Minehill* 50	323,000	semi-an.	July '82 5
M.Hill& Schuyl.Hav* 50	4,022,500	semi-an.	July '82 3½
Missouri Pacific.....100	28,169,800	q'rterly.	July '82 1½
Mobile&Montgomery100	3,022,517	semi-an.	Feb. '80 2½
Mont. & Wells River100	800,000	annual	Feb. '80 2
Morris and Essex.... 50	15,000,000	semi-an.	July '82 3½
Mt Carbon&PtCarbon 50	282,350	semi-an.	July '82 6
Nashua and Lowell..100	800,000	semi-an.	July '82 4
Nashua & Rochester.100	1,305,800	semi-an.	Apl. '82 1½
Nashv. & Decatur...100	1,827,000	semi-an.	June'81 3
Nash.,Chat.&StLouis 25	6,670,325	semi-an.	Apl. '82 1½
Naugatuck.....100	2,000,000	semi-an.	Jan. '82 5
Nesquehoning Val'y* 50	1,300,000	semi-an.	Mar.'82 3
N.Castle&Beaver Val* 50	600,000	q'rterly.	Oct. '81 —
NewLondonNorth'n*100	1,500,000	q'rterly.	July '82 1½
N. Y. Cen. & Hud. R.100	89,428,330	q'rterly.	July '82 2
N. Y. and Harlem....100	7,950,000	q'rterly.	July '82 4
" " pref.100	1,500,000	q'rterly.	July '82 4
" City Line.. —	.....	annual	Apl. '82 3
N.Y.,LakeErie&West.100	77,083,900	.....	.....
" " pref.100	8,156,825	.....	Jan. '82 6
N. Y., N. H. & Hart...100	15,500,000	semi-an.	Jan. '82 5
N. Y., Prov. & Boston100	3,000,000	q'rterly.	Aug. '82 2
Niag.Bridg&Canand*100	1,000,000	semi-an.	July '81 3
North Carolina*.....100	3,000,000	semi-an.	Sep. '81 3
" " pref.100	1,000,000	semi-an.	Sep. '81 3
N. Eastern (S.C.) pref100	86,000	semi-an.	May '81 4
Norfolk & Western pref.	15,000,000	q'rterly.	Sept. '82 $1
North Pennsylvania. 50	4,527,150	q'rterly.	Aug. '82 1¾
Northern Central.... 50	6,142,000	semi-an.	July '82 3
Northern N. Hampsh100	3,068,400	semi-an.	June'82 3
Northern N. Jersey*..100	1,000,000	semi-an.	July '80 2½
Norwich&Worcester*100	2,604,400	semi-an.	July '82 5
Ohio 100	18,500,000	.....	.....
Ohio and Miss. pref..100	4,030,000	semi-an.	Mar.'75 3½
Old Colony.....100	7,333,800	semi-an.	July '82 3½
Oregon R'way&Nav.100	6,000,000	q'rterly.	Aug. '82 2
Oswego & Syracuse..100	1,320,400	semi-an.	Aug.'81 4½
Panama.....100	7,000,000	.....	July '82 6½
Paterson & Hudson*.100	630,000	semi-an.	July '82 4
Paterson & Ramapo.100	248,000	semi-an.	July '82 4
Pember.&Hightst'n*. 50	342,150	semi-an.	Jan. '82 3
Pennsylvania..... 50	77,672,750	semi-an.	May '82 4
Pennsylvania Co..... 50	20,000,000	semi-an.	June'81 2½
Peoria & Bureau Val*100	1,200,000	semi-an.	Feb. '82 4
Philadelphia & Erie*. 50	7,013,700	semi-an.	.....
" " pfd 50	2,400,000	semi-an.	Jan. '75 4
Phil,Ger.&Norrist'n* 50	2,231,900	q'rterly.	June'82 3
Phil. and Reading... 50	32,726,375	q'rterly.	Jan. '76 2½
" " pref. 50	1,551,800	q'rterly.	July '76 3½
Phila. and Trenton..100	1,259,100	q'rterly.	July'82 2½
Phila., Wil. and Balt. 50	11,585,750	semi-an.	July '82 4
Pittsb.,Ft. W. & Chi.*100	19,714,285	q'rterly.	July'82 1¾
" Special Imp.100	6,770,900	q'rterly.	July'82 1¾
Pittsfield&N.Adams..100	450,000	semi-an.	July '82 2½
Portl., Saco & Portsm100	1,500,000	semi-an.	July '82 3
Providence & Worces.100	2,000,000	semi-an.	July '82 3
Rensselaer&Saratog.*100	7,000,000	semi-an.	July '82 4
Rhode Island& Mass.100	100,000	.....	Jan. '81 3
Richmond& Danv...100	3,866,000	q'rterly.	Aug. '82 2
Richmond & Petersb100	1,009,300	semi-an.	Jan. '81 3
Roch.&Genesee Val.*100	555,200	semi-an.	July '82 3
Rutland preferred.. 100	4,000,000	semi-an.	Sept. '82 1
St.L.,Alt. & T.Haute.100	2,300,000	.....	.....
" " pref.100	2,468,406	.....	May '82 3
St.L.&S.Fran.1st pref100	4,500,000	.....	Aug. '82 3½
St.L.,I.Mt.&South'n.100	21,459,921	semi-an.	Feb. '74 3
St.L.,Jac'ville & Chic.100	1,293,000	.....	Aug. '82 4½
" " " pref.100	1,034,000	.....	Aug. '82 4½
St. P. & Duluth pref.100	4,705,000	q'rterly.	June'82 1¾
St. P., Minn. & Man...100	15,000,000	semi-an.	Aug. '82 3½
Schuylkill Valley*... 50	576,050	semi-an.	July '82 2½
Seaboard & Roanoke.100	1,229,600	semi-an.	May '82 5
Shamokin V.&Pottsv 50	669,450	semi-an.	Feb.'82 3
Shore Line*.....100	1,000,000	semi-an.	July '82 4
Sioux C.&Pacific pref100	169,000	semi-an.	Apl. '82 3½
South Br. (N. J.)*....100	438,300	semi-an.	Jan. '82 3
South Western (Ga.)*100	3,892,300	semi-an.	Dec. '81 3½
Stockbridge&Pitts.*..100	448,700	semi-an.	Oct. '81 1½
Syr.,Bingham&N.Y.*100	2,500,000	semi-an.	Feb. '81 2
Terre Haute & Ind....100	1,988,150	semi-an.	Aug. '82 4
Troy and Boston....100	1,609,000	semi-an.	Feb. '80 2
Union Pacific. 100	61,000,000	q'rterly.	July '82 1¾
United Cos of N. J.*..100	20,490,000	q'rterly.	July '82 2½
Utica, Shenango&S V100	4,000,000	semi-an.	Nov. '81 3
Utica and Black Riv.100	1,772,000	semi-an.	Mar. '82 2
Vermont and Mass..100	3,050,000	semi-an.	Apl. '82 3
Wab. St.L.& Pac.pref.100	22,615,100	q'rterly.	Nov. '81 1½

Markedthus(*)are leased roads.	Stock out-standing.	Divide'd Periods.	Last Dividend Payable.
Ware River*.....100	750,000	semi-an.	July '82 3½
Warren (N. J.).....100	1,800,000	semi-an.	Apl. '82 3½
Warwick Valley.....100	340,000	semi-an.	July '82 2½
Westchest&Phil.pref100	821,300	semi-an.	July '80 2
West Jersey.....100	1,359,750	semi-an.	Apl. '83 38
Wilmingt'n&Weld'n.100	1,456,200	semi-an.	July '82 3
Wil., Col., & Aug 100	960,000	semi-an.	July '82 3
Winchester&Poto'c.*100	180,000	semi-an.	July '82 3
Winchester&Strasb.*100	74,700	semi-an.	July '82 3
Worcester & Nashua. 75	1,789,800	semi-an.	July '82 1½
HORSE-POWER R. R.			
Albany City.....100	200,000	annual	.....'80 5½
Baltimore City..... 25	1,000,000	semi-an.	July '82 3
Balt.,Cat.&El. Mills..100	....	semi-an.	July '82 2
BleeckerSt.&Ful.F'y.100	900,000	semi-an.	July '81 ¾
Boston&Chelsea pref. 50	110,000	semi-an.	Apl. '82 3
Broadway (Brooklyn)100	250,000	q'arterly	Oct. '81 3
B'way&7th Av,(N.Y.)100	2,100,000	q'arterly	Oct, '81 2
B'klyn&Hunter's Pt.100	400,000	semi-an.	Apl. '79 3
Brooklyn City.....100	2,000,000	q'arterly	Dec.'81 3½
Bushwick (Brooklyn)100	309,000	semi-an.	July '81 2½
Cambridge.....100	908,000	q'arterly	Apl. '82 4½
Cen.Park,N.& E.Riv.100	1,800,000	q'rterly.	July '82 2
Christoph'r&TenthSt100	650,000	semi-an.	Aug.'81 2½
Citizens' (Phil.)..... 50	192,500	q'rterly.	Jan. '82 2½
Citizens' (Pbg.)..... 50	200,000	annual..	....'80 14½
Coney Island&Bklyn100	500,000	semi-an.	Oct. '80 5
Continental (Phil.) .. 50	580,000	semi-an.	July '82 6
D.Dock,E.B'way&Bat100	1,200,000	q'arterly	Nov. '81 4
Eighth Av. (N. Y.)...100	1,000,000	q'rterly.	Oct. '81 3
42d St. & G. St. Ferry100	747,000	semi-an.	Nov.'81 6
Frankf.&Southw (Ph) 50	600,000	q'rterly.	Jan. '82 6
Germantown, (Ph.).. 50	572,800	q'rterly.	July '82 2½
Girard College (Ph.) . 50	500,000	semi-an.	July '71 3
Grand St. & Newton..100	170,091	semi-an.	July '81 2½
Green&Coates St.(Ph) 50	150,000	q'rterly.	July '82 3
Heston,Mantau&F'm 50	299,381	semi-an.	Jan. '75 4
Highland.....100	600,000	semi-an.	July '82 4
Lomb.&SouthSts(Ph) 25	195,000	semi-an.	Oct. '75 4
Lynn and Boston....100	200,000	semi-an.	May '82 4
Malden and Melrose.100	165,000	.....	.....
Metropolitan (Bost.). 50	1,500,000	semi-an.	July '82 4
Middlesex (Boston)..100	650,000	semi-an.	May '82 3½
N.Y.,Bay Ridge&Jam100	150,000	.....	Oct. '78 7
Ninth Av. (N. Y.)....100	797,320	.....	.....
Orange &Newark....100	282,555	.....	.....
People's (Phila.) pref. 25	124,744	.....	July '82 2
Philadelphia City... 50	475,000	semi-an.	July '82 4
Phila. and Darby.... 20	200,000	semi-an.	July '81 3½
Phila.&Grey's Ferry. 50	308,000	semi-an.	Jan. '82 6
Pbg,Alleg.&Manches. 50	300,000	q'rterly.	Oct. '81 3
Ridge Avenue (Ph.).. 50	420,000	semi-an.	Oct. '81 11
Second Avenue (N.Y.)100	1,199,500	semi-an.	July '81 2½
Second&ThirdSt.(Ph) 50	771,076	q'rterly.	Jan. '82 4½
17th &19th sts (Ph.).. 50	250,000	semi-an.	July '81 3
Sixth Avenue (N. Y.)100	750,000	semi-an.	Oct. '81 5
Somerville (Boston).100	113,000	semi-an.	May '82 3
South Boston..... 50	600,000	semi-an.	July '82 4
Third Avenue, N. Y..100	2,000,000	q'rterly.	Nov.'81 5
13th and 15th sts.,Ph 50	334,529	q'rterly.	Jan. '82 4
23d street, N. Y.....100	600,000	semi-an.	Aug.'81 4
Union, Boston.....100	374,300	semi-an.	Jan. '82 4
Union, Phila..... 50	1,005,000	semi-an.	Jan. '82 7
West Philadelphia.... 50	750,000	semi-an.	July '77 10
CANALS.			
Chesapeake and Dela 50	2,078,038	semi-an.	June'75 2
Delaware Division... 50	1,633,350	semi-an.	Aug. '82 $1
Delawa. and Hudson100	20,000,000	q'rterly.	Sept. '82 1¾
Delaware & Raritan*.100	5,847,400	q'rterly.	July '82 2½
Lehigh Coal and Nav 50	11,204,250	semi-an	June'82 2
Monongahela Nav... 50	1,004,500	semi-an.	July '82 $3
Morris, consolidated.100	1,025,000	semi-an.	Feb. '81 2
" preferred....100	1,175,000	semi-an.	Feb.'81 5
Pennsylvania..... 50	4,501,200	.....	.....
Schuyl. Nav., com.*. 50	859,100	annual..	Au. '81 50c.
" " pref... 50	3,200,000	annual..	Aug. '81 $1
MISCELLANEOUS.			
Adams Express.....100	12,000,000	q'rterly.	Sept.'82 2
American Express... 50	18,000,000	semi-an.	July '82 3
Amoskeag Manuf.Co.100	3,000,000	semi-an.	June'81 5
Calumet&HeclaMin'g —	100,000 S.	q'rterly.	Aug. '82 $5
Central Mining Co....100	.....	semi-an.	Feb. '82 2½
Consolidation Coal..100	10,250,000	semi-an.	Jan. '82 2
George's Creek C.&I.100	.....	semi-an.	Jan. '82 3
Maryland Coal.....100	4,400,000	semi-an.	Feb. '76 1½
Mariposa L. &Mining100	10,000,000	.....	.....
" pref100	5,000,000	.....	.....
Missouri Val.LandCo100	200,000	semi-an.	July '82 12
National Tube Works100	1,000,000	q'rterly.	July '82 3
Pac. Mail Steamship.100	20,000,000	q'rterly.	Sept.'69 3
Pennsylvania Coal... 50	5,000,000	q'rterly.	Aug. '82 3
Pullman Palace Car..100	10,032,800	q'rterly.	Aug. '82 2
Quicksilver, com....100	5,708,700	.....	May '82 0.4
" pref....100	4,291,300	.....	May '82 6
Quincy Mining Co... 25	40,000 shs	semi-an.	Aug. '82 $5
Quincy R. R. Bridge.100	1,750,000	semi-an.	July '82 5
SiouxC.&I.F.L.&L.Co100	500,000	semi-an.	June'82 5
Spring Mt. Coal.....100	1,500,000	semi-an.	June'82 3½
Topeka Equip'nt Co.100	255,500	semi-an.	Apl. '82 5
United States Ex....100	7,000,000	q'rterly.	Aug. '82 1
Wells-Fargo & Co. Ex100	6,250,000	semi-an.	July '82 4
Western Union Tel..100	80,000,000	q'rterly.	July '82 1½

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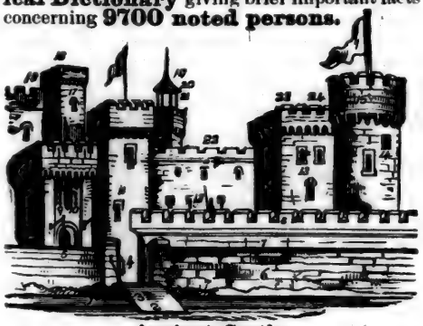
A GREAT Northern Railway train, with an eight-feet single driver outside cylinder engine, lately ran from Leeds to London, 186¾ miles, in exactly three hours—sixty-two miles an hour.

THE other day a spirited English traveler asked a Mormon woman why she was willing to marry a tenth of a man. She replied, "Because he is nine-tenths English and I married the other tenth."

OF those killed by railroad accidents in Great Britain last year by causes beyond their own control, the proportion was one to 27,050,435. The proportion of the injured was one to 630,354. The totals were 108 passengers killed and 1,854 injured, and of employes 531 killed and 3,445 injured. From trespasses, suicides, and miscellaneous causes death came to 467 persons, and injuries to 265. The risk of travel is seen to be extremely low.

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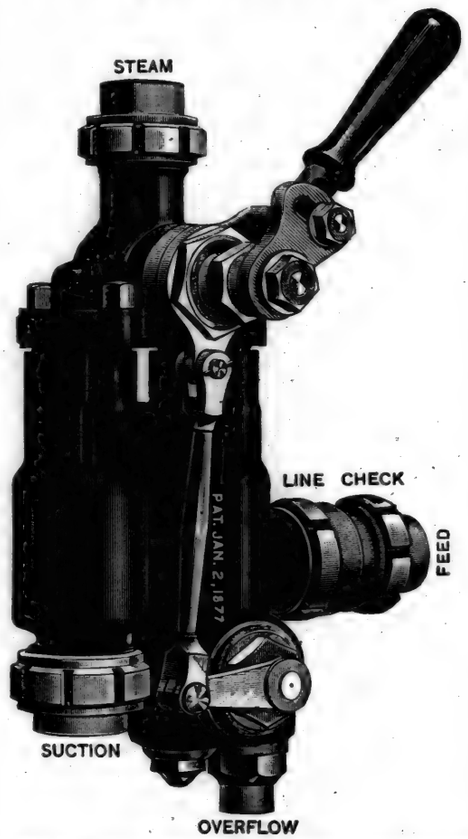
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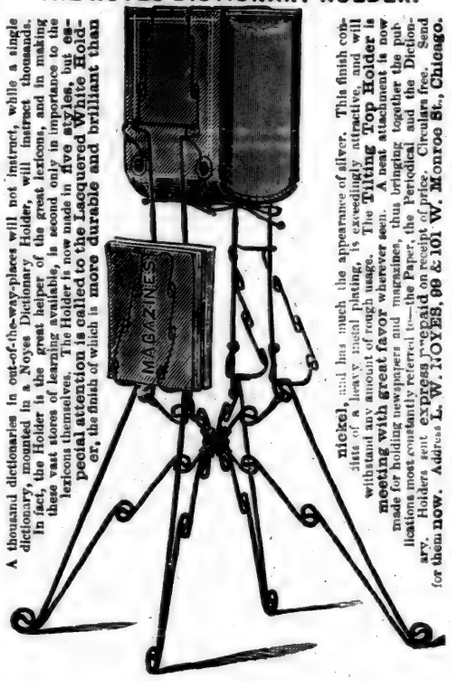
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NEW YORK, AUG. 2, 1882.

THE FORTIETH SEMI-ANNUAL CASH DIVIDEND of the ILLINOIS CENTRAL RAILROAD COMPANY, being three and a-half (3½) per cent on its capital stock, will be paid by the undersigned September 1, 1882, to shareholders as registered at the close of business on the 12th of August, after which and until the 5th day of September the transfer-books will be closed.

L. V. F. RANDOLPH, Treasurer.

THE LAKE SHORE AND MICHIGAN SOUTHERN RAILWAY CO.

TREASURER'S OFFICE, GRAND CENTRAL DEPOT,
NEW YORK, June 27, 1882.

The Board of Directors of this company have this day declared a QUARTERLY DIVIDEND of TWO PER CENT upon its capital stock, payable on Tuesday, the first day of August next, at this office.

The transfer-books will be closed at 3 o'clock P. M. on MONDAY the THIRD DAY OF JULY next, and will be re-opened on the morning of Friday, the fourth day of August next

E. D. WORCESTER, Treasurer.

[From our Special Correspondent.]

OUR ST. LOUIS LETTER.

WITH A PASSING GLANCE AT MEN AND THINGS OUT WEST.

THE bountiful crops which this year reward the labors of the farmers throughout the length and breadth of Missouri hold out to the numerous railroad companies running through this State the finest prospects for immense traffic. Transportation was never so extensive as it will be during the coming months on all our Western lines, and the vast and ever-increasing volume of business which the various roads are doing affords a gratifying proof of the steady and permanent progress which is being made in the development of the West generally. Districts heretofore unpeopled are fast becoming settled, and the hum of the mill and the ring of the anvil are now heard in places where, up to a short time since, one monotonous tract of timber land fell upon the view. It is truly marvellous how rapidly villages spring into existence out West; nor is it less encouraging to note the large number of lines of railroad which are being constructed to accommodate the growing wants of the people. Judging from present appearances many years cannot elapse before the great West is traversed by one endless chain of railroads, and judging from the success which has thus far attended those already built, there are millions in any similar enterprise that may hereafter be undertaken. In proportion as this section becomes populated, to the same extent will the lines become prosperous, and it is pleasant to observe that the roads seem fully alive to this important fact, and are using every legitimate means to induce emigration.

Our coming State Fair, which is fast acquiring a National reputation, promises to be the grandest event ever held in St. Louis. Space for exhibiting purposes is being applied for from all parts of the country—the railroads and steamboats running into our city have all decided on greatly reducing their passenger and freight rates for the occasion—and all the indications go to show that the first week of the coming October will be the most enjoyable of all the fairs ever held in our city. The Veiled Prophets' display will this year exceed in brilliancy all previous pageants, while the city will be illuminated at enormous expense. Twenty thousand special gas lamps are to be erected within a radius of six blocks in the heart of the business district, while Fourth and Fifth streets will each night present a scene of dazzling glory. The indomitable president of the Fair Association, Charles Green, Esq., is leaving nothing undone to bring about the results above foreshadowed, and there is now no doubt that the fair of 1882 will cause his administration to be long remembered with pride by our citizens, and with pleasure by the vast multitudes who will visit St. Louis during its coming six-day celebration.

The Helmbacher Forge and Rolling Mills of this city are at present working only a small force, the Union hands having all struck. This immense concern gives much employment, and it is to be sincerely hoped that whatever differences exist between it and its men may be speedily and amicably adjusted. In antagonizing labor-affording establishments like this the Union shows poor statesmanship and bad policy, and Mr. Helmbacher, as president, and Mr. Goetz, the secretary of the company, now declare that in future none but non-union men will be employed by them.

The St. Louis Bridge and Tunnel Company, after considerable skirmishing, has succeeded in getting the City Government to pass a law by which they can lay tracks in different streets and alleys adjoining their present premises. General Manager Taussig engineered the bill, and quietly "sat down" upon all opposition.

Capt. R.S.Hayes, senior vice-president of the Gould system of railways, is at present in New York, as is also General Manager A. A. Talmage, of the Missouri Pacific—both on important railroad business.

At the meeting of railroad men in Chicago last week an agreement was signed restoring full tariff rates on all lines running through southwest Missouri and Kansas. Mr. Thos. E. Cassidy, general freight agent of the St. Louis and San Francisco road, did the business with a well-timed speech.

General Manager Wheeler, General Superintendent Mellon, General Freight Agent Goddard, and General Passenger Agent White, of the Atchison, Topeka and Santa Fe Railroad, were in the city during the week. They are putting their rolling-stock in trim, and state that (crops, etc. included) they have now more traffic in sight along their line than they can move in eight months.

The Dundee Land Company, of Scotland, have purchased 44,000 acres of timber land in Missouri and Arkansas.

Railroad men here deny the rumor that Texas cotton rates are to be advanced 20 per cent in the fall. This denial is probably true, as there will be lively competition between the roads running through that State long before winter sets in.

C. H. Billings has resigned the local treasurership of the Cairo and Fulton Railway to accept the coal agency of the Missouri Pacific system.

A gravel train was ditched on the Iron Mountain road near Benton, Ark., Thursday, killing Conductor Mogart and badly wrecking the locomotive and 15 cars.

In this city and Chicago there is much talk of a probable railroad war, and reduced passenger rates.

It is stated the Arkansas Midland Railroad will join the Paramore combination in opposition to the Gould system.

J. C. Gault, Esq., the active vice-president of the Wabash, has been for a few days past in Chicago on business connected with his road.

The Texas and St. Louis Railway has completed its connections with Jonesboro, and are laying the track in other directions at the rate of 2½ miles per day.

D. W. C. Rowland, Esq., general superintendent of the Louisville and Nashville road, was in St. Louis a few days ago, *en route* to Denver, Col. Before leaving for the west he looked into one of the best conducted railroad offices in the city—that managed by another official of the road, Mr. John W. Mass, assistant general passenger agent.

The result of the recent interview in New York between presidents Ackerman, Cummings and Vanderbilt, is that a half million dollars will be laid out in building a depot in Chicago, to be jointly occupied by the Illinois Central, Michigan Central, Baltimore and Ohio, and the New York, Chicago and St. Louis railroads.

The northeast extension of the Houston and Texas Central Railway has been built into Terrell.

The Fort Smith people want the machine-shops of the St. Louis and San Francisco road built in their town, and held a public meeting to that end, and also to urge the building of the line into their city.

Mr. Frank S. Gault, the general and popular private secretary to the vice-president of the Wabash Railway, has been indisposed for several days past, but his numerous friends will be glad to learn that he is once more at his post, rejuvinated in health and vigor.

Mr. E. L. Dudley, superintendent of the Texas and Pacific Railway, came on a visit to St. Louis a few days ago, and while driving through one of our parks his horse took fright, upsetting his buggy, and breaking his arm.

A rumor is ventilated in railroad circles here to the effect that Mr. A. W. Soper, late superintendent of the Iron Mountain, was likely to take the management of Col. Paramore's narrow-gauge lines and their connections in Texas. The realization of this rumor would give the greatest satisfaction, for few men are more deservedly popular with all classes in this country than the gentleman named.

Mr. H. C. Townsend, of the Wabash, left Saturday to attend a special meeting of railroad men in New York. Col. Joseph Hill, of the Vandalia, left for the same purpose.

Coup's circus train was wrecked near Cairo, Ill., on Sunday. It consisted of two sections, the last of which ran into the first, killing three men and wounding thirty others.

Railroading occupations are as popular almost in St. Louis as "the army" is in London. In this city we have some of the most respectable young gentlemen, many of them very well-known in our best society, occupying positions of various grades in railroad offices. Mr. Fred. Paramore, the son of Col. J. W. Paramore, president of the Texas and St. Louis Railway, and one of our most wealthy and respected citizens, is so busy in his father's railroad office that he can scarcely afford a vacation; Mr. Frank S. Gault, son of John C. Gault, Esq., vice-president of the Wabash and one of the most prominent railroad men in the west, is situated precisely as young Mr. Paramore; Mr. Charles M. Hays, son of our efficient Postmaster, is the courteous private secretary to General Manager Talmage, of the Missouri Pacific, and Mr. H. Crittenden, son of the present Governor of our State, occupies a desk in the Wabash office. There are hosts of others who might be mentioned in this connection, and whom I may refer to in a future communication.

Mr. H. S. Knight, general passenger agent of the Chicago and Alton, is enjoying a well-earned vacation.

It is said that General Managers Potter of the C., B. and Q., Dodge of the Denver and Rio Grande, and Wheeler of the Atchison, Topeka and Santa Fe, will meet in New York soon to pool the differences which now exist between these roads.

It is pretty generally believed here that a combination has or will soon be entered into between the Houston and Texas Central, the Gulf, Colorado and Santa Fe, and the Texas and St. Louis railroads in opposition to the Gould roads.

P. H. T.

ST. LOUIS, August 24, 1882.

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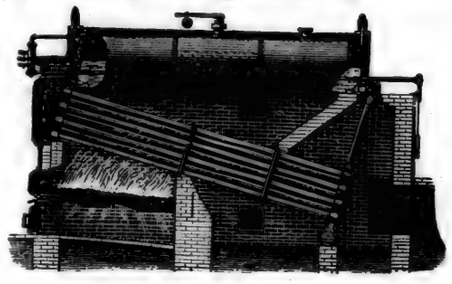
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Facts well worthy the consideration of travelers.

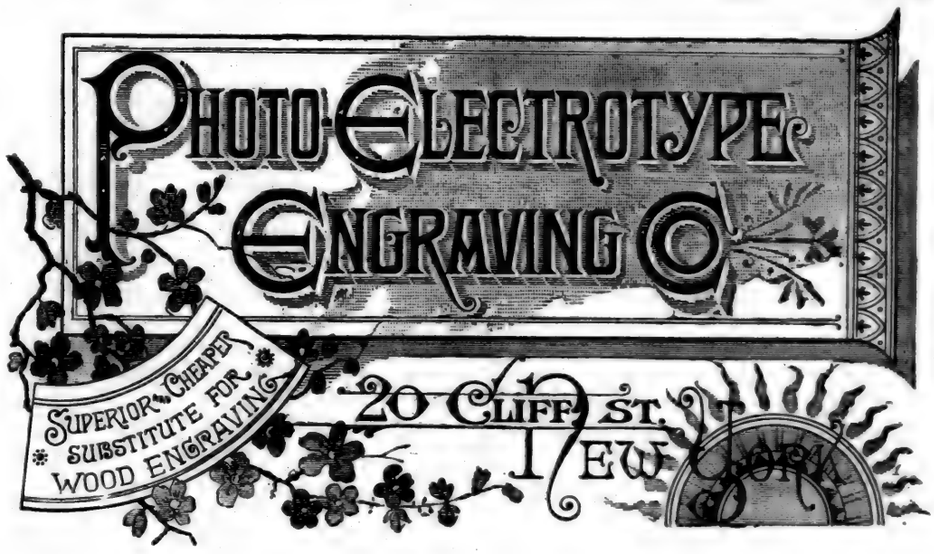
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OUR BOSTON LETTER.

[From Our Special Correspondent.]

THE JOURNAL MAN GOES TO THE MOUNTAINS.

STARTING one bright and pleasant morning when the cool Northwest wind made one long to go somewhere or do something, the representative of the JOURNAL betook himself to the depot of the Boston and Lowell Railroad for a flying trip through the mountain region of New Hampshire. Having heard much of the great beauty of the ride over the Boston, Concord, Montreal and White Mountains Railroad, he decided to go that route and see for himself. At the Lowell depot were to be seen those odd and comical sights to the close observer which are always to be noticed at railroad stations. Just before the train left a woman came hurrying down the station with a very small child in tow by one arm, and at times it looked as if the arm would come off. She was talking all the time to the child about the danger of losing the train, and as she talked she walked at the top of her speed, while the child scarcely touched the floor, but made its legs go in mid-air with the surety that if its arm held on it would get there as soon as she did. As is usual, the woman passed right by all the signs telling her where the trains went to, and going to the last car in the string, towards the engine, asked a brakeman standing there "if that train went to the mountains?" "Yes," he said. "Well, was he sure?" "Yes, he was." After two or three other foolish questions she dragged the panting young one into a car and was lost to public view. We started. No sooner had the writer settled down and begun to read the morning paper, and was edifying himself with the important fact that Arabi Bey's army had had its daily scare from two or three English soldiers (as the British dispatches read), than two of those creatures who make life miserable fo. other people who travel, came and took the seat back of him and began in a loud voice "that they might be heard for their much speaking," to tell where they had been and what individual feats, which ought to go into history, each one of them had performed while there. After standing it as long as he could, and devoutly wishing that they were in "Hades" or somewhere else, the JOURNAL man changed his seat to another car.

The journey from Boston to Concord is without especial interest, and too well known to need any description. Our train was heavily loaded and ran slowly. At Concord the Boston, Concord and Montreal Railroad is reached, and here the beauty of the journey begins. As we pull out of Concord one can realize that he is in the Granite State, for, on the left, high hills rise up from which the foundation granite looms out in large quantities, furnishing the supply which annually goes from Concord to all parts of the country. After a brief run, Tilton, a pretty place, is reached, and from this station northward the scenery increases in wildness and beauty, one might say with every revolution of the drivers. The horizon begins to be fringed with mountains, while the foreground, a rolling country, heavily wooded, has a very pleasing aspect to the eye. Laconia is the next station of importance, a lively manufacturing town. Here are located the Laconia Car Works, whose handiwork is found on many of the railroads of the Union. From this point the road runs for many miles along the side of Lake Winnipiseogee, noted for its natural beauty. The lake is about 25 miles long and from 10 to 12 wide, and one wonders, as he looks at it, if the water knew before it started on its long journey to the ocean how much work it had to do before it got there, it would start. This lake has an outlet into the Merrimac River, which turns more spindles than any other river in the world, it turning at Manchester, N. H., 400,000, and at Lowell, Mass., 800,000, and nobody knows how many more at Lawrence and the rest of the places it goes through.

The Boston, Concord and Montreal Railroad is very smoothly laid and the cars well and handsomely built, and the ride over it very enjoyable. At Weirs, our next stopping place, boats can be taken for Center Harbor, and a sail among the many islands of this beautiful lake is worth taking. The scenery is very grand. Mountains on every hand, which, with the beautiful blue of the water, the wooded foreground, and the massive peaks, towering in some instances to the clouds, form a scene which is seldom surpassed, no matter where one may go. The Boston, Concord and Montreal Railroad runs for miles at the side of this lake, and even if one has no time to linger by the way, a trip over this road refreshes the eyes of ye city man wearied with looking at hot brick walks in a manner that can only be appreciated when tried. A little steamboat, named the Mayflower, was in at Weirs Landing, the shape of whose hull must resemble that of its venerable but illustrious predecessor in the waters of Cape Cod Bay. After leaving the lake we follow the course of the Pemigewasset River, climbing a long grade and running through woods.

One thing about the B., C. and M. is worthy of mention, *i. e.*, their locomotives are all wood burners, and there is an almost entire absence of cinders. One can even put his head out of the window and run small risk of injury to the eyes, while the privilege of having the car windows open was enjoyed by many, the fresh cool mountain air entering in such invigorating quantities as to make the writer as hungry as the proverbial bear, and all the more ready to enjoy the fine repast which was set before him at the Pemigewassett House at Plymouth, where the train next stops for dinner. At this place the new Pemigewassett Valley Railroad to Fabyans is in process of construction, and large amounts of material are here stacked up. This road will be controlled by the B., C. and M., and will give them a 35-mile shorter route to the White Mountains.

It was noticed all along the line that wherever any spare rails were kept four posts were set in the ground, cross timbers laid parallel, and the rails deposited on these at a height of about four feet from the ground, thus preserving them from dampness in summer and snow in winter. Warren, a famous resort for ye followers of old Isaak Walton, is our next stopping place, where is Mt. Moosehillock, the highest peak this side of Mt. Lafayette, one of the most celebrated of the White Mountains. Moosehillock rises to a height of 4,811 feet, and looks down on those around it. The village is surrounded by mountains on all sides. The scenery gets wilder as we proceed, the peaks outlining themselves against the sky with almost the vividness of a silhouette; two lofty mountains being apparently composed of solid rock, one of them presenting a perpendicular rock face of at least 2,000 feet without a break, and having only here and there a tree or shrub clinging in some crevice. It was also noticed that rock was a large part of the composition of them all. The grade as we leave Warren is 75 feet to the mile, and we go up it very slowly. This road has some very heavy grades on its branch which connects with the Mt. Washington Railway, it being at one place 126 feet to the mile. After passing the Warren Summit, as it is called, we ran for some distance along the head-waters of the Connecticut, which is here the dividing line between New Hampshire and Vermont, the mountains on the Vermont side coming close to the river; and the views as we occasionally got a sight of the Connecticut Valley for 10 or 20 miles were exceedingly fine.

After passing Lisbon station the road branches away from the river but soon joins another one called the Amonoosuc, on which is the lively town of Littleton, celebrated as a summer resort, and whose scenery is quite famous. A great many buckskin gloves are made here. Above Littleton the grandeur of the mountains increases, and at Wing Road we get a sight of Mt. Washington and some of the more famous of the range. The Tip-Top House is plainly visible from here, and a branch road takes travelers to Fabyans, the Profile House, the Notch, and various other noted places of resort.

A very large number of people pass over this popular route every summer, it being one of the best and most attractive of the ways to the mountains, about which too much has been written for the writer to add anything. The remainder of the way has not much of interest up through Lancaster until Groveton is reached, where the Stratford peaks and other lofty eminences are in sight, giving to the sojourner here an ever changing panorama of mountain views. The B., C. and M., connects here with the Grand Trunk Railway for Portland or Montreal. All of the streams for the last 50 miles seem to be utilized largely by saw-mills, of which wood for locomotives and ties for railroads, with sawed and dressed lumber, are the productions. At Whitefield, south of Groveton, are the works of the Brown Lumber Company, one of the largest in the State. The streams are all blocked with logs, and the spring drives are tremendous. A feature to be noticed at all stations was that a crowd would come down for the daily excitement of seeing the train come in; among it would be here and there apparently business men taking a rest, with their hands folded behind them, and that bored I-must-take-it-easy air which a live man always wears, when either by virtue of his wife's entreaties, or the health of his children, he finds himself tied down in a small country town with nothing in the world to do but loaf; and what is harder than that.

The times for longing "for a lodge in some vast wilderness" during the hot weather, which used to be so popular, is past, and we Americans are fast getting into that state wherein nothing is more irksome than to have nothing to do. The ride which the JOURNAL man took is one of the prettiest and best there is within so short a distance of Boston (Groveton Junction being only 220 miles), and if one wants rest (without being bored) and a change of scene and air, he could not do better than to take a flying trip through this delightful region as I did. "CURTIS."

BOSTON, August 24, 1882.

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The McLeod Air Railroad Signal.

THE production of a thoroughly reliable automatic railroad signal has long been an acknowledged desideratum, and innumerable experiments have been made, but the machines and electrical appliances heretofore used and so much depended on proved so uncertain and inefficient that railroad companies hesitate to trust any of them as an only safeguard against collision on their roads. It is believed that the McLeod Air Signal will give a perfect warning to both trains and people at crossings, and it has been practically tested by several railroads and found to work perfectly, while it is so simple that it is not liable to get out of order, and relatively so inexpensive that its general adoption seems assured.

Below we give cuts and description. The active forces are simply gravity and common air.

Fig. 1.

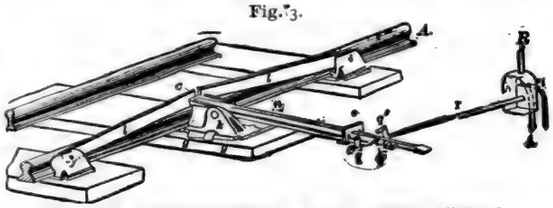


Fig. 1. shows a highway grade crossing or station signal and its timely warning. Fig. 2 shows the often result at crossings with the ordinary sign board. Near by is shown the bellows house and "*Block Signal*" standard of this signal, which is made of iron, thus safely protecting the mechanism, and which may be placed by the side of the track, at any desired distance from the place to be signalled, usually about one-third of a mile, and connected with the signal by a pipe laid in the ground.

Fig. 3 shows the mechanism acted upon by the trains, and its connection with the track. *A*, track rail; *j*, incline bar chairs, fitted to the flange of the rail; *k*, fulcrum chair, also fitted and fastened to the flange of the rail, and into which is pivoted the actuating lever *p*; *l l*, are two reverse incline bars placed parallel with the outside of the rail, their outer ends interlocked into a recess in the chairs, *j*, *j*, a little below the top of the rail; their meeting ends are interlocked with the short arms of the actuating lever, *p*, by which they are normally kept on an incline above the rail, whereby the short arm of the lever is depressed by the car wheel passing over the bar, thus throwing up the long arm of the lever, which is caught and held by a catch lever pivoted in the bellows house, in which also is placed an air bellows, the top and bottom of which is made of cast iron, and covered between by leather, specially tanned and coated with rubber and fastened together by hoops, to work like an ordinary blacksmith's bellows, thus making it perfectly air tight and durable. *N*, *o*, *q*, *q*, *r*, and *R*, *i*, *t*, shows a mechanism for shifting the air in either direction by a train passing both ways on a single track, and thus prevent wrong or back signalling. A spring is placed between the bellows and the lever, to yield to the sudden action of passing trains, and being compressed, presses gradually against the bellows and forces the air to the signals, where it expands a valve, which sets a *train indicator*, consisting of two discs, one of blue color facing the engineer, to indicate to him that all are warned in advance of the approaching train, and the other color to indicate danger on the track. It also sets in motion a clock mechanism, operated by a weight, which drops a *conspicuous sign* to view with inscription, "*Train coming! Look out!*" (see cut) and also *rings a gong* nearly as loud as an ordinary locomotive bell, thereby warning passers on the highway or at the station of the approaching train, both by visible and audible signals; *and none need fail* to have their attention called to the fact that a train is coming, and that crossing the track is attended with risk and danger of life, and so signals for a given time or until stopped by the passing of the train, which also winds it up.

To more conspicuously announce the approaching train, a lantern is suspended in full view, to revolve on pivots by means of a spiral wire connecting it with a wheel in the clock mechanism. For highway crossings or stations the lantern is colored red on opposite sides, and has a pin projecting from one side, and connected with the movable signal in such a way as to stop its revolving by the stopping of the signals, while the red shows in both directions of the track, so that in case of any accident to the signal, the approaching engineer will be notified, thus making it an *absolute signal* for either "*Safety*" or "*Danger.*"

Fig. 3.



TRACK CONNECTION AND OPERATION.

To avert disasters by collision of trains, a "*Block Signal*" is provided to be placed at the commencement of curves or other such dangerous places. It consists simply of a movable disc placed in the bellows house standard, and connected by a rod and lever with a valve on top of the bellows, and is moved to "*Danger*" by the air from the bellows expanding the valve. Another pivoted-lever locks the disc at "*Danger*" when thrown up, which is connected with another valve at the end of a pipe leading to another bellows a suitable distance away, and the operation of which moves the locking lever and allows the disc to move to "*Safety.*" As will be seen, a train passing the "*Block Signal*" sets it at "*Danger*" to "*Block*" a following train from running into it while in that section. It remains locked until the train passes the other bellows, which forces air back to release the locking lever; and by placing them interlapping at all intermediate and dangerous places, an absolute, reliable and inexpensive automatic "*Block Signal*" is thus provided, to prevent trains dashing into each other on the track, and thus save life and property.

By the use of different colored or parti-colored lanterns, a complete set of signals can be arranged for junctions and grade crossings, and for use on curves and dangerous places. We have examined the signal, and it certainly seems to be all that it is claimed to be; and the company have received many letters, which we read, speaking in terms of highest praise of the efficiency of the signal. *Only one second of time* elapses between the moving of the actuating lever and the moving of the valve *one-third of a mile away*, and in *three seconds* the gong is sounded and visible signals given, and so continues until the train passes and stops it. In case of a train stopping before it reaches the signal, it is so arranged as to automatically stop itself in three minutes.

Fig. 2.

In fact the invention is adequate to each and every form of signal required. The bar requires at least 1,200 lbs. to work it, and the mechanism is so inclosed in an iron house to protect it from the weather, that it cannot be tampered with by the boys. Being operated and wound up by the weight of passing trains, it is entirely automatic, reliable and inexpensive in its use, and not affected by atmospheric changes.

This company have in process of construction an automatic crossing gate, operated on the same principle as the signals, and also an air switch-signal, attachable to all switches and draw-bridges, so arranged by means of a double air action as to absolutely insure its operation, and when the main track is switched to the right, it will display a right hand danger signal about one-quarter of a mile each way, to notify any approaching engineer, and *vice versa*, left hand. It is also applicable for yards and stations, to signal coming and going trains; and its cost is nominal, and its operations are entirely automatic and inexpensive.

Orders have been received so fast that it has been impossible for the company to meet them. They are now fitting up a new shop with machinery specially adapted, and will soon be in a position to meet the demand. The company's office is at No. 4 Pemberton Square, Boston, Mass.

THE English postal authorities have made arrangements with the railroads for a "parcels post." Fifty-five per cent of the receipts are to go to the companies and forty-five to the Government. Six cents for parcels weighing less than one pound will be charged.

THE Baldwin Locomotive Works, Philadelphia, are pressed with work. The delay occasioned by the Pittsburgh strike, which interfered with the reception of iron, is over, and shipments of locomotives proceed as usual. The firm expects to turn out about 570 engines this year, being a few more than last year's consignments—555, the largest number ever built by any one firm in the world.

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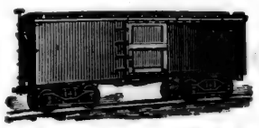
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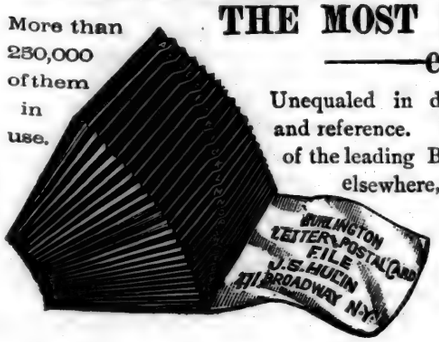
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N. B.—Send for Stock List

Philadelphia and Reading Companies.

The following is the comparative statement of the Philadelphia and Reading Railroad Company and the Philadelphia and Reading Coal and Iron Company for the month of July, 1882 and 1881 :—

	1882.	
GROSS RECEIPTS.	*Profit for mo.*	*Year to date.*
Railroad traffic	$950,435 86	$5,469,847 23
Canal traffic	48,928 58	41,703 21
Steam colliers	*l*2,598 85	183,013 23
Richmond coal barges	*l*2,133 58	*l*14,382 59
Total Railroad Co	$994,632 01	$5,680,181 08
Reading Coal & Iron Co.	113,675 02	439,740 68
Total of all	$1,108,307 03	$6,119,921 76
TONNAGE & PASSENGERS.	*Month.*	*Year to date.*
Tons of coal on railroad	779,931.07	5,094,661.09
Tons of merchandise	575,703.17	4,922,300.08
Passengers carried	1,154,791	7,587,452
Coal transp. by steam colliers	44,611.00	369,419.02
TONS OF COAL MINED.		
By Coal and Iron Company	396,101.05	2,416,639 11
By tenants	135,328.11	925,301.15
Total mined from lands owned and controlled by Co. and from leasehold estates	531,429.16	3,341,941.06

	1881.	
GROSS RECEIPTS.	*Profit for mo.*	*Year to date.*
Railroad traffic	$833,311 22	$4,935,634 07
Canal traffic	72,873 42	174,700 17
Steam colliers	19,892 13	136,923 30
Richmond coal barges	*l*592 71	*l*1,200 55
Total Railroad Co	$925,484 06	$5,247,997 05
Reading Coal & Iron Co.	165,570 80	531,595 44
Total of all	$1,091,060 86	$5,779,592 49
TONNAGE & PASSENGERS.	*Month.*	*Year to date.*
Tons of coal on railroad	747,728.05	4,828,190.04
Tons of merchandise	584,657.15	4,124,626.19
Passengers carried	999,085	6,582,088
Coal transp. by steam colliers	51,705.16	354,065.05
TONS OF COAL MINED.		
By Coal and Iron Company	392,375.10	2,244,997.06
By tenants	127,219.10	908,995.07
Total mined from lands owned and controlled by Co. and from leasehold estates	519,595.00	3,153,992.13

Total of both companies for the month of July, 1882 : Gross receipts, $3,448,790.28 ; gross expenses, $2,340,483.25—profit, $1,108,307.03.

Commerce of the United States.

The imports at all the ports from foreign ports for the year ending June 30, were:

	1881.	1882.
Merchandise	$642,604,628	$724,623,317
Coin and bullion	110,575,497	42,472,390
Total imports	$753,240,125	$767,095,707

The exports from all the ports to foreign ports for the year ending June 30, were:

	1881.	1882.
Produce and merchandise	$902,377,346	$750,351,173
Coin and bullion	19,406,847	49,412,576
Total exports	$921,784,193	$799,763,749

For the year ending June 30, 1881, the exports of produce and merchandise exceeded the imports of foreign products, exclusive of specie, $259,712,718; for the last year the difference is only $25,727,856, a change in the balance of trade, outside of the precious metals, of $233,984,862 in a single year. In the former year the imports of specie exceeded the exports of coin and bullion $91,168,650; in the latter year we exported $6,940,186 of the precious metals more than we imported. These changes are very significant. For the last four months of the year the balance of trade was against us, even adding in the shipments of coin, as will be seen by the following comparison:

1882.	Total imports.	Total exports.	Excess imports.
March	$70,064,121	$67,369,694	$2,694,427
April	67,967,980	61,276,217	6,691,763
May	69,166,171	64,241,076	4,925,095
June	63,742,359	57,859,024	5,883,335
Total	$270,940,631	$250,746,011	$20,194,620

This shows that for four months, notwithstanding the considerable exports of specie, the balance of trade against us has amounted to $20,194,620. Unless the larger harvests and lower rates for cereals enables us to overtake the heavy imports with largely increasing exports, this may continue until it is severely felt in every channel of business.—*Journal of Commerce.*

Commerce of New York.

The foreign imports at New York for the month of July were :—

	1880.	1881.	1882.
Ent. for cons	$20,427,942	$19,572,873	$22,090,260
Do. for warehousing	10,923,589	7,374,808	10,252,378
Free goods	8,924,494	8,531,972	11,552,080
Specie and bullion	552,272	649,820	162,880
Total ent. at port	$40,828,297	$36,129,473	$43,954,598
Withdrawn from warehouse	7,977,599	6,824,490	7,904,851

The foreign imports at New York for seven months from January 1, were :—

	1880.	1881.	1882.
Ent. for cons	$143,999,637	$124,879,979	$152,224,515
Do. warehouse	77,401,050	54,318,779	64,198,743
Free goods	72,816,039	69,695,400	76,359,010
Specie and bullion	5,167,832	30,384,755	2,113,645
Total ent. at port	$299,444,558	$279,278,919	$294,895,913
Withdrawn from warehouse	47,734,947	54,921,032	52,658,459

Received for Customs at the Port of New York :—

	1880.	1881.	1882.
In Jan	11,960,677 78	10,572,559 15	13,387,515 96
In Feb	12,254,602 24	11,217,760 87	13,585,053 25
In March	14,469,557 05	13,122,964 03	13,999,138 76
In April	11,901,071 43	11,678,760 93	11,900,105 45
In May	9,752,873 54	11,055,935 39	11,981,893 08
In June	10,699,840 52	10,993,452 70	11,428,930 11
In July	13,360,394 37	12,079,573 95	13,730,752 87
Total 7 mos.	$84,398,917 53	$80,721,013 02	$90,019,389 48

The exports from New York to foreign ports for the month of July, were :—

	1880.	1881.	1882.
Dom. produce	$38,584,961	$31,016,490	$28,861,855
For. free goods	211,950	359,051	659,611
Do. dutiable	383,316	344,962	391,298
Specie and bullion	459,111	1,047,467	5,580,826
Total exports	$39,639,338	$32,767,970	$35,493,590
Do. exclusive of specie	39,180,227	31,720,503	29,912,764

The exports from New York to foreign ports for seven months from January 1, were :—

	1880.	1881.	1882.
Dom. produce	$229,864,345	$208,592,134	$180,420,963
For. free goods	1,660,753	5,400,945	3,321,439
Do. dutiable	2,638,606	3,726,935	3,888,583
Specie and bullion	5,179,982	7,400,249	41,492,432
Total exports	$239,343,686	$225,120,263	$229,123,417
Do. exclusive of specie	234,163,704	217,720,014	187,630,985

The latest thing out is the President's flag, which was displayed for the first time on the United States steamer Dispatch, when President Arthur left Washington for New York. The flag is thus described : Size, 14 by 11 feet ; material, blue bunting. In the center is the American coat of arms—the American eagle, holding in its mouth the pennant, on which is inscribed "*E Pluribus Unum*," perched on a shield, grasping in one claw a bunch of arrows, in the other a bunch of oak leaves. Above the coat of arms, arranged in a semi-circle, are 13 white stars representing the 13 original States.

The new buildings of the Lobdell Car Wheel Company, in South Wilmington, Del., are completed and the first casting was done there on the 15th inst.

The Canadian Pacific Railway Company has issued instructions to all its eastern agents to impose a discount of 5 per cent upon American bills, and 20 per cent upon American silver. This step has been rendered necessary by the large quantities of American currency offered in payment of fares and freights, at country stations mainly.

At a meeting of the merchants and manufactures of Louisville, Ky., held at the Board of Trade Rooms in that city on the 12th inst., it was decided to celebrate on the 13th of September, the opening of the Chesapeake and Ohio, and Southwestern and St. Louis Air Line railroads by an industrial street pageant, by exhibitions of the Louisville Fair Association and Louisville Exposition, by decorating houses for the entire week from the 11th to the 16th proximo, and by a general illumination of all houses on the night of the 12th.

The iron steamship Albatross was successfully launched on the 19th inst., from the shipyards of the Pusey & Jones Company, Wilmington, Del. She is 200 feet long, 27½ feet beam, 16¾ feet depth of hold and of 800 tons burden. She is built expressly for the United States Fish Commission and will, on completion, leave for the London Exposition, stocked with Government and private exhibits. She will be provided with deep-sea dredges and other apparatus. She will have two compound engines, 18 and 34 inches in diameter, and 30-inch stroke, with surface condenser driving twin screws.

Messrs. John A. Hambleton & Co., of Baltimore, Md., and associates, have recently purchased 24,232 acres of coal, timber and iron land lying on the Great Kanawha River and the Chesapeake and Ohio Railroad, in Fayette county, W. Va. This tract, known as the "Loup Creek Estate," is one of the most valuable in the coal regions of West Virginia, as it has both railroad and water transportation ; and in addition to the vast quantities of fine oak and poplar timber and splint and bituminous coals, it contains several large veins of fine coking coal. It is probable that a railroad will in a short time be built through the property from the Chesapeake and Ohio Railroad so as to fully develop it.

Within a few years past the manufacture of iron rails for the use of railroad companies has almost entirely ceased, by reason of the superior excellence of steel rails. By reason of the cessation of the demand for iron rails, there has been less activity at the mills of the Abbott Iron Company, located at Canton. The president, C. H. Ashburner, and the directors of the company, in this emergency determined to effect a change in the mills so that steel rails could be produced instead of iron rails, as in former years. With this purpose in view, and in order to obtain the facilities to enable them to succeed in the new enterprise, the officers executed a mortgage for $200,000—all its property, consisting of sixteen lots of ground, and improvements, consisting of rolling-mills, with the machinery therein contained—to Charles Wheeler, John M. Kennedy and William Matthews, of Philadelphia as trustees. The mortgage was filed for record in the Supreme Court, Baltimore, on the 17th inst.

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One new 3ft. Gauge Saddle Tank Engine, delivery this month.
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Three Second-hand Passenger Coaches in good order.
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The Devil's Bridge.

It is an enchanting drive to the Baths of Lucca. The white road, dazzling and dusty, first runs across the flowery plain to the foot of the hills, and then follows the Serchio far into their recesses. Picturesque villages with widely overhanging roofs and pergolas of vines bowed with their purple grape clusters cling to the sides of the hills. Roses, especially our common China roses, are formed into hedges amid which a shrine with a picture or an image of a saint peeps out here and there. The corn-fields are red with gladiolus and poppies or blue with corn-flowers. High above the olives the tall cypresses shoot up into the sky. At length, in the narrowest part of the valley, we come upon the old bridge, the Ponte della Maddalena, built by Castruccio more than 500 years ago, with one of the highest and widest arches in Italy, raised even far higher than the roofs of the neighboring houses to be out of the way of the sudden floods which characterize the river. So high is it that the peasants believe it impossible that it could have been built by human hands, and it is often known by the name of Ponte del Diavolo. When the builder was in despair, they say, the devil came by night to help him, but demanded the first passenger across the bridge as his reward. In the morning the bridge was finished, but the man outwitted the fiend by making a dog cross the bridge first. So furious was the devil at his disappointment, that he seized the animal and dashed it with such force upon the ground that it went through the center arch, and was carried away by the flood, "in proof of which," say the condini, "the hole which the dog fell through might be seen under the present pavement to this day."

Romance of the Golden Ledge.

A story about which there is a fascination which it is impossible to resist when you hear men tell it is that of the "Home of Gold." Somewhere in southwestern New Mexico, in the Sierra Madre, it is said there is a wonderful valley. Small, inclosed in high rocky walls and accessible only by a secret passage, which is known to but few, is this extraordinary place. It is about ten acres in extent, has running through it a stream, which waters it thoroughly and makes it a perfect paradise, with its exquisite flowers and beautiful trees. In it are thousands of birds of the most beautiful plumage. Running across it is a ledge of pure gold about thirty feet wide, which glistens in the sunlight like a great golden belt. The stream crosses this ledge and, as it runs, murmurs around blocks of yellow metal as other streams do around pebbles. The ledge of gold is supposed to be solid gold and to run down into the center of the earth. The legend is of Indian origin and around it clusters a number of Indian stories, in which the name of the ill-fated Montezuma occurs frequently. The descendants of the Aztecs believe firmly that the day will come when Montezuma will return and free them from the dominion of the descendants of the Conquestodores. They believe that the money necessary for this work will be taken from the Madre d'Oro. The secret of the entrance into the valley is carefully guarded by a tribe of Indians living near it, and among them it is only communicated to the oldest men, amid the solemn ceremonies of the medicine lodge. Having such a story to work upon there is little wonder that the vivid imagination of the Mexicans should have built upon it tales of men who have found this wonderful place. One is that a certain Jose Alvaraz, while wandering through the mountains in search of game, saw the valley from the top of the wall. Finding that he could not hope to enter by climbing down, he took up his abode with the Indians who guard the canyon leading into it. The daughter of the chief fell in love with him and betrayed the secret to him. Exactly how she found it out they do not tell. Having been shown the entrance, Jose went in and would possibly have gotten away with some of the gold had he not weighted himself down to such an extent that he could not get up the declivity at the lower end of the passage. He was discovered and the Indians sacrificed him on the golden ledge with all the terrible ceremonies of the Aztec religion. She, in despair at losing him, threw herself from the high walls into the valley below. Hundreds of prospectors have spent months of toil trying to find the Madre d'Oro, but it is scarcely necessary to say without result.

Spencerian Ink.

Complaints are constantly made of difficulty in getting good ink; and as novelties are continually being brought out, they are tried in the hope that they may prove free from the usual defects. Few of these succeed in permanently securing any share of public support. In the meantime, inks of established reputation, manufactured with all the improvements that long experience can suggest, are easily to be obtained.

Probably, in some cases the durability of the ink is of little consequence—the writing has done its work in an hour or two; but occasions constantly arise which give great importance to writings, or perhaps to the mere signature of a name. The usual inkstand is, of course, resorted to, and if an inferior ink is commonly used, the result may possibly be disastrous.

Many of the fancy inks at present in vogue are only dyes, which form no chemical combination in the paper, are soluble in water, and can, therefore, if necessary, be simply washed out. The pleasant flow from the pen, and non-liability to thicken of some of these inks, are due to their being only solutions of color, but the use of them for writings of any importance is dangerous.

It is claimed for the Spencerian Ink that it is made from recipes which have been in use in England for over one hundred years, and that the ink forms a chemical combination in the fibre of the paper due to the action of the air, and that the black so formed remains unimpaired for a great number of years. When first used from the bottle it writes a pale blue, but dries a jet black. It does not thicken in an inkstand, flows easily and smoothly, and is particularly well adapted for use in hot weather, when much difficulty is experienced with many kinds of inks.

Double Time-Keeping.

An invention has just been patented by which the time of two distinct places, at whatever distance situated, can be simultaneously marked on the face of a watch or other time-piece without interfering with the fixed time which it is desired to keep or necessitating the moving of the hands of the piece. This invention consists of two supplemental movable rims, working independently of the fixed dial and of each other. The inner rim is divided into hour sections, the outer one into minutes. Two tiny wheels, projecting slightly from the metal bezel which holds the crystal in position, enable the wearer to bring the hour and minute at which he wishes to set these movable dials exactly opposite the hour or fraction of hour and minute respectively then and there indicated by the hands of the fixed dial. By this simple device two different times are kept at the option of the wearer. The convenience of such an arrangement to the traveling public is self-evident. These supplemental dials may also be used for the recording of engagements, as either hour or minute chronographs, and for a variety of other purposes which will readily suggest themselves to the reader. The inventor is Mr. John J. D. Trenor, of this city.

The Seashore Railroad.

The new Seashore Railroad between Cape May City and Cape May Point, which was opened on the 17th inst., is thus described by the Cape May *Wave*:—

"The road runs along the beach and is built upon a terrace which is protected from the rubbing of the waves by pilings driven in the sand and cedar brush winrowed in behind them; these form a barrier against the waves. The wind blows the sand against the work, where it is checked, and the result is a natural barrier is formed by what would otherwise have been a hindrance to the permanency of the work. The wooden material of the road is of the very best, being composed of seasoned Florida pine. The crossing at Devine's Inlet, about 270 feet wide, is of crib work, very substantial indeed, and as solid as a rock. Each crib has a foundation of 3-inch plank and an 8x12 base, thoroughly fastened with eight large screw-bolts, and 12x12 inch stringers. The entire length of the road is 8,474 feet. The work reflects much credit upon the engineer in charge, and we don't see how it could be better built, or smoother and freer from jolt or jar. As to its position as relates to the ocean, there is nothing equals it on our whole coast; you may almost touch the waves with your cane at high-water as the train whisks along just clear of them."

The North Carolina State Fair, to begin in Raleigh, October 9, and to continue to the 14th, inclusive, promises to be the most successful exhibition ever given in the old North State. Every industry throughout its borders is in a highly prosperous condition, and the exhibition promises to partake somewhat of the character of a thanksgiving occasion.

AMERICAN Railroad Journal.

ESTABLISHED 1831.

Steam Navigation, Commerce, Finance, Banking, Machinery, Mining, Manufactures.

SECOND QUARTO SERIES.—VOL. XXXVIII., No. 34.] NEW YORK, SEPTEMBER 2, 1882. [WHOLE No. 2,419.—VOL. L

CONSTRUCTION.

THE Stony Clove and Catskill Mountain Railway was formally opened from Phœnicia to Hunter, N. Y., on the 29th ult.

THE contract for the earthwork on the Lake Erie, Wooster and Muskingum Valley Railroad has been awarded to J. J. Maney, of Alliance, for $23,000.

A CONTRACT has been entered into for the construction of a line of railroad from the Jersey Shore and Pine Creek Railroad to the Snowshoe coal fields.

THE line of the Buffalo, Pittsburgh and Western Railroad has been completed to Buffalo, but trains will not be run over it until the middle of September.

It is said that railroad building in Texas has come to a stop in consequence of the short-sighted and unwise, as well as oppressive laws enacted by the Legislature.

A DOUBLE track is to be laid along the Delaware and Raritan Canal, upon the line of the Pennsylvania Railroad, between the cities of Trenton and Bordentown, N. J.

A CONNECTION was made at Grand Crossing on the 27th ult. between the New York, Chicago and St. Louis and the Illinois Central railroads thus giving Chicago a new trunk line to New York.

THE right of way for a railroad connecting Walla Walla (W. T.) with the Baker City Railroad has been secured, and things look bright for an early beginning and speedy completion of the road.

W. W. REED, of Erie, Penn., has been awarded the contract to build the twenty mile extension of the Shenango and Allegheny Railroad from Coalville Junction to Butler. The work has already been begun.

CONNECTIONS are being completed on the New York, Chicago and St. Louis Railway between Chicago and Buffalo. An inspection train, with the officers of the road, left Chicago on Wednesday for a trip over the line.

THE California Northern Railway is now at a point within ten miles of Tehama. It is thought that the road will be completed by the 10th of September, and that through trains from Redding will commence running at once thereafter.

THE New River branch of the Norfolk and Western Railroad from New River Bridge to Pocahontas, 72 miles, will be completed early in the fall. The coal field at the terminus will furnish 1,000 tons a day by the time the road is finished,

THE North and West Branch Railroad has been completed to Nanticoke, at which place connections are made with the Central Railroad of New Jersey. Coal trains will be run on the road from Wilkesbarre to Catawissa on the 4th of September.

IT is expected that the Pittsburgh and Western Railroad will be completed from Pittsburgh to Bradford, by the way of Butler, by the 10th of September. It is intended at the same time to run from Pittsburgh to Youngstown by way of New Castle.

A TELEGRAM from Regina, the new capital of the Northwest Territory, announces the completion of the Canadian Pacific Railway to the Pile of Bones River. Construction trains have crossed the site, and track-laying is now proceeding two miles beyond it.

IT is said that the St. Louis and San Francisco Railroad Company has virtually abandoned the project of building from Pacific, Mo., to St. Louis. It will, however, build from Pacific to Kirkwood, and thence continue to use the Missouri Pacific into St. Louis.

THE Northern Pacific Railroad authorities say there remain but 497 miles of their track to be laid to form a continuous rail connection from Lake Superior to Puget Sound. For more than half this distance the road-bed is graded, and ties are distributed ready for track-laying.

The Wheeling and Lake Erie is completed from Toledo to Valley Junction, a distance of 155 miles, where it is met by the Valley Railway from Cleveland. The road when complete will be 406 miles long, and extend from Toledo, O., to Wheeling, W. Va., with branches from Valley Junction to Cleveland and Marietta.

THE Chicago and Atlantic Railroad has just been completed, and will be opened October 1. It is 257 miles in length, extending from Chicago to Marion, Ohio, where connection is made with the New York, Pennsylvania and Ohio Railroad, and through that road with the New York, Lake Erie and Western Railroad.

Track has been laid on the Atlantic and Pacific Railway to a point 365 miles west from Albuquerque. Work is now in progress on the Johnson Canyon Bridge. The Southern Pacific is advancing toward the Colorado River, and is now west of the river about the same distance the Atlantic and Pacific is East of the river.

The Nicaraguan Government is about to sign a contract for the construction of a short line of railroad from Maraya, on Lake Managua, to Granada, on Lake Nicaragua. The completion of the line between Corinto, on the Pacific, and Leon Viejo, on Lake Managua, and the construction of the portion mentioned, would insure through interoceanic communication, by rail and steamer, from the Atlantic port of San Juan del Norte (Greytown) to the Pacific.

THE line from Calvert to Tecumseh, Neb., connecting the Atchison and Nebraska systems of the Chicago, Burlington and Quincy Railroad, materially shortening the line to Denver, was completed on the 29th ult. Contracts will at once be let for an extension from Tecumseh to the main Denver line, making another considerable saving in distance.

INCORPORATION.

THE Harlem River Ferry Company of Westchester county, N. Y., has been incorporated with a capital of $1,000.

"THE American Bag-loaning Company," of New York, has filed a preliminary certificate of incorporation at Albany, its capital to be $500,000.

A CERTIFICATE of incorporation has been filed at Albany of the International Post-Office Marking and Cancelling Machine Company, of New York; capital $1,000,000.

ARTICLES of incorporation of the Markesan and Brandon Railway Company have been filed with the Secretary of State at Madison, Wis. The road will run between Brandon and Markesan, a distance of 12 miles.

ARTICLES of incorporation have been filed at Albany, N. Y., of the Port Chester and Tarrytown Railroad Company, capital $500,000. The road is to run from Port Chester to intermediate points and terminate at Tarrytown.

A COMPANY has been incorporated in Arkansas to build a road from Van Buren to Texarkana, a distance 150 miles. The capital stock is fixed at $1,500,000, being 15,000 shares of $100 each. All the stock taken is held by citizens of Van Buren, except $3,000, which appears in the name of J. E. Johnson, of Kansas City.

THE Ellendale and Wahpeton Railroad Company has been organized in Dakota. The line is to run from Ellendale, the present northern terminus of the Hastings and Dakota division of the Chicago, Milwaukee and St. Paul Rail-

way, through Dickey, Ramson and Richland counties to Wahpeton, on the St. Paul, Minneapolis and Manitoba Railroad. The estimated length of the road is 100 miles. Capital stock, $250,000.

CONSOLIDATION.

THE Baltimore and Delta Narrow-Gauge Railroad corporation has been merged into the Maryland Central Company in order to avail of enlarged powers, and a claim to the city's indorsement of $600,000 bonds voted in 1870.

THE stockholders of the New Orleans and Mississippi Valley Railroad Company will meet in New Orleans, Sept. 14, to consider and act upon a resolution to consolidate this company with the "Memphis and Vicksburg Railroad Company," the "Tennessee Southern Railroad Company," and the "Mississippi Valley and Ship Island Railroad Company."

AN agreement has been made for a consolidation with the Cumberland Railway Company of Kentucky, the Morristown, Cumberland Gap and Ohio, of Tennessee, and the Morristown and Carolina companies. None of these companies have any completed road; their projected lines extend from Columbia, South Carolina, to Cumberland Gap in Tennessee.

ORGANIZATION.

A TEMPORARY organization of incorporators of the Ohio River and Indiana Railway Company has been effected by the election of the following officers: James Wilson, Jr., president; J. C. Hassenear, vice-president; C. W. Timmermeister, secretary; W. S. Rogers, treasurer; C. A. Layton, general attorney.

AT the annual meeting of the stockholders of the Kanawha and Chesapeake Railroad, Kanawha Bridge, and Greenbrier Stock-Yard Companies, held in New York on the 28th ult., the following named directors were elected: Kanawha and Chesapeake Railroad Company, C. P. Huntington, I. E. Gates, W. H. Hogeman, James B. Hawes and Edward H. Pardee; Kanawha Bridge Company, C. P. Huntington, I. E. Gates, W. H. Hogeman, James B. Hawes and Frank H. Davis; Greenbrier Stock-Yards Company, I. E. Gates, James B. Hawes, Wm. Mahl, George Howes and E. H. Pardee.

Texas and St. Louis Railroad.

The Texas and St. Louis Narrow-gauge Railroad is gaining every day. It is growing more important and more powerful each day, and it will not be in the far-off future when it will be considered one of the main lines for Texas, and to many points the most important. The directors and officers are doing everything in their power to make it a success, and they are by no means meeting with disappointment in any particular. In a few months Tyler will have connection with St. Louis by this line. It is also being extended beyond Waco at a rapid rate. The road is in good condition, and it is extending accommodations to the public equal with any other in the State. Daily passenger and express trains run from Texarkana to Waco, and the coaches are first-class. They are now running parlor-coaches, and we are glad to notice that the several coaches are not being pulled over the road without passengers. Besides getting a good passenger custom, it is also doing a good freighting business. We mark the success of this road with pleasure.—*Tyler Courier.*

IT is not always the flower of the family that furnishes the bread.

THE Atchison, Topeka and Santa Fe Railroad Company has bought the Leavenworth, Topeka and Southwestern line.

IN the British House of Commons recently, Mr. Buxton asked the president ot the Board of Trade whether it would not be possible to impose on all railway companies regulations such as were already in force on the Metropolitan Railway, as to printing clearly on all railway tickets the price of the passenger's fare. Mr. Chamberlain replied it would be conducive to the convenience of passengers if the fares were in all cases printed on the tickets, but he had no power to compel companies to do so. Whenever legislation took place on railways this was one of the matters that would be carefully considered.

A GREAT international fisheries exhibition, under the patronage of Her Majesty the Queen and the presidency of H. R. H. the Prince of Wales, will be held in London in 1883. According to *Herapath*, the principal objects to be admitted are intended to include all kinds of specimens of fish life, and to illustrate all the modes by which the marine and fresh water animals of economic value are captured and utilized, together with the commercial, scientific, social, historic, and legislative aspects of such fisheries. Medals in gold, silver, and bronze, and diplomas of honor, will be awarded by a jury, the composition of which will be settled later.

AMONG the great canals which have been projected to facilitate the commerce of the world is one across the Isthmus of Kraw, Malay Peninsula. At present vessels passing between India and China or Japan are obliged to make a long détour to the south, through the Straits of Malacca, to within a few degrees of the equator. The proposed canal will cut the Malay Peninsula at about ten degrees north latitude, and will save from six to eight hundred miles in the passage from India to China. Its construction is believed to be perfectly feasible. Advantage will be taken of the Pakchan River, on the west coast of the peninsula, the mouth of which furnishes safe anchorage for the largest vessels, and which, by dredging, can be made navigable for forty miles toward the interior. From this point a cutting of some eight miles will reach the River Tayoung, which empties into the Gulf of Siam. This river will also have to be dredged, the total length of the excavations and dredgings being about thirty-seven miles and the length of the canal from sea to sea eighty miles. The cost of construction is estimated at £4,000,000, and it is hoped that the canal will be completed by 1885.

The Cable Motor in Philadelphia.

THE work of constructing a cable road on the extension of the Columbia avenue branch of the Union street car line has been practically completed, and in a few days the new method of transportation, which has met with such great success in the West, will be in operation in Philadelphia. The principle of propelling cars by means of an underground cable is quite simple. An endless cable runs at the rate of six miles an hour through cast-iron tubes, which are sunk a few feet below the surface of the road-bed. To this cable the car is attached or detached at the pleasure of the conductor. It is as if a person on a car reached below through a narrow slit in the roadway and gripped the continually moving cable, so that as long as he held on to the cable the car would be dragged ahead at six miles an hour, and when he released his hold and put on a brake the car would stop. When he wanted to go ahead again all he would have to do would be to reach down and catch on again. The first questions which at once suggest themselves to the uninitiated in connection with the application of this principle to the running of a continuous line of street cars would be: How is the rope kept moving? How is it kept taut? How is the connection made between the moving cable and the car? The power which keeps the rope in motion is an immense steam-engine at one of the termini of the road, which will be hereafter described, as will also the appliances for making the cable taut. A slit 11-16 of an inch wide is made in the roof of the tunnel. Through this slit passes a shank or shaft of wrought steel connecting the car with an attachment which "grips" the cable.

The tubes which form the continuous tunnel are about one foot in diameter, eight feet long, and weigh each 1,800 pounds. They rest on solid iron foundations at each end, where they are firmly connected with each other, and are attached at each end by heavy cross-beams to the sleepers on which the street rails rest.

"The grip," by means of which the iron shank catches hold of the cable, is the most interesting mechanical contrivance of the motor. Imagine a man's arm extending through the bottom of the car and his hand half closed, as if in the act of grasping the wire cable, his thumb above and his four fingers below, while the cable slips easily along the hollow of his hand, and the reader will have a pretty accurate idea of the position of the "grip" while the car is standing still, the arm being the shaft. When the individual wanted to start the car he would simply close his hand tight on the rope. The mechanical "grip" is made to do the same thing by having its upper and lower jaws, representing the one the thumb and the other the four fingers of the hand, to shut tightly like a vise on the moving cable, and away goes the car. The three pieces of which the shank, or arm, of the grip is constructed are turned at the end like a man's hand in the act of taking hold, and sliding up and down at the will of the operator on the car, who works them by means of a grip-wheel—like a brake-wheel—just as he desires the grip to take hold or let go. He not only can make the grip take hold, but he

can make it take hold firmly, and thus run at the full rate of six miles an hour, or he can control the degree of tightness with which it clutches on to the cable.

It would not do to start off at once at a rate of six miles an hour, so when a start is to be made the grip-wheel in the hands of the operator is turned just enough to give it a slipping hold, which is tightened as the car begins to move until it goes at full speed—like a man sliding with his hands down a rope. He can slide down slowly or fast, as he tightens or loosens his hands. The operator who works the grip stands at the front end of the car, where he can see everything before him. He will be signalled by means of a gong sounded by a rope extending through the train, which will consist of the dummy, in which some passengers can ride, and one other car.

HOW THE GRIP IS WORKED.

An iron shaft, about four feet high, managed at the top by a wheel, exactly as the present brake is manipulated, extends through the platform and a few inches below. A cog-wheel is attached to the shaft at the platform floor with a dog worked by the operator's foot. A short chain fastened to the end of the shaft below the bottom of the platform tightens or loosens a bar extending back to the center of the car, where it is attached to a little cam revolving on an eccentric axis fastened to the part of the shank which extends down through the slot and forms the under jaw of the grip. Thus as the operator turns his wheel the chain is wound about the shaft, the bar extending to the cam is brought forward, and, moving on its eccentric, pulls up its attached section of the shaft and of the grip jaw attached below, and the cable is clutched. When the operator gets his grip to suit him he shoves the dog into the cog-wheel with his foot, and everything is secure. All he has to do now to stop the car is to throw off the dog-catch with his foot, then put on the regular brake and the thing is done.

The endless wire cable which pulls the cars along is made from crucible steel wire, and has six strands of nineteen wires each. Each wire is .062 inch in diameter, has a tensile strength of 160,000 pounds per square inch used, and is capable of bending and knotting over itself without fracture. This rope, as has been explained, runs through the tubes or channels the entire length of the tunnel under one track, and at the Park terminus of the road, after winding half around a large horizontal sheave, or wheel, with grooves to hold the cable, it passes into the other tunnel under the other trackway, and, being thus directed into its new channel, runs on through and passes out at the eastern terminus to an engine-room, where it winds several times about two winding sheaves, which are worked by two Porter & Allen engines of 100-horse power each. Here lies the motive power which sends the cable whirling along at the rate of six miles an hour. After being thus supplied with power the cable passes around a horizontal sheave, which is run upon a tension carriage mounted on a track. Heavy weights are attached to the tension carriage, which draw it back as the rope slackens, preserving the same amount of tension on it at all times and keeping it always taut. From the sheave on the tension the cable runs below into the tunnel under the first track, thus completing its circuit. The cable is always moving, and is supplied with sufficient power to haul all the cars of the line at one time at six miles an hour. In order to keep the cable always in line with the slot in the tunnel through which the shaft of the "grip" attachment comes down, and to prevent it from sagging down to the bottom of the tunnel, perpendicular guide-wheels are fixed thirty-two feet apart in the center of the tubes, a few inches below the grip, into the grooves of which the rope falls and is guided on its course when the grip does not lift it.

In making a turn or in ascending a considerable grade the cable would naturally have a tendency in the first place to run up to the top, to obviate which it is kept in place by grooved pulleys extending down from the roof of the tunnel, and so constructed as to clear the grip and shaft as they come along. In the case of a curve on the level the turn is made by means of horizontal rope sheaves. A guide section is also built in the tubes at the curve, to prevent the shaft of the grip from being bent by the deflection of the rope from the line of the curve, because of the tautness of the cable.

Another difficulty which is not met with on the present experimental road, but which will have to be provided for when the cable motor is in general use, will be the crossing of another cable line at the street intersections. This will be done in a very simple manner. Of course, the rope of one of the intersecting roads is below the other. At the intersection the track is slightly deflected to one side—just enough to clear the grip entirely from the rope, which is allowed to slip entirely away from it. The car then goes over the crossing by its own momentum, and the grip is switched on to the rope again as the former moves back to its original line on the other side, the tubes at such points being especially constructed so as to give the cable proper elevation.

Every precaution has been made to detect the slighest flaw in the cable. Its progress through the engine-room is closely watched, and tell-tales are affixed at a point where the rope enters the engine-room, which automatically sound an alarm should a strand have been broken. An adjustable covering bar is placed over the slot, which can be easily removed and allow the rope to be taken up at any point and at once repaired. This arrangement is also useful in enabling the workmen to clean out any extraordinary accumulation of dirt or ice which might interfere with the smooth and safe working of the rope sheaves or pulleys. The rope on the experimental road here is about two and a half miles long, and it is calculated that it will not need renewal for two years.

The surface of the street through which the cable road runs presents the same appearance as the ordinary horse-car road, except that the slot appears in the center of the road-bed, which would, however, scarcely be noticed, and could not be felt by any passing vehicle, it being flush with the paving of the trackway.

HOW THE TUNNEL IS CLEANED OUT.

One of the first problems to be solved after the first motor road was constructed was how, to keep the tunnels clear of dust, rubbish and ice. This is now accomplished by very simpl contrivances. A broom made especially for the purpose of cleaning the sheaves is pushed edgewise down the slot into the tunnel, then turned around, and, guided by a man at the top, is pulled along by a rope in the hands of an operator at any one of the man-holes provided at intervals along the tunnel. Every bit of accumulated dirt is thus swept out into the man-holes, which are then closed up and the rubbish removed.

The construction of the motor appliances on the Park extension will cost about $100,000. Including the interest on this outlay, it is expected to reduce the expenses of running the road at least 20 per cent. If the motor works smoothly, and the anticipations of the company in the matter of cost are fully met, the work of putting down cable motors on all its other lines will be commenced in a few months, and the horse car will be abolished entirely. It costs 17 cents to run a two-horse car one mile. It costs that much whether the car runs full or empty. Of the 17 cents 8 cents represent the power that propels the car. No reduction can be made in the other 9 cents, which represent labor, taxes, interest, etc. If by the use of wire rope the cost of motive power can be reduced from 8 cents to 4 cents for every mile each car is run, then a new era will be opened in the operation of street cars in Philadelphia.—*Phila. Record.*

An Old Express Company in New Quarters.

THE United States and Canada Express Company has just moved into its new and elegant quarters at Nos. 41 to 45 Franklin street, the premises recently occupied by Lee & Shephard. The office has been fitted up apparently without regard to expense, and the result justifies the appellation bestowed upon it of the finest office of the kind in the United States. It is finished with ash; the officers of the company having commodious rooms on the right as one enters from Franklin street, and the remainder being devoted to the general business purposes. The desk of the office agent, Mr. Hawley, is so situated as to command a view of the entire room, and at the same time is at the point to which the visitor would naturally first turn his steps. The arrangements for the money department are most complete, as well as of such a nature as to preclude the possibility of attacks from those with thievish intent, and render the keeping of money and valuables entirely safe. The office is well worth a visit of inspection, even if one has no business to transact.—*Boston Journal.*

JOHN MCCAULLY, gate-keeper and switch-tender, employed by the Philadelphia, Wilmington and Baltimore Railroad Company, desires it stated in the Wilmington *Every Evening* that hereafter all persons interfering with the gates at the railroad crossings or with the gatekeepers will be dealt with to the fullest extent of the law. The penalty for obstructing the railroad tracks or interfering with the duties of the gatekeeper is $1,000 fine, one year's imprisonment, 20 lashes and one hour in the pillory.

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SAFETY AT HIGH SPEED.

A WRITER, who professes to be a practical railroad worker, has been offering a prediction that it will soon become necessary for the speedy railroad trains to be furnished with a special officer whose duty it shall be to keep a sharp lookout for a clear road—the engineer and fireman being already overtaxed by the new demands on their time and attention. The position assigned to this railroad "pilot" is to "be forward of the engine or above the present cab," communication with the engineer being by signals or signs. This is probably a little more than an amplification of *Punch's* old joke that the infallible way to prevent railroad collisions was to "tie a director in front of the engine;" but it serves to bring to mind the increasing complexities and difficulties of the locomotive engineer of express trains. Not only must he see that his boiler has plenty of water, the engine supplied with fuel, and the working of his machinery uniform and smooth, but he must keep a nearly continuous lookout ahead at the track and signals, and maintain a succession of communications by whistle with those concerned ahead of him, and with the conductor in the train behind him, and apply the steam brake at need. The man in charge of a modern fast train flitting over the ground at the rate of a mile in sixty to ninety seconds, has enough to do, and must be of quick thought and steady nerve, as well as correct, strong eyesight. It is a position of fearful responsibility; but it is not easy to see how the duties can be subdivided with advantage. No system of communication, not even that of direct colloquy, can be so intimate or so reliable as that nerve current between the good eye and the free hand at the lever moved by the same brain. Long practice and discipline are competent to produce the driver of a locomotive as nearly and perfectly filling the task as can be required by travel. The difficulties and dangers that beset fast travel are chiefly those of human contrivance, and the results show that, on the whole, railroad travel is growing more and more safe.

It is not much to predict that the future safeguards to rapid travel will lie in a different direction; in the way of removing the chances and causes of accident, rather than in employing a special set of eyes to detect them within the brief period when an object becomes visible to the eye and the moment of approach. One prolific source of disaster to trains is found in not having the track and right of way inclosed, and in carrying crowded streets and roadways across the railroad at grade. This can be remedied, and will be by the older roads, as it is on European railways, by fencing out from off the road all the world but the company's employés. This is now common at terminal stations, and should be at junctions and busy stopping places. Crossings, overhead or underneath, should be provided at all points where there are frequented thoroughfares. The "cattle slaughter" account on our Western railroads forms a regular item of outlay; and stray cattle on the track sometimes add seriously to the other damages. All this can be economically obviated by constructing stout barb-wire fences, the posts for which can be found in old ties.

Combined with this riddance of outside obstructions are some devices for preventing the collision of the different trains occupying and traversing the same line of road. The "block system" is now being used in England largely—not so much on account of its intrinsic utility, as from a desire to escape statutory penalties—and is worked by one trunk line here, the Pennsylvania. It is far from being a satisfactory solution, however, and American ingenuity may be trusted to improve upon it, or supersede it. It is quite expensive, and in point of practice merely puts an additional set of eyes and nerves to watch for the possible failure of the set on the train. In a fog or snowstorm, when vision is obscured, it may be invaluable; but at other times it degenerates into a delaying nuisance; it is not well adapted to the requirements of a single-track road, and a majority part of American roads are and must ever be of this description.

Attempts are being made to communicate from the moving train to the starting station; but this, if successful, is not quite what is wanted at all times. As an addition to this it will occur to some practical electricians that in the line of telegraph poles which closely accompanies our railroad tracks we have the foundation of a device for communicating intelligence from a halted train for any desired distance forward and aft, so as to warn approaching trains. By stretching a special wire for this purpose along the line, electricity could be made to show day or night signals, or even to light up the scene. In other words, every telegraph pole could instantly, and at pleasure, be turned into a block signal station, and every train-hand, with the proper key, could become for the occasion a block signal man. No sooner had the train come to a stand for any reason (or equally, if anything were found wrong with the track in front of an oncoming train) the nearest pole is at once made a telegraph office, and the word could be transmitted in either or both directions. It will come to this, that a train stalled in the snow (on the Northern Pacific for instance) in Montana will

be able to communicate from the spot at once with the train dispatcher, just as easily as is now done by a special operator.

Do what we may, and introduce what automatic contrivances we will, there remains a margin of human failure, which cannot quite be overcome—though it may be diminished. Just as there is no constant safeguard against insanity, paralysis, or many other sudden visitations of the bodily frame, so there is no absolute assurance against drowsiness, sleep, or even carelessness. Alcoholic stimulants and other drugs are responsible for much of this imperfection. The best men will sometimes be off the line of sound health, however, their brains may be muddled, they are liable to dream at their posts, and may even mistake the dream for reality, or the reality for the dream. It is related recently of an engineer on the Union Pacific Railway that he awoke with his hand on the lever, his engine at a stand-still on the main track, his fire nearly out, the fireman asleep, and the conductor rubbing his drowsy eyes, while the passengers were unconscious of anything amiss, none of them being able to tell whether they had passed a due train on a side track or not. Fortunately no harm followed, but the story has its unpleasant suggestions in these days of high expresses.

Chesapeake and Ohio Canal.

Lewis Cass Smith, of Washington county, Md., has been elected President of the Chesapeake and Ohio Canal Company, vice A. P. Gorman, resigned. The other officers of the company are: Benjamin Fawcett, secretary and treasurer; Stephen Gambrill and Louis G. Stanhope, superintendents; and John P. Ayers, accountant. Mr. Smith, the new President, is well known on the line of the canal from Cumberland to the Georgetown terminal, Mr. Gambrill has been in the service of the company ten years, and Mr. Stanhope as a boy worked on the canal when it was being built.

Mr. Gorman was elected president in June, 1872, when he was Speaker of the House of Delegates. He succeeded James C. Clarke, who was president in 1870 and 1871. The canal has had eighteen presidents, commencing with Charles F. Mercer, who served from 1828 to 1832, and coming down to Lewis C. Smith, who was Speaker of the House of Delegates in 1876. Mr. Gorman's ten years of service is the longest in the list. James M. Cole was in eight years, from 1843 to 1851; Alfred Spates two terms, aggregating five years. Mr. Gorman, when he took hold in 1872, considered the canal simply a water highway, beginning at Georgetown and terminating at Columbia, with the terminus at both ends in the hands of private parties, with no improved appliances or steam machinery. Now the company owns a wharf property at Cumberland that cost $100,000, from which a revenue is derived, and has secured the passage of the boats from the canal to the Potomac River at Georgetown outside of private parties. It has a telephone along the whole line, the waterway is dredged to a uniform depth of six feet, thus increasing the average tonnage of the boats; it has a steam dredger that cost $20,000, a steam dredge, stone crusher and hoisting machines; and a system of lengthened locks has been determined upon. Fourteen locks have been lengthened so far at a cost in 1881 of $83,000, of which $70,000 was paid during that year. The purpose was, like that of the railroading of the present time, to provide for carrying increased tonnage at minimum cost, so that a large business could be done at small profit. Railroad competition decided this line of action. The canal is considered to be in better condition than at any previous time to meet the demands of traffic. During the administration just closed $964,052.72 was paid on account of the coupons on the preferred construction bonds, on the repair bonds issued in 1852, and on debts created prior to 1872—a larger sum than in any previous ten years.

The history of the canal, not in any respect considered in its partisan phases, illustrates the changes in freight carrying in ten or twelve years. About 1870 to 1872, and of course previous to those years, the Baltimore and Ohio Railroad freight charges on a ton of coal from Cumberland to Baltimore were as much as the present entire cost of a ton of that article delivered in Baltimore to a purchaser. The canal shared in these high rates, and its revenues were satisfactory. But Clearfield coal entered the field, the railroad rates were cut down, and the Baltimore and Ohio and the canal cut against each other. In 1870 the canal carried 600,000 tons of coal, and each year the figures crept up until 1875, when the total was 900,000 tons on a reduced output in the region. This increased business caused sharper railroad rivalry, which culminated in the battle before the Legislature in 1878 and the settlement by compromise, which both sides agreed was fair. In 1877 the canal was well-nigh destroyed by a flood. To meet the outlay the Legislature authorized the issue of $500,000 repair bonds, which had a precedence in the list of securities, and afforded an item in the bill of complaint in the great legal receivership battle several years after. The flood repairs cost $228,500, and $124,000 of the bonds were issued, the balance being paid out of the treasury of the company.

Strikes of the coal miners and of the boatmen have been numerous and lengthy in the past few years, the canal all the time a sufferer, and what with floods and low water, and curtailed business in consequence, many people have nearly lost hope in the future of the "ditch." Not so the retiring president, who says the contracts made with the new George's Creek and Cumberland Railroad and the West Virginia Central and Pittsburgh Railroad in the Elk Garden region gives the canal new feeders, of which it has not yet felt the good effects. With 1,000 tons a day being mined already in the Elk Garden region, and the prospect that it will soon have as great an output as has the Cumberland region proper, it is thought to be safe computation to place the yield of all the coal territory in 1883 at 600,000 tons greater than in 1881. The Baltimore and Ohio Railroad and the canal will benefit by this, and each year will add to the volume of business; hence the canal outlook is not bad to those who examine into the details without prejudice.

A point about which the canal people congratulate themselves is the good feeling that has existed among their employés. In the midst of strikes they have never "struck," nor given signs of disturbance, notwithstanding their pay has been months in arrears. In a business period on the canal there are about 400 persons employed, the large majority at laboring work, at $1 a day, or around that figure.

The business of this year from the opening of navigation has not been larger than that for any ordinary good month. From five to six boats a day are running on the canal, instead of several times that number, as usual when there is no strike. About 250 to 300 boats are laid up along the line all the way to Georgetown, and word has been sent to get them ready for service. With some this is no easy task. Boatmen have gone to other places for work, and some have disposed of their teams. With four months of good business this year, which are hoped for yet, the canal can do much toward making up for the time lost, and realize revenues to meet unpaid floating liabilities.

Railroads and Coal and Iron Mining in West Virginia.

The present outlook for the Great Kanawha Valley is very promising. On Davis Creek, four miles below Charleston, a standard-gauge railroad with steel rails is being constructed from the Great Kanawha River to the black band iron ore and coal deposits on the head-waters of Davis Creek. This black band iron ore crops out also on the Coal River side of this mountain. At the mouth of Davis Creek the same company is erecting an iron furnace, where iron will be made from this black band ore. Both the Davis Creek furnace and railroad will be completed this fall. Boston capitalists are doing this work, and own 3,500 acres of land on Davis Creek.

On Field's Creek, thirteen miles above Charleston, the Winifrede Coal and Railroad Company has constructed a first-class railroad from the Great Kanawha River to its coal banks at the head of Field's Creek, distance six miles. The company owns 12,500 acres of land, extending from the Great Kanawha to Big Coal River. Philadelphia capitalists are operating here, and are mining and shipping the well-known Winifrede coal extensively, east by the Chesapeake and Ohio Railway and west by the Great Kanawha River.

On Cabin Creek, seventeen miles above Charleston, a railroad is being constructed from the mouth of this creek to the superior coal lands situated eight or ten miles up this creek. The enterprise is owned and carried on by Baltimore and Pennsylvania capitalists.

On Paint Creek, twenty-one miles above Charleston, a narrow-gauge railroad has been

constructed from the mouth of this creek to the Cannel coal deposits, situated five miles up the creek. This Cannel coal is now being mined and sent to market. Eastern capitalists and Kanawha parties are operating these works.

On Coal River the prospects look favorable for starting a railroad this fall.

All of these railroads when completed will connect with the Chesapeake and Ohio Railway.

Other coal companies on the Kanawha are mining and shipping coal largely from Campbell's Creek, Coalburg, Coal Valley, Cannelton, Peabody, Carkin, and other localities.—*Kanawha Gazette.*

[From our Special Correspondent.]

OUR CINCINNATI LETTER.

Suit has recently been instituted in the Superior Court of Hamilton county, Ohio, against the Pittsburgh, Cincinnati and St. Louis Railway for $10,000 damages, by Wm. Cameron, administrator of Wm. Huffman, deceased, who was injured in a railroad accident on June 4th, 1881, from which injuries he died January 22d last. It is alleged that on the day of the accident the deceased was in the employ of the Ohio Southern Railroad Company as locomotive engineer. This road crosses the Cincinnati and Muskingum Valley road, which was controlled by the defendant company at Washington C. H., Ohio. Great care is requisite at this crossing, and it is claimed that Huffman, as engineer, obeyed all the rules, but that the engineer in charge of a train on the other road is said to have failed to do so, which negligence resulted in a collision, with the above result. It is alleged in the petition that the accident was caused by the negligence and want of care on the part of the defendant company's servants, and judgment is therefore asked in the above amount.

Trains of the Cleveland and Marietta road have commenced to run over the Cleveland and Pittsburgh Railroad from Canal Dover and Zoar, by contract with the Wheeling and Lake Erie, thus making an unbroken line for the latter road from Toledo to Marietta, greatly facilitating traffic.

A committee appointed at a recent meeting of clerical employés of roads centering here, has issued a circular drawing the attention of clerks, freight-checkers, etc., to the object of a proposed organization. The objects of such are as follows:—

1. To promote acquaintance and sociability among those persons engaged in a like occupation throughout the city.

2. To assist worthy members who are out of positions to situations, and to give them friends and assistance when in new positions.

3. To provide a beneficiary system that shall be inexpensive and confined to persons of like occupations and risks. In this connection special attention is called to the fact that it is not expected to be an insurance company in any way whatever. Parties joining will pay a regular admission fee, and a stipulated amount each month, and the income from this source will be sufficient to cover all expenses; hence there will be no assessments. It is intended to pay a benefit each week to sick members, and furnish funeral expenses, but this will all come from the General Fund, and will, as before stated, call for no assessment.

Instead of an assessment, members will have to pay an initiation fee and regular monthly dues. It is proposed to make the initiation fee two dollars, and the monthly dues fifty cents.

The iron railway bridge over the New River, which has been in course of erection during the past year, is just finished, and trains are now running over it. A thorough test of the bridge was made a few days since, by the superintendent of the C. H. and D., and other gentlemen, the official report of which is as follows:—South span—First, over this were run four large engines at the rate of five miles per hour. During the crossing of the engines, the deflection was ½ an inch; lateral deflection ⅛th inch. Second, then four engines were sent across at a speed of 15 miles per hour, when the deflection was ⅝ths of an inch, and the lateral deflection ⅛th. Third, the engines were then sent across at a speed of 30 miles per hour, when the deflection was 15-16ths of an inch, lateral deflection 5-16ths. North span—The four engines were sent across at a speed of 5 miles an hour, when the deflection amounted to ⅝ths of an inch, and lateral deflection ⅛th. At a speed of 15 miles per hour the deflection was 7-15th of an inch, and the lateral deflection ⅛th of an inch. At a speed of 30 miles per hour, the deflection was ¾ths of an inch, and the lateral deflection 3-16ths. The strength of the new bridge is now therefore fully determined.

An order has been filed at Columbus, O., in the District Court, allowing a temporary injunction in the case of the B. and O. R. R. Co., vs. the P., C. and St. L. Co., to continue in that Court the same as the present one in the Common Pleas Court.

A contract has just been completed between the Cincinnati and Eastern Railroad Company and Isidore Myers & Co., of this city, for sufficient 56lb steel rails, fish-plates, bolts and spikes for the completion of the road to Portsmouth. The contractor from Newport to Otway reports that in about six weeks the Shemar trestle will be finished, when track-laying will be pushed with vigor. It is not improbable, if the weather is favorable, that the Scioto River will be reached before the end of the year. "A."

Cincinnati, August 31, 1882.

During the month of August 47,124 tons of iron ore were imported at Baltimore from Europe and Africa.

Dr. B. J. Jeffreys made an argument before the tariff commission at Boston on the 25th ult., in favor of admitting certain books and instruments used in testing color-blindness free of duty.

The Florida Land and Improvement Company's Canal has just been completed to Lake Kickapochee, a large lake within three miles of Lake Okeechobee, and an immense body of water is pouring down the Caloosahatchee river amid great rejoicings. The completion of this work will bring into cultivation the finest sugar lands of Florida.

State Ownership of Railways.

At the close of 1879 there were in Italy 8,348 kilometres of railway, of which the State owned 5,384 kilometres, was part owner of 444 kilometres and operated 564 kilometres belonging to private parties; and a year later, State ownership had been extended over most of the remaining railways. In 1874, and again in 1877, the Government, dissatisfied with the results of its operations, proposed to lease the railways to private parties, but Parliament rejected the proposition, and in the latter year it appointed a Railway Commission to investigate the question. The Commission has at length made its report, the principal conclusions of which are summarized in the *Evening Post* from a German economic periodical, in which the results of the investigation are given at length.

First, as to freigut tariffs, experience in Italy does not show that the public derives any advantage from lower rates under the system of State ownership. On the contrary, rates are sometimes increased by the introduction of a tax on transportation. In Italy, during five years following the establishment of the tax, the consequent increase of rates was 73,000,000 lire; and in several cases, where the management of the roads desired to lower the rates, the Government refused to allow it. Second, as to cost of management, private enterprises are managed less expensively than those owned by the State. The statistics are not given for Italy, though the fact is stated; but the following statistics, for 1876, relating to countries where some of the roads are controlled by the State and some by corporations is instructive. The expenses of operating the roads amounted to the following per cent of the gross income:

	Public roads.	Private roads.
Germany	59	53
Austria-Hungary	70	50
Belgium	63	59
Denmark	71	55
Norway	74	63
Sweden	63	57

Averaging the experience of these countries, we find that the running expenses of the State roads were 67 per cent of the gross income, as compared with 56 per cent in the case of the private roads.

A good deal of attention is paid in the report to the political and economical dangers which are connected with a State system of railways. The Italian roads employ more than 54,000 officers, who, with other public officers, make up a place-holding force of 120,000 men. These appear at elections as political factors, and the disappointed applicants for positions appear also. There is a likelihood that the service of the roads will deteriorate under a system which makes political pressure and influence potent in securing positions, rather than fitness and faithfulness; and politics in general will become demoralized accordingly. These results the Commission finds to have already taken place, in some degree, and it reaches the conclusion that the system of State railways endangers political freedom, vastly increases the power of the Ministry, involves personal interests with the public welfare, and corrupts politics and the Administration. Add to these considerations the increased cost of the system, as compared with private management, and the absence of any advantage to the public in the form of lower rates, and the case against the plan of State ownership appears to be pretty strong.

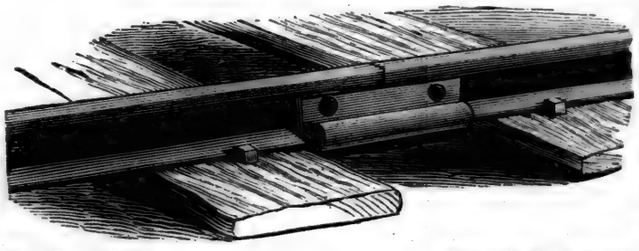
A New Railroad Rail Joint.

We wish to call the attention of the reading public, and more particularly the railroad men, to a new Railroad Rail Joint, which is now being manufactured and offered for sale by the American Railroad Rail Joint Company, of 17 Milk street, Boston, and at their New York office, Room 10, No. 243 Broadway.

The cut below, while giving a fair idea of the mechanical construction of the Joint and the position in which it should be placed between the ties on the rail, might not be fully understood by all without a partial description of its manufacture, advantages, and mode of application.

The American Railroad Rail Joint is made from the best rolled iron plates, one-half inch thick and ten inches long. The bottom plate has its side edges turned upward and inward, and the side-plates are made something like the ordinary angle-plates, except having a bead on the upper side of the lower edge of the plate to fit the under curve of the bottom plate; and the under flange of the side-plate is rounding so as to have a fine bearing on the upper side of the flange of the rail. The bottom plates are placed under and on the rail. And the side-plates are rolled or locked under the curved edges of the bottom plate and the bearing on the top of the flange of the rail which forms a fulcrum. The bolts are then passed through the plates and rails, compressing the top of the plates, which act as levers to lift or hug the bottom plate to the bottom of the rail, and the edges of the side-plates fitting under the head of the rail, thus giving a double bearing and support to the end of the rails, which makes it impossible for the ends of the rails to change their relative position, and makes the Joint the strongest part of the rail, with allowances for expansion and contraction.





Four of the Joints were tested by Colt's Fire Arms Company of Hartford, Conn. The pieces of rails used were of the Pennsylvania Railroad pattern, 4½ inches deep and 18 inches long, joined end to end by the Joints, which were 10 inches long, in samples Nos. 1 and 2, and 12 inches long in 3 and 4. The samples rested upright on dull knife edges placed two feet apart, equi-distant from the junction of the rail ends. The pressure was applied downward on the top of the rails at the junction, by a cylindrical pressing piece about two inches in diameter, and the following results obtained:

Number of samples.....	1	2	3	4.
Greatest load in lbs.....	79,260	77,840	88,400	86,800
Ultimate set in inches. ...	1.43	2	1.8	1.6

By constructing a Joint on this principle the rail ends are kept in proper position and not allowed to work upwards and downwards, but makes the rail practically an endless rail, giving the rail the same strength and elasticity at the Joint as at any other part of the rail, and with no extra strain on the [illegible] and there is no want of a nut-lock, as there is a continued pressure against the nut by the spring of the side-plates, which keeps them in proper position.

The durability of the Joint can easily be estimated by the bearing the rail has on the Joint, which will average 40 square inches on the shoe and 10 square inches on the upper edges of the side-plates.

In comparing this Joint with the ordinary Fish or Angle plates, which support the sides of the rail properly, but fail to sustain properly the heavy downward pressure, as their only support to the rail is the four bolts and the rests of the head of the rail on the upper edges of the side-plates, which will show a bearing of about 24 square inches in all, though one-half of which is over 6 inches from the rail ends, and is comparatively of little use; so it will be seen that the new Joint gives 50 square bearing inches instead of 12 square inches, as in the old Joint.

This Joint is made to order to fit properly the samples of rails furnished, is easily applied without in any way disturbing the rails or roadbed, and will save the rail ends and rolling-stock, and prevent the continual clatter and many accidents which now occur from battering or breaking of the rails caused by loose and imperfect joints. It is furnished complete, including bolts, at the low price of $1.25 per Joint, which is actually less than is now paid for the heavy angle-plates, without bolts, washers and nut-locks.

So thoroughly has the Joint been tested, and so satisfactory has it proved, that the company guarantee that each Joint will outlast the best steel rail.

All interested in railroads cannot fail to be interested in this Joint, which provides absolute safety, at the same time effecting a saving in the wear and tear of stock, and that too with a saving of money. Orders have already been received for joints for 500 miles of one road and 200 miles of another.

Railroad parties desiring joints should send an end of the rail used with bolt hole punched in it, as the joints are made expressly to fit.

Railroads wishing to use this Joint and about laying new rails, should consult the company before having the bolt holes punched.

Orders or correspondence addressed to the American Railroad Rail Joint Company, 17 Milk street, Boston, Mass., or to Clark & Adams, 243 Broadway, New York, will receive prompt attention, and at either place the Joint will be shown, and its especial value be fully demonstrated.

Two men, in attempting to climb over the railing of the Tuilleries Garden, Paris, during a recent display of fireworks, caught hold of the electric wire used for the illumination of the grounds, and both were immediately struck dead.

Funny Movements in Nassau Street.

Ten square feet of the pavement in Nassau street, near Ann, became suddenly bewitched early yesterday afternoon. The first indications of the change were noticed when a farmer, driving a sleepy sorrel nag, drove over it. In the twinkling of an eye, the old mare began a double-shuffle on the cobble-stones. The farmer rubbed his eyes and gazed with astonishment at the remarkable evolutions of his hitherto peaceable beast.

"I've driv that 'ere mare nigh onto ten years, and I swan, I never knowed her to act like that afore," he remarked to a bystander upon the sidewalk.

Next came a big truck loaded with paper. No sooner had the horses stepped upon the magic spot than they dropped upon their knees and delivered several kicks toward the driver's nose.

"What in the divil has got hold of um?" shouted the man as he plied his whip.

By this time a crowd of spectators had gathered around the bewitched place. Three policeman got their heads together and held a consultation.

"What kin we do?" said the spokesman.

"Spake to the Cap'n and have it arrested," said the other.

"Put a barrel over it," replied one.

A newsboy rushed down the street, and, beckoning to a comrade, cried out:

"There's ghosts up there, Jimmie."

In the meantime a pedlar of tinware, with a ten-dollar skeleton of a horse, drove through the crowd. At the moment he entered the charmed circle his quadruped gave a snort, and with ears erect and tail pointing toward the North Star, dashed down the street at a 2.40 gait. Roars of laughter followed the terror-stricken peddler as he grasped the reins with one hand and with the other endeavored to hold down his dancing stock in trade.

Nassau street never contained such a jolly crowd or beheld such a free circus. Bankers, lawyers, clerks and bootblacks laughed till the tears ran down their cheeks. At length somebody suggested that there might be a break in the Edison electric light wires which, contained in iron pipes, run through this street. Word was at once sent to the branch office in Pearl street, and the current being shut off, all the strange qualities of the mysterious spot immediately disappeared. The disappointed audience soon melted away and the business of the street was again resumed. Workmen discovered last evening that the cap at the end of the pipe leading into a building had slipped down and established a connection with the earth. In this way the electricity was allowed to escape.—*Ex.*

The Fontaine engine No. 2 is still running on the Canada Southern between Amherstburg and St. Thomas. One of its stockholders claims that the Fontaine, with a train of seven coaches, made 45 miles in 38 minutes the other day.

The Stock Exchanges and Money Market.

New York Stock Exchange.

Closing Prices for the week ending Aug. 30.

	Th.24.	F.25.	Sat.26.	M.28.	Tu.29.	W.30
Adams Express						
Albany and Susq.						
1st mortgage						
2d mortgage						
American Express	96			96	94¾	96
Burl., C. R. & Nor.						
1st mortgage 5s						102½
Canada Southern	63	62	61⅝	62	63½	63½
1st mortgage guar						93⅛
Central of N. Jersey	78¾	77½	77⅜	76½	78¾	77¾
1st mort. 1890						
7s, consol. ass		109				109
7s, convertible ass		110				
7s, Income		75				
Adjustment						
Central Pacific	92¼	91⅞	91⅞	91⅞	93	93½
6s, gold	115	115⅞			115	
1st M. (San Joaq)						
1st M. (Cal. & Or.)						
Land grant 6s						
Chesapeake & Ohio	24	24	23¾	23¾	24½	24
1st pref	35¾	36¼	35⅞		37¾	38
2d pref						
1st mort., series B			85½			
Chicago and Alton	139	138			138	
Preferred						
1st mortgage						
Sinking Fund	114					
Chi,, Bur. & Quincy	135⅞	136¾	134⅛x	134¾		136
7s, Consol. 1903			127¾			
Chi., Mil. & St. Paul	122⅛	121⅜	121	121½	122½	123½
Preferred	136½	136½	135½	135⅝	136¾	137¼
1st mortgage, 8s						
2d mort., 7 3-10s		124				
7s, gold						
1st M. (La. C. div)						
1st M. I. & M. div.)						
1st.M. (I. & D. ext.)						
1st M. (H.&D. div.)	118¼					118
1st M.(C. & M.div.)				125	125	
Consolidated S. F.				125		
Chi. & Northwestern	143¾	143¾	143½	144	145	145
Preferred	167				169½	170
1st mortgage						
Sinking Fund 6s						
Consolidated 7s						
Consol. Gold bo'ds				125	125	
Do. reg						
Chi., R. Isl. & Pac.	135¾	136	135¾	135¾	136⅜	136⅜
6s, 1917, C						
Clev.,Col.,Cin.&Ind.	78⅛	78⅜	78	78	81¼	81½
1st mortgage						
Clev. & Pittsburg gr.						
7s, Consolidated	124½					
4th mortgage						
Col.,Chi.,& Ind. Cent	12		12	12¾	13	13⅛
1st mortgage						
2d mortgage						
Del. & Hud Canal.	116⅛	116⅜	117	114¾x	115¾	115¼
Reg. 7s, 1891						
Reg. 7s, 1884		106		107	107	
7s, 1894						
Del.,Lack.& Western	142⅛	142⅝	143	142⅞	144⅞	144¾
2d mortgage 7s						
Consol. 1907						
Erie Railway						
1st mortgage				130		
2d mort. 5s, ext.	111					
3d mortgage						104¾
4th mort. 5s, ext.						
5th mortgage						
7s, Consol. gold					130	
Great West. 1st mort						
2d mortgage						
Hannibal & St. Jo						
Preferred	95⅛	94⅜	94⅞	94¼	94½	94⅜
8s, Convertible						
Houston & Tex. Cen	85		83⅛	83		82
1st mortgage	112		112		112½	
2d mortgage						
Illinois Central	136¼	136¼	135½	136	138	139
LakeShore&MichSo	112⅜	111⅞	111⅜	111¼	113	113
Consol. 7s						
Consol. 7s, reg						
2d Consolidated		125				
Leh. & W. B. con.ass						
Long Dock bonds						
Louisville & Nash.	73⅞	72¾	70⅞	71½	72⅞	72⅞
7s, Consolidated			118			
Manhattan						53¼
1st pref						
Met. Elevated	89	89	89	88⅛	90	
1st mortgage	99⅜	99⅛	99⅜		99¼	
Michigan Central	97⅛	97⅜	97	98⅛	99¾	99
7s, 1903						
Morris & Essex				126		
1st mortgage						
2d mortgage						
7s of 1871						
7s, Convertible						
7s, Consolidated		124				
N.Y. Cen. & Hud. R.	133¾	133	132½	132¾	134	134⅞
6s, S. F. 1883					102½	
6s, S. F., 1887						
1st mortgage			133	132½	133	
1st mortgage, reg.						
N. Y. Elevated						
1st mortgage		115⅛	115⅛	115⅛	115⅜	115¾
N. Y. & Harlem						
Preferred						
1st mortgage						
1st mortgage, reg						
N. Y., Lake Erie & W	38¾	38⅜	38⅜	38¾	39⅜	39¾
Preferred	77	78¼	78		79¼	81
2d Consolidated	97⅝	97	97	97½	97¾	98¼
New 2d 5s fund				94½	94¾	95
N.Y.,N.Hav'n&Hart						
North Mo. 1st mort						
Northern Pacific	49		49¼	49¼	50¼	50⅝
Preferred	91⅝		91⅜	91⅜	92⅞	92¼
Ohio & Mississippi	39¾		38	38	38⅞	38⅜
Preferred						
2d mortgage					124	
Consolidated 7s						
Consol. S. Fund						
Pacific Mail S. S. Co	44⅜	44¼	43¾	44⅜	45	45¼
Pacific R. R. of Mo.						
1st mortgage						106
2d mortgage						
Panama					167	
Phila. & Reading	60⅝	60	60	60¼	60⅛	60⅝
Pitts,Ft.W.&Chi.gtd		136				
1st mortgage						
2d mortgage						
3d mortgage						
Pullman Palace Car	130¾	131		131½	132	131
Quicksil'r Min'g Co						
Preferred						
St. Louis & San Fran	40					
Preferred	58⅛	58¾			58	58½
1st Preferred						99
St. L., Alt'n & T. H.		38¼	37		39	41
Preferred					87½	
1st mortgage						
2d mort. pref						
Income bonds						
St. L., Iron Mt. & S						
1st mortgage						114
2d mortgage						
Toledo and Wabash						
1st mortgage	106½					
2d mortgage						
7s, Consolidated						
St. Louis Division						
Union Pacific	115¼	114¾	114¾	115	115¾	116⅜
1st mortgage			116¾	116⅝	116½	116¾
Land Grant 7s			115	115		
Sinking Fund 8s	123				122½	
United States Ex	74				74⅞	
Wabash, St. L.& Pac	35¼	35⅝	37½	36	37¼	37½
Preferred	64	64½	63⅞	64¾	66⅞	66⅞
New mort. 7s						
Wells-Fargo Ex	131	131		130½		131
Western Pacific b'ds		112				
Western Union Tel.	89	88⅞	88¾	89½	89⅞	90⅞
7s., S.F conv., 1900						
FEDERAL STOCKS :—						
U. S. 4s, 1907, reg	119⅞		120	120		
U. S. 4s, 1907, coup.	119¾		120			
U. S. 4½s, 1891, reg.	113½	113¾				113¼
U. S. 4½s, 1891, coup						
U. S. 5s, cont'd at 3½						101⅛
U. S. 6s cont'd at 3½						
Dt. of Col. 3-65s, reg						
Dt. of Col.3-65s,coup						

Boston Stock Exchange.

Closing Prices for the Week Ending Aug. 30.

	Th.24.	F.25.	Sat.26.	M.28.	Tu.29.	W.30.
Atch.,Top.&San.Fe.	94	94¼	93⅞	94	95	95
1st mortgage		122				
Land Grant 7s						
Boston & Albany	170					170¾
Boston and Lowell		102				
Boston & Maine				148		
Boston& Providence						
Bos'n,Hart.& Erie7s						
Burl.& Mo.R.L.G.7s						
Burl.& Mo.R.in Neb						
6s, exempt						
4s						
Chi.,Burl. & Quincy	136¼	136½	135x	134¾	136	136
Cin.,Sand&Clev($50)			27¼			
Concord ($50)						
Connecticut River						
Eastern	42	42		42		
New 4½ Bonds				108¾	109	
Fitchburg		132	131			
N.Y. & New England	52⅛	52	51¾	51⅞	52	52
7s				116½		
Northern N. H.					111	
Norwich&Worcester						
Ogden & Lake Cham						
Old Colony					133	
Ph.,Wil.&Balt.($50)						
Portl'd,Saco & Ports						
Pueblo & Ark Val 7s						
Pullman Palace Car				130		
Union Pacific	115½			114⅝		
6s	116¼	116				
Land Grant 7s						
Sinking Fund 8s	119			118½		
Vermont & Mass	134	134				
Worcester & Nashua						58
Cambridge (Horse)						
Metropolitan(Horse)						
Middlesex (Horse)						
Cal.&Hecla Min'gCo	250	250	250	250	250	
Quincy	63		64	65	66¼	

Philadelphia Stock Exchange.

Closing Prices for the Week Ending Aug. 29.

	W.23.	Th.24.	F.25.	Sat.26.	M.28.	Tu 29
Allegh'y Val. 7 3-10s						
7s, Income						
Buff., Pitts & West.	21⅛	21¼	21⅛	21	21	21⅛
Camd'n & Am. 6s, '83						
6s, 1889						
Mort. 6s, 1889						
Camden & Atlantic						
Preferred						50
1st mortgage						
2d mortgage						
Catawissa						
Preferred						
2d pref	54	54	54⅛			
7s, new						
Del. & Bound Brook						
7s						
Elmira&Williamsp't						
Preferred						
Hunt. & B. Top Mt.						
Preferred	28¼					
2d mortgage						
Lehigh Navigation	43¼	43	43⅛	43	42⅞	43⅛
6s, 1884						103½
Gold Loan						
Railroad Loan						
Conv. Gold Loan						
Consol. Mort, 7s	116⅛			116¼	116	
Lehigh Valley			62⅜			62¾
1st mort. 6s, coup					63¼	
1st mort. 6s, reg						
2d mort. 7s						
Consol mort. 6s						
Consol.mtg.6s,reg						
Little Schuylkill						
Minehill&Sch.Hav'n		61¼			61¼	61¼
North Pennsylvania				63⅜		63⅜
1st mortgage 6s						
2d mortgage 7s						
Genl. mtg.7s,coup						
Genl. mtg. 7s, reg						
Northern Central	51¼	52	52¼	52	52	52¼
5s					97¾	
Northern Pacific	49¼	48⅞	49	49⅛	49¼	50⅜
Preferred	91¾	91¾	91½	91⅛	91⅜	93
Pennsylvania R. R.	62⅜	62	62	62	62	62¼
1st mortgage						
Gen'l mort			125			
Gen'l mort reg						
Consol. mort. 6s				121		
Consol. mort. reg						
Pa. State 5s, new						
do 4s, new						
do 3½s, 1912						
Phila. & Reading	30⅝	30¼	30	30⅜	30	30⅜
1st mortgage 6s						
7s of 1893						
7s, new convert						
Consol. mort. 7s						
Consol. mort. reg				125¼		
Gen'l mort. 6s	95⅛	95¼	95½		95¾	95½
Def. Income bonds						
Philadelphia & Erie				17¼	17⅜	
1st mortgage 5s						104½
2d mortgage 7s						
Pittsb.,Cin.&St.L.7s	119			119		
Pitts.,Tit.&Buff. 7s,				94		94
Schuylkill Navi't'n						
Preferred						
6s, 1895						
6s, 1907						
United Co. of N. J.	190		190⅝	190½	190⅝	190½
Hestonville, (Horse)						
Chestnut&Wal.(do)						

Baltimore Stock Exchange.

Closing Prices for the Week Ending Aug. 29.

	W.23.	Th.24.	F.25.	Sat.26.	M.28.	Tu.29.
Baltimore & Ohio....	195	194½	.....	.....	194	.....
6s, 1885.....	.....	.....	.....	.....	.....	107½
Central Ohio ($50)...	.....	.....	.....	.....	.....	46½
1st mortgage.....	.....	.....	.....	.....	.....	.....
Marietta & Cincin'ti.	.....	.....	.....	.....	.....	.....
1st mortgage, 7s..	.....	.....	.....	.....	.....	.....
2d mortgage, 7s....	...	.....	.....	.....	.....	101
3d mortgage, 8s...	.....	.....	.....	.....	.....	.....
Northern Cen. ($50).	.....	51⅞	52¼	52½	52⅛	52
2d mort. 6s, 1885..	.....	.....	.....	.....	.....	.....
3d mort. 6s, 1900..	.....	.....	.....	.....	.....	.....
6s, 1900, gold.....	.....	.....	.....	.....	.....	116¼
6s, 1904, gold.....	.....	115⅛	.....	.....	.....	.....
Pitts. & Connelsv. 7s.	.....	.....	.....	.....	.....	121½
Virginia 6s, Consol..	59¼	...	.....	59½	59	59¼
Consol. coupons...	.....	.....	.....	.....	.....	.....
10-40 bonds.....	.....	.....	43	.....	.....	.....
Def'd Certificates	.....	.....	.....	.....	.....	.....
Western Maryland..	.....	.....	16½	.....	.....	.....
1st M.,end.by Balt	.....	.....	.....	.....	.....	.....
2d M., do.	.....	.....	.....	.....	.....	.....
3d M., do.	.....	.....	.....	.....	.....	.....
1st M., unendorsed	....	.....	.....	...	.....	.....
2d M.,end.Wash Co	.....	.....	.....	.....	.....	.....
2d M., preferred...	.....	.....	107⅛	.....	.....	.....
City Passenger R. R.	.....	.....	41	.....	.....	.....

London Stock Exchange.

	Closing Prices			
	Aug. 11.		Aug. 18.	
Baltimore and Ohio 5s, 1927.....	106	108	106	108
Central of N. J., $100 shares.....	93	99	93	98
Do. consol. mort.....	112	114	112	114
Do. Income Bonds.....	92	96	92	96
Central Pacific of Cal., $100 shs..	96½	97½	95	96
Do. 1st mort. 6s, 1895-'98.....	118	120	118	120
Det., G'd Haven & Mil. Equip bds.	116	118	116	118
Do. Con. M. 5p.c., till '83 after 6p.c.	114	116	114	116
Illinois Central $100 shares.....	143	145	140	142
Do. S. F. 5s, 1903.....	106	108	106	108
Lehigh Valley Cons. mort. 1923...	115	119	115	119
Louisville and Nashville mort. 6s	98	100	98	100
Do. capital stock $100 shares...	75	78	75	77
N. Y. Cen. & Hud. R. mort. bonds.	132	136	132	136
Do. $100 shares.....	139	140	139	140
Do. mort. bonds (stg.).....	121	123	121	123
N. Y. Lake Erie & West. $100 shs.	41	41½	39¾	40¼
Do. 6 p. c, pref. $100 shares....	81	83	81	83
Do. 1st Con. Mort. bonds (Erie).	130	134	127	130
Do. do. Funded Coupon bonds.	129	131	126	129
Do. 2d Consol. Mort. bonds....	99	101	99	101
Do. do. Funded Coupon bonds.	96	98	96	98
N. Y., Pa. & Ohio 1st mort. bonds.	48	49	47	48
Do. Prior Lien bonds (sterling).	103	108	103	108
Pennsylvania $50 shares.....	63¼	63¾	63⅛	63¾
General Mortgage.....	123	125	123	125
Phil. & Erie Gen. mort. 6s, 1920...	117	119	117	119
Philadelphia & Reading $50 shs..	30¼	30¾	30¾	31¼
General Consol Mortgage.	116	118	116	118
Do. Improvement Mortgage....	103	105	103	105
Do. Gen. Mtg. '74, ex-def'd coup.	97	98	97	98
St. L. Bridge 1st mort. gold bond.	125	127	125	127
Do. 1st. pref. stock.....	97	100	97	100
S. P'fic of Cal., 1st mort 6s, 1905-6.	108	110	108	110
Union Pacific 1st mtg. 6s, 1896-9..	118	120	118	120
Wabash, St. L. & P. $100 shares..	38	39	36½	37½
Do. $100 pref. shares.....	68	69	66½	67½
Do. gen. mort. bonds....	87	89	86	88

AMERICAN RAILROAD JOURNAL.

Financial and Commercial Review.

THURSDAY EVENING, August 31, 1882.

The quotation for call loans on stocks this morning was 5@6 per cent (with few loans above 5½ per cent), and on United States bonds 3@4 per cent. Time loans were about 6 per cent, and mercantile paper 5½@6 per cent. In the afternoon and at the close the quotation was 5 per cent.

The actual rates for prime bankers' sterling were 4.85 @½ and 4.89@⅛, with cable transfers 4.90@½, and prime commercial bills 4.84@⅛. The actual rates for Continental bills are as follows: Francs, 5.18¾ and 5.15; Marks, 94¾ and 95⅛, and Guilders, 40 and 40¼.

The Secretary of the United States Treasury at Washington issued on the 29th of August the 116th call for the redemption of bonds of the loan of March 3, 1863, continued at 3½ per cent from July 1, 1881, in which he says: "The bonds hereinafter indicated will not be accepted for surrender and exchange into 3 per cent bonds; the principal and accrued interest on the bonds hereinbelow designated will be paid at the Treasury of the United States, in the City of Washington, D. C., on the 4th day of October, 1882, and the interest on said bonds will cease on that day, viz: Registered bonds of the act of March 3, 1863, continued during the pleasure of the Government under the terms of circular No. 42, dated April 11, 1881, to bear interest at the rate of 3½ per cent per annum from July 1, 1881, and which constitute the residue of those issued under the act of March 3, 1863, known as continued 6s, and which have not heretofore been called or which have not been offered for surrender and exchange into 3 per centum bonds of the act of July 12, 1882. Bonds forwarded for redemption should be addressed to the 'Secretary of the Treasury, Division of Loans, Washington, D. C.,' and all the bonds called by this circular should be assigned to the 'Secretary of the Treasury for redemption.' Where checks in payment are desired in favor of any one but the payee the bonds should be assigned to the 'Secretary of the Treasury for redemption for account of ——' (here insert the name of the person or persons to whose order the check should be made payable)." It is estimated that the bonds embraced in this call amount to about $3,500,000. There were $4,600,000 of this class of bonds outstanding on the 28th, but the amount was subsequently reduced to about $3,500,000 by the surrender of about $1,000,000 of the 3½ per cents for transfer into 3s. The offer of surrender was made by telegraph before the call for bonds was issued.

United States pensions, both for soldiers and sailors, are paid quarterly on the 4th days of March, June, September and December.

The interest on the bonds of the Eastern (Mass.) Railroad Company, which has hitherto been at 4½ per cent, will be increased to 6 per cent from the 1st of September. This was originally a thirty-year loan, issued in 1876, at 3½ per cent the first three years, 4½ per cent the next three, and will now have twenty-four years to run at 6 per cent interest—the principal maturing in 1906.

The $952,000 "State of Rhode Island and Providence Plantation" 6 per cent bonds mature on the 1st of September. These were originally "War Bonds," issued in 1862, and having 20 years to run.

The American Watch Company, Waltham, Mass., will pay a semi-annual dividend of 4 per cent, amounting to $60,000, on the 1st of September. The Napa Quicksilver Mining Company will pay on demand in Boston a dividend of ten cents per share, amounting to $10,000. The dividends on the stock of this company are paid once in about six weeks.

The quarterly interest on the United States 4½ per cent gold bonds (1¼ per cent) is payable on the 1st days of March, June, September and December.

The estimated traffic receipts of the New York, Pennsylvania and Ohio Railroad for the month of July, 1882, were $446,907, against corrected actual earnings of $430,792 for the month of July, 1881—showing an estimated increase of $16,115.

The gross traffic receipts of the St. John and Maine Railway for the month of June, 1882, were $11,032 against $9,638 for the month of June, 1881—an increase of $1,394. The expenses were $11,246, against $12,138—a decrease of $891. The net gain, therefore, was $12,137.

The earnings of the Marquette, Houghton and Ontonagon Railroad for the month of July, 1882, were $195,639.36, the operating expenses $114,821.14, and the net earnings $80,818.22; for the month of July, 1881, the earnings were $155,682.75, the operating expenses $99,535 82, and the net earnings $56,046.93—showing an increase in gross earnings of $39,956.61 and in net earnings of $24,771.29.

The gross earnings of the Philadelphia and Erie Railroad for July, 1882, were $377,206.08, the expenses, $216,231.92, and the net earnings, $160,974.16, an increase, as compared with the month of July 1881 of $88,375.32. The net earnings for the seven months of 1882, as compared with the corresponding period of 1881, show an increase of $56,240.13.

At a meeting of the stockholders of the North Carolina Midland Railway Company, held at Winston, N. C., on the 24th of August, at which all of the stock of the company was represented, resolutions were unanimously adopted authorizing the board of directors to issue bonds to provide for the construction of the entire road, and to execute a mortgage to guarantee the said bonds; also to lease the line when completed to the Virginia Midland Railway Company. It is said that steps will be taken at once by the officers of the North Carolina Midland Company to carry out the above resolutions, and it is thought the construction of the road will be commenced at an early day. The North Carolina Midland Railway will extend from Danville, Va., through Rockingham Stokes, Forsythe, Davidson, Davy and Rowan counties, in North Carolina, to Mooresville, Iradale county, one of the richest sections of the State.

The foreclosure case of the Marietta and Cincinnati Railroad, which is now before the Common Pleas Court at Chillicothe, Ohio, has been further postponed to the 16th of October. In the meantime a master in chancery is to examine the securities on deposit with the trust company in New York, to see if they are there as represented. This delay in the litigation is annoying to the owners of the securities, who are about unanimous in the desire to see the road reorganized. One of the bondholders' committee is reported to have stated that there is no help for it; there is to be an election in Ohio this fall, and if a fast and loose game is determined upon in reference to the railroad, then there is nothing else to do but await the final decision, which, in equity, must be on the side of the property owners.

The Navy Department at Washington is in receipt of communications from a number of scientific schools and universities, in the various States, asking for the detail of the engineer officers of the Navy for the purpose of promoting a greater knowledge of steam engineering and iron shipbuilding among the young men of the country. As a rule engineers would rather not be detailed to this special duty, and it is doubtful if all the requests will be complied with. Although an act of Congress in 1879 authorized the detail of twenty-five officers for this purpose, the act leaves it to the discretion of the President and Secretary of the Navy to decide; and the detail will depend largely, therefore, on the influence possessed by the various institutions.

The gross receipts of the Panama Railroad Company in 1880 amounted to 11,957,789 francs, and in 1881 to 12,449,690 francs. The expenses amounted to 6,170,932 francs in 1880 and 5,591,058 francs in 1881. The net gains consequently amounted to 6,858,681 francs in 1881, which permitted a dividend of 97 francs 95 centimes per share to be declared.

The Commissioners of the Rhode Island State Sinking Fund sold on the 28th of August $20,000 of the City of Providence 5 per cent water bonds for $11,826.50, and $20,000 of the same for $11,657, the sale being made to meet maturing State bonds.

At a special meeting of the stockholders of the Rochester and Pittsburgh Railroad Company, held on the 27th of August, the capital stock of the company was increased from $10,000,000 to $15,000,000. The vote was unanimous, and included 76,400 shares out of a capital stock of 100,000 shares. The new issue is to be devoted to the purchase of the capital stock of the Perry Railroad Company of this State, and of the Brockwayville and Punxutawney Railway Company of Pennsylvania, and to take up the income bonds of the Buffalo and Pittsburgh division of the Rochester and Pittsburgh Railroad, etc.

The United States Treasurer has given instructions for the transfer to the Mint at Philadelphia for recoinage all the uncurrent subsidiary silver held at the different depositories throughout the country. This has been done in accordance with an appropriation of $25,000 made at the last session of Congress for this purpose. There are about $500,000 of these coins held at the various offices, including three cent silver pieces, five cent silver pieces, twenty cent silver pieces, and other uncurrent silver.

The Tennessee Funding Committee has exchanged $8,000,000 worth of the new bonds for the old issue, in accordance with the compromise measure passed by the last Legislature of that State.

The West Jersey Railroad Company has declared a dividend of 3 per cent, payable in cash on the 15th of September to stockholders of record August 24th; also a dividend of 3 per cent upon such capital stock as shall, after the said 24th day of August, 1882, and before the 24th day of August, 1883, be issued in exchange for dividend scrip dated April 17, 1882, payable in cash at the time of such exchange to the registered holder thereof.

The total number of acres of public lands disposed of during the fiscal year ending June 30, 1882, as shown by an official statement issued from the General Land Office at Washington, was 15,690,848, an increase over last year of about 5,000,000 acres. The cash received for this land amounts to about $8,361,091, as against about $5,000,000 during the last fiscal year. The number of acres entered for agricultural purposes as "cash sales" during the year amounted to 3,699,899 acres; for mineral purposes, 3,706,801 acres; for desert lands, 166,055 acres; for coal

lands, 7,194 acres. There were 6,347,729 acres entered under the homestead laws, while 2,216,244 acres were "proved up" under the same laws. Under the timber-culture acts 2,609,797 acres were entered and "proved up;" under the various land warrants, railroad grant, school and State-selection acts (including various kinds of scrip), 615,866 acres were disposed of. The great increase in the disposition of public lands during the past fiscal year is said to be owing to the immense immigration to the Northwest. In Dakota the increase is most noticeable. A very large increase is also noticeable in Louisiana and Florida. The area of cash sales in Dakota alone was 698,094 acres, and the homestead entries in the same territory were more than 2,000,000 acres.

The following quotation of sales of railway and other securities, for the week, are in addition to those given elsewhere in our columns.

New York.—Albany and Susq. consol., 126½; Atchison, Colorado and Pacific 1st, 92; Boston and New York Air Line pref., 80; Boston, Hartford and Erie 1st, 54½; Chicago, St. Paul, Minneapolis and Omaha, 55; do. pref., 113; do. consol., 105¾; Columbus, Chicago and Indiana Central inc., 52; Chesapeake and Ohio 1st, Series A, 108; do. 6s, 1911, 101½; do. cur. 6s, 52½; Chicago, Milwaukee and St. Paul, Chicago and Pacific West div. 1st, 93⅛; do. Southern Minn. div. 1st, 107¾; Cairo and Fulton 1st, 107¾; Chicago and Northwestern S. F. 5s, 101¾; Central Iowa 1st, 101½; Clev., Col., Cin. and Ind. consol., 123; Chicago, St. Louis and New Orleans 5s, 105; Chicago, Burlington and Quincy, Iowa div. 4s, 87½; Delaware and Hudson 1st, Penn. div., reg., 130; Dubuque and Sioux City, 92, Denver and Rio Grande, 57¾; do. 1st, 113⅞; do. consol., 97; Denver, South Park and Pacific 1st, 101; East Tennessee, Virginia and Georgia, 11¼; do. pref., 19; do. inc., 43; do. 5s, 74; do. divisional 5s, 92½; Evansville and Terre Haute, 79½; do. 1st, 96½; Elizabethtown, Lex. and Big Sandy 6s, 96; Fort Worth and Denver 1st, 98¼; Green Bay, Winona and St. Paul inc., 25; Gulf, Colorado and Santa Fe 1st, 107⅞; Houston, East and West Texas 1st, 102; Hannibal and St. Joseph 6s, consol., 106; Indiana, Bloomington and Western, 45¼; Kansas Pacific inc., No. 16, 93; do. 1st consols, 104; do. 6s, Denver div. ass., 109½; do. 6s, 1896, 110½; Louisiana and Missouri River, 17¾; Long Island, 57½; Lake Erie and Western, 39¾, do. inc., 54; Louisville, New Albany and Chicago, 73; Louisville and Nashville genl. mort. 6s, 95¼; do. 2d, 52; do. Cecelian Branch 110; do. New Orleans and Mobile div. 1st, 92½; do. Nashville and Decatur 1st, 120; Manhattan Beach, 23; Marietta and Cincinnati 2d pref., 6⅞; Minneapolis and St. Louis, 33¾; do. pref., 68½; do. 1st, 115; Mobile and Ohio, 23; do. 1st deben., 80; Missouri, Kansas and Texas, 39¾; do. genl. mort. 6s, 87; do. consol. 7s, 105⅝; Missouri Pacific, 108¾; Memphis and Charleston, 60; Milwaukee, Lake Shore and Western, 57¾; do. 1st, 101; New York City, M. and N. genl. mort., 57½; New York, Chicago and St. Louis, 17⅜; do. pref., 37; do. 1st, 95; Nashville, Chattanooga and St. Louis, 62; New York and New England, 52¼, Norfolk and Western, 18; do; do. pref., 56¾; do. genl. mort., 102⅞; New York, Ontario and Western, 26⅜; Northern Pacific 1st, 103⅝; New Orleans Pacific 1st, 92; Ohio Central, 17½; do. inc., 33, Ohio Southern, 16¾; do. inc., 33; do. 1st, 82; Oregon Transportation, 90¾; Oregon Railway and Nav., 152; do. 1st, 107½; Ohio and Mississippi, Springfield div. 1st, 120½; Oregon Short Line 6s, 103; Peoria, Decatur and Evansville, 36¾; do. 1st, 105; Rochester and Pittsburgh, 27⅝; Richmond and Alleghany, 23; do. 1st, 100; Richmond and Danville, 116¾; do. deben., 78; do. 6s, 100; Richmond, Danville and West Point, 62½; Rome, Watertown and Ogdensburg inc., 35; St. Paul, Minneapolis and Manitoba, 146¾; do. 1st, 108½; do. 2d, 110; St. Paul and Duluth pref., 89; St. Louis, Alton and Terre Haute div. bonds, 55; Southern Pacific of California 1st, 106½; Scioto Valley 1st, 96¼; South Carolina, 1st, 102; St. Paul and Sioux City 1st, 110; St. Louis and San Francisco 2d, Class A, 98½; do. B, 91; St. Louis, Jacksonville and Chicago 1st, 117½; St. Louis, Iron Mountain and Southern, [Cairo, Ark. and Texas 1st, 107½; Toledo, Delphos and Burlington inc., 21½; Texas and Pacific, 51⅝; do. inc. Land Grant, 66¼; do. consol. 6s, 97½; do. Rio Grande div. 1st, 86; Toledo, Peoria and Western 1st, 111; Utah Southern genl. mort. 7s, 104; Wabash, St. Louis and Pacific, gen'l mort., 85⅝; do. Havana div. 1st, 90; Arkansas 7s, M. & L. R., 30@34; North Carolina, special tax, 3d class, 7; Tennessee 6s, 54; do. Compromise bonds, 63; Virginia 6s, def., 12⅞; American Dist. Telegraph, 51; Mutual Union Telegraph, 26⅞; do. 6s, 79; Colorado Coal and Iron, 42¾; do. 6s, 86; Consolidation Coal, 32; New Central Coal, 18; Sutro Tunnel, ⅜; Homestake Mining, 17½; Standard, 8½.

Philadelphia.—American Steamship Co. 6s, 107½; Central Transp., 34¾; Cincinnati 7-30s, J. and J., 132; Huntingdon and Broad Top Mt. consol. 5s, 93; Nesquehoning Valley, 55½; Pennsylvania R. R. consol. mort. 5s, reg., 108; Philadelphia City 6s, 1903, 132; Philadelphia and Reading R. R. scrip, 100¾; Pennsylvania Co. 4½s, 96; St. Paul and Duluth pref., 87; Texas and Pacific, 1st, 108; do. consol. mort. 6s, 95; West Jersey consol mort. 6s, 111. The latest quotations are: City 6s, 108@120; do. free of tax, 127@132; do. 4s, new, 108@112; Pennsylvania State 5s, new loan, 113@115; do. 4s, old, 108@112; do. 4s, new, 113@115; Philadelphia and Reading Railroad, 30⅜@30½; do. consol. mort. 7s, reg., 125¼@126; do. gen'l mort. 6s, coupon 95@96; do. 7s, 1893, 121@—; do. new conv., 74@75; United New Jersey R. R. and Canal, 190½@191; Buffalo, Pittsburg and Western, 21⅜@21½; Pittsburgh, Titusville and Buffalo 7s, 93¾@94¼; Camden and Amboy mort. 6s, 1889, 113@115; Pennsylvania R. R., 62¼@62¾; do. general mort. 6s, coupon, 125@126; do. reg., 126@126½; do. consol. mort. 6s, reg., 120@122; Little Schuylkill R. R., 56½@57½; Schuylkill Navigation pref., 13@13½; do. 6s, 1882, 91@92; Elmira and Williamsport pref., 58@60; do. 5s, 100@101; Lehigh Coal and Navigation, 43¼@43¾; do. 6s, 1884, 103@103½; do. R. R. loan, 113@116; do. Gold Loan, 113@114; do. consol. 7s, 116@117; Northern Pacific, 50¼@50⅝; do. pref., 92⅞@93; North Pennsylvania, 63@64; do. 6s, 106½@107½; do. 7s, 120@123; do. 7s, General mort. reg., 121½@123; Philadelphia and Erie, 17@17½; do. 7s, 114@115; do. 5s, 104@105; Minehill, 61@61½; Catawissa 23@24; do. pref., 54½@55; do. new pref., 54@54½; do. 7s, 1900, 118@—; Lehigh Valley, —@63; do. 6s, coupon, 122@123; do. reg., 122½@123; do. 7s, 135@137; do. consol. mort., 121@122; Fifth and Sixth streets (horse), 160@161; Second and Third, 111@113; Thirteenth and Fifteenth, 70@75; Spruce and Pine, 40@45; Green and Coates, 80@90; Chestnut and Walnut, 90@93; Germantown, 70@71; Union, 109@110; West Philadelphia, 105@115; People's 17@17½; Continental, 100@102.

Boston.—Atlantic and Pacific blocks, 28; do. inc., 27; Atchison, Topeka and Santa Fe guar., 112½; Boston Land, 8; Burlington and Missouri River in Neb. 6s, non-exempt, 103; do. L. G. 7s, 114¾; Boston, Clinton, Fitchburg and New Bedford, 59; Cheshire R. R., 60½; Chicago, Burlington and Quincy old, 85⅞; do. Denver ext. 4s, 84½; Connotton Valley, 7⅜; Connecticut and Passumpsic Rivers R. R., 95; Chicago and West Michigan 5s, 94; California Southern 6s, 81; Detroit, Lansing and Northern pref., 115; Flint and Pere Marquette, 22; do, pref., 95; Iowa Falls and Sioux City, 93; Kansas City, Ft. Scott and Gulf, 7s, 112; Kansas City, St. Joseph and Council Bluffs 7s, 116; Little Rock and Fort Smith, 53; Mexican Central, 27½; do. 7s, 84½; do. inc., 27½; do. blocks No. 2, 119; Massachusetts Central, 4; do 6s, 40; Marquette, Houghton and Ontonagon, 73; New York and New England 6s, 105⅜; Oregon Short Line 6s, 103½; do. subscriptions, 120; Rutland, 3¼; do. 6s, 100; St. Louis and San Francisco 2d pref., 58; Sonora 7s, 105¾; Summit Branch 14; Toledo, Cincinnati and St. Louis, 8¾; do. 6s, 69⅞; do. Branch inc., 19; Toledo, Delphos and Burlington, Dayton div. 6s, 72; Allouez Mining Company, 2½; Brunswick Antimony, 10; Franklin, 15⅝; Huron, 3⅜; Harshaw, 1¼; National, 1⅞; Osceola, 33¼; Pewabic, 10¾; Sullivan, 2½; Silver Islet, 17.

Baltimore.—Atlantic Coal, 1.20; Atlanta and Charlotte 1st, 108¾; Baltimore City 6s, 1890, 116½; do. 5s, 1916 125; Columbia and Greenville 1st, 102; Charlotte, Columbia and Augusta, 54¼; Canton Co. 6s, 103; Maryland Defense 6s, 106¼; Marietta and Cincinnati 1st Trust certificates, 128; do. 2d do., 101; do. 3d do., 57; Northern Central 5s, series B, 97¼; North Carolina consol. 4s, 79½; Ohio and Mississippi, Springfield div. 1st, 120; Virginia and Tennessee 2d, 101½; Virginia 10-40 coupons. 66; Virginia Midland 2d mort., 111; do. 5th mort., 96¼. The latest quotations are: Atlanta and Charlotte, 75½@76; do. 1st, 108¾@109; Baltimore and Ohio, 194@—; do. 6s, 1885, 106¾@—; Baltimore City 6s, 1890, 116@116¼; do. 6s, 1902, —@131½; do. '58, 1894, 115@116¼; do. 5s, 1916, 124¼@126; do. 5s, 1900, 116@116¾; Central Ohio, 46½@46¾; do. 1st, 111½@112; Columbia and Greenville 1st, 101¾@102; Canton Co. 6s, 102½@104; Marietta and Cincinnati 1st, 128@128½; do. 2d, 100⅝@101; do. 3d, 57@57½; Northern Central, 52@52½; do. 6s, 1900, 116¾@117; do. 5s, Series B, 96@97; do. 6s, 1904, gold, —@116; Ohio and Mississippi, Springfield div. 1st, 119¾@—; Pittsburgh and Cornellsville 7s, 121¼@122; Richmond and Danville, 111½@—; Virginia Midland 5th mort., 96½@97; do. inc., 70@75; Virginia consols. 59@59½; do. consol. coupons, 59@60; Virginia 10-40s, 42¾@43; do. 10-40 coupons, 66@67; Western Maryland 2d pref., 106½@108; do. 2d mort., guar. by Washington Co., 113@115.

The Coal Trade.

THE leading coal-carrying companies make the following reports of their tonnage for the week ending August 19, and for the year to that date, compared with their respective amounts carried to the same time last year:—

	Week.	1882.	1881.
Reading Railroad	162,024	5,587,991	5,347,535
Schuylkill Canal	16,505	254,993	335,609
Lehigh Valley	143,061	4,309,650	3,928,071
Delaware, Lackawanna and Western	109,563	2,742,071	2,584,828
Shamokin	27,803	683,004	669,532
Central R. R. of New Jersey	89,941	2,677,437	2,641,111
United R. R. of New Jersey	32,503	1,050,152	950,353
Pennsylvania Coal	33,160	826,485	812,941
Delaware and Hudson Canal	79,684	2,097,950	2,179,835
Huntingdon and Broad Top Mountain	5,943	260,864	323,082
Penn. and New York	28,288	1,022,529	1,031,988
Clearfield, Pa.	63,543	1,802,583	1,524,330

The total tonnage of anthracite coal from all the regions for the week ending Aug. 19, as reported by the several carrying companies, amounted to 637,807 tons, against 604,291 tons in the corresponding week last year, an increase of 33,516 tons. The total amount of anthracite mined for the year is 17,311,028 tons, against 16,669,496 tons for the same period last year, an increase of 641,532 tons. The quantity of bituminous coal sent to market for the week amounted to 74,989 tons, against 95,57 tons in the corresponding week last year, a decrease of 20,586 tons. The total amount of bituminous mined for the year is 2,526,170 tons, against 3,080,355 tons for the corresponding period last year, a decrease of 554,185 tons. The total tonnage of all kinds of coal for the week is 712,796 tons, against 669,866 tons in corresponding week last year, an increase of 12,930 tons, and the total tonnage for the coal year is 19,837,198 tons, against 19,749,851 tons to same date last year, an increase of 87,347 tons. The quantity of coal and coke carried over the Pennsylvania Railroad for the week ending August 19 was 204,806 tons, of which 157,112 tons were coal and 47,694 tons coke. The total tonnage for the year thus far has been 6,897,613 tons, of which 5,067,251 tons were coal and 1,830,362 tons coke. These figures embrace all the coal and coke carried over the road, east and west. The shipments of bituminous coal from the mines of the Cumberland coal region for the week ended Aug. 19 were 13,004 tons, and for the year to that date 609,779 tons, a decrease of 669,471 tons as compared with the corresponding period of last year. The shipments were: To the Baltimore and Ohio Railroad—For the week, 11,090 tons; year, 505,111 tons; decrease as compared with 1881, 123,147 tons. Chesapeake and Ohio Canal—Week, 1,914 tons; year, 25,994 tons; decrease as compared with 1881, 259,025 tons. Pennsylvania Railroad — Week, none; year, 74,842 tons; decrease as compared with 1881, 90,433 tons. The Reading Railroad shipment for last week, ending August 26 was about 195,000 tons, of which 56,000 tons were sent to and 63,000 tons shipped from Port Richmond, and 12,600 tons sent to and 15,200 tons shipped from Elizabethport.—*Philadelphia Ledger, Aug.* 28.

THE Railway Traveling Auditors' Association will hold an adjourned meeting at the Louisville Hotel, Louisville, Ky., on Wednesday, September 13, at 11 A. M. The National Association of General Passenger and Ticket Agents will hold its next meeting, pursuant to adjournment, in Montreal, September 19. The Master Car Builders' Association will meet in convention, pursuant to adjournment, on October 10, at Niagara Falls. The Master Car Painters' Association will hold its annual convention in Chicago, beginning September 20.

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Cars—Passenger and Freight Cars of all descriptions for early delivery.
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Connecting at Syracuse, N. Y., at 7.15 P.M., with through sleeping cars for Cincinnati, Cleveland, Toledo, *DETROIT AND CHICAGO.*

3.00 P.M. CINCINNATI EXPRESS.

Pullman Sleeping Car attached, running through to Cincinnati without change. (Only Line running Pullman Cars from Boston.) This car runs *via* Erie Railway and N.Y., P. & O. R.R., making direct connection for Louisville, St. Louis, Kansas City, New Orleans, and all points in Texas and New Mexico.

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Through sleeping car for Buffalo, Toledo, Fort Wayne, Logansport, Lafayette, Danville Tolono, Decatur and St. Louis, making direct connection with through Express Trains for Kansas, Colorado, Texas, and all points in the

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The only line running a through sleeping car *via* Buffalo and Detroit without change, arriving at Chicago at 8.00 A.M. second morning, making sure connections with through Express Trains for Iowa, Nebraska, Kansas, Colorado, the Pacific Coast, Wisconsin, Minnesota and all points in the

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RAILROAD AND CANAL DIVIDEND STATEMENT.

Showing the amount of Stock Outstanding, the Dividend Periods and the date of last Dividend.

Marked thus(*)are leased roads.	Stock out-standing.	Divide'd Periods.	Last Dividend Payable.
Albany and Susq*...100	2,500,000	semi-an	July '82 2
Ashuelot.....100	210,000	q'arterly	Oct. '81 3½
Atch., Top. and S. Fe100	54,000,000	q'arterly	Aug. '82 1½
Atlanta and W. Point100	1,232 200	semi-an	Jan. '82 6
Atlantic and St. Law*100	5,840,000	semi-an	Mar.'82 3
Augusta and Savan'h100	1,022,900	semi-an	June'81 3½
Avon,Genesee&MtM*100	225,000	semi-an	July '81 3
Baltimore and Ohio. 100	14,792,566	semi-an	May '82 5
" " pref.100	5,000,000	semi-an	July '82 3
Washington Br....100	1,650,000	semi-an	Apl. '82 5
Berkshire*.....100	600,000	q'arterly	Apl. '82 1¾
Boston and Albany..100	20,000,000	q'arterly	Sept.'82 2
Bos.&N.Y.AirLine pf.100	2,795,227	q'arterly	June'82 1
Bos.,Cl.,F.&N.B.pref.100	1,750,100	.....	Apl. '82 3½
Bos.,Conc.&Mont.pf*100	800,000	semi-an	May '82 3
Boston and Lowell..500	3,940,000	semi-an	July '82 2
Boston and Maine...100	6,921,274	semi-an	May '82 4
Boston & Providence100	4,000,000	semi-an	May '82 4
Attleborough Br...100	131,700	semi-an	July '82 3½
Bos.,Revere B &Lynn100	419,400	semi-an	July '82 3½
Buffalo,N. Y. & Erie*.100	950,000	semi-an	June'82 3
Camden & Atlantic.. 50	377,400	q'arterly	Apl '80 38
" " pref. 50	880,650	q'arterly	Apl '80 3½s
Camden & Burl. Co...100	381,925	semi-an	July '82 3
Canada Southern....100	15,000,000	.....	Feb. '81 2½
Cape May &Millville* 50	447,000	semi-an	June'81 3
Catawissa*..... 50	1,159,500	annual	Oct.'81 $1½
" pref..... 20	2,200,000	semi-an	May '82 3½
" new pref.. 50	1,000,000	semi-an	May '82 3½
Cayuga and Susq.*.. 50	589,110	semi-an	July '81 4½
Cedar Rapids&Mo.R*100	6,850,400	q'arterly	Aug. '82 1½
" " pref.100	769,600	semi-an	Aug .'82 3½
Central of Georgia...100	7,500,000	semi-an	June '82 4
Central of New Jersey100	18,563,200	q'arterly	July '76 2½
Central Ohio*..... 50	2,437,950	semi-an	July '82 3
" pref.. . 50	411,550	semi-an	July '82 3
Central Pacific 100	59,275,500	semi-an	Aug. '82 3
Chemung*.....100	380,000	q'arterly	July '81 1½
Cheshire preferred ...100	2,155,300	semi-an	July '82 1½
Chicago and Alton...100	11,181,741	semi-an	Sept. '82 4
" " pref 100	2,245,400	semi-an	Sept. '82 4
Chi., Burl. & Quincy.100	55,337,455	q'arterly	Sept. '82 2
Chi., Iowa & Nebras*.100	3,916,200	semi-an	July '82 4
Chi., Mil. & St. Paul.100	20,404,261	semi-an	Oct. '82 3½
" pref 100	14,401,483	semi-an	Oct. '82 3½
Chi. & N. Western...100	14,988,257	semi-an	June'82 3½
" pref.100	21,525,353	q'arterly	Sept. '82 2
Chi., R. I. & Pacific..100	41,960,000	q'arterly	Aug. '82 1¾
Chi. and West Mich .100	6,151,000	semi-an	Feb. '82 2½
Chi.,St.P.,M.&O.pref.100	10,390,000	q'arterly	July '82 1¾
C., Ind., St. L. & Chi..100	6,000,000	q'arterly	July '82 1½
Cin., Sand. & Clev.pf. 50	429,037	semi-an	May '82 3
Clev. and Mahoning* 50	3,759,200	semi-an	Nov. '81 3½
Clev. and Pittsburg* 50	11,244,336	q'arterly	Sept. '82 1¾
Columbus & Xenia*. 50	1,786,200	q'arterly	June'82 2
Colum.&HockingVal.100	2,500,200	semi-an	Aug. '81 208
Concord 50	1,500,000	semi-an	May '82 5
Concord and Ports.*.100	350,000	semi-an	July '82 3½
Conn.& Passump.Riv100	2,244,400	semi-an	Aug '82 3
Connecticut River ..100	2,100,000	semi-an	July '82 4
Cumberland Valley.. 50	1,292,950	q'arterly	July '82 2½
" 1st pref 50	241,900	semi-an	Apl. '82 4
" 2d pref. 50	243,000	semi-an	Apl. '82 4
Danbury & Norwalk. 50	600,000	.....	Apl. '82 1½
Dayton and Mich.*.. 50	2,402,573	semi-an	Apl. '82 1¾
" " pref. 50	1,211,250	q'arterly	July '82 2
Delaware*..... 25	1,468,940	semi-an	July '82 3
Del. & Bound Brook*100	1,652,000	q'arterly	Aug. '82 1¾
Del., Lack.& Western 50	26,200,000	q'arterly	July '82 2
Denver & Rio Grande.100	29,160,000	q'arterly	Jan. '82 1½
Den.,South P. & Pac.100	3,500,000	....	Aug.'80 4
Detroit, Lans. & Nor.100	1,825,600	semi-an	Aug.'80 2½
" " pref.100	2,503,380	semi-an	Aug.'82 3½
Dubuque&Sioux C'y*100	5,000,000	semi-an	Apl. '82 3
East Pennsylvania*., 50	1,709 550	semi-an	July '82 3
East Mahanoy*..... 50	392,950	semi-an	July '82 3
Eastern (N. H.).....100	492,500	semi-an	June'82 2½
Eel River.....100	3,000,000	q'arterly	Sept. '82 $1
Elmira.Jef.&Canand*100	500,000	annual	Sep. '80 5
Elmira&Williamsp't* 50	500,000	semi-an	May '82 1½
" " pref. 50	500,000	semi-an	July '82 3½
Erie and Pitsburg*.. 50	1,998,400	q'arterly	June '82 1¾
Evansville & Terre H.100	100,000	semi-an	Nov.'81 2
Fitchburg.....100	4,500,000	semi-an	July '82 3
F. & P. Marquette pf.100	6,500,000	semi-an	July '82 3
Ft.W. & Jackson pref.100	2,000,000	.....	May '82 2
Georgia. ..... .100	4,200,000	q'arterly	July '82 2½
Granite 100	1,250,000	semi-an	July '82 3
Han. & St. Jo. pref .100	5,083,024	semi-an	Aug. '82 3½
Harrisbg&Lancaster . 50	1,182,500	semi-an	July '82 3½
Housatonic pref. ...100	1,180,000	q'arterly	July '82 2
Illinois Central.....100	39,000,000	semi-an	Sept. '82 3½
Ia.Falls & Sioux City*100	4,623,500	q'arterly	Sept.'82 1¾
Iowa R. Land Co....100	7,620,000	q'arterly	Au.. '82 1
Jeffersonv. Mad.&Ind100	2,000,000	q'arterly	May '82 1¾
Joliet and Chicago*..100	1,500,000	q'arterly	June'82 1¾
Kan.C.,Ft.S.&Gulf...100	4,000,000	.....	Feb. '82 2
" " pref..100	2,750,000	semi-an	Aug. '82 4
Kentucky Central...100	500,000	semi-an	June'81 1
" " pref..100	5,583,500	semi-an	June'83 1
Lake Shore&Mich.So.100	49,466,500	q'arterly	Aug. '82 2
" (guar.)100	533,500	semi-an	Aug. '82 5
Lawrence*..... 50	450,000	q'arterly	July '82 2
Lehigh Valley..... 50	27,496,895	q'arterly	July 82 1½
" pref. 50	106,300	q'arterly	July'82 1½

Marked thus(*)are leased roads.	Stock out-standing.	Divide'd Periods.	Last Dividend Payable.
Little Miami..... 50	4,637)300	q'arterly	June'82 2
Little Rock & Ft. S..100	4,096,135	.....	July' 81 108
Little Schuylkill*.. . 50	2,646,100	semi-an.	July '82 3½
Louisville & Nashv..100	19,130,913	semi-an.	Feb. '82 3
Lowell & Andover....100	500,000	semi-an.	Jan. '82 3½
Lykens Valley.....100	600,000	q'rterly.	Oct.' 81 2½
Manchester & Law...100	1,000,000	semi-an.	May '82 5
Manhattan 100	13,000,000	.....	.....
" " 1st pref.100	6,500,000	q'rterly.	July '82 1½
" " 2d pref.100	6,500,000	q'rterly.	July '82 1½
Marietta& Cincinnati 50	1,386,350	.....	.....
" " 1st pref 50	8,105,600	semi-an.	Sep. '66 38
" " 2d pref 50	4,440,000	semi-an.	Sep. '66 38
Marq.Hout.&Ont.pf...100	2,259 026	.....	Aug. '82 4
Massawippi*..... 100	400,000	semi-an.	Aug. '82 3
Michigan Central....100	18,738,204	q'rterly.	Aug. '81 1
Middlesex Central...100	280,000	semi-an.	Aug. '82 3
Mill Creek&Minehill* 50	323,000	semi-an.	July '82 5
M.Hill& Schuyl.Hav* 50	4,022,500	semi-an.	July '82 3½
Missouri Pacific..... 100	28,169,800	q'rterly.	July '82 1½
Mobile&Montgomery100	3,022,517	semi-an.	Feb. '80 2¾
Mont. & Wells River100	800,000	annual	Feb. '80 2
Morris and Essex.... 50	15,000,000	semi-an.	July '82 3½
Mt Carbon&PtCarbon 50	282,350	semi-an.	July '82 6
Nashua and Lowell..100	800,000	semi-an.	July '82 4
Nashua & Rochester.100	1,305,800	semi-an.	Apl. '82 1½
Nashv. & Decatur...100	1,827,000	semi-an.	June'81 3
Nash.,Chat.&StLouis 25	6,670,325	semi-an.	Apl. '82 1½
Naugatuck.....100	2,000,000	semi-an.	Jan. '82 5
Nesquehoning Val'y* 50	1,300,000	semi-an.	Mar.'82 3
N.Castle&Beaver Val* 50	600,000	q'rterly.	Oct. '81 —
NewLondonNorth'n*100	1,500,000	q'rterly.	July '82 1½
N. Y. Cen. & Hud. R.100	89,428,330	q'rterly.	July '82 2
N. Y. and Harlem.....100	7,950,000	q'rterly.	July '82 4
" " pref.100	1,500,000	q'rterly.	July '82 4
" City Line.. —	.....	annual	Apl. '82 3
N.Y.,LakeErie&West.100	77,083,900	.....	.....
" " pref.100	8,156,825	.....	Jan. '82 6
N. Y., N. H. & Hart...100	15,500,000	semi-an.	Jan. '82 5
N. Y., Prov. & Boston100	3,000,000	q'rterly.	Aug. '82 2
Niag.Bridg&Canand*100	1,000,000	semi-an.	July '81 3
North Carolina*.....100	3,000,000	semi-an.	Sep. '81 3
" " pref.100	1,000,000	semi-an.	Sep. '81 3
N. Eastern (S.C.) pref100	86,000	semi-an.	May '81 4
Norfolk & Western pref.	15,000,000	q'rterly.	Sept. '82 $1
North Pennsylvania. 50	4,527,150	q'rterly.	Aug. '82 1¾
Northern Central.... 50	6,142,000	semi-an.	July '82 3
Northern N. Hampsh100	3,068,400	semi-an.	June'82 3
Northern N. Jersey*.100	1,000,000	semi-an.	July '80 2½
Norwich&Worcester*100	2,604,400	semi-an.	July '82 5
Ohio 100	18,500,000	.....	.....
Ohio and Miss. pref..100	4,030,000	semi-an.	Mar.'75 3½
Old Colony.....100	7,333,800	semi-an.	July '82 3½
Oregon R'way&Nav.100	6,000,000	q'rterly.	Aug. '82 2
Oswego & Syracuse..100	1,320,400	semi-an.	Aug. '81 4½
Panama..... 100	7,000,000	.....	July '82 6½
Paterson & Hudson*.100	630,000	semi-an.	July '82 4
Paterson & Ramapo.100	248,000	semi-an.	July '82 4
Pember.&Highst'n*. 50	342,150	semi-an.	Jan. '82 3
Pennsylvania..... 50	77,672,750	semi-an.	May '82 4
Pennsylvania Co..... 50	20,000,000	semi-an.	June'81 2½
Peoria & Bureau Val*100	1,200,000	semi-an.	Feb. '82 4
Philadelphia & Erie*. 50	7,013,700	semi-an.	.....
" " pfd 50	2,400,000	semi-an.	Jan. '75 4
Phil,Ger.&Norrist'n* 50	2,231,900	q'rterly.	June'82 3
Phil. and Reading... 50	32,726,375	q'rterly.	Jan. '76 2½
" " pref. 50	1,551,800	q'rterly.	July '76 3½
Phila. and Trenton..100	1,250,100	q'rterly.	July'82 2½
Phila., Wil. and Balt. 50	11,585,750	semi-an.	July '82 4
Pittsb. Ft. W. & Chi.*100	19,714,285	q'rterly.	July'82 1¾
" Special Imp.100	6,770,900	q'rterly.	July'82 1¾
Pittsfield&N.Adams..100	450,000	semi-an.	July '82 2½
Portl., Saco & Portsm100	1,500,000	semi-an.	July '82 3
Providence &Worces.100	2,000,000	semi-an.	July '82 3
Rensselaer&Saratog.*100	7,000,000	semi-an.	July '82 4
Rhode Island& Mass.100	100,000	.....	Jan. '81 3
Richmond& Danv...100	3,866,000	q'rterly.	Aug. '82 2
Richmond & Petersb100	1,009,300	semi-an.	Jan. '81 3
Roch.&Genesee Val.*100	555,200	semi-an.	July '82 3
Rutland preferred.. 100	4,000,000	semi-an.	Sept. '82 1
St.L.,Alt. & T.Haute.100	2,300,000	.....	.....
" " pref.100	2,468,406	.....	May '82 3
St.L.&S.Fran.1st pref100	4,500,000	.....	Aug. '82 3½
St.L.,I.Mt.&South'n.100	21,459,921	semi-an.	Feb. '74 3
St.L.,Jac'ville & Chic.100	1,293,000	.....	Aug. '82 4½
" " " pref.100	1,034,000	.....	Aug. '82 4½
St. P. & Duluth pref.100	4,705,000	q'rterly.	June'82 1¾
St. P., Minn. & Man..100	20,000,000	semi-an.	Aug.'82 3½
Schuylkill Valley*... 50	576,050	semi-an.	July '82 2½
Seaboard & Roanoke.100	1,229,600	semi-an.	May '82 5
Shamokin V.&Pottsv 50	669,450	semi-an.	Feb.'82 3
Shore Line*.....100	1,000,000	semi-an.	July '82 4
Sioux C.&Pacific pref100	169,000	semi-an.	Apl. '82 3½
South Br. (N. J.)*....100	438,300	semi-an.	Jan. '82 3
South Western (Ga.)*100	3,892,300	semi-an.	Dec. '81 3½
Stockbridge&Pitts.*.100	448,700	semi-an.	Oct. '81 1½
Syr.,Bingham&N.Y.*100	2,500,000	semi-an.	Feb. '81 2
Terre Haute & Ind...100	1,988,150	semi-an.	Aug. '82 4
Troy and Boston....100	1,609,000	semi-an.	Feb. '80 2
Union Pacific 100	61,000,000	q'rterly.	July '82 1¾
United Cos of N. J.*.100	20,490,000	q'rterly.	July '82 2½
Utica, Shenango&S V100	4,000,000	semi-an.	Nov.'81 3
Utica and Black Riv.100	1,772,000	semi-an.	Mar.'82 2
Vermont and Mass...100	3,050,000	semi-an.	Apl. '82 3
Wab. St.L.& Pac.pref.100	22,615,100	q'rterly.	Nov.'81 1½

Markedthus(*)are leased roads.	Stock out-standing.	Divide'd Periods.	Last Dividend Payable.
Ware River*.....100	750,000	semi-an.	July '82 3½
Warren (N. J.).....100	1,800,000	semi-an.	Apl. '82 3½
Warwick Valley.....100	340,000	semi-an.	July '82 2½
Westchest&Phil.pref100	821,300	semi-an.	July '80 2
West Jersey.....100	1,359,750	semi-an.	Sept. '83 3
Wilmingt'n&Weld'n.100	1,456,200	semi-an.	July '82 3
Wil., Col., & Aug 100	960,000	semi-an.	July '82 3
Winchester&Poto'c.*100	180,000	semi-an.	July '82 3
Winchester&Strasb.*100	74,700	semi-an.	July '82 3
Worcester & Nashua. 75	1,789,800	semi-an.	July '82 1½
HORSE-POWER R. R.			
Albany City.....100	200,000	annual	.... '80 5½
Baltimore City..... 25	1,000,000	semi-an.	July '82 3
Balt.,Cat.&El. Mills..100	....	semi-an.	July '82 2
BleeckerSt.&Ful.F'y.100	900,000	semi-an.	July '81 ¾
Boston&Chelsea pref. 50	110,000	semi-an.	Apl. '82 3
Broadway (Brooklyn)100	250,000	q'arterly	Oct. '81 3
B'way&7th Av,(N.Y.)100	2,100,000	q'arterly	Oct, '81 2
B'klyn&Hunter's Pt.100	400,000	semi-an.	Apl. '79 3
Brooklyn City.....100	2,000,000	q'arterly	Dec.'81 3½
Bushwick (Brooklyn)100	309,000	semi-an.	July '81 2½
Cambridge.....100	908,000	q'arterly	Apl. '82 4½
Cen.Park,N.& E.Riv.100	1,800,000	q'rterly.	July '82 2
Christoph'r&TenthSt100	650,000	semi-an.	Aug.'81 2½
Citizens' (Phil.)..... 50	192,500	q'rterly.	Jan. '82 2½
Citizens' (Pbg.)..... 50	200,000	annual..	....'80 14½
Coney Island&Bklyn100	500,000	semi-an.	Oct. '80 5
Continental (Phil.).. 50	580,000	semi-an.	July '82 6
D.Dock,E.B'way&Bat100	1,200,000	q'arterly	Nov.'81 4
Eighth Av. (N. Y.)...100	1,000,000	q'rterly.	Oct. '81 3
42d St. & G. St. Ferry100	747,000	semi-an.	Nov.'81 6
Frankf.&Southw (Ph) 50	600,000	q'rterly.	Jan. '82 6
Germantown, (Ph.).. 50	572,800	q'rterly.	July '82 2½
Girard College (Ph.) . 50	500,000	semi-an.	July '71 3
Grand St. & Newton.100	170,091	semi-an.	July '81 2½
Green&Coates St.(Ph) 50	150,000	q'rterly.	July '82 3
Heston,Mantau&F'm 50	299,381	semi-an.	Jan. '75 4
Highland.....100	600,000	semi-an.	July '82 4
Lomb.&SouthSts(Ph) 25	195,000	semi-an.	Oct. '75 4
Lynn and Boston....100	200,000	semi-an.	May '82 4
Malden and Melrose.100	165,000	.....	.....
Metropolitan (Bost.). 50	1,500,000	semi-an.	July '82 4
Middlesex (Boston)..100	656,000	semi-an.	May '82 3½
N.Y.,Bay Ridge&Jam100	150,000	.....	Oct. '78 7
Ninth Av. (N. Y.)....100	797,320	.....	.....
Orange &Newark....100	282,555	.....	.....
People's (Phila.) pref. 25	124,744	.....	July '82 2
Philadelphia City... 50	475,000	semi-an.	July '82 4
Phila. and Darby.... 20	200,000	semi-an.	July '81 3½
Phila.&Grey's Ferry. 50	308,000	semi-an.	Jan. '82 6
Pbg,Alleg.&Manches. 50	300,000	q'rterly.	Oct. '81 3
Ridge Avenue (Ph.).. 50	420,000	semi-an.	Oct. '81 11
Second Avenue (N.Y.)100	1,199,500	semi-an.	July '81 2½
Second&ThirdSt.(Ph) 50	771,076	q'rterly.	Jan. '82 4½
17th &19th sts (Ph.).. 50	250,000	semi-an.	July '81 3
Sixth Avenue (N. Y.)100	750,000	semi-an.	Oct. '81 5
Somerville (Boston).100	113,000	semi-an.	May '82 3
South Boston..... 50	600,000	semi-an.	July '82 4
Third Avenue, N. Y..100	2,000,000	q'rterly.	Nov.'81 5
13th and 15th sts.,Ph 50	334,520	q'rterly.	Jan. '82 4
23d street, N. Y.....100	600,000	semi-an.	Aug.'81 4
Union, Boston.....100	374,300	semi-an.	Jan. '82 4
Union, Phila..... 50	1,005,000	semi-an.	Jan. '82 7
West Philadelphia... 50	750,000	semi-an.	July '77 10
CANALS.			
Chesapeake and Dela 50	2,078,038	semi-an.	June'75 2
Delaware Division... 50	1,633,350	semi-an.	Aug. '82 $1
Delawa. and Hudson100	20,000,000	q'rterly.	Sept. '82 1¾
Delaware & Raritan*.100	5,847,400	q'rterly.	July '82 2½
Lehigh Coal and Nav 50	11,204,250	semi-an.	June'82 2
Monongahela Nav... 50	1,004,500	semi-an.	July '82 $3
Morris, consolidated.100	1,025,000	semi-an.	Feb. '81 2
" preferred....100	1,175,000	semi-an.	Feb. '81 5
Pennsylvania..... 50	4,501,200	.....	.....
Schuyl. Nav., com.*. 50	859,100	annual..	Au. '81 50c.
" " pref... 50	3,200,000	annual..	Aug. '81 $1
MISCELLANEOUS.			
Adams Express.....100	12,000,000	q'rterly.	Sept.'82 2
American Express... 50	18,000,000	semi-an.	July '82 3
Amoskeag Manuf.Co.100	3,000,000	semi-an.	June'81 5
Calumet&HeclaMin'g 25	100,000 S.	q'rterly.	Aug. '82 $5
Central Mining Co...100	.....	semi-an.	Feb. '82 2½
Consolidation Coal..100	10,250,000	semi-an.	Jan. '82 2
George's Creek C.&I.100	.....	semi-an.	Jan. '82 3
Maryland Coal.....100	4,400,000	semi-an.	Feb. '76 1½
Mariposa L. &Mining100	10,000,000	.....	.....
" pref100	5,000,000	.....	.....
Missouri Val.LandCo100	200,000	semi-an.	July '82 12
National Tube Works100	1,000,000	q'rterly.	July '82 3
Pac. Mail Steamship.100	20,000,000	q'rterly.	Sept. '69 3
Pennsylvania Coal... 50	5,000,000	q'rterly.	Aug. '82 3
Pullman Palace Car...100	10,032,800	q'rterly.	Aug. '82 2
Quicksilver, com....100	5,708,700	.....	May '82 0.4
" pref.....100	4,291,300	.....	May '82 6
Quincy Mining Co... 25	40,000 shs	semi-an.	Aug. '82 $5
Quincy R. R. Bridge..100	1,750,000	semi-an.	July '82 5
SiouxC.&I.F.L.&L.Co100	500,000	semi-an.	June '82 5
Spring Mt. Coal.....100	1,500,000	semi-an.	June '82 3½
Topeka Equip'nt Co.100	255,500	semi-an.	Apl. '82 5
United States Ex....100	7,000,000	q'rterly.	Aug. '82 1
Wells-Fargo & Co. Ex100	6,250,000	semi-an.	July '82 4
Western Union Tel..100	80,000,000	q'rterly.	July '82 1¼

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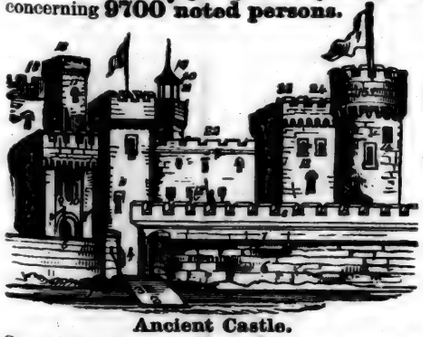
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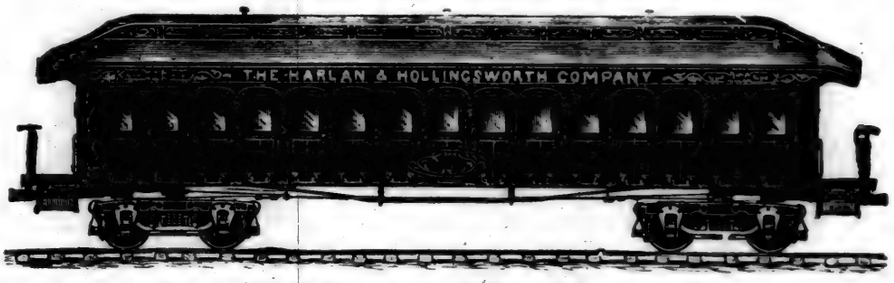
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During the Centennial season—six months closing September 10, 1876—the Erie Railway carried almost THREE MILLION passengers, without a single accident to life or limb or the loss of a piece of baggage.

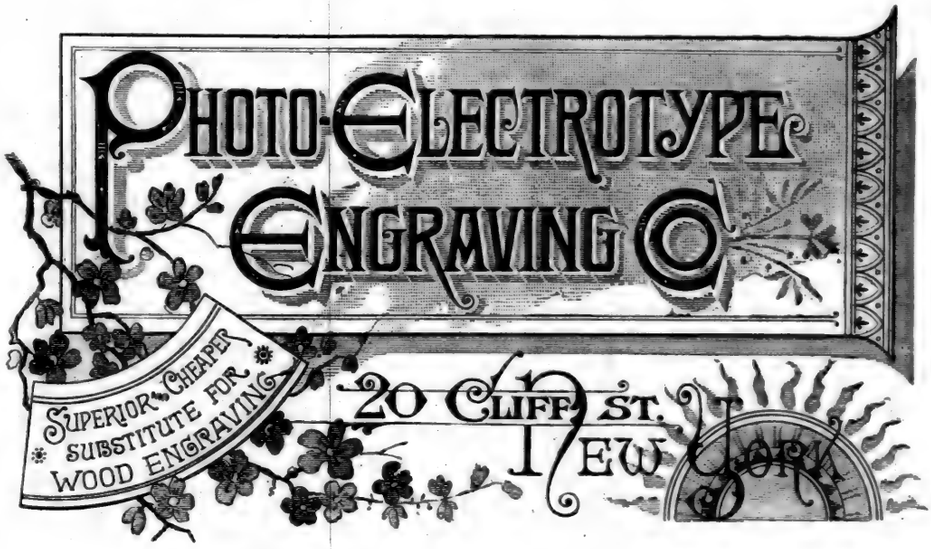
And for a whole year the official records of the United States Post Office Department show the arrivals of Erie Railway trains in New York, on time, to be from 15 to 27 per cent ahead of competing lines.

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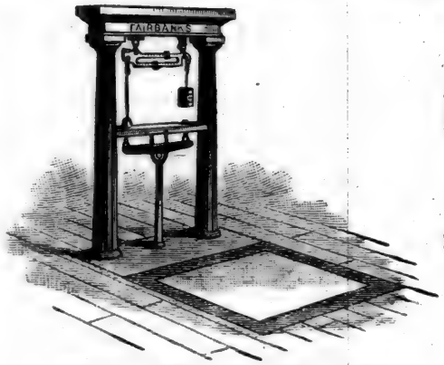
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RAILROAD EARNINGS—MONTHLY.

	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total.
BURL., CEDAR RAP. & NORTHERN:													
1880	184,316	165,170	188,325	141,652	149,504	153,378	143,432	160,160	179,804	204,991	189,330	193,419	2,053,484
1881	167,750	124,510	148,551	184,680	165,630	205,912	174,351	209,112	221,801	221,748	203,880	232,812	2,259,037
1882	252,823	225,631	224,107	178,304	199,278	211,257	198,476	.....	.....	.....	.....	.....	.....
CENTRAL PACIFIC:													
1880	1,200,614	1,070,487	1,373,438	1,356,716	1,778,488	1,724,950	1,840,067	1,973,438	1,964,997	1,120,229	2,199,466	1,905,221	20,508,112
1881	1,602,907	1,454,218	1,709,637	1,872,370	2,091,410	2,159,381	1,899,346	2,059,000	2,293,000	2,514,000	2,267,000	2,110,000	23,947,951
1882	1,876,000	1,702,000	1,987.000	2,052,000	2,353,000	2,239,000	2,020,000	.....	.....	.....	.....	.....	.....
CHESAPEAKE AND OHIO:													
1880	202,335	198,681	222,762	221,559	199,443	214,352	238,236	259,110	247,303	211,820	240,795	218,000	2,674,308
1881	162,540	184,389	228,479	227,343	252,235	241,135	225,096	262,858	247,144	237,303	235,585	203,562	2,702,762
1882	210,455	209,708	208,981	267,454	255,939	260,753	306,831	.....	.....	.....	.....	.....	.....
CHICAGO AND ALTON:													
1880	534,054	497 013	626,473	542,961	616,128	617,524	708,906	761,120	767,349	785,199	696,776	574,695	7,718,198
1881	487,890	461,641	529,915	558,190	548,556	635,860	676,205	771,466	768,897	750,359	680,133	635,307	7,553,988
1882	579.447	530,480	584,483	561,787	553,412	613,886	671,537	.....	.....	.....	.....	.....	.....
CHICAGO AND NORTHWESTERN:													
1880	1,154,632	1,131,683	1,361,725	1,294,573	1,875,608	1,671,177	1,699,686	1,767,938	2,020,245	2,105,217	1,855,671	1,477,902	19,416,007
1881	1,240,667	963,208	1,178,795	1,474,612	1,879,006	2,306,640	1,983,031	2,315,164	2,292,676	2,341,097	2,019,037	1,855,476	21,849,209
1882	1,620,336	1,471,945	1,696,568	1,634,819	2,058,133	2,022,700	2,025,736	.....	.....	.....	.....	.....	.....
CHICAGO, BURLINGTON AND QUINCY:													
1880	1,432,740	1,411,870	1,732,518	1,489,894	1,909,627	1,682,956	1,773,643	1,834,321	1,862,285	1,934,762	1,837,860	1,552,018	20,454,494
1881	1,307,948	1,034,821	1,418,149	1,574,371	1,679,455	2,083,803	1,888,558	2,173,945	2,262,981	2,031,001	1,816,133	1,905,490	21,324,150
1882	1,658,834	1,457,300	1,566,217	1,530,838	1,505,261	1,437,164	.....	.....	.....	.....	.....	.....	.....
CHICAGO, MILWAUKEE AND ST. PAUL:													
1880	764,298	738,749	900,675	871,041	1,134,745	1,037,958	1,026,708	991,297	1,257,677	1,493,620	1,472,037	1,397,308	13,086,119
1881	990,847	682,717	916,989	1,259,946	1,538,491	1,729,811	1,568,706	1,678,000	1,645,000	1,590,000	1,569,000	1,855,000	17,025,462
1882	1,435,000	1,377,000	1,561,000	1,518,000	1,629,000	1,620,000	1,465,000	.....	.....	.....	.....	.....	.....
CHICAGO, ST. PAUL, MINNEAPOLIS AND OMAHA:													
1880	193,827	173,078	259,783	259,208	232,146	218,093	236,995	251,013	300,833	342,052	342,894	312,173	3,122,097
1881	257,786	158,594	251,648	261,211	350,124	404,562	383,202	385,586	363,685	382,714	380,733	391,950	3,981,296
1882	307,498	315,100	405,779	356,558	406,420	363,109	331,480	.....	.....	.....	.....	.....	.....
CINCINNATI, INDIANAPOLIS, ST. LOUIS AND CHICAGO:													
1880	155,697	172,541	198,220	168,199	186,995	200,332	204,138	233,478	343,627	239,881	209,014	198,254	2,412,185
1881	182,523	171,511	191,005	183,710	191,096	192,299	177,161	229,858	219,977	212,606	194,805	192,623	2,296,916
1882	200,042	186,879	208,066	204,269	199,110	195,948	209,564	.....	.....	.....	.....	.....	.....
DENVER AND RIO GRANDE:													
1880	124,759	126,922	160,883	164,882	193,925	295,455	373,132	400,133	406,583	473,318	408,562	349,196	3,478,007
1881	307,476	317,681	398,493	433,111	514,767	584,230	548,284	606,193	620,643	665,686	566,819	643,417	6,206,812
1882	491,914	412,987	535,055	559,917	614,298	537,462	495,797	.....	.....	.....	.....	.....	.....
HANNIBAL AND ST. JOSEPH:													
1880	176,079	166,965	216,061	206,735	191,317	179,396	224,312	238,081	233,448	242,214	207,147	279,635	2,561,366
1881	154,401	122,874	176,356	190,812	172,950	190,740	201,899	215,308	202,567	313,433	201,782	180,376	2,230,961
1882	138,284	154,717	168,798	148,913	154,917	155,030	184,347	.....	.....	.....	.....	.....	.....
ILLINOIS CENTRAL:													
1880	595,212	613,806	613,008	535,732	665,120	681,736	724,095	732,755	806,836	880,211	783,120	673,182	8,304,812
1881	631,281	524,499	557,789	662,493	673,259	803,887	720,004	868,407	828,847	815,238	737 218	763,475	8,586,397
1882	728,173	689,387	695,371	674,603	674,749	663,746	752,251	.....	.....	.....	.....	.....	.....
INDIANA, BLOOMINGTON AND WESTERN:													
1880	80,498	89,690	116,185	90,374	85,733	106,954	103,438	116,732	110,622	121,343	96,621	104,619	1,233,079
1881	90,283	83,261	192,085	203,677	200,064	199,846	199,125	117,956	195,307	181,674	160,826	156,697	.....
1882	195,824	175,755	206,235	205,934	182,554	186,133	206,072	.....	.....	.....	.....	.....	.....
LOUISVILLE AND NASHVILLE:													
1880	674,455	575,035	612,593	563,883	655,014	976,229	772,537	827,088	931,910	1,000,326	953,086	949,184	9,491,346
1881	816,960	805,124	947,959	850,862	828,726	1,227,885	817,135	876,192	951,566	1,002,950	1,065,223	1,122,285	11,326,859
1882	950,065	960,036	1,073,745	950,007	946,435	1,187,385	1,038,385	.....	.....	.....	.....	.....	.....
MOBILE AND OHIO:													
1880	250,116	204,094	168,301	140,091	129,249	121,855	131,621	140,593	184,246	264,714	251,368	287,373	2,373,621
1881	224,347	216,768	230,916	163,551	145,803	136,517	135,548	159,348	209,044	252,921	252,434	262,025	2,406,437
1882	161,433	158,154	152,651	145,272	137,645	138,572	136,398	.....	.....	.....	.....	.....	.....
NASHVILLE, CHATTANOOGA AND ST. LOUIS:													
1880	205,633	191,154	169,457	155,466	158,839	144,155	151,594	169,326	167,473	178,266	182,087	175966	2,049,48
1881	178,143	190,866	207,710	183,525	104,430	154,549	150,430	168,317	179,979	172,121	152,059	173,127	2,075,256
1882	156,994	159,961	161,005	154,155	137,645	119,074	160,991	.....	.....	.....	.....	.....	.....
NEW YORK AND NEW ENGLAND:													
1880	164,232	149,907	183,845	179,689	183,701	219,891	205,056	249,885	235,642	215,491	210,856	198 108	2,396,302
1881	189,749	173,614	212,019	216,913	217,185	231,518	246,821	280,524	299,573	261,199	242,412	237,729	2,809,255
1882	213,840	217,261	265,222	263,544	283,244	290,060	308,920	.....	.....	.....	.....	.....	.....
NEW YORK, LAKE ERIE AND WESTERN:													
1879	1,147,173	1,207,391	1,356,780	1,372,755	1,350,574	1,230,419	1,273,533	1,450,223	1,492,497	1,713,697	1,515,835	1,398,224	16,509,127
1880	1,296,381	1,252,218	1,644,958	1,643,151	1,592,544	1,661,812	1,580,976	1,606,874	1,786,417	1,899,910	1,799,338	1,726,788	19,149,361
1881	1,443437	1,425,765	1,847,261	1,709,057	1,776,891	1,794,982	1,787,081	1,772,895	1,734,200	.....	.....	.....	.....
NORTHERN CENTRAL:													
1880	334,494	330,860	415,325	386,130	329,788	419,193	450,298	453,923	464,093	512,918	459,054	494,310	5,050,387
1881	386,157	382,657	452,906	487,273	465,588	487,287	440,811	498,008	429,565	449,664	487,160	476,622	5,443,697
1882	407,368	413,551	430,194	435,129	482,607	482,762	509,683	.....	.....	.....	.....	.....	.....
NORTHERN PACIFIC:													
1880	81,390	77,259	119,357	185,700	217,613	253,105	241,277	223,500	330,300	358,456	300,822	220,993	2,629,710
1881	116,508	78,803	162,984	216,210	312,705	412,024	393,260	411,624	490,096	565,485	428,903	434,331	4,044,576
1882	239,800	269,000	384,000	438,000	568,332	631,342	679,240	.....	.....	.....	.....	.....	.....
PHILADELPHIA AND ERIE:													
1880	224,307	245,372	327,678	334,947	311,470	331,024	308,699	347,532	322,737	367,082	324,966	281,919	3,727,733
1881	224,303	225,501	285,573	293,323	343,792	350,585	291,669	303,849	276,522	292,392	284,078	282,772	3,454,309
1882	252,727	246,246	265,311	277,851	341,415	341,614	371,206	.....	.....	.....	.....	.....	.....
ST. LOUIS AND SAN FRANCISCO:													
1880	198,091	195,948	193,146	176,164	167,664	173,607	213,297	259,995	280,873	328,194	290,329	226,063	2,698,371
1881	212,435	178,234	262,050	265,298	283,399	260,254	252,333	286,373	279,064	308,569	284,320	287,914	3,160,245
1882	256,784	244,654	274,959	242,806	253,419	240,177	318,613	.....	.....	.....	.....	.....	.....
ST. LOUIS, ALTON AND TERRE HAUTE:													
1880	153,139	163,737	168,994	155,462	147,928	150,207	191,077	216,759	204,295	221,863	188,773	184,503	2,146,741
1881	175,725	166,012	201,137	197,447	172,177	165,896	165,393	189,295	187 299	179,921	162,544	153,852	2,112,801
1882	168,987	149,619	178,145	157,450	162,842	142,742	192,017	.....	.....	.....	.....	.....	.....
ST. LOUIS, IRON MOUNTAIN AND SOUTHERN:													
1880	555,983	490,195	451,560	408,241	349,053	363,454	432,655	565,869	671,219	688,365	632,052	656,951	6,265,597
1881	570,957	560,791	704,002	548,300	479,075	474,302	533,512	644,386	690,400	719,239	687,280	709 498	7,319,744
1882	516,370	501,127	585,008	581,977	519,120	529,700	515,519	.....	.....	.....	.....	.....	.....
ST. PAUL, MINNEAPOLIS AND MANITOBA:													
1880	180,239	137,645	261,798	333,014	281,899	243,407	272,089	232,579	274,188	345,057	300,675	297,641	3,160,231
1881	254,187	159,482	320,962	425,685	382,642	405,322	387,488	414,954	485,736	605,708	508,530	528,262	4,878,960
1882	395,461	418.358	531,004	570,890	858,902	856,417	853,296	.....	.....	.....	.....	.....	.....
TEXAS AND PACIFIC:													
1880	245,785	219.165	215,070	174,177	141,083	153,066	195,711	226,073	266,570	303,666	312,184	301,858	2,734,408
1881	284,176	260,781	319,928	295,066	281,782	285,305	328,063	354,082	337,117	578,668	357,724	381,218	3,921,569
1882	310,785	255,644	332,911	359,543	409,228	384,713	367,215	.....	.....	.....	.....	.....	.....
UNION PACIFIC RAILWAY:													
1880	1,433,636	1,393,992	1,730,509	1,937,220	2,027,269	1,928,528	1,934,215	1,913,035	2,270,179	2,707,860	2,251.148	1,869,335	23,448,445
1881	1,339,799	1,374,740	1,674,860	1,766,894	2,319,238	2,884,774	2,528,826	2,638,659	2,844,357	3,289 350	2,773,608	2,267,004	27,451,831
1882	1,961,088	1,759,863	2,226,832	2,462,004	2,491,590	2,508,453	2,301,000	.....	.....	.....	.....	.....	.....
WABASH, ST. LOUIS AND PACIFIC:													
1880	776,790	759,451	978,629	892,024	948,773	953,468	1,966,742	1,189,478	1,178,950	1,501,203	1,131,787	1,050,816	12,428,112
1881	811,617	818,922	1,121,592	1,023,482	1,144,660	1,308,993	1,131,752	1,542,838	1,490,027	1,396,300	1,399,555	1,328,278	14,461,570
1882	1,229,965	1 134 768	1,315,776	1,378,194	1,204,864	1,149,632	1,418,837	.....	.....	.....	.....	.....	.....

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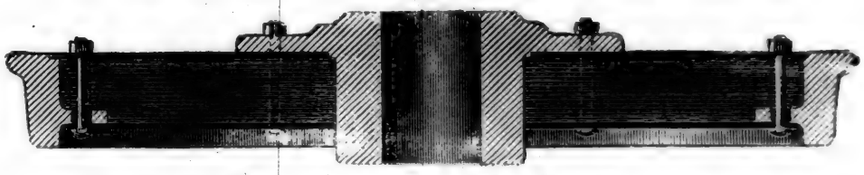
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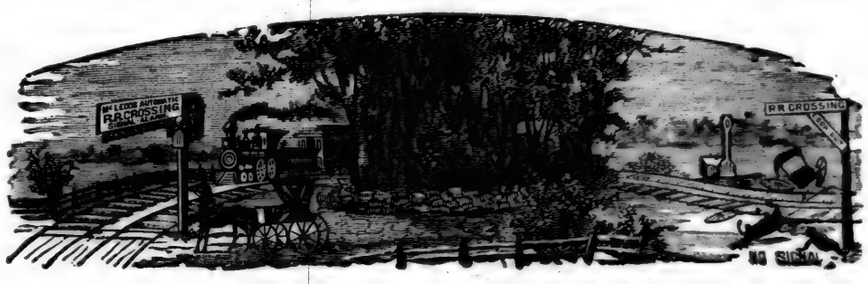


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The company can shortly fill orders to place it on any railroad, and invite communication from Railroad Officials from all parts.

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Canadian Pacific Railway.

Mr. C. J. Brydges gives the following interesting account of his recent trip westward along the line of the Canadian Pacific Railway:

"In company with Sir John Rose, Mr. Herbert, of the Colonial Office, and Mr. W. H. Osborn, for many years president of the Illinois Central Railroad Company, I went to the end of the track of the Canadian Pacific Railway, which was then laid to a point about 335 miles west of Winnipeg. We went over the old Government line to Portage la Prairie, the air line, built last fall, not having been sufficiently repaired after the damage done by the spring floods to allow traffic to run over it. It is expected that it will be ready in about a week or ten days, when the distance to the Portage will be reduced about fifteen miles.

"From Portage la Prairie to Flat Creek, about thirty-five miles west of Brandon, the track was laid last year, and for nearly fifty miles beyond the grading was also partially completed last year. This part of the line, viz., from Portage la Prairie to Flat Creek, suffered considerably from the spring flood. The bridge at Brandon was not built sufficiently high, and the water flowed over the floor of the bridge. The piers are a good deal damaged, and are to be rebuilt and raised above flood water. A large number of culverts were washed out, and are being replaced by pile structures, leaving sufficient waterways to prevent, it is hoped, future difficulty. The track on the old road is also being raised and balasted. By the fall considerable improvement will have been effected, and the road-bed, which was not originally well constructed, will be very materially improved by the work which is now being done. West of Flat Creek there is a very marked improvement in the mode of construction and the condition of the road-bed. The grading is being very well done, the banks being wide and of good height, the track kept well above the level of the prairie, no cuttings anywhere, and good substantial pile openings to allow of the free passage of water where necessary. From Flat Creek to Moose Jaw Bone Creek, the grading will average about 17,000 yards to the mile. I do not believe that any prairie road has ever been built better or in a more perfect and substantial manner, and very few roads indeed that I have seen in a long experience have been so well constructed in the first instance. The rails are all of steel, with an excellent joint, having four bolts and nuts in each, and the sleepers average 2,640 per mile, thus securing ample strength and solidity, and the whole is thoroughly well spiked throughout. The grading is in a very forward state up to Moose Jaw Bone Creek, and the number of teams and men at work will keep the grading out of the way of the track-layers to a point beyond Old Wives Lake, if the track is laid at the rate of four miles for every working day.

WONDERFUL TRACK-LAYING.

"I witnessed the operation of track-laying, and never saw in any part of the world so perfect a system and so complete and thorough an organization. At least four and frequently five trains a day are dispatched from Winnipeg, each train containing everything necessary to lay one mile of track. The cars have a mile of rails, a mile of joint fastenings, a mile of bolts and nuts, a mile of spikes, and a mile of ties. For every ninth or tenth mile the train contains, in addition, the material necessary to lay a long siding, comprising rails, ties, spikes, fish-plates, etc., and two switches. With some of these trains is also sent a supply of piles and lumber for waterways, and also poles and wire and insulators for a telegraph line. At the front, at the extreme end of the track, is a boarding train, containing everything necessary for the feeding and lodging of the 250 men engaged in track-laying. About forty teams are at the front, engaged in hauling the ties from each train as it arrives. This enables the men distributing and spacing the ties to keep about half a mile ahead of the track-layers. The actual track-laying is done with marvellous rapidity, and, under the most perfect system of well organized labor, brings out the most remarkable results ever seen upon railway construction. In sixteen days 50½ miles of track were laid, being an average of 3.10 miles a day. The greatest length laid in one day has hitherto been 3.90, and the foreman assured me that he would not be satisfied until he had succeeded in laying five miles in one day, and that he had no doubt of doing so.

"The extent of average daily track-laying done has never yet been equalled on any railway in the world, and could only have been done by the most complete and perfect organization, under which every man employed does the maximum amount of work with the least possible apparent expenditure of force or effort.

THE STAFF AND HOW IT IS ORGANIZED.

"The boarding-houses are models of cleanliness, with good food and every reasonable comfort. They are advancing now across the prairie at a rate of nearly four miles a day. The men are remarkably healthy, the proportion on the sick-list being extremely small. Surfacers in large gangs are following the track-layers, putting the track into very fair shape, and ballast trains are at work at the places where they are required. At every siding a fair-sized station building is being constructed, water tanks put up, and the needful appliances provided for carrying traffic as soon as it is possible to do so. Telegraph builders are also busy at work erecting poles and stringing the wire, and nearly every night it is possible to send messages from the extreme point to which the track is laid. The regulating system and organization under which this great amount of work is being successfully carried out day after day, without a break or a hitch, is the most successful and remarkable operation which I have seen in an experience, connected with railways, extending now over a period of nearly forty years.

THE BIG BESS FARM.

"The track has reached the Bell Farm, south of Qu'Appelle, where a considerable amount of breaking is being done this year. A few of us drove across the prairie to the Hudson's Bay post in the beautiful and picturesque valley of the Qu'Appelle, a distance of about twenty miles. Leaving the post about nine o'clock on Monday morning, we drove back to the line, and leaving the end of the track about two o'clock, reached Winnipeg at about half-past six on Tuesday morning, thus covering the distance of upwards of 350 miles in less than 22 hours, a journey which has hitherto occupied from 7 to 10 days. Sir John Rose had performed the journey from Liverpool to Qu'Appelle, including a stoppage of more than a day at Newport, after his arrival in New York, in almost exactly 14 days.

"For a new line, the road is in very fair condition, and will continue steadily to improve as the surfaces and ballast trains follow over the newly laid track. Settlers are to be seen dotted in large numbers over the prairie on each side of the line, and a large amount of land is being broken. At every newly established station numerous tents, of large and small size, on which are to be seen conspicuous signs rough-and-ready in execution, announcing that they comprise hotels, taverns, stores for the sale of all kinds of goods, and in several cases the sign of civilization is denoted by the words 'billiard hall.' Many of these tents move on from place to place as the railway progresses, and many are to be replaced by wooden buildings as soon as the railway can convey the lumber with which to construct them.

THE FUEL AND WATER SUPPLY.

"There does not appear to be any difficulty in procuring a reasonably good supply of water. Fuel and building materials will be the greatest difficulties, and if the country is to be successfully settled by a large population, it is indispensably necessary that the railway company should make arrangements for establishing depots of fuel to be sold at moderate prices at every station, and also supplies of lumber. At the present price at which both coal and lumber are sold in Manitoba, great difficulties must arise. The opening of the railway to Thunder Bay, if moderate rates of carriage are to be established, ought to very greatly reduce the prices at which both coal and lumber are sold. If this is done, the whole question of settlement is solved. If not, the greatest possible difficulties and dangers will arise.

"There is practically an unlimited extent of the most fertile land which the railway is making rapidly accessible. Nothing is wanted to complete the assurance of a large and contented population but the supplying of fuel and building material in sufficient quantities and at moderate prices. It is the clear interest of the company to see that this is done promptly and effectually, and I have no doubt that they will at once take the necessary steps to do so."

The Great Central Belgian Railroad has prepared some elaborate statistics as to the wear and tear of rails upon its system. It appears that after twelve years' service only 0.38 per cent of the steel rail laid down upon its system in 1869 had been withdrawn in 1881. On the other hand, the proportion of the iron rails laid down in 1869 and withdrawn in 1881 was 94.74 per cent of the whole number employed. Since the organization of the Great Central Belgian Railroad Company in 1865, it has employed 79,116 tons of rails, of which 66,569 tons were iron rails, and 11,547 tons steel rails. Of the iron rails laid down, 31,874 tons have been replaced, while of steel rails laid down only three tons have been replaced.

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We give on editorial page our new subscription rates, which are so changed in the belief that it will not only prove acceptable to many who desire to become regular readers of the paper, but that it will meet with the hearty approval of our advertising patrons, who are rapidly filling up the pages offered to them since the improvements in the JOURNAL have been started.

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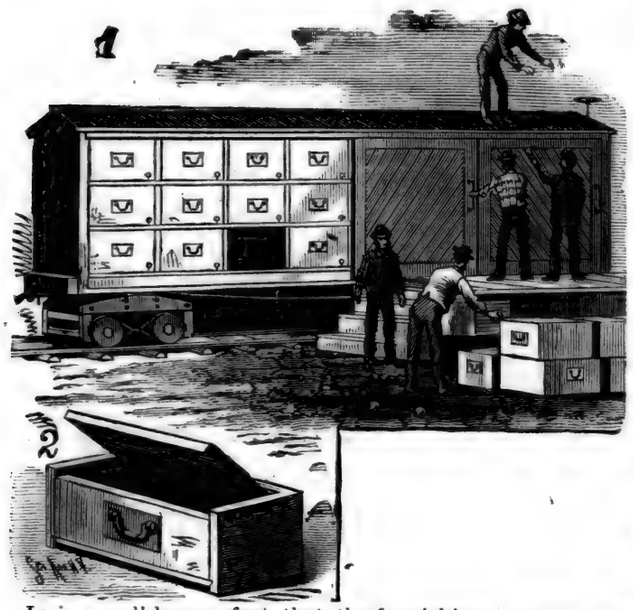
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The McManus Freight Car.



It is a well-known fact that the furnishing of packing boxes in which to ship merchandise involves an enormous expense, reaching to hundreds of thousands of dollars annually. This fact is more apparent when it is realized that for the transportation of every car-load of merchandise, about three thousand feet of lumber are consumed, which with the added cost of manufacturing into boxes, will amount to about one hundred dollars or even more, and which after being once, or possibly twice, used, are utterly worthless.

The improved freight car represented in the above engraving, is designed to do away with this immense waste of property and destruction of lumber. As will be seen, this car is divided into three horizontal sections, which are cut into compartments by vertical partitions, of dimensions capable of receiving boxes of convenient size to handle when filled with merchandise. These compartments extend through the car, so the boxes can be loaded or unloaded from either side. The sides of the car are formed of sliding doors which can be securely locked, hiding the boxes from view, or can be shoved aside so as to expose any of the boxes. The facility with which this car can be loaded or unloaded will save a great amount of time and labor, and its boxes completely fill the car, so there is no waste of room in it.

The boxes are to be made of sufficient strength to last for years with reasonable care, and are to be provided with locks or bolts for fastenings, and with handles at each end. They will be held in their places by pins dropping into the bed pieces on which they rest. They will usually be of a length, and meet in the center of the car, but for special goods can be made as long as the car is wide, and they will be water-tight unless completely submerged; and the ease with which they can be opened and closed will rid merchants of the filth and confusion incident to the opening and closing of common boxes.

When wanted for use, the shipper will make a requisition upon the railroad company for as many as he wishes, fill them, bolt, seal and direct them, and return them to the railroad to be placed in the car and sent to their destination. The receiver of them will empty and return them to the depot, from which he took them, to be taken up by the same or a like car, or refilled and reshipped to other parties. Merchandise shipped in this car will not be lost or damaged which is frequently the case when shipped by the ordinary mode, which will save railroads a vast amount of trouble and expense for such accidents.

Railroads can charge advanced rates of freight, which will pay them well for the additional cost of this car and the little trouble occasioned by its use, and still save from thirty to fifty per cent of the present cost of transporting merchandise. Mr. Edwin McManus, of Randolph, N. Y., is the patentee of this valuable invention.

Texas and St. Louis Narrow-Gauge Railroad.

The Texas and St. Louis Narrow-Gauge Railroad has been completed to a point 40 miles beyond Waco, or within six miles of Gatesville, Tex. Track-laying has reached the Red River, 26 miles from Texarkana. By September 1 the road will be in running operation from Pine Bluffs to Camden, Ark., and from Clarendon on White River to a point 30 miles north of Brinkley, at which latter place it will intersect the Memphis and Little Rock Railroad. On or before the same date the line from Bird's Point, Mo., to Jonesboro, Ark., will have been finished, a distance of 125 miles, making all told a total mileage of 572 miles in running operation by September 1. That much of the road is practically completed now, and track-laying is going on at the rate of 50 or 60 miles per month. The whole of the grading in Arkansas will be done by October 1. Three hundred men are at work at Bird's Point on the incline and yards, which are to be finished by September 15. A depot has already been erected there, and the round-houses are now being built. The cattle yards are being also made there, f at Bird's Point the transferring will be don , under the traffic arrangement with the Cairo Short Line.

The section of country along the Narrow-gauge is being rapidly populated. Before the road was commenced, lands in that part of the State could be purchased as low at 75 cents an acre. The same lands are now being sold at from $5 to $8 per acre.

To show the developments since the road has been operated, it can be stated that along the Texas portion there have been started 30 sawmills, and over 20 new ones are in operation along the line in the States of Missouri and Arkansas. The timber at different points is pronounced fine and abundant. Parties who have been over the territory say that after one gets 20 miles south of Bird's Point he sees one continuous cotton field.

Orders have been given for a number of cars, both passenger and freight, as well as engines. The Pullmans are building the entire passenger equipments, including six handsome sleeping, cars and enough cars for eight full trains, which will consist of first and second class passenger coaches, baggage cars, and express and mail cars. Among the other orders given is one for 20 passenger locomotives and 20 "moguls" or freight engines of 26 tons each, and several consolidated engines of 30 tons each. By the time the continuous line of 700 miles is formed the Narrow-gauge will have 70 engines, there being 20 in use at present in the State of Texas.

Steam Wheels.

A new kind of steam-engine has been recently patented by Professor Wellner, of Brunn. The so-called "steam wheel" consists of a simple water wheel mostly immersed in hot water in a closed vessel. Steam is admitted at the lower part, and forces the cells of the wheel upward, producing rotation. The steam fills more and more of the cells on the rising side, and at length begins to escape into the steam space above the water. Steam may either be produced directly at the lower part or conducted to the vessel from elsewhere. The upper tube for outlet of steam may lead either into the open air or into a condenser. The mechanical work consists in the ascent of the specifically lighter steam in the heavier liquid. These steam wheels may either be used as independent motors or in connection with ordinary steam-engines. In the latter case the escape steam of one kind of machine is utilized for the other.—*Vienna Polytechnic Journal.*

Electric Railways.

The development of electric railways and tramways is now considerable. Putting aside numerous lines that are merely talked of or projected, those that are working, authorized or in course of construction, show a total length of 160 kilometres—about 100 miles—and grants are becoming even more numerous. The lines actually at work are those of Lichterfelde (about 2.6 kilometres in length) and that from the Spandauer Rock to Charlottenberg, near Berlin; another line, from Port Rush to Bush Mills, in the north of Ireland, has been inaugurated (length about 10 kilometres), and also in Holland, one from Zandvoort to Kostverloren (length a little over 2 kilometres). Among lines authorized or in construction, the following are noted: In Austria, the Mœdling line, near Vienna (2½ kilometres), to be constructed by the Southern Railway Company there. In Germany, the line from Wiesbaden to Nurnberg (2 kilometres), and that from the royal mines of Saxony to Zankerode. In England, a line under the Thames, connecting Charing Cross and Waterloo stations (1.2 kilometres), also a line in South Wales (60 kilometres), for which the force will be derived from fall of water. In Italy, Turin and Milan will soon began the construction of electric tramways. In America the Edison Company have arranged for the working of 80 kilometres on one of the great lines from New York. Another small line (1.8 kilometres) is to be made at St. Louis, in Missouri, by Mr. Heisler —*Paris Revue Industrielle.*

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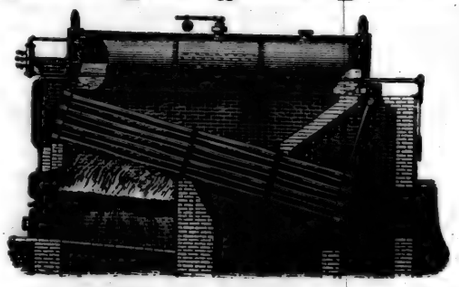
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Color-Blindness, Knowledge and Experience.

Editor AMERICAN RAILROAD JOURNAL:

YOUR contributors who have criticized or quoted a very silly article in the *National Car Builder* of May 1, 1882, headed "Color-Blindness, Science and Nonsense," signed W. S. Huntington, have confounded the author with Mr. Huntington of the Chesapeake and Ohio and Central Pacific railroads. Probably also the article has been quoted in one or another journal under the same mistake.

The writer makes some misstatements and mistakes which should be corrected. Whether these are from ignorance or prejudice is not easily determined. He states that "Massachusetts people were horrified to learn that many of the locomotive engineers on the roads of the State were color-blind, and scientific experts were at once employed to detect the men who were afflicted with the dangerous infirmity."

No greater misstatement could be made. It is precisely because experts have *not* been employed that the employés are dissatisfied. Only two roads, the Troy and Greenfield, under the State, and the Nantasket Beach, have had their men tested under the law, by an *expert*. The recent editorials in the Chicago *Railway Review*, give the whole evidence on this point as brought out at the Railroad Committee hearings of the Massachusetts Legislature, etc. To write as the author has in the face of these facts is, to say the least, culpable ignorance. There will, and very justly, continue to be dissatisfaction so long as the corporations run the risk of a suit, in employing under the law as "competent persons," railroad commissioners, superintendents, assistant superintendents, paymasters, assistant paymasters, conductors, station agents or lawyers, to examine or decide on the fitness of employés for their several positions in respect to visual power and the color-sense.

The writer says, again: "A shudder ran through New England at the appalling discovery that there were a score or more of railroad operators in their very midst who were not experts in discriminating delicate shades of color; all of them have been removed, and their places filled by others who are at least competent to run haberdashery shops, etc."

The test for the color-sense has been so ignorantly applied by the above-mentioned *in*-"competent persons" that this criticism has some truth in it. Only it should have been stated that these examinations were *not* made by experts, who call for no "discrimination of shades," nor do they ask the name of any color. The belief that such tests *are* required comes from their being ignorantly required by *non*-experts. A proper test for the existence of color-blindness and determining its amount has never been made here in Massachusetts except by an expert, and cannot be made by any other. The Legislative Railroad Committee have had abundant proof of this at their hearings in Massachusetts.

The writer gives a funny description of a one-eyed engineer, and of his *consequent value*, since "it is a well-known fact that the loss or permanent injury of one organ or a limb of the body increases the strength of the remaining ones. The loss of one eye gives additional power to the other, total blindness renders the hearing more acute; and it is the same with respect to legs and arms."

Here certainly is an expert needed to correct such mischievous ignorance as this. *The fact is that the loss of one eye by injury or disease is the most dangerous thing for its fellow.* It is precisely this reason that calls for the proof of the requisite vision in *each* eye for railroad work. The lost organ is liable to cause most insidious and destructive trouble in the sound eye. From this danger the person is never free. Moreover, a speck in the one eye remaining renders its owner *practically blind*. It is dangerous for the laity to touch medical subjects unadvisedly.

The writer of that article would make out that a one-eyed railroad employé was as good or better than another with two eyes; that being "deaf as a post" was of no consequence; and being unable to read or write rather a recommendation. The community cannot agree with this, and versus the individual have some rights which they must and will assert.

While assisting them in this assertion I am equally engaged in defending the employés from injustice due to "ignorance, prejudice or pecuniary considerations." The National or State Government must fix certain standards of visual power and color-sense for the several grades of railroad work, and standard methods of testing for the same. Experts alone can determine if employés come up to these requirements, and they must be State officials with no authority to decide other than this. Aside from my monograph, which gives an exhaustive description of color-blindness, its dangers and its detection, there are multitudinous articles in the public journals, a perusal of which would prevent a writer from making, otherwise than wantonly, such statements as I have criticized, the doing which, and preventing the public from being deceived, and the employés thereby finally injured, has been one of the most disagreeable parts of my unpaid and thankless task in the public's behalf.

Respectfully yours,

B. JOY JEFFRIES, M. D.

15 Chestnut st., Boston, Mass.

THE trial of the locomotive smoke-burner on the Chicago, Rock Island and Pacific Railway is said to have resulted satisfactorily, the emission of smoke from the stack being scarcely perceptible. The device causes an inrush of air to the combustion chamber through the agency of a steam jet. The practical economies of the invention with reference to interference with steaming, excessive consumption of coal, etc. are yet to be determined, and the company has decided to give it a thorough trial.

List of Patents for Inventions Relating to Railway Interests.

[Reported expressly for the AM. RAILROAD JOURNAL.]

Bearing date of August 29, 1882.

263,655. Car Door Fastening: T. N. COOKE, Chicago, Ill.
263,401. Extinguishing Fire in Railway Trains: A. M. GRANGER, Boston, Mass.
263,653. Car Coupling: E. CASPER, Collomsville, Pa.
263,454. Elevated Railway: N. ALLEN, Rockaway Beach, N. Y.
263,516. Running Gear for Cars: T. HERSEE, Buffalo, N. Y.
263,529. Car Brake: T. L. JOHNSON, Indianapolis, Ind.
263,549. Car Coupling: C. E. MACARTHY, Forsyth, Ga.
263,421. Car Coupling: P. E. MIGNAULT, Acton Vale, Canada.
263,604. Car Coupling: C. A. SMITH, St. Louis, Mo.
263,587. Car Coupling: F. RITTER, Blairstown, Iowa;
263,363. Car Starter: C. A. SULYMAN, Waterford, N. Y.
263,658. Combined Seal and Alarm for Car Doors: J. D. Hollister, Savannah, Ga.

Baltimore Street Railways.

The following statement shows the trackage, equipment and force of the street railway companies in Baltimore and suburbs:

	Men.	Cars.	Horses.	Miles of Track.
City Passenger.....	450	99	900	32
Citizens'.....	125	35	310	20
North Baltimore....	160	21	340	7
Peoples'.....	70	20	140	10
Union.....	150	19	300	20
Hall's Springs.....	32	7	80	4½
York Road.....	35	8	100	8
Monumental.....	60	23	100	5
Catonsville.....	30	6	70	7
Powhatan.....	20	4	30	7
Pimlico.....	10	2	10	6
Central.....	70	20	150	10
Cross-Town.....	70	20	150	7
Columbia avenue...	70	20	150	7½
Grand total.....	1,352	304	2,830	151

The last three mentioned roads are in process of construction and nearly finished.

SEVERAL months ago the Tanite Company, of Stroudsburg, Pa., received an order from one of the foreign governments for a solid emery wheel 36 inches in diameter, and 8 inches in thickness. A wheel of this size weighs about 800 pounds, and its price is $500. A few weeks since, the company received a cable order from its Liverpool house for a special machine on which to run its immense wheel, which it is now constructing. It is the largest the company has yet built, and is from an entirely new design, and will weigh, when completed, 2,200 pounds.

FATHER'S ADVICE TO HIS SON.—"My son, I have heretofore presented you with a copy of the Holy Bible. If you study only one book let that be the Book, as the truths it contains 'are able to make you wise unto salvation.' I herewith present you with a copy of the recent edition of Webster's Unabridged Dictionary. If you study only two books let this be the other, as it is not only a dictionary unsurpassed in the spelling, pronunciation and definition of words, but is also an encyclopedia of information in its Vocabularies of persons and places noted in Fiction, Scripture, Greek, Latin, and Geographical Names, Biographical Dictionary, Quotations, Pictorial Illustrations, etc., making it a book to which you will have occasion frequently to refer during life."—*Rev. J. J. Scherer, A. M., President Marion Female College, July* 11, 1882.

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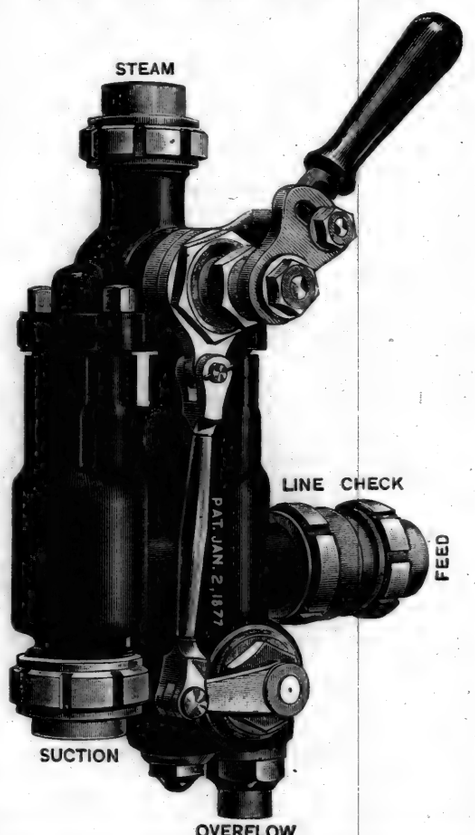
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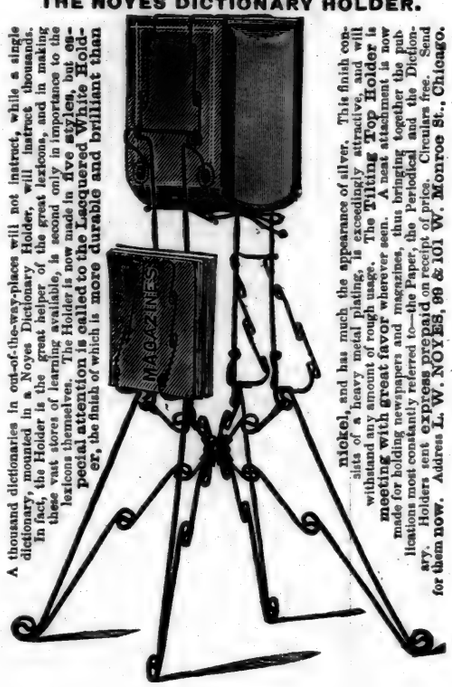
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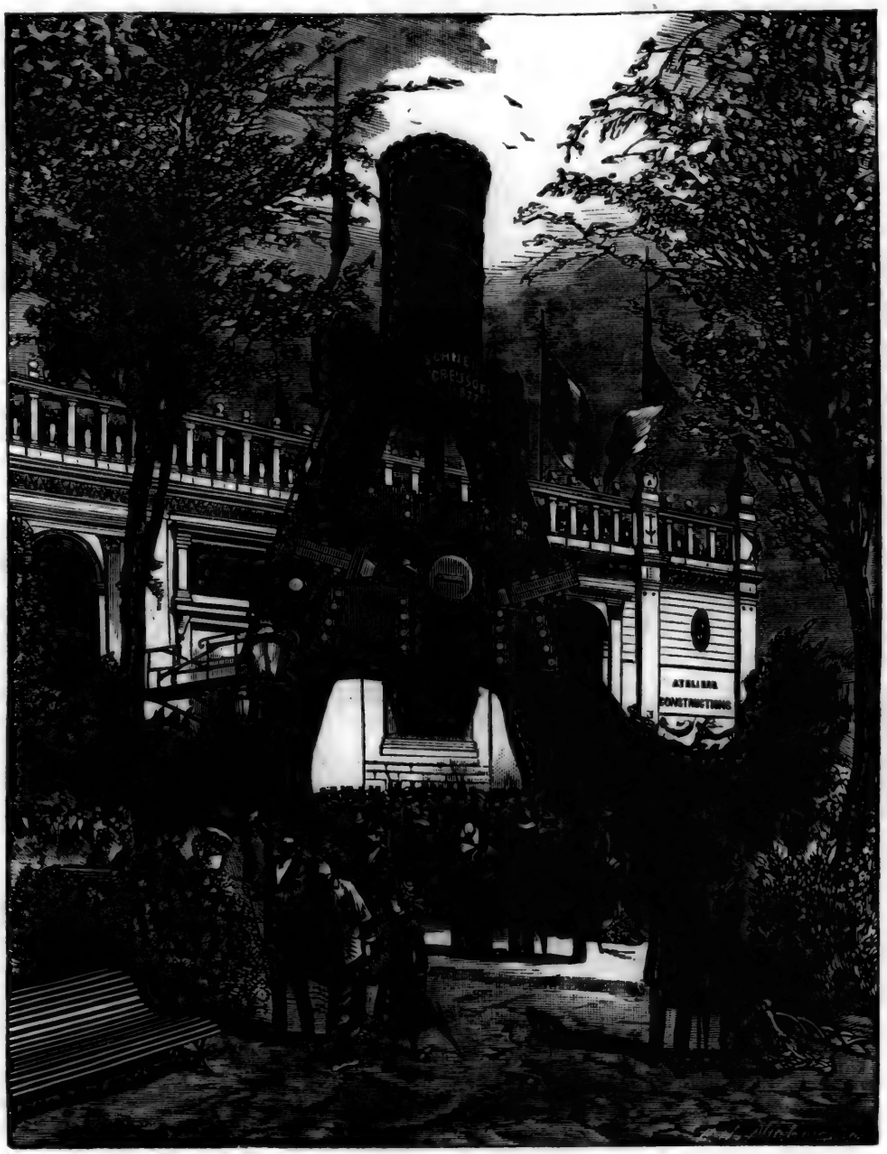
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The hearty approval which Knight's American Mechanical Dictionary has received in all parts of the world has encouraged the publishers to issue an entirely new volume, thus continuing the record from the date at which the former work went to press, but carefully avoiding repetition, and aiming to furnish not only a satisfactory supplement to the original work, but a book which shall have an individual and separate value as a complete record of half a decade in the history of invention. From this fact it is evident that this volume forms an indispensable supplement to all works of reference upon mechanics now extant, as none of them cover the period mentioned.

The same method has been adopted in dealing with the subject matter in both works. First, each article appears in its proper alphabetical place, thus fulfilling the function of a dictionary, in affording direct response to inquiry. Second, the items of information thus distributed throughout the work are classified in special indexes of the Art, Profession, or Manufacture to which they pertain. The book thus fulfills the function of a Cyclopædia, which is a collection of treatises.

The value of a work of reference depends largely upon its Index. When one has a question to ask of an ordinary Cyclopædia it is frequently very difficult to determine under which title or heading to look.

The author has invented a system of what he terms "Specific Indexes," by the use of which the inquirer is guided straight to the information he is in quest of, even though he be entirely ignorant of the name of a thing, and has but the most vague and general notion of its use. This is accomplished by grouping under the general title of each Science, Art, Trade or Profession a list or "Specific Index" of every article in the book bearing any relation to the subject in question. The titles of these Indexes are in turn grouped at the beginning of the book, so that by a glance one may determine which clew to follow.

Besides the use above mentioned, these Specific Indexes afford the reader an excellent opportunity for investigating thoroughly all that pertains directly or indirectly to any special subject, by using the Index under the title of that subject as a sort of head-center, and following out its various branches through all their ramifications.

Special attention is called to a new and valuable feature in the work, by means of which exhaustive information on any subject is placed within easy reach. The author has made a complete Index to technical literature, covering a period of five years, and embracing all English and American technical journals published from 1876 to 1880 inclusive. Under title of each subject may be found a complete list of every article which has appeared, during this period, in the columns of these periodicals and as every subject of importance has been thoroughly discussed therein, it is evident that the whole range of recent investigation is thus placed at easy command. This Index cannot fail to meet with the heartiest appreciation among those who have experienced the labor and difficulty attending an exhaustive search upon any line of inquiry.

"Index-learning turns no student pale,
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The work treats of many thousand subjects and is illustrated with over 2,500 carefully prepared engravings and numerous full-page plates, and for general typographical excellence, quality of paper, and printing it is unsurpassed. It may be bound uniform with any edition of the Knight's American Mechanical Dictionary, or with any Cyclopædia or other book of reference of the usual size and shape. Sold only by subscription in four sections, containing 240 pages each.

For further particulars address the Publishers, Houghton, Mifflin & Co., Boston, Mass.

——:o:——

"I never was in favor of war," said an old Arkansawer, "but I notice that some of the world's greatest men are not of my opinion. Now, there's old Trademark. He's a great man, and he believes in war." "Old who?" asked a bystander. "Old Trademark." "Who on earth is old Trademark?" "No wonder they call us ignorant when such fellows as you show your lack of schoolin'. Didn't you ever hear of the great German military man, Trademark?" "I've heard of Bismarck.' "That's a fact—Bizmarck. I knowed that it was some sort of a commercial name."

The Canadian Engine and Locomotive Company, of Kingston, have completed the second engine for the Quebec Central Railway. It is a passenger engine. The road over which will travel runs from Sherbrooke to it Point Levis, opposite Quebec.

The Alexandria, Va., *Gazette* says: "A new engine from Paterson, N. J., for the Western North Carolina Railroad arrived here on the 5th. Several new engines for the road have passed through here during the past week, and we learn that an order has been given by the Richmond and Danville syndicate for ten new first-class engines. Four new passenger cars for the Washington and Western Railroad are expected here the latter part of the month."

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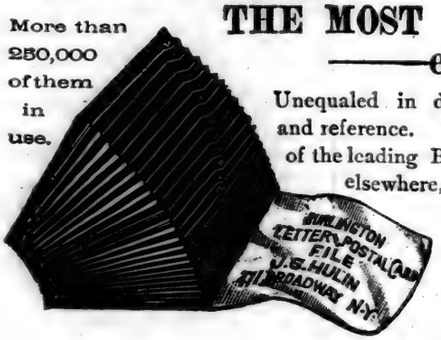
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JACOB ELMER, of Biloxi, Miss., has recently succeeded in constructing a permanent bed for railroads, across swamps and the like, in such a manner that the timber used will not decay or rot, and the heaviest trains run over without the bed sinking or washing out on account of heavy rains or high tides.

A ditch 20 or 25 feet in width is dug alongside the road-bed with dredge-boats (such as are in use at present), of a sufficient depth to float the boat, the mud from the ditch to be thrown on the road-bed and levelled to the width of 25 feet the whole length of the swamp. Then the bed is to be covered with logs or timbers laid close together, every piece reversed with relation to its adjacent pieces, and not less than 10 inches in diameter and 25 feet long. Then a ditch is dug on the opposite side of the bed, parallel and of the same size and width as the former, the mud from this ditch to be thrown on the timber or causeway, entirely covering the timber, for the purpose of preserving the timber for all time to come. This bed, when levelled, will be ready to receive the cross ties and rails. The two ditches will facilitate the laying of the track, as the material can be transported through these canals. This will elevate the bed at least 3 feet above the adjoining land.

When the road has to cross sinks, bayous, or ponds where there is six feet of water or less, rafts are to be constructed of logs 25 feet long and not less than 12 inches in diameter, fastened together with stringers on each side, and not less than 8 inches in diameter. These stringers are bolted on top on the end of the logs on each side. The rafts are covered with small stones or rocks from 20 to 30 pounds in size, and in number sufficient to sink the raft and hold it to the bottom, and so on with additional rafts, one upon another, until the last raft will be on a level with the road-bed. The first raft has to be fastened with anchors and chains to place the raft and hold it in proper position until the road-bed is completed; then the anchor and chain can be removed. When the rafts are of a proper height they are to be covered with mud, the same as other parts, to keep the timber from decaying. After the cross ties and rails are applied the road is ready for travel.

For a proper protection of the bed, poles, saplings, or brush made into bundles and tied together, from 15 to 20 feet in length, not exceeding 300 pounds in weight, may be placed lengthwise in the ditches alongside of the road-bed, on top of each other, to within 1 foot of the top and the full length of the bed. The bundles, when so laid, are to be covered with mud even with the top of the road-bed. This will keep the bed from washing and the bundles from decaying.

The mud for covering the bundles is to be had by digging an additional ditch along each side of the first ditches, and leaving a partition wall of 6 feet between the two ditches. This partition wall will brace and keep the road-bed from washing.

Rights of this patent for sale by American Patent Agency, home office, Nos. 188 and 190 West Fifth Street, Cincinnati, O. Western office, 712 Pine Street, St. Louis, Mo.

NEW INVENTIONS.

THE Haulenbeek Car Coupler requires no change of draw-bars, is simple and inexpensive in construction, and can be operated from either side or from top of car. It consists of a rod of iron three-quarters or seven-eighths of an inch thick, bent at each side of car to form handles, and in the center, one draw-head made in the form of a yoke, to which is attached the ordinary coupling-pin by a ring, so that the pin is raised in the draw-head when a coupling is to be made to another car, and at the same time the guide, made of heavy sheet iron and also attached to coupler, is raised and guides the link into the draw-bar.

Thos. Eubank's Automatic Lock and Spark-proof Attachment for Box Car Doors is a great improvement over the ordinary car door, simply changing the car doors now in use, that work on a slide at top, by doing away with the lugs or guide at bottom of door, and putting a batten at side where it formerly was made to slide, bevelling the batten at top, so that when the door is pulled out eight inches at bottom it will slide past the batten and lock itself on the side of the car, preventing door shaking off and being lost. The locks are very simple and work automatically, being proof against carelessly leaving the door unfastened either when open or closed.

Mr. Mancy has a simple, cheap grain door made to slide upwards on inside of the car, and, turning at top as if on a hinge, fastens against the roof of the car. Two pieces of band iron furnish the slides, and the door is fastened and held in place when in use by very simple and ingenious automatic catches.

All of these inventions are by practical mechanics working at Sedalia, Missouri.

A Discreet Young Lady on Her Travels.

"May I open the window for you, Miss?" politely inquired a gentleman of a young lady on the Northern Pacific road, as he saw her tugging at a sash that had not recovered from the preceding winter.

She glared at him a moment and gave a reluctant consent.

"Folks can't be too careful who they speak to or accept favors from," she remarked, after a long pause.

"That's very true," replied the gentleman quietly.

"Are you a Boston drummer?" she inquired.

"No, I am not," he answered.

"A hotel clerk?"

"No, not a hotel clerk."

"I am glad of that," said she. "I never let a drummer or a hotel clerk speak to me. Maybe you're an actor?"

"No, not an actor."

"That's first-class," she exclaimed, showing her dimples and becoming more and more confidential. "If an actor should speak to me I'd die. What *is* your business?"

"I'm a bartender, and I'm traveling West to get a Territorial divorce from my wife," explained the gentleman.

"Oh, I'm so glad!" giggled the girl. "Reach down my satchel; there's a bottle of whiskey and a pack of cards in it. I'll play you an odd game of California Jack for $5 a corner! I like to meet gentlemen, and I know 'em when I see 'em. Ask that bald-headed duffer across there if he's got a corkscrew, will you?"

How Cæsar Found Water in Egypt.

THE painful interest now attaching to the water supply of Alexandria has led Dr. Samuel Crompton to call attention to a passage in the writings of Lord Bacon bearing upon that subject. "Dig a pit," says the author of the "Novum Organon," "upon the seashore somewhat above the high-water mark, and as the tide comes in it will fill with water fresh and potable. This is commonly practiced upon the coast of Barbary where other fresh water is wanting." Lord Bacon refers briefly in confirmation to the experience of Cæsar during the Alexandrian war. The incident is told with more detail in the "Commentaries" attributed to Hirtius. The General of the Egyptian troops was Ganymed, who made great exertions to deprive the Roman troops of their water supply by the introduction of salt water into the canals supplying the cisterns of the quarter of the town held by them. When the brackishness of the water became increasingly known there was something like a panic. Some blamed Cæsar for not at once retreating to the ships, while others were afraid that such a step would lead to further mischief, since the retrograde movement could not be concealed from the Alexandrian troops. Moreover, in the part in which the Roman troops were stationed were many inhabitants, charitably supposed to be favorable to Cæsar and his fortunes, but whose fidelity was not too much assured. "All who know them," in effect, says Aulus Hirtius, "will be convinced that they are the most suitable instruments in the world for treason." To allay the fears of the soldiery, Cæsar assured them that they could easily find fresh water by digging wells, since the seacoasts naturally abounded in fresh springs, and that even if the soil of Egypt differed from all others in that respect, there was the open sea and access by it to Parætonium on the left and to Pharos on the right, whence they could obtain supplies. He counselled them to abandon all thought of retreat and to seek safety in victory alone. The soldiers were reassured by the words of their great leader. The centurions, laying aside all other works, devoted themselves to the digging of wells, and the labor was continued by day and night. So vigorously, we are told, was the undertaking prosecuted that during the first night abundance of fresh water was discovered. "Thus," says Hirtius, "the mighty projects of the Alexandrians were entirely defeated, and that without any great effort on our side."

AMERICAN Railroad Journal.

ESTABLISHED 1831.

Steam Navigation, Commerce, Finance, Banking, Machinery, Mining, Manufactures.

SECOND QUARTO SERIES.—VOL. XXXVIII., No. 35.] NEW YORK, SEPTEMBER 9, 1882. [WHOLE No. 2,420.—VOL. L.

ORGANIZATION.

THE following have been elected directors of the Brooklyn, Flatbush and Coney Island Railroad Company: Henry C. Murphy, William Marshall, Stephen H. Herriman, Charles Storrs, William C. Kingsley, Daniel Chauncey, James Jourdan, E. L. Garvin, Albert Daggett, George I. Murphy, B. F. Tracy, Robinson Gill, and H. D. Polhemus.

A CIRCULAR was issued from the office of the Missouri Pacific Railroad Company, at St. Louis on the 4th inst., announcing that the office of general manager will be discontinued on September 11; that H. M. Hoxie is elected third vice-president and will assume charge of the traffic and land departments, and that A. A. Talmage, late general manager, is appointed general transportation manager.

AT the annual meeting of the stockholders of the Harrisburg, Lancaster, Mount Joy and Portsmouth Railroad Company held on the 1st inst., at the Pennsylvania Railroad Office, the following directors were elected: Edmund Smith, George B. Roberts, Wistar Morris, John M. Kennedy, N. Parker Shortridge, James Young, Lewis Elkin, A. J. Cassatt, John P. Green.

AT the annual meeting of the Newport and Wickford Railroad and Steamboat Company, held at Newport, Rhode Island, on the 4th inst., the following officers were elected: President, George M. Miller of New York; secretary, Anthony S. Sherman of Newport; directors, John S. Weaver, George M. Miller, J. N. A. Griswold and George Peabody Wetmore of New York; S. H. Vaughan of Wickford, N. F. A dividend of three per cent was declared.

AT the annual election of the Albany and Susquehanna Railroad Company, at Albany on the 5th inst., the following directors were chosen: Thomas Dickson, of Scranton, Pa.; Col. F. Young, Honesdale, Pa.; Henry Smith and W. L. M. Phelps, Albany; Minard Harder, Cobleskill; John Westover, Richmondville; J. Pierpont Morgan, Charles Tracey, Robert M. Olyphant, James R. Taylor and David Dows, New York; James Roosevelt, Hyde Park, and Henry M. Olmsted, Morristown, N. J. Col. F. Young was elected president, and William L. M. Phelps, secretary and treasurer.

AT the annual meeting of the stockholders of the Baltimore, Cincinnati and Western Railroad Company, held in this city on the 3d inst., the following were elected directors: William J. Best, Daniel J. Sprague and Henry S. Turbell, of New York; Thomas L. Young and Geo. F. Steadman, of Cincinnati; Jackson Holland, of Baltimore; and Charles P. Janney, of Leesburg, Virginia. The officers, elected on the 5th inst., are: President, Wm. J. Best, of New York; first vice-president, Thomas L. Young, of Cincinnati, Ohio; second vice-president, Jackson Holland, of Baltimore, Md.; treasurer, Henry S. Turbell, of New York; secretary, E. D. McConky, of New York; and executive committee, Daniel J. Sprague and Henry S. Turbell, of New York, and Charles P. Janney, of Leesburg, Virginia.

CONSTRUCTION.

THE railroad from Jacksonville, Fla., to St. Augustine will be finished in December.

THE thirty miles of the Conca Railroad between Buena Ventura and Cordoba have been opened for traffic.

TRACK-LAYING has been commenced on the Chattahoochee extension of the Savannah, Florida and Western Railway.

THE California Southern Railroad between Colton and San Diego has been completed. The new line is 127 miles in length.

IT is expected that the Delaware, Lackawanna and Western Railway will be completed to the International Bridge by the 1st of October.

THE opening of the Wheeling and Lake Erie Railroad for traffic was celebrated on the 23d ult., by an excursion from Toledo to Marietta.

THE New Orleans Pacific Railroad has been completed, and trains will be put on between New Orleans and Marshall, Texas, by the 15th inst.

WORK has been begun on the new telegraph line which is to connect the Baltimore and Ohio line with Alexandria, Richmond and the South.

THE extension of the Ohio Central Railroad from its present southern terminus to Point Pleasant, on the Ohio River, a distance of 44 miles, will be opened early in November.

IT is expected that trains will be running between Jersey Shore and Williamsport on the Shamokin, Sunbury and Lewisburg Railroad by the 1st of November.

THE Cincinnati and Eastern Railroad Company have contracted for a sufficient quantity of 56lb. steel rails to complete their road from Newport to Portsmouth, Ohio.

THE St. Joseph, Kansas City and Arkansas Railway Company has been organized to build a narrow-gauge road from Joplin, Mo., south to Van Buren, Ark., about 150 miles.

THE railroad from Newport News to Old Point is nearly completed, and it is expected that trains will be running on the Hampton branch in a few days.

THE contractors for the Selkirk branch of the Canadian Pacific Railway commenced grading on the 4th inst. They will operate from both ends of the line, and expect to have the work completed this fall.

THE Cincinnati, Wabash and Michigan Railroad was finished to Berrien Center, on the 1st inst. It is expected to have it completed to Benton Harbor, its final terminus, in about six weeks.

THE Danville, Olney and Ohio River Railroad Company celebrated the completion of the northern division of their road from Danville to Olney, by running an excursion train over their road on the 23d ult.

THE surveyors of the proposed extension of the Scioto Valley and Chesapeake and Ohio Railroad, running their line from Columbus to Fort Wayne the third time, reached Columbus, Ohio, on the 4th inst. They are locating this time.

THE Denver, South Park and Pacific division of the Union Pacific Railway has just been completed to Gunnison, and the first passenger train ran through from Gunnison to Denver on the 5th inst., carrying 270 persons to the Mining Exposition.

ARDAUGH, BANNERMAN & Co. have accepted the contract awarded to them by the directors of the Kingston and Pembroke Railway Company, to grade the track from the Madawaska to Renfrew, and have it finished by the 1st of September, 1883.

THE completion of the Wabash, St. Louis and Pacific Railroad to Des Moines on the 30th of August, gives it an air line almost from Des Moines to St. Louis; also a direct through line to the East. The connection at Des Moines unites the Northwestern branches with the main line.

THE surveys for the Essex Center cut-off have been completed. The engineer reports the line to be nearly straight, and the greatest grade only 5 feet in the mile, except the approach to the river, where there will be a cut twenty feet deep, but the grade there will not be as

sharp as it is at Amherstburg. This cut-off is 15¼ miles long, and will probably be built as rapidly as any road of the same length ever was built.

BROWN, HOWARD & Co., the contractors for the New York, Chicago and St. Louis Railroad, have formally announced the completion of their contract. The road has been finished between Chicago and Buffalo, and turned over to the railroad company, which has also announced the fact that they have taken formal possession of the property.

WORK has been commenced on the White River branch of the St. Louis, Iron Mountain and Southern Railway. This road is projected to run from Shiloh Junction, on the main line, to Eureka Springs, a distance of 160 miles. When completed this branch will traverse the northern counties of Arkansas and open up a section of country at present entirely destitute of railway facilities.

WITHIN the year ending August 31, 1882, there have been completed in Texas 1,641 miles of railroad, at an estimated cost for construction and equipment of $44,525,000. The State has now 5,908 miles of completed railroads, the cost of equipment and building being placed at $165,806,600. The amount paid out by the roads during the year for repairing, building engines and cars, and for salaries, approximates $10,282,434.

THE cut-off line from Calvert to Tecumseh, Nebraska, which connects the Chicago and the Atchison systems of the Chicago, Burlington and Quincy road, has been completed. The line is thirty miles long. The contracts will soon be let for extending it from Tecumseh westward to the main line leading to Denver. These links will straighten and shorten the route of the Burlington road between the Missouri River and Denver.

ALL the extra work that will be done on the Pennsylvania Railroad this year is nearly finished. The four tracks now extend from Philadelphia on the main line as far as Villanova, a little more than 12 miles, but all the grading and bridge work necessary for their extension as far as Eagle is done. At Wayne the track on the line is being laid as fast as possible, and within a month the old road running close to Wayne station will be abandoned, and a curve about 1,000 feet in length will be taken out.

THE New York, Chicago and St. Louis Railroad extends from Chicago, Ill., to Buffalo, N. Y., by way of Fort Wayne, Ind., and is 521.89 miles in length, with the standard gauge of 4 feet 8½ inches. The rails are 60-pound steel. The company was organized about a year and a half ago. Its total stock and bond capital is $39,000,000. It is proposed to put on the finest limited train that has ever run between the East and West. It will be composed entirely of Pullman palace cars of the very finest make. They are now being built in the Pullman shops. The road will be opened for business on the 1st of October.

THE Texas and St. Louis Narrow-gauge Railroad has been completed to a point 40 miles beyond Waco. The road is in running operation from Pine Bluff to Camden, Ark., and from Clarendon, on White River, to a point 30 miles north of Brinkley, at which latter place it intersects the Memphis and Little Rock Railroad. The line from Bird's Point, Mo., to Jonesboro, Ark., has been finished a distance of 125 miles, making, all told, a total mileage of 572 miles in running operation, and track-laying is going on at the rate of 50 or 60 miles per month. The whole of the grading in Arkansas will be done by October 1. Three hundred men are at work at Bird's Point on the incline and yards, which are to be finished by September 15.

GEORGE T. ANTHONY, the general superintendent of the Chihuahua division of the Mexican Central Railway, announces that it had been decided to open the Mexican Central Railroad to Chihuahua on the 16th inst., with great festivities, lasting eight days. The Mayor and City Council of Chihuahua have raised a subscription fund of about $20,000 already, and the scheme has been indorsed by Governor Terragas. This division of the road is 224.7 miles in length, extending from Chihuahua to Paso del Norte, opposite El Paso, Texas, where connection is made with the Atchison, Topeka and Santa Fe, the Southern Pacific, the Texas and Pacific, and the El Paso division of the Galveston, Harrisburg and San Antonio Railroad. The length of the main line, from Mexico to Queretaro, is 152.8 miles, and the Tampico division, from Tampico to San Luis Potosi, 262 miles—the latter now under construction.

THE turning of the first sod of the Murray Canal was formally celebrated on the 31st ult., at a point on the line of the canal about half a mile from its western terminus. The contract for its construction has been awarded to Silcox & Mawry. The canal, commencing at a point known as "Twelve O'clock Point," on the shore of the Bay of Quinte, will be constructed in almost a straight line to Weese's Creek, which empties into Presque Isle harbor. The entire length will be a fraction over 5 miles, the width 8 feet at the bottom and 150 at the top, and the depth 20 feet. The object of the canal is to connect the head waters of the Bay of Quinte with Lake Ontario, and thus insure a perfectly safe passage for all the shipping going from the West to Kingston and Montreal, which, instead of going down Lake Ontario to the St. Lawrence as formerly, will pass through the canal and down the Bay of Quinte, thus avoiding the dangerous storms which so frequently occur on Lake Ontario. Work was commenced immediately after the conclusion of the ceremony of turning the first sod.

MR. KNIGHT, inspector of the New York and New England Railroad, gives the following high commendation in his report in relation to the McLeod Air Railroad Signals: "Experiment has already shown that with the pipe now in use (5-16 in. pipe), the signal using 1,800 feet is set in motion in three seconds. * * The general adaptation of the parts to their function in the construction of the mechanism *seems excellent*. * * For the railroad of one or two tracks this signal promises all that is to be desired, and when all completed I should be very much surprised if, upon prolonged trial—the best of test, especially of durability—any defect should be discovered, which could not be readily remedied, and thereafter guarded against."

Telegraphing the Precise Time.

FOR a long time the firm of M. S. Smith & Co. and the Michigan Central Railroad Company have been in the habit of obtaining the time to regulate their clocks by from the observatory at Ann Arbor. Twice a week the regulating was done, an operator going from Jackson to Ann Arbor. But telegraphing by hand was likely to result in slight errors, and the method was not the most satisfactory. M. A. T. Hill, of the firm of M. S. Smith & Co., has invented and perfected a device for telegraphing to any given point the precise time. A large clock of the usual kind will be placed in the observatory at Ann Arbor and astronomically regulated. Connected with this is a secondary clock, which will run two minutes each day, beginning at 11:59 A. M. and stopped at 12:01 P. M. When it begins to run it automatically operates a telegraphic sounder, which for the first minute strikes once a second, and at precisely noon begins a peculiar and unmistakable double "click-click," continuing for one minute. Now the Michigan Central Railroad Company furnish the use of a wire to Detroit, for the sake of getting accurate time. At A. M. Smith & Co.'s store a sounding bell will be rung, the one stroke per second for the first minute calling attention to the fact that it is nearly noon. All watches can be pulled out and set at 12 o'clock, and when the double stroke begins, the owners of the time-pieces know that it is 12 o'clock. The Board of Trade, engine houses, and City Hall will be connected with the circuit. The device is very complete in its minute details. For instance, if the secondary clock should be out of order and stop, at the end of three minutes the large clock "switches the line out," so that the wire can again be used for telegraphic purposes.

Horse-Shoeing in Ancient Times.

HISTORIANS assert that the practice of shoeing horses was introduced into England by William the Conqueror, who instituted an office for the inspection of the farriers, and gave the city of Northampton as a fief, to the person who held that office. Henry de Ferrers, ancestor of the famous Earl of Derby, and whose descendants still bear in their arms six horseshoes, received his title, probably, from having been inspector, the horses evidently being shod with *iron* (the French *fer*). The custom of covering the feet of their horses was known to the ancient Greeks and Romans. In scenes of great magnificence, princes sometimes had their horses and mules shod with silver and gold. The mules of Nero were shod with silver, those of Poppœa, his wife, with gold, and when the Marquis of Bonifazio, of Tuscany, went to meet Beatrix, his bride, about the year 1038, so magnificent were the decorations of his equipage, that the horses were shod with silver, the nails were of the same metal, and if any dropped out, they belonged to those who found them. Post-horses were shod sometimes in the ninth century, but few of any other description. Horseshoes have been found in the graves of some of the old Germans and Vandals in the northern countries, but the antiquity of them cannot be ascertained.

Journal of Railroad Law.

CAMDEN AND ATLANTIC RAILROAD CO. vs. HOOSEY.

SUPREME COURT OF PENNSYLVANIA.

CONTRIBUTORY NEGLIGENCE.

A party who takes an exposed position on a train in motion, by his choice and not from necessity caused by any act of the company, is guilty of contributory negligence, and cannot recover in damages for an accident resulting from such exposed position.

Gordon and Trunkey, JJ. dissent.

Error to the Court of Common Pleas No. 1 of Philadelphia county.

Opinion by STERRETT, J. February 20, 1882.

The single breach of duty with which the defendant below was specifically charged, as the only ground of liability to the plaintiff for the injury he sustained in falling off the platform of the car on which he was then standing, was the failure of the company to provide a sufficient number of cars to seat all the passengers on the train.

Without assenting to the broad proposition contended for, that a railroad company, using steam motive power, is bound absolutely and under all circumstances to provide every passenger on the train with a seat, it cannot be questioned that, as a general rule and under ordinary circumstances, it is the duty of such company to provide suitable car accommodations and seats for those whom it undertakes to carry; and, if a passenger, exercising reasonable care and prudence, is injured in consequence of the company's neglect of duty in that regard, the latter is liable to respond in damages, for the injury thus occasioned solely by its own negligence. There appears to be nothing in the circumstances in this case to exempt the company from that general rule of duty; and if its negligence was the proximate cause of the plaintiff's injury, the liability of the company would necessarily follow, unless the plaintiff himself was guilty of negligence which contributed thereto. His contention was, that, in common with many other passengers, he was unable to procure a seat, and while searching for one he was thrown from the platform of one of the cars, and thus sustained the serious injury which resulted in the loss of his arm. The overcrowded condition of all the cars composing the train, and the consequent inability of the plaintiff and others to procure seats, were facts clearly proven. Assuming for the present that the company was justly chargeable with negligence resulting in injury to the plaintiff below, and that under the circumstances he was not guilty of contributory negligence in passing from car to car in search of a seat while the train was in rapid motion, can it be pretended that it would not be gross negligence in him to voluntarily take a position near the outer edge of the platform and remain there until by an ordinary jolt of the car he lost his equilibrium and was thrown off? This is precisely what the evidence as to the plaintiff's position at the time of the accident clearly establishes. Apart from his own testimony there is very little evidence tending to show precisely where he was at and shortly before that time; and there is certainly nothing that militates against his own version of what then and there occurred. He testified in substance that on entering the cars at Atlantic City and finding the rear cars overcrowded he pushed his way forward, searching in vain for a seat, until he reached the front car. After remaining there a short time he started back, and, quoting from his own testimony as found in the bill of exceptions, he says: "I left that car because I was tired standing there; had been there seven or eight minutes; started back through the cars; went through some ten or twelve cars; stopped several times going through; can't recollect time it took to go through back; could not get through for crowd; it was pretty near the same going back as coming through; I stopped outside on platform; rear platform of fourth or fifth car, right outside the door; stood on one side; the right hand side coming up. When I got out first I had hold of a little rail or something across the window; I held on to the little rail across the window to keep from falling off; let go to go through the cars; I was standing there a minute or two or so; it was two minutes to the best of my knowledge; can't tell if it was longer; when I left I started to go through, when the car gave a jolt, and somebody struck me. Could not count how many passengers passed through while I was on the platform; they were coming in the opposite direction, up toward the engine, and some were going through the same way, toward the rear of the train; can't say whether the car door of the car I passed out of was open; when I went out the door of the opposite car I am positive sure was open; saw parties coming from the opposite car; I did not stand aside inside of car because I could not see them well, and because I wanted to go through myself; I came out and stood with my back against the car, and my hand behind me; people were passing through into the car I left; there was a crowd; I left that car to go into an adjoining car; while standing there the car got a jolt, and somebody behind me staggered me, the jolt and it had something to do with it; can't tell whether the jolt without the other would have thrown me off; as soon as I got the jolt I made a grab with the right hand, and missed, and caught with the left the rail on the platform; there is a similar rail on the body of the car, to assist people in and off; I tried to get hold of the rail on the body; I was thrown partly round, and caught the dasher rail with my left hand; I was thrown with my chest towards the inside track; train was traveling very rapidly; my arm was mangled."

It is very evident from plaintiff's own statement, that at the time of the accident and for some minutes before, he was not in the act of passing from one car to another in search of a seat; on the contrary, he was standing quite near the edge of the platform with his back to the end window of the car. He was not only in a position of known danger, but was there voluntarily and in disregard of the rules of the company. There is nothing in the testimony from which a jury would be justified in coming to any other conclusion. While he was thus standing on the platform, persons passed from one car to the other in both directions, and there is nothing whatever to show that he could not have gone into the next car if he had been so disposed. Neither he nor any other witness pretends to say that it was necessary for him to stop and stand on the platform.

In the seventh point of the defendant below, the court was requested to charge "That even if a search for a seat was the real purpose of the plaintiff in going out on the platform, and even if it were not negligence for him to have crossed from car to car for that purpose, yet, if the jury believe from the evidence that he lingered on the platform, instead of immediately crossing, the verdict should be for the defendant." The learned Judge, in affirming this proposition, added the qualifying words, "unless compelled thereto by circumstances." The jury was thus authorized to inquire whether or not the plaintiff was compelled by circumstances to linger on the platform. We see nothing in the testimony to warrant the submission of this inquiry to the jury. As already intimated, there was not a particle of testimony from which it could be reasonably inferred that plaintiff was compelled to take or retain the position he did on the platform. Having shown by his own testimony that at the critical juncture he was in a position where no one of ordinary prudence should have placed himself, it was incumbent on him to prove that he was there from necessity and not from choice. While the latter was clearly shown, there was no testimony to prove the former. The point should have been affirmed without the qualification complained of. But, for reasons already suggested, we think the court should have gone further, and instructed the jury as requested in defendant's ninth point, which was: "That the evidence shows negligence on the part of plaintiff which contributed to produce the injury complained of, and therefore he cannot recover."

The dangerous position on the platform in which the plaintiff voluntarily placed himself, while the cars were in rapid motion, was undoubtedly the immediate cause of his being jolted off. If there had been any testimony from which it could have been reasonably inferred that he was there from necessity and not from choice, it would have been a question for the jury; but in the absence of such evidence it was error to refuse the point, and leave it to the jury to determine whether he was or was not guilty of contributory negligence.

Of all the passengers on a long train of twenty overcrowded cars the plaintiff was the only one who appears to have been injured. If he had submitted, as many others did, to the inconvenience of standing inside the cars, or if he had been guilty of no greater imprudence than passing from car to car, while the train was in rapid motion, it is not at all probable he would have been injured. His much to be regretted misfortune was the result of his own carelessness. This was clearly proved by uncontroverted testimony, from which no other conclusion could reasonably be drawn.

Judgment reversed.

H. B. Freeman and *George M. Dallas, Esqs.*, for plaintiff in error.

John H. Fow, Edward A. Anderson, and *Francis E. Brewster, Esqs.*, for defendant in error.

THE sale of intoxicants has been forbidden in all restaurants of the Grand Trunk Railway.

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REFORM IN PASSENGER CAR ACCOMMODATIONS.

THE early railroad passenger cars were made uniformly alike as to class; that is to say, there were no 1st, 2d, 3d, or even 4th class in the same train, or on the same line of road. This latter distinction strikes an American abroad as being amusingly absurd, based as it is, on social caste. The lapse of time has, however, shown the necessity of a classification of our cars, not according to social rank, nor to the upholstering of the seats, nor yet according to the wealth of the passenger, but according to the length of the journey—the "through" cars passing over several roads being appropriately devoted to that travel and therefore having a preference. The "Parlor" cars, like the "Sleeping" cars, have won their way to a permanent utility. This, however, is not so much because they are fitted and arranged like a "Parlor," or the more pretentious title "Drawing-room," as because they are usually allotted to a special service, running between given points, which is not the case with the ordinary coach. In other cases where a traveler is accompanied by ladies, or for parties in delicate health, they have special recommendations. Our car builders have, however, been too much misled by the names which have been attached to these special coaches; and have devoted too much attention and expense to mirrors, gilding, veneering and the like, rather than to comfort and economy.

There is room for reform in these particulars in both the Sleeping and Parlor cars of both the Pullman and Wagner variety. What is wanted is a car with less ornamentation, upholstery, chandelier, mirror and gilding, and more practical ease, and which can be furnished to through passengers at about half the present charge. In regard to Sleeping cars it is quite feasible to do away with the luxuriance of carved walnut and massive walls and seats, and substitute for them a car of equal capacity, convenience and comfort. Instead of the present stuffy cushions, a woven wire seat could be devised which could be easily converted into the best of matresses; and a hair instead of feather pillow. A good bed, on the lower tier, ought to be afforded for one dollar, and in the upper tier for seventy-five cents, which concession would do away with part of the prejudice against the latter. The Pacific railroads, we are informed, are building emigrant cars which have seats convertible into sleeping-berths, for which no extra charge is made, the traveler furnishing his own top matress, if he desires. It is perfectly practicable to produce a Sleeping car of equal seating capacity and convenience with the standard Pullman or Wagner, having only two-thirds the weight (an important item to the railroad companies) for one-half the cost, and which would earn more money for both the car owner and transporter. Too much of the present outlay is for pleasing the eye; but it is not necessary to a man of business that his journey should be made in a room ornamented like a bed chamber of an European potentate.

The Baltimore and Ohio, the Delaware, Lackawanna and Western, and some other companies are now using handsome sleeping and parlor cars of their own make; and to them rather than to the Pullman and Wagner companies must the traveling public look, we imagine, for reform in this service. If such of these companies as expect to compete earnestly for passenger travel will instruct their master car builders to design and produce a day and night car which will earn a fair interest on its cost by charging one-half of the present tariff, the result will be seen at once in a diversion of business. The Wagner "Chair car"—for that is the proper designation—is a notorious tax on the endurance, and on the pocket; since it is part of the Vanderbilt policy to drive travelers into it, by making the ordinary first-class cars as uninviting as possible, and by getting for the Wagner car service far more than it is worth. On some of the Western roads are very comfortable "Chair cars," which can be had for fifty cents for a day's travel, of say 12 hours; but what is needed is a car with about the same capacity and finish as the regular Springfield or Wilmington day car, with the seats differently arranged so as to permit greater freedom, for the service of which say one dollar, or ten cents per hour, would be ample. This, as before explained, would not be an intermediate social rank; but simply for greater seclusion, for the certainty of a seat, and for cars passing over more than one road. The genius that can devise such a car will go far to drive out of use the heavy and too highly ornamental, but not altogether cleanly, Sleeping and Palace cars.

It has been suggested to us that some thoughtful railroad superintendent might with advantage take the subject of plush car seats under consideration. The worsted car plush, now in general use on American railroads, seems to have been adopted for seat coverings more out of regard to its appearance to the eye than from its comfort to the traveler. It is hot and stuffy in summer, it harbors dirt, and even vermin, at all seasons, it is liable to be spoiled in appearance by chance cinders, and it is very expensive. This, however, is not its greatest objection. Whoever has ridden on the regulation car seat for several hours together will have

noticed the disposition to slide forward on the seat unless braced by the feet. The plush nap slides from under him, as it were, and from a medical point of view, is promotive of irritation and inflamation of the scrotum and adjacent organs. Inquiry will elicit great uniformity as to this tendency. Leather is too expensive and too cold in winter; rattan is too cool, perhaps, in winter. Mr. Pullman might make another step ahead in this direction, as his car seats are said to be notorious offenders in this particular.

Rapid Railway Construction.

THE *St. James Gazette* discusses Sir Garnet Wolseley's chances of quickly constructing a line of railway from the canal wharves at Ismailia to join the existing railway at Zagazig, a distance of forty-eight miles. From Zagazig to the junction with the railway from Alexandria to Cairo at Benha-el-Asl, on the right bank of the Damietta branch of the Nile, near the railway bridge over that stream, is twenty-four miles; and from Benha-el-Asl the distance to Cairo is thirty miles, for the greater part of which the line of railway is perfectly straight. The whole length of railway existing in Egypt at the date of the publication of the "Mémoirs sur les Principaux Travaux en Egypte," by M. de Bellefond, was 220 miles, of which ninety were on the now disused route from Cairo to Suez.

It may be of some interest to know what are the greatest *tours de force* that have hitherto been effected by engineers, whether civil or military, in the rapid construction of railways where the nature of the ground has been such as not to demand much labor for its levelling previous to laying the rails. The instances in which—as shown by the Minutes of Proceedings of the Institution of Civil Engineers—the most rapid work has been effected in the construction of permanent way, are those of the railway across the Grandes Landes from Bordeaux to Bayonne, laid by Mr. Conder for the Compagnie du Chemin de Fer du Midi, in 1855; and that on the Candahar Railway, under the direction of the Engineer-in-Chief of the Indus Valley Railway, in 1879.

In the first case the rails and fittings for sixty-eight miles of railway were delivered at Bordeaux, and the timber was supplied at four intermediate stations on the line of railway. From the 20th of March to the 20th of July the progress on the works was slow, as the materials were very slowly delivered by the company. But the Emperor of the French, having expressed a wish that the line should be opened by the end of August, to allow of the conveyance over it of the Empress to Biarritz, Mr. Conder undertook, on the 20th of July, that a length of twenty-eight kilometres should be laid by the 31st of August. On the 5th of August the state of the works was such as to require a progress of 1.07 kilometre a day to effect this. But between the 5th and 20th of August, in spite of the loss of four working days—one from the non-supply of rails, a second from the occurrence of the Emperor's fete, on the 15th, and two more from rain—in the remaining seventeen days a length of thirty-five kilometres was laid, being at the rate of 2.06 kilometres or 1.28 mile per day in the hottest part of the year.

This great speed was exceeded on the Candahar Railway. On the 4th of October, 1879, the operations were fairly commenced. From that time to the 14th of January, 1880, out of 101 days seven were lost. Eighty-four working days were thus left, in which 133½ miles of railway were laid, being at the average rate of 1.59 mile a day, or at twenty-four per cent greater speed than was attained on the Bordeaux line. But the heat of the Grandes Landes in August is far more formidable than was that at the foot of the Hala Mountains in December. On six of the working days a length of two and one-half miles was laid per day, and on one day as much as two and three-quarter miles.

In both these cases the real limit to progress was the time demanded for sending forward the materials ahead of the work. Thus on the Candahar line, out of a cost of £515 per mile for the work only, £171 per mile was the cost of the actual laying the way, £344 being the cost per mile of forwarding the materials. On the Bordeaux line the whole of the materials were sent on over the line itself, temporarily laid for that purpose, and the greater part of the heavy expenditure for forwarding was thus saved.

On the line from Ismailia to Zagazig the facilities afforded for the transport or materials by the existing road and by lighterage along the Sweet Water Canal are so great that it may be said that the limit of speed will be determined almost wholly by the number of competent workmen who may be available on the spot. In the Landes the limit to the actual laying power was found to lie in the number of shipwrights, or men accustomed to the use of an auger. It was essential that these should be English workmen, as the French were quite unable to use this valuable tool with accuracy and dispatch. Provided this requirement has been borne in mind there seems no insuperable difficulty in attaining or even exceeding the greatest Candahar speed of two and three-quarter miles a day on the railway from Ismailia to Zagazig. Bonaparte, among the number of troops detailed for the expedition to Egypt, included two companies of workmen, besides miners and pontoniers. The point to which experience leads us to look as fixing the limit of rapid railway laying is the supply of workmen capable of doing first-rate work with the auger. There are, however, two branches of the Nile to cross—one at six and one at four miles before arriving at Zagazig.

The Place for Locomotive Cabs.

CORRESPONDENT "E. J. R.," of the Philadelphia *Record*, writing from Reading, Penn., under date of August 26, in reply to an article which had previously appeared in that paper upon the necessity for a "pilot" to accompany each locomotive, and upon which we commented in our last issue says:—

"I am an old railroad man of over thirty years' standing and experience. Your recent article speaking of a "pilot" for every locomotive drawing a train is much more important than I suppose you imagine. While I do not see the necessity for a pilot to control the engineer and conductor, I think the position of the engineer should be in a cab located on the front platform or bumper of his engine. Very nearly all the locomotives of the present day are so constructed that the view of the engineer is confined to a line straight ahead. On most engines now running, the engineer, being on the right-hand side, cannot see the track fifty feet ahead of him on a left-hand curve. This may seem a startling assertion, but is, nevertheless, a true one, and a large majority of the accidents on railroads caused by running into land slides or the rear end of trains are due to this cause. An engineer, as a rule, is forced to sit in a strained position, most of the time with his head out of the cab window, to get even a partial view of the track ahead; and, perhaps, at the moment when he straightens himself up to relieve his tired muscles, he pops into some obstruction, and an accident (?) is the result. I am a practical locomotive engineer, and know whereof I speak.

"There is no difficulty whatever about placing the engineer in the position on his engine that will obviate all this risk of accident that arises from an imperfect view of the track. Ross Winans, of Baltimore, built an engine for the Reading Railroad Company, to haul passenger trains, that had the cab on the front platform, and it was the most pleasant to ride on of all the engines I ever saw. The Philadelphia and Reading Railroad Company set the engineer's cab much further ahead on their locomotives than any other railroad or builder. The engine builder who breaks through the present prejudice and puts the engineer in the proper place on his engine will take a step that will not only pay, but will add to the safety of the engineer and the train behind him."

Mexican National Railway.

THE first passenger train on the Mexican National Railway reached Monterey, Mexico, on the 31st of August. The road is now completed from Corpus Christi, Texas, to that point, a distance of 333 miles. Monterey is one of the business centers of Mexico, and has a population of about 40,000. It is connected by rail with Laredo. An excursion over the road from that point is promised for the 16th inst. Regular trains will be run as soon as the track is ballasted. Between the 26th of August and the 1st of September a little over three miles of rails were laid each day by the construction party, that being necessary to enable them to reach Monterey by the day named. The company have now 520 miles finished in Mexico and Texas and claim that they will have 600 miles in October. Monterey is about 500 miles from Maravatio, which point it is promised the track shall reach from the City of Mexico next month. It is stated that over 900 miles have been subscribed for.

The Toluca division was opened for passengers on the 4th inst—the Government Engineers having reported that it was solidly built. Toluca is 46 miles west of the City of Mexico. An excursion train passed over the road on the 2d inst., to Toluca, carrying the Cabinet Ministers, Congressmen, and many other distinguished persons, including ex-President Diaz. It will take some little time to perfect arrangements for freight traffic.

OUR BOSTON LETTER.

Being a Review of Events.

[From Our Special Correspondent.]

THE FORBIDDEN CONSOLIDATION.

For the last two years a scheme has been afloat to consolidate the Boston and Lowell Railroad with the Concord Railroad. It was wisely thought that much money could be saved annually if one set of officers managed both these systems, as they would not aggregate a large mileage. The Boston and Lowell main line to Lowell, a distance of 26 miles, joined on to the Concord Railroad, which extends to Concord, N. H., 49 miles further, making a total main line of 75 miles. The legislatures of both New Hampshire and Massachusetts were petitioned, and without waiting for the consent thereof the articles of consolidation were made out, the usual inventories taken and everything made ready for the sanction of the great and general courts, to be followed by the consent of the stockholders of both roads. They even went so far as to move the offices of the Concord Railroad down into those of the Lowell road in this city. About this time the New Hampshire Legislature forbid the consolidation under an old law, extant. Treating this as mere chaff the joint officers went ahead, endeavoring by legal quibbles to set aside this decision. New cars were built, and they were painted "Boston, Lowell and Concord Railroad." About this time came a voice from the Granite State crying, in the words of the Rajah in "Around the World in Eighty Days," "The law, the law; Respect the law," and sent the Concord road a summons for contempt of court. The officers thereof hurried around, and among other things had an S painted on the new cars, making them read, "Boston, Lowell and Concord Railroads," and announced that the two roads only happened to have the same officers; and "the law" was satisfied, and its head, which had risen in anger, sank peacefully to its bosom again, while the two roads above mentioned rejoice daily in having "pooled their issues."

This coming winter it is said that new efforts are to be made toward building the Lake Shore Railroad of New Hampshire, which will extend from Alton Bay to Weirs along the shore of Lake Winnipiseogee, a distance of 17 miles, and its estimated cost is $500,000. This road, if built, will be operated in the interest of the Boston and Maine, and give them a connection at Weirs with the B., C. and M. Railroad to the White Mountains. Brave attempts were made last winter to get the charter of this road through the New Hampshire Legislature, but it met with great opposition. The average New Hampshire legislator is sharp, and not a member of the unwary, for although it was alleged that the pockets of the great and general court were full of Boston and Maine passes good for that winter, the project failed to go through. Perhaps the legislators are looking for "annuals" or "life's," so that they would be useful during the beach and mountain seasons. Anyway, many think that this year the charter will be obtained.

The Eastern Railroad is having at present a tremendous passenger traffic. One train last week had to be divided into two sections, with ten cars each. This company report the heaviest passenger travel this past summer in the history of the road. The fine cars built by this road early in the season have been duly appreciated.

A thoughtful man traveling over roads leading from the beaches or mountains at the present time might well come to the conclusion that the American people were fast becoming an affectionate and loving race, were he to judge from the large number of osculatory performances which are daily witnessed at the stations on these lines. The writer, coming over a road leading from one of these resorts the other day, had the felicity of seeing a performance calculated to try at least the soul of the man who had to go through it. At Lowell the usual crowd was gathered to see the incoming train, and there was the customary amount of expectation to be seen on the faces of the people. Conspicuous among them was a man whose face showed that joy was in store for him, and the sequel proved that he was not to be disappointed. After the train had come to a standstill there emerged from it a procession consisting of four women, two children and a baby, which headed for the man before mentioned, with the exclamation from a child of "There's papa." They rapidly approached each other, and it was evident that the woman carrying the baby was his wife, and therefore entitled to the first salute. A dilemma here presented itself to the man as to whether he should kiss his wife first or the baby, and for a minute it staggered him. Finally, seeing from appearances that it would not be safe to make any distinctions, he managed to bring both their faces together and to obtain a sort of consolidated joint osculation eminently satisfactory to all three, then he hurriedly kissed the clamorous small boys and two of the women and backed away with a very red face and a feeling that he had done his duty. A sharp pull on his sleeve caused him to turn towards his better half, when he discovered to his horror that he had in his haste skipped the third woman. He gave one look at her, shut both eyes, made a rush accompanied by an explosive sort of a sound, and then after a glance to see if any had got away, he retired from public view inside the waiting-room. Which led the JOURNAL man to reflect that, as there were 68,000 more women than men in this State, the daily number of similar performances must foot up large.

The new steamship Cyphalonia of the Cunard Line reached this port on the 4th, with the largest number of cabin passengers ever brought here by one ship. There were 144 cabin and 411 steerage passengers. The ship is a fine one, and on her first trip. She is 5,500 tons, built of iron, and 440 feet long by 47 wide, and has all the modern improvements. Her cabins are among the finest on the Atlantic, and she will be a great accession to the Cunard fleet.

The Fitchburg Railroad is about to make important changes in its time-tables, taking effect September 4th. Several trains will be discontinued. It is about time now for numbers of trains to be taken off the roads whose business covers many resorts.

The Boston and Lowell Railroad also changed its time table, to take effect September 4th.

The Fitchburg Railroad is laying two more tracks through the viaduct under the Boston and Lowell Railroad at Cambridge, which crosses it above grade.

On all the roads running out of here are to be seen boxes in the passenger cars labeled "tools," in accordance with the State law passed last winter. These boxes contain a saw, crowbar, axe and hammer, for use in case of accident. These are usually placed in the center of the car, and under certain circumstances might save many lives.

The Boston and Albany Railroad is building 9 new freight cars at its Springfield shops, and repairing 10 locomotives so that when they go forth they will be as good as new. The passenger business of this road has been very heavy all summer, many of their western trains are at present drawn by two engines, and parties desiring sleeping-car berths have to engage them a week in advance to obtain any sort of a choice.

An old lady on the Old Colony Railroad the other day, inquired of the conductor "if there would be any 'dericks' waiting at the depot to take her across the city." After some questioning it was found out that she wanted a "Hordic." It is safe to say that she came from the Old Colony region on the Cape.

It appears as if the Eastern Railroad was bound to consolidate with somebody; and now that the Boston and Maine won't take them, it is rumored that they are going to consolidate with the Maine Central, and the European and North American. Such an action would make a fine through line from Boston to the Provinces all rail.

The baggage men of all the roads complain of the great quantities people have taken with them this summer. A train at the Fitchburg depot the other night, which had come down from Vermont over the Cheshire Railroad, had *only* 123 pieces of baggage on board for the poor "smashers" to play with. It is not yet known whether there was any dynamite in any of it or not. "CURTIS."

BOSTON, September 5, 1882.

THE Lobdell Car Wheel Company, of Wilmington, Del., are moving into their new foundry at South Wilmington, which has just been completed. The new foundry has a capacity of five hundred wheels daily, which can be increased to seven hundred by using space now occupied for other purposes. They are now averaging two hundred and fifty wheels, and say that business is good.

BOWERS, DUBÉ & Co., of Wilmington, Del., are still working on the cars for the Manhattan Elevated Railroad. They have already delivered thirty, and expect to deliver ten more about the middle of the month. They are building six very handsome cars for the Norfolk and Western Railroad. These cars are finished in Eastlake style, have washstands and plate-glass mirrors in the toilet-room, and are very handsome in all particulars of finish. They are also building two sleeping-cars for the Georgia Railroad, and in the freight car department have just completed 100 20-ton box cars for the Shenandoah Valley Railroad, and are now working on one hundred and eighty hopper-bottom gondolas for the Norfolk and Western Railroad. They are running full-time and express themselves as well satisfied with prospects for business this fall.

List of Patents for Inventions Relating to Railway Interests.

Bearing date of August 29, 1882.

263,349. Flue Cleaner: PHILIP OPPER and HERMANN CHALL, Cleveland, Ohio. Filed June 26, 1882. (No model).

263,353. Electric Motor: DESIRE THOMAS PIOT, Great Titchfield street, County of Middlesex, England. Filed May 17, 1882. (No model). Patented in England Nov. 5, 1881, No. 4,851, and in France May 2, 1882.

263,356. Steam-Engine-Cylinder Lubricator: OSCAR A. ROLLINS, Campello, Mass. Filed July 5, 1882. (No model).

263,362. Spark-Arrester: MATHEW A. SIMS, Warrenton, Va. Filed April 3, 1882. (No model).

263,363. Car-Starter: CHARLES A. SULZMAN. Waterford, N. Y. Filed July 12, 1882. (No model).

263,374. Lubricator: THOMAS M. WILSON, Indianapolis, Ind. Filed April 21, 1882. (No model).

263,382. Force Pump: HIRAM BLAKE, Keene, N. H. Filed June 12, 1882. (No model).

263,396. Signal Lantern: JOHN H. EWING, Wheeling, W. Va., assignor to the Ewing & Bill Lantern Company, same place. Filed April 17, 1882. (No model).

263,399. Adjustable Belt-Tightener: WILLIAM L. GARDNER, New York, N. Y. Filed June 9, 1882. (No model).

263,401. Means for Extinguishing Fire in Railway Trains. ALMON M. GRANGER, Boston, Mass. Filed February 4, 1882. (No model).

263,410. Injector: LOVREN E. HOGUE, Sandy Lake, Pa. Filed February 1, 1882, (Model).

263,456. Smoke-Consuming Attachment for Furnaces: JACOB J. ANDERSON, Rochester, Pa. Filed July 22, 1882. (No model).

263,460. Lubricator: GEORGE W. BAKER, Chicago, Ill. Filed April 24, 1882, (no model).

263,470. Grate for Boiler Furnaces: WILLIAM BOWERS, Carbondale, Pa. Filed July 22, 1882. (No model).

263,482. Wire Fence: EMILE CHAVANNES, Altoona, Iowa. Filed February 23, 1882. (No model).

263,488. Shaft-Coupling: MICAJAH R. DAVIS, Pink Hill, Tex. Filed July 15, 1882. (No model).

263,490. Oil Conductor for Car-Axle Boxes: JULIUS DE LONG, Allegheny, Pa. Filed June 14, 1882. (No specimens).

263,496. Spark-Arrester: JOHN H. FILCER and JAMES GILDUFF, Mattoon, Ill. Filed May 23, 1882. (No model).

263,505. Rotary Engine: ALEXANDER C. GIBSON, Toronto, Ontario, Canada, assignor of one-half to Edmund Armant, same place, Filed April 10, 1882. (No model).

263,514. Vacuum Exhaust-Pipe: DENNIS HARRIGAN, Somerville, Mass. Filed June 13, 1882. (No model).

263,532. Steam Boiler Furnace: PETER KIEFER, Cincinnati, Ohio, Filed May 29, 1882. (No model).

263,566. Traction-Engine: JACOB NIXON, Winfield, Kansas, Filed March 15, 1882. (No model).

263,569. Spark-Arrester: JOHN H. OPTENBERG, Oshkosh, Wis. Filed April 21, 1882. (No model.)

263,573. Rotary Engine: JOHN PATTEN, San Francisco, Cal. Filed August 20, 1881. (No model).

263,615. Steam Generator: JAMES C. STEAD, Brooklyn, N. Y. Filed April 24, 1882. (No model).

263,629. Journal Bearing and Box: ROBERT W. TRAYLOR, Richmond, Va. Filed May 25, 1882. (Model).

263,661. Feeder for Locomotive Injectors and Pumps. DANIEL R. MURPHY, Newark, assignor of one-half to Gurdon D. Johnson, Granville, Ohio. Filed July 8, 1882. (No model).

263,663. Steam Boiler Furnace: WILLIAM H. ODELL, Yonkers, N. Y. Filed October 15, 1881. (No model).

10,190. Apparatus for Heating Cars: IRA A. SALMON, Boston, Mass. Filed July 17, 1882. Original No. 227,997, Dated May 25, 1880. Reissue.

THE truck wheels to be used under the new parlor cars now being built at the car shops in Reading, Penn., it is said, cost $109 per pair. They are known as the compressed paper wheels with steel tires. The entire set for one car will cost $654. The cost of each car is estimated at $10,000 to $12,000. The first car is nearly completed and another is under way.

Delaware Railroad and its Branches.

J. F. PENNINGTON, writing in the *Industrial Review* for August, recounts the development of the Peninsula Railway system, as follows:

In 1831, a dense unbroken forest of gloomy pines stretched from New Castle, Del., southward for many miles; the country was sparsely populated, and the rich and varied resources of the Delaware and Chesapeake Peninsula—the valuable oyster deposits, the great belt of oak and pine timber extending along the ocean front, and the products of the bays, rivers and estuaries—clams, crabs, fish, etc.—were as yet unknown to those energetic pioneers of progressive civilization, who were, however, knocking loudly at the doors which opened into this great country; and they practically crossed the threshold when they triumphantly consummated the first grand achievement in modern science and mechanism—the construction of the first link in the Peninsular Railroad chain, known as the New Castle and Frenchtown, 16 miles in length, running from New Castle, Del., to Frenchtown, Md., an obscure village on the Elk River. The rolling-stock was in keeping with the crude ideas of the times—constructed with a view to hard service and utility rather than to show and elaborate ornamentation. It was known as the "omnibus" line, the cars being modelled upon a plan identical with the omnibus of this more modern date. They were mounted upon four wheels, and the passengers occupied the seats *vis-a-vis*. The engine was without a cab, and was stopped at intervals to take on a fresh supply of wood fuel.

The first tangible evidence of the future result of the benefits of this railroad enterprise was the importance it gave to commerce. Vessels were dispatched from Baltimore to connect with this road at Frenchtown; thence freight and passengers were transferred to New Castle, and reached points north by sail-vessel or stage-coach. A strong opposition to railroads had already sprung up among the people, and this opposition, particularly among the operators of the coach lines, was intensified when there became a perceptible diminution in their receipts, and the driver, as his horses plodded along through heavy sand over lonesome dreary roads, relieved the monotony of his irksome duty by singing the famous song which began with "God curse the railroads and canals." But the current was irresistible.

The success of this experimental road inspired its projectors with a desire to extend their sphere of usefulness. On the 7th of July, 1837, the first regular train passed over the newly constructed road from Wilmington, Del., to Perryville, Md., and a few years later the tracks were extended to Philadelphia. This road is the Philadelphia, Wilmington and Baltimore Railroad, the connecting link between the North and South. The New Castle and Frenchtown Railroad was soon absorbed by the new line, having as it did increased facilities and valuable outlets both at Philadelphia and Baltimore.

The Delaware Division of the Philadelphia, Wilmington and Baltimore was completed to Delmar, the present terminus, in 1860. It begins at Delaware Junction two miles from Wilmington, and traverses the great fruit, agricultural and timber region of the Peninsula, a distance of 96 miles. This is the substantial backbone of the great network of collateral branches ramifying in every direction through the Peninsula, which Mr. Pennington enumerates as follows:—

The Breakwater and Frankford, from Georgetown to Selbyville; the Junction and Breakwater, from Harrington to Lewes on the Delaware Bay, connecting with the Old Dominion Steamship Company for New York; the Dorchester and Delaware, from Seaford to Cambridge, Md., on the Choptank, in daily communication with Baltimore by steamboat. (All these roads are partly or wholly operated in Delaware.) The Smyrna and Delaware Bay, from Pierson's Cove on the Delaware Bay, to Massey's Junction, Md.; the Delaware and Chesapeake, from Clayton, Del., to Oxford, on the Choptank, Md.; the Eastern Shore, from Delmar to Crisfield, Md., on the Annemessix, and the vast oyster fields of Tanger Sound; Kent county, from Bombay Hook, on the Delaware Bay, to Chestertown, on Chester River, Md.; the Queen Anne's and Kent, from Townsend to Centerville, Md.; the Wicomico and Pocomoke, from Salisbury through the great oak timber belt of Worcester county, to Ocean City, Md., a fashionable seaside resort on the Atlantic coast; the Worcester, from Selbyville to Franklin City, Va., and Chincoteague Island, via steamer; and the Worcester and Somerset, from Newtown Junction to Pocomoke City on the Pocomoke River, Md.

The cost of construction of these roads aggregates $8,523,065; the number of miles in operation, 449; number of stations, 196; capital stock represented, $4,500,000. Most of them have outlets on rivers which empty into the Delaware and Chesapeake bays, thus having direct connection with the cities and intermediate towns on the bays by steamer. Most of the towns and villages about which these roads circulate are the direct result of railroad enterprise, and to complete the grand system the prospective road from Pocomoke City to Cherrystone, Va., will make an air line from Florida to Maine, and put the products of the Peninsula into the Philadelphia and New York markets 24 hours earlier than at present.

BY referring to the Advertisement in another column, of the Brown Manufacturing Company, of Providence, R. I., Manufacturers of Special Railroad Supplies, it will be seen that they have for sale Machinery Wipes, Absorbent Mops, Lamp Wicking for Packing, etc., etc., the prices for which may be learned by an examination of their card.

THE instruments which will be used by the transit of Venus "observation" party in New Zealand, necessarily of the finest and most delicate nature, and requiring the greatest care in transportation, were loaded in an express car, which was dispatched from Washington on the 5th inst. attached to a fast passenger train, under an agreement, ratified by officers of the different railroad companies, that the car should be carried through to San Francisco without disturbing its contents.

The Stock Exchanges and Money Market.

New York Stock Exchange.

Closing Prices for the week ending Sept. 6.

	Th.31.	F.1.	Sat. 2.	M.4.	Tu.5.	W.6.
Adams Express	.....	.....	.....	141½	141	.....
Albany and Susq	.....	.....	.....	.....	.....	.....
1st mortgage	.....	.....	.....	.....	.....	.....
2d mortgage	107½	.....	.....	.....	.....	.....
American Express	96	95¼	.....	95¾	95⅞	95¾
Burl., C. R. & Nor	.....	.....	.....	.....	.....	.....
1st mortgage 5s	.....	.....	.....	101	101	100½
Canada Southern	63½	63⅝	64½	63¾	62¼	63
1st mortgage guar	.....	.....	.....	93¾	93⅜	.....
Central of N. Jersey	77⅞	78½	78⅞	78⅝	78	78½
1st mort. 1890	.....	.....	.....	.....	.....	.....
7s, consol. ass	109	.....	109¾	.....	.....	.....
7s, convertible ass	.....	109½	.....	109	.....	.....
7s, Income	.....	.....	.....	.....	.....	.....
Adjustment	108	.....	.....	.....	.....	.....
Central Pacific	93¾	93¼	93¾	93½	93¾	93⅝
6s, gold	115½	.....	.....	.....	115	.....
1st M. (San Joaq)	.....	.....	.....	.....	.....	.....
1st M. (Cal. & Or.)	.....	.....	.....	.....	.....	.....
Land grant 6s	.....	.....	.....	.....	.....	.....
Chesapeake & Ohio	24	24	24	24	.....	24½
1st pref	.....	.....	38	.....	.....	38
2d pref	26	.....	.....	.....	.....	.....
1st mort., series B	85⅝	85¼	85½	85¾	85¾	86
Chicago and Alton	.....	.....	.....	.....	.....	.....
Preferred	.....	.....	.....	.....	.....	.....
1st mortgage	.....	.....	.....	.....	120	.....
Sinking Fund	.....	.....	.....	.....	.....	.....
Chi., Bur. & Quincy	136¼	136½	136¼	134¾	135¼	135¼
7s, Consol. 1903	.....	.....	128	128	.....	.....
Chi., Mil. & St. Paul	124	124½	124½	123⅝	123⅞	124⅜
Preferred	137¼	140	139½	139¾	139½	134½
1st mortgage, 8s	.....	.....	130	.....	.....	.....
2d mort., 7 3-10s	.....	.....	.....	.....	.....	.....
7s, gold	.....	.....	125	.....	.....	.....
1st M. (La. C. div)	.....	.....	.....	.....	.....	.....
1st M. I. & M. div.)	.....	.....	124	.....	.....	.....
1st M. (I. & D. ext.)	.....	.....	.....	.....	.....	.....
1st M. (H.&D. div.)	.....	.....	118	.....	.....	118¼
1st M. (C. & M. div.)	.....	.....	.....	.....	.....	.....
Consolidated S. F.	.....	124½	125	.....	.....	126
Chi. & Northwestern	147½	147⅞	148	147½	146⅞	147
Preferred	170	170	170½	170½	.....	.....
1st mortgage	.....	.....	.....	.....	.....	.....
Sinking Fund 6s	.....	.....	.....	.....	.....	.....
Consolidated 7s	.....	.....	.....	.....	.....	.....
Consol. Gold bo'ds	.....	.....	.....	.....	.....	.....
Do. reg	.....	.....	.....	.....	125	.....
Chi., R. Isl. & Pac.	136	136	136¾	136¼	.....	136½
6s, 1917, c	.....	.....	.....	.....	.....	.....
Clev.,Col.,Cin.&Ind.	81½	81	80¾	81	.....	.....
1st mortgage	.....	.....	.....	.....	.....	.....
Clev. & Pittsburg gr.	.....	.....	.....	.....	.....	.....
7s, Consolidated	124½	.....	.....	.....	.....	.....
4th mortgage	.....	.....	.....	.....	.....	.....
Col.,Chi.,& Ind. Cent	.....	13¾	14	14	.....	.....
1st mortgage	.....	.....	.....	.....	.....	.....
2d mortgage	.....	.....	.....	.....	.....	.....
Del. & Hud Canal.	115½	115¾	116	116	115¾	115⅝
Reg. 7s, 1891	.....	.....	.....	.....	.....	.....
Reg. 7s, 1884	.....	.....	.....	.....	.....	.....
7s, 1894	.....	.....	.....	.....	.....	.....
Del.,Lack.& Western	145¼	146¾	147½	147	146½	146½
2d mortgage 7s	.....	.....	.....	.....	.....	.....
Consol. 1907	.....	.....	.....	.....	.....	.....
Erie Railway	.....	.....	.....	.....	.....	.....
1st mortgage	.....	.....	.....	.....	.....	.....
2d mort. 5s, ext	.....	.....	.....	.....	.....	.....
3d mortgage	.....	101½x	101½	101½	101½	101⅜
4th mort. 5s, ext	.....	.....	.....	.....	.....	.....
5th mortgage	.....	.....	.....	.....	.....	.....
7s, Consol. gold	.....	.....	127x	.....	127½	127
Great West. 1st mort	.....	.....	106	.....	.....	.....
2d mortgage	.....	103⅜	103⅜	.....	.....	101¾
Hannibal & St. Jo	.....	.....	.....	47½	48	48
Preferred	93½	93¾	97¼	95	93⅞	92½
8s, Convertible	.....	.....	.....	106	.....	.....
Houston & Tex. Cen	85	.....	.....	.....	.....	.....
1st mortgage	.....	.....	.....	112	.....	.....
2d mortgage	.....	.....	.....	.....	.....	.....
Illinois Central	138½	138¾	139	139⅜	.....	139
LakeShore&MichSo	112¾	112½	111⅞	111⅜	111½	111⅛
Consol. 7s	.....	.....	.....	.....	.....	.....
Consol. 7s, reg	.....	.....	.....	.....	.....	.....
2d Consolidated	.....	.....	.....	.....	.....	.....
Leh. & W. B. con.ass	.....	.....	105	.....	105	105
Long Dock bonds	.....	.....	.....	.....	.....	.....
Louisville & Nash.	72¾	72¼	72½	72	72¼	72⅝
7s, Consolidated	.....	.....	.....	.....	118½	.....
Manhattan	.....	.....	.....	53¼	.....	53⅛
1st pref	.....	90	.....	.....	.....	.....
Met. Elevated	.....	.....	.....	.....	.....	91½
1st mortgage	.....	99½	.....	99¾	99¼	.....
Michigan Central	98¾	99	98¾	98¼	98¾	99¼
7s, 1902	124½	.....	.....	.....	.....	.....
Morris & Essex	127⅜	.....	.....	126	.....	125¾
1st mortgage	.....	.....	.....	137½	.....	.....
2d mortgage	.....	.....	.....	.....	.....	.....
7s of 1871	.....	.....	.....	.....	.....	.....
7s, Convertible	.....	.....	.....	.....	.....	.....
7s, Consolidated	.....	124	.....	.....	.....	.....
N.Y. Cen. & Hud. R.	133¾	134	134	133⅝	133¾	134
6s, S. F. 1883	.....	102⅜	.....	.....	.....	.....
6s, S. F., 1887	.....	.....	.....	.....	.....	.....
1st mortgage	.....	.....	.....	.....	132	.....
1st mortgage, reg.	.....	.....	.....	.....	.....	.....
N. Y. Elevated	.....	.....	.....	.....	.....	.....
1st mortgage	.....	.....	.....	115½	.....	115
N. Y. & Harlem	.....	.....	.....	.....	.....	.....
Preferred	.....	.....	.....	.....	.....	.....
1st mortgage	.....	.....	.....	.....	.....	.....
1st mortgage, reg	.....	.....	.....	.....	.....	.....
N. Y., Lake Erie & W	39¾	39⅝	39⅝	39¼	39¾	39⅝
Preferred	81	.....	80	.....	80	.....
2d Consolidated	98¼	98¼	98	.....	97¾	.....
New 2d 5s fund	.....	.....	.....	.....	.....	.....
N.Y.,N.Hav'n&Hart	.....	181	.....	.....	.....	182
North Mo. 1st mort	.....	.....	.....	.....	.....	118¾
Northern Pacific	50¾	50¼	51	51	51⅛	52¼
Preferred	93¼	92⅞	93¼	92⅞	94⅞	96⅞
Ohio & Mississippi	38½	38⅞	.....	.....	38⅛	38⅜
Preferred	.....	.....	.....	.....	.....	.....
2d mortgage	.....	.....	.....	.....	.....	.....
Consolidated 7s	.....	.....	.....	.....	115	.....
Consol. S. Fund	.....	.....	.....	.....	.....	.....
Pacific Mail S. S. Co	44⅛	45⅛	45¼	.....	44⅛	.....
Pacific R. R. of Mo.	.....	.....	.....	.....	.....	.....
1st mortgage	106	106⅛	.....	.....	106⅜	106¼
2d mortgage	.....	.....	.....	.....	.....	.....
Panama	.....	167	.....	.....	.....	.....
Phila. & Reading	61	61⅜	62⅛	62⅛	62⅝	63
Pitts,Ft.W.&Chi.gtd	.....	.....	.....	.....	.....	.....
1st mortgage	.....	.....	.....	.....	.....	.....
2d mortgage	.....	.....	.....	.....	.....	.....
3d mortgage	.....	.....	.....	.....	.....	.....
Pullman Palace Car	131¾	132	132¾	132⅞	.....	132¾
Quicksil'r Min'g Co	.....	.....	.....	.....	.....	.....
Preferred	.....	.....	.....	.....	.....	.....
St. Louis & San Fran	.....	.....	.....	.....	.....	.....
Preferred	58½	.....	.....	59	57¾	.....
1st Preferred	.....	.....	.....	98	.....	99
St. L., Alt'n & T. H.	.....	41½	.....	42½	.....	.....
Preferred	.....	.....	.....	.....	.....	82
1st mortgage	.....	.....	.....	.....	.....	.....
2d mort. pref	.....	.....	.....	.....	.....	.....
Income bonds	.....	.....	.....	.....	.....	.....
St. L., Iron Mt. & S	.....	.....	.....	.....	.....	.....
1st mortgage	.....	.....	.....	.....	.....	114
2d mortgage	.....	.....	.....	.....	.....	.....
Toledo and Wabash	.....	.....	.....	.....	.....	.....
1st mortgage	.....	107	.....	.....	.....	.....
2d mortgage	.....	.....	.....	.....	.....	.....
7s, Consolidated	100	.....	.....	.....	.....	.....
St. Louis Division	.....	.....	.....	.....	.....	.....
Union Pacific	116½	116⅞	117⅜	117⅛	117⅜	117⅜
1st mortgage	116½	116¼	116½	116¼	116	116¼
Land Grant 7s	114¾	115	115	115	115	.....
Sinking Fund 8s	122¼	.....	.....	.....	.....	.....
United States Ex	74½	.....	.....	73¾	.....	73⅛
Wabash, St. L.& Pac	36⅞	37⅛	37¼	37⅛	37⅜	37¼
Preferred	66⅞	67	67⅛	67⅛	67⅜	67¼
New mort. 7s	.....	.....	.....	.....	.....	.....
Wells-Fargo Ex	.....	131	130½	.....	131	132
Western Pacific b'ds	.....	.....	.....	.....	.....	.....
Western Union Tel.	90⅞	90¾	90¼	90⅜	90¼	90¼
7s., S.F conv., 1900	.....	.....	.....	.....	.....	.....
FEDERAL STOCKS :—						
U. S. 4s, 1907, reg	.....	.....	.....	.....	.....	.....
U. S. 4s, 1907, coup	119⅞	.....	119⅞	119⅞	.....	.....
U. S. 4½s, 1891, reg	.....	113½	.....	.....	.....	.....
U. S. 4½s, 1891, coup	.....	.....	.....	.....	.....	.....
U. S. 5s, cont'd at 3½	.....	.....	.....	.....	.....	.....
U. S. 6s cont'd at 3½	.....	.....	.....	.....	.....	.....
Dt. of Col. 3-65s, reg	.....	.....	.....	.....	.....	.....
Dt. of Col. 3-65s, coup	.....	.....	.....	.....	.....	.....

Boston Stock Exchange.

Closing Prices for the Week Ending Sept. 6.

	Th.31.	F.1.	Sat.2.	M.4	Tu.5.	W.6.
Atch.,Top.&San.Fe.	94⅞	94⅞	95⅛	95⅛	94⅞	94⅞
1st mortgage	.....	.....	.....	.....	.....	.....
Land Grant 7s	.....	.....	114	.....	.....	.....
Boston & Albany	172	.....	.....	.....	.....	170
Boston and Lowell	.....	.....	.....	.....	.....	.....
Boston & Maine	150	.....	.....	.....	151	152
Boston& Providence	.....	160	.....	.....	.....	.....
Bos'n,Hart.& Erie7s	.....	.....	.....	.....	.....	.....
Burl.& Mo.R.L.G.7s	.....	.....	.....	.....	.....	.....
Burl.& Mo.R.in Neb	.....	.....	.....	.....	.....	.....
6s, exempt	.....	.....	.....	.....	112	.....
4s	82	.....	.....	.....	.....	.....
Chi.,Burl. & Quincy	136¼	136½	136⅜	134⅞	134½	135⅝
Cin.,Sand&Clev($50)	.....	.....	.....	27¼	.....	27½
Concord ($50)	.....	.....	.....	.....	.....	.....
Connecticut River	.....	.....	.....	.....	.....	.....
Eastern	42½	43½	.....	43¾	44	44½
New 6s, Bonds	.....	109½	.....	110	109	110
Fitchburg	.....	.....	.....	.....	.....	130
N.Y. & New England	53	52¾	53¾	54	54½	55
7s	.....	.....	.....	.....	116½	.....
Northern N. H	.....	.....	.....	.....	.....	.....
Norwich&Worcester	.....	.....	.....	.....	.....	.....
Ogden & Lake Cham	.....	.....	.....	.....	.....	.....
Old Colony	132	.....	.....	133	133¾	133¼
Ph., Wil.&Balt.($50)	.....	.....	.....	.....	.....	.....
Portl'd,Saco & Ports	.....	.....	.....	.....	.....	.....
Pueblo & Ark Val 7s	115	.....	.....	.....	.....	.....
Pullman Palace Car	.....	.....	.....	.....	.....	.....
Union Pacific	116¼	116¾	.....	.....	.....	117⅛
6s	.....	.....	.....	.....	.....	.....
Land Grant 7s	.....	.....	.....	.....	.....	.....
Sinking Fund 8s	.....	.....	.....	.....	118	.....
Vermont & Mass	.....	.....	.....	.....	.....	.....
Worcester & Nashua	59	.....	.....	.....	.....	58
Cambridge (Horse)	.....	.....	.....	.....	.....	.....
Metropolitan(Horse)	.....	.....	.....	.....	.....	.....
Middlesex (Horse)	.....	.....	.....	.....	.....	.....
Cal.&Hecla Min'gCo	.....	251	.....	252	255	255
Quincy	66	66½	66	66¾	67	68

Philadelphia Stock Exchange.

Closing Prices for the Week Ending Sept. 5.

	W. 30.	Th.31.	F.1.	Sat. 2.	M. 4.	Tu 5.
Allegh'y Val. 7 3-10s	.....	.....	122	.....	.....	122
7s, Income	.....	.....	.....	.....	.....	.....
Buff., Pitts & West.	21⅛	21⅞	21⅞	21⅞	21¾	21⅞
Camd'n & Am. 6s, '83	.....	.....	.....	.....	.....	.....
6s, 1889	.....	.....	.....	.....	.....	.....
Mort. 6s, 1889	.....	.....	.....	.....	.....	.....
Camden & Atlantic	.....	.....	.....	.....	.....	.....
Preferred	50	50	.....	.....	53	.....
1st mortgage	.....	.....	.....	.....	.....	.....
2d mortgage	.....	.....	.....	.....	.....	.....
Catawissa	.....	.....	.....	.....	.....	.....
Preferred	.....	.....	.....	55	.....	.....
2d pref	.....	.....	.....	54	.....	.....
7s, new	.....	.....	.....	.....	.....	.....
Del. & Bound Brook	.....	.....	.....	.....	.....	.....
7s	.....	.....	.....	.....	.....	.....
Elmira&Williamsp't	.....	.....	.....	.....	.....	.....
Preferred	.....	.....	.....	.....	.....	.....
Hunt. & B. Top Mt.	.....	.....	.....	.....	.....	15¼
Preferred	.....	.....	28½	.....	28¾	.....
2d mortgage	.....	.....	.....	.....	.....	.....
Lehigh Navigation	43¼	43¼	43½	43¾	.....	43⅞
6s, 1884	.....	.....	103½	.....	103½	103½
Gold Loan	.....	.....	113½	.....	.....	.....
Railroad Loan	.....	.....	.....	.....	.....	.....
Conv. Gold Loan	.....	.....	.....	.....	.....	.....
Consol. Mort, 7s	116¼	.....	.....	.....	.....	.....
Lehigh Valley	.....	62½	.....	62½	62⅜	62½
1st mort. 6s, coup	.....	.....	.....	.....	.....	.....
1st mort. 6s, reg	.....	.....	.....	.....	.....	.....
2d mort. 7s	.....	.....	.....	.....	.....	131½
Consol mort. 6s	.....	.....	.....	.....	.....	.....
Consol.mtg.6s,reg	.....	.....	.....	.....	122	.....
Little Schuylkill	.....	.....	.....	.....	.....	.....
Minehill&Sch.Hav'n	.....	.....	.....	61½	.....	.....
North Pennsylvania	.....	.....	.....	.....	.....	64
1st mortgage 6s	.....	107	.....	.....	.....	107
2d mortgage 7s	.....	.....	.....	.....	.....	.....
Genl. mtg.7s,coup	.....	.....	.....	.....	.....	.....
Genl. mtg. 7s, reg	.....	.....	.....	122	.....	.....
Northern Central	53¾	54¾	54	54¼	54¼	.....
6s	.....	.....	.....	97¾	.....	97¾
Northern Pacific	50⅝	50¾	50⅛	51⅛	51⅛	51¼
Preferred	92¾	93	92¾	93⅛	92⅞	94¼
Pennsylvania R. R.	62¾	62¾	62¾	62⅞	62⅜	62¾
1st mortgage	.....	.....	.....	.....	.....	.....
Gen'l mort	192	.....	.....	.....	128	.....
Gen'l mort reg	.....	.....	.....	.....	.....	.....
Consol. mort. 6s	.....	.....	.....	.....	.....	.....
Consol. mort. reg	.....	.....	.....	.....	.....	.....
Pa. State 6s, new	.....	.....	.....	.....	.....	.....
do 4s, new	.....	.....	.....	.....	.....	.....
do 3½s, 1912	.....	.....	.....	.....	.....	.....
Phila. & Reading	30⅜	30⅛	30¾	31¼	31	31¼
1st mortgage 6s	.....	.....	.....	.....	.....	.....
7s of 1893	.....	.....	.....	.....	.....	.....
7s, new convert	.....	.....	.....	75	75⅛	75¼
Consol. mort. 7s	.....	.....	.....	126	.....	.....
Consol. mort. reg	.....	.....	.....	.....	.....	.....
Gen'l mort. 6s	95⅛	95⅝	96¼	96⅜	96¼	96⅜
Def. Income bonds	.....	.....	.....	.....	.....	.....
Philadelphia & Erie	17⅜	18⅛	18⅜	18⅜	19¾	19¾
1st mortgage 5s	.....	104½	104½	.....	.....	.....
2d mortgage 7s	113¾	.....	.....	.....	113¾	.....
Pittsb.,Cin.&St.L.7s	.....	.....	.....	.....	120	.....
Pitts.,Tit.&Buff. 7s,	.....	.....	.....	.....	.....	94¼
Schuylkill Navi't'n	.....	.....	.....	.....	.....	.....
Preferred	.....	.....	.....	.....	.....	.....
6s, 1895	.....	.....	.....	.....	.....	.....
6s, 1907	.....	.....	.....	.....	.....	.....
United Co. of N. J.	190½	190½	191	.....	191	191
Hestonville, (Horse)	.....	.....	.....	.....	.....	.....
Chestnut&W'al.(do)	.....	.....	.....	.....	.....	.....

Baltimore Stock Exchange.

Closing Prices for the Week Ending Sept. 5.

	W. 30.	Th. 31.	F. 1.	Sat. 2.	M. 4.	Tu. 5.
Baltimore & Ohio....	195	.....	.....	.....	.....	.....
6s, 1885.....	.....	.....	.....	.....	.....	.....
Central Ohio ($50)...	.....	.....	47	.....	.....	.....
1st mortgage.....	.....	.....	.....	.....	.....	.....
Marietta & Cincin'ti.	.....	.....	.....	.....	.....	.....
1st mortgage, 7s..	.....	.....	.....	.....	.....	.....
2d mortgage, 7s....	...	.....	.....	.....	.....	... ..
3d mortgage, 8s..	.....	.....	.....	.....	.....	.....
Northern Cen. ($50).	53¾	54¾	54	54¼	54¼	.....
2d mort. 6s, 1885..	.....	.....	.....	.....	.....	.....
3d mort. 6s, 1900..	.....	.....	.....	.....	.....	.....
6s, 1900, gold.....	.....	.....	.....	.....	.....	116¾
6s, 1904, gold.....	.....	.....	.....	.....	.....	.....
Pitts. & Connelsv. 7s.	.....	.....	.....	.....	.....	.....
Virginia 6s Consol..	.....	... .	59¾	.....	60	60¼
Consol. coupons...	.....	59¼	.....	.....	.....	.....
10-40 bonds.....	42¼	42¼	.....	43	.....	43⅛
Def'd Certificates	.....	.....	.....	.....	.....	.....
Western Maryland..	16¾	16¼	16	16	.....	.....
1st M., end. by Balt	.....	.....	.....	.....	.....	.....
2d M., do.	.....	.....	.....	.....	.....	.. ..
3d M., do.	.....	129	.....	.....	.....	.....
1st M., unendorsed	....	.....	.....	...	.....	.....
2d M., end. Wash Co	.....	115	.....	.....	.....	.....
2d M., preferred...	.....	.....	.....	.....	.....	.....
City Passenger R. R.	.....	.....	.....	.....	.....	.....

London Stock Exchange.

	Closing Prices Aug. 25.		Aug. 18.	
Baltimore and Ohio 5s, 1927.....	106	108	106	108
Central of N. J., $100 shares.....	85	90	93	98
Do. consol. mort.....	112	114	112	114
Do. Income Bonds.....	92	96	92	96
Central Pacific of Cal., $100 shs..	94	95	95	96
Do. 1st mort. 6s, 1895-'98.....	117	118	118	120
Det., G'd Haven & Mil. Equip bds.	116	118	116	118
Do. Con. M. 5p.c., till '83 after 6p.c.	114	116	114	116
Illinois Central $100 shares.....	130	141	140	142
Do. S. F. 5s, 1903.....	106	108	106	108
Lehigh Valley Cons. mort. 1923...	115	119	115	119
Louisville and Nashville mort. 6s	97	99	98	100
Do. capital stock $100 shares...	74	76	75	77
N. Y. Cen. & Hud. R. mort. bonds.	132	136	132	136
Do. $100 shares.....	136	137	139	140
Do. mort. bonds (stg.).....	121	123	121	123
N. Y. Lake Erie & West. $100 shs.	39	39½	39¾	40¼
Do. 6 p. c, pref. $100 shares....	79	81	81	83
Do. 1st Con. Mort. bonds (Erie).	126	129	127	130
Do. do. Funded Coupon bonds.	124	127	126	129
Do. 2d Consol. Mort. bonds....	98	100	99	101
Do. do. Funded Coupon bonds.	95	97	96	98
N. Y., Pa. & Ohio 1st mort. bonds.	47	48	47	48
Do. Prior Lien bonds (sterling).	103	108	103	108
Pennsylvania $50 shares.....	63¼	63¾	63¼	63¾
General Mortgage.....	123	125	123	125
Phil. & Erie Gen. mort. 6s, 1920...	117	119	117	119
Philadelphia & Reading $50 shs..	30¾	31	30¾	31⅛
General Consol Mortgage.	115	117	116	118
Do. Improvement Mortgage....	104	106	103	105
Do. Gen. Mtg. '74, ex-def'd coup.	96	98	97	98
St. L. Bridge 1st mort. gold bond.	125	127	125	127
Do. 1st. pref. stock.....	97	100	97	100
S. P'fic of Cal., 1st mort 6s, 1905-6.	108	110	108	110
Union Pacific 1st mtg. 6s, 1896-9..	118	120	118	120
Wabash, St. L. & P. $100 shares..	35⅛	36½	36¼	37½
Do. $100 pref. shares.....	65	66	66½	67½
Do. gen. mort. bonds.....	85	87	86	88

AMERICAN RAILROAD JOURNAL.

Financial and Commercial Review.

THURSDAY EVENING, September 7, 1882.

IN the money market this morning the quotation for call loans on stocks was 5@6 per cent—few loans being made above 5½ per cent. On United States bonds the quotation was 3@3½ per cent. The rate for prime commercial paper was about 6 per cent. In the afternoon the quotation for call loans on stocks was 5 per cent, at which rate the bulk of the business was transacted.

The posted rates for prime bankers' sterling were 4.85½ and 4.89½@4.90; the actual rates were 4.84½@4.85 and 4.88¾@4.89, with cables 4.89½@4.89¾, and prime commercial bills 4.83@4.83½. The actual rates for Continental bills are as follows: Francs, 5.19¾ and 5.15; Marks, 94¾@94⅞ and 95⅝@95¾, and Guilders, 40 and 40¼.

The first of the new series of 3 per cent bonds was issued from the Treasury Department at Washington on the 4th inst. There are five denominations of these bonds—$50, $100, $500, $1,000, and $10,000. Three hundred and fifty million dollars of the bonds have been printed. Each denomination of the new bonds has a distinctive vignette, as follows: $50, Fessenden; $100, De Witt Clinton; $500, Franklin; $1,000, Garfield; $10,000, Hamilton. They are printed on distinctive paper, with threads running through it, similar to the paper used for the national bank notes and greenbacks. Each bond bears a view of the Treasury Department. The corner-pieces are of scroll-work, in which is interwoven the denomination of the bond. The bonds are called the "Three Per Cent Loan of 1882." which legend is printed across the upper part of the face. On the right hand, in the border, are the words, "Act of July 12, 1882." On the opposite border are inlaid letterings of "Three per Cent." Near this are engraved "fasces," entwined with ribbon, bearing the motto, "E Pluribus Unum," with the monogram "U. S." On the center-piece on the right and left of the portrait is the denomination in geometric lathe-work. In each of the letters of the legend is engraved "United States of America," in white-faced letters on a black background forming the shank of the letters. In the title of the bond "United States of America" is printed in large scroll letters across the face, under the vignette. All are dated August 1, 1882. The denomination is engraved in tint to prevent photographing. The numbers are printed on scroll-work panels on each side of the portrait. The panels and the denominations are printed in fugitive tints to prevene the alteration of the number. The space for the name of the payee is also tinted. There are three seals on the bonds—the printed seal of the Secretary's office, an embossed seal, and a printed seal of the Treasury Department. The face of the bonds is printed in black with five distinct tints. The color of the backs is different in each denomination—green on the $50, blue on the $100, red on the $500, brown on the $1,000, and black on the $10,000. There are five different patterns of scroll work on the back of the bonds. One peculiarity of the new bonds is that they are printed in such a way that when fold the whole story of the bond can be read without opening the bond.

A mortgage for $160,000,000 was recorded in the office of the Recorder of Deeds at Philadelphia, Penn., on the 31st ult. It was executed jointly by the Philadelphia and Reading Railroad and Philadelphia and Reading Coal and Iron Companies and covers the entire property of every kind, real and personal, together with all rights, privileges and franchises, including all leasehold interests. This is the mortgage under which the five per cent consols are issued, the proceeds of which are intended to redeem all other outstanding obligations of the company, so that it will ultimately become a first lien for the only bonds outstanding, namely the five per cents. Copies of the mortgage will also be recorded in the various counties of Pennsylvania, New York and Virginia, where the companies' property is located.

Notice has been given by the Secretary of the Treasury at Washington that the exchange of 3½ per cent for 3 per cent bonds will be suspended from September 20 until November 1, when it will be resumed and continued until further notice. This action is taken in order to allow the preparation of the schedules and interest checks for the payment of the November 1 dividend on the United States registered bonds of the acts of July 14, 1870, and January 20, 1871, continued at 3½ per cent, which have not been exchanged into 3 per cent bonds, and the dividend which will be due at the same time on the 3 per cent bonds of the act of July 12, 1882, which are now being issued. The gold certificates will not be ready before the 1st of October.

The financial statement of the Comptroller issued on the 31st ult., shows that the total funded debt of the City of New York on that day was $136,941,518.59, not including $16,959,529.40 revenue bonds issued in anticipation of taxes. During the month of August warrants were drawn against the City Treasury to the amount of $1,987,969.50, making a total of $26,055,365.33 since January 1. From January 1 to August 31, inclusive, stocks and bonds were issued to the amount of $18,353,295.40. The net funded debt of the city on the 31st of Aug., 1882, was $97,532,480.51, against $98,290,206.17 for December 31, 1881. The total of the revenue bonds issued under special laws December 31, 1881, was $4,328,059.06, and the total issued up to August 31, 1882, was, as stated above, $16,959,529.40, showing that despite this large extra issue of revenue bonds the net city debt was reduced nearly a million.

It was officially announced on the 5th inst., that payment would be made immediately, without rebate, of the $16,000,000 of bonds covered by the 115th call, which mature on the 13th inst. The text of the announcement was: "The payment of bonds included in the 115th call will be made immediately, without rebate of interest, and those who choose can present them for payment to the Assistant Treasurer of the United States at New York."

From a statement furnished by the Chief of the Bureau of Statistics, at Washington, we learn that for the month ending July 31, 1882, the excess of imports over exports of merchandise was $11,387,712, while for the corresponding month of 1881 the excess of exports was $10,610,936. For the seven months ended July 31, 1882, the excess of imports was $50,824,742, while for a corresponding period in 1881 the excess of imports was $108,610,902. For the twelve months ended July 31, 1882, the excess of exports was only $3,904,035, as against $256,613,067 for the twelve months ended July 31, 1881. For the twelve months ended July 31, 1882, the excess of exports of gold and silver coin and bullion was $12,596,098, while for the corresponding period ended July 31, 1881, the excess of imports was $90,666,977. The value of the imports of merchandise into the United States for the twelve months ended July 31, 1882, was $738,044,236, and for the twelve months ended July 31, 1881, $637,782,325. Values of the exports of domestic and foreign merchandise from the United States for the twelve months ended July 31, 1882, were $741,948,271, and for the twelve months ended July 31, 1881, $894,395,392.

By referring to the Public Debt Statement on another page it will be seen that the total debt of the United States on the 31st of August was $1,901,866,690.42, less cash in the Treasury $242,960,518.46, leaving net $1,658,926,171.96. The debt was reduced $16,128,261.24 in August, and $29,988,288.76 since the 1st of July. Of the bonded debt $250,000,000 bears 4½ per cent interest, $739,351,450 bears 4 per cent, $434,252,300 bears 3½ per cent, and $14,000,000 (navy pension fund) bears 3 per cent. Interest has ceased upon $12,472,725, and upon $440,204,928 there is no interest, being in the shape of currency, certificates of deposit, and gold and silver certificates. Of the cash in the Treasury $141,629,211 is entered as available. In addition to the above there are outstanding $64,623,512 bonds issued to Pacific Railroad companies, and known as currency 6s, which mature from 1895 to 1899.

The disbursement from the United States Treasury in August, other than payments on account of the public debt and interest, were: For the War Department $5,450,818.16; civil and miscellaneous $7,677,056.48; Navy $1,297,061.79; Interior, Indians, $1,053,141.63, and pensions $9,702,078.07—total, $25,190,051.13.

The Boston *Transcript* says it is understood that the Mexican Government is disposed to reconsider its action in forfeiting the concession of the Tehuantepec Railroad. It seems to realize that its hasty action has done injustice to those who embarked capital in the enterprise, and that the harsh forfeiture of the concession may have the effect of keeping out foreign capital from Mexico. For the credit of the Government as well as for the benefit of those interested in the enterprise, it is to be hoped that Mexico will reconsider its unfavorable action on the Tehuantepec Railroad.

The receipts from Customs at the New York Custom House for the month of August amounted to $16,483,260.72, of which $10,006,742.90 were for duties on imports and $5,486,517.82 for duties on withdrawals from warehouse. The receipts for August, 1881, amounted to $15,204,469.58. The increase this year over last was $1,278,791.14.

On substantially the same mileage as last year the New York and New England Railroad shows an increase in gross earnings of 33 per cent, and in net earnings of 75 per cent. It is believed that it will earn from $5,000,000 to $6,000,000 per annum after January next, as in a few weeks the Lehigh and Hudson River Railroad will be open for business to Newburg, giving a direct connection with the anthracite coal fields. The lines of the company, which represent a market value of $25,000,000, have actually cost $65,000,000. Within thirty days all the floating debt of the company will be paid and a surplus of nearly $2,000,000 will remain in the treasury. The Pennsylvania Railroad Company is said to be extensively interested in this property.

The total stock and bonds of the New York, Chicago and St. Louis Railway Company is $69,000,000, of which $50,000,000 is stock—$28,000,000 common, and $22,000,000 preferred. Of the bonds $15,000,000 draw 6 per cent, and $4,000,000 equipment bonds draw 7 per cent. The latter bonds are payable $400,000 annually for ten years, be-

ginning 1885 and ending 1894. The interest, however, begins October 1, 1882, with the opening of the road. It will thus be seen that the annual interest on the bonded indebtedness of the road is but $1,180,000.

The following quotation of sales of railway and other securities, for the week, are in addition to those given elsewhere in our columns.

New York.—Atchison, Colorado and Pacific 1st, 92; Boston and New York Air Line pref., 79¾; Chicago, St. Paul, Minneapolis and Omaha, 55⅝; do. pref., 112; do. consol., 106; Chesapeake and Ohio cur. 6s, 51¾; do. 1st, Series A, 108; Chicago and Northwestern S. F. 5s, 101¾; Chicago, St. Louis and New Orleans 5s, 105; Chicago, Burlington and Quincy 8s, 102; do. Iowa div. 4s, 87⅛; do. Denver div. 4s, 84; Cairo and Fulton 1st, 106½; Chicago, St. Paul and Minn. 1st, 111; Chicago, Milwaukee and St. Paul, Southern Minn. div. 1st, 107½; do. Chicago and Pacific West div. 1st, 93½; Columbus, Chicago and Indiana Central inc., 50; Denver and Rio Grande, 58½; do. 1st, 114; do. consol., 99½; Delaware and Hudson 1st, Penn. div., 130; East Tennessee, Virginia and Georgia, 10¾; do. pref., 18¼; do. 5s, 74; do. inc., 43; Evansville and Terre Haute, 80; do. 1st, 96; Fort Worth and Denver 1st, 98½; Green Bay, Winona and St. Paul, 13; do. inc., 25; Gulf, Colorado and Santa Fe 1st, 107¾; Houston and Texas Central genl. mort., 102; Hannibal and St. Joseph consol. 6s, 104; Indiana, Bloomington and Western, 44½; do. Eastern div. 6s, 95; Indianapolis, Decatur and Springfield 1st, 104; Illinois Central, Middle div. 5s, 108; International and Gt. Northern 1st, 105½; do. 6s, coup., 86⅞; Keokuk and Des Moines 1st. 105; Kansas Pacific 1st consols, 104⅛; do. 6s, Denver div. ass., 109; Lafayette, Bloomington and Muncie 1st, 102; Long Island, 60; Lake Erie and Western, 38¾; do. 1st, 102½; do. inc., 54; Louisville, New Albany and Chicago, 73; do. 1st, 102½; Lehigh and Wilkesbarre inc., 85; Louisville and Nashville 2d, St. Louis div., 51; do. genl. mort. 6s, 95; do. Nashville and Decatur 1st, 120; Milwaukee and Madison 1st, 114; Michigan Central 5s, 98; Minneapolis and St. Louis, 35¾; do. pref., 72; do. 1st, 115; Missouri, Kansas and Texas, 39½; do. consol. 7s, 106⅛; do. 2d, 68; do. genl. mort. 6s, 87; Missouri Pacific, 109⅛; do. 1st consol., 101⅛; do. 3d, 111¾; Milwaukee, Lake Shore and Western, 57¾; do. 1st, 101; Manhattan Beach, 24; Mobile and Ohio, 21; Memphis and Charleston, 55; New York City and Northern genl. mort., 57½; New York, Chicago and St. Louis, 16¾; do. pref., 36; do. 1st, 94⅛; Nashville, Chattanooga and St. Louis, 61⅛; do. 1st, 115; New York, Ontario and Western, 26¾; Norfolk and Western, 20; do. pref., 56; do. genl. mort., 103; New Orleans Pacific 1st, 91½; Northern Pacific 1st, 103⅞; Ohio Central, 18½; do. 1st, 91¾; do. inc., 36; Ohio Southern, 17½; do. 1st, 83; do, inc., 33; Oregon Railway and Nav., 156¾; do. 1st, 107¾; Oregon Transportation, 94⅝; Oregon Short Line 6s, 103½; Peoria, Decatur and Evansville, 36½; do. 1st, 105; do. Evansville div. 1st, 101; Rochester and Pittsburgh, 25¾; do. inc., 53; Richmond and Danville, 115¾; do. 1st, 100½; do. deben., 77¼; Richmond, Danville and West Point, 63; Rome, Watertown and Ogdensburg ext. 5s, 74; do. inc., 39¼; St. Paul and Duluth, 33½; do. pref., 88½; St. Paul, Minneapolis and Manitoba, 149; do. 1st, 110; do. 2d, 112; Dakota ext. 1st, 107¾; St. Louis, Kansas City and Northern R. E. 7s, 105; Southern Pacific of California 1st, 106½; St. Louis, Jacksonville and Chicago 1st, 118; St. Louis and San Francisco 2d, Class B, 91; St. Paul and Sioux City 1st, 111; South Carolina inc., 61; do: 2d, 95; St. Louis, Iron Mountain and Southern 5s, 81; do. Arkansas Br. 1st, 108; Toledo, Delphos and Burlington inc., 20; Texas and Pacific, 50¾; do. inc. Land Grant, 64; do. Rio Grande div. 1st, 85; Texas Central S. F. 7s, 108¾; Wabash, St. Louis and Pacific, gen'l mort. 6s, 86; do. Iowa div. 1st, 90; Alabama, Class A, 7s; Arkansas 7s, L. R., B. P. & N. O., 28; Missouri 6s, 1886, 10s; do. 6s, 1889-'90, 111; Mutual Union Telegraph, 27¼; do. 6s, 78; South Carolina 6s, non-fund., 7½; Tennessee 6s, 54½; do. Compromise bonds, 64; Colorado Coal and Iron, 43; New Central Coal, 22; Standard Mining Company, 7½; Sutro Tunnel, 0.50.

Boston.—Atchison, Topeka and Santa Fe guar., 114¼; do. plain 5s, 89; Atlantic and Pacific blocks, 106: do. 6s, inc., 26¾; Boston Land Co., 7⅞; Burlington and Missouri River in Neb. 6s, non-exempt, 103; Connecticut River R. R. pref., 160; Chicago, Milwaukee and St. Paul, Dubuque div. 6s, 103½; Chicago, Burlington and Quincy 4s, old, 85¾; do. Denver ext. 4s, '84¼; California Southern, 20; do. 6s, '81; Cheshire 6s, 109; Connecticut and Passumpsic Rivers pref., 95; Connotton Valley, 7½; do. 6s, scrip, 64; do. new 5s, 59; Flint and Pere Marquette, 21; do, pref., 94¾; Florence, El Dorado and Walnut Valley 7s, 107; Fort Scott Branch 7s, 110; Iowa Falls and Sioux City, 92⅝; Kansas City, Ft. Scott and Gulf pref., 125; do. 7s, 112; Little Rock and Fort Smith, 53; Marquette, Houghton and Ontonagon, 73; do. pref., 118; Mexican Central, 27; do. blocks No. 2, 119; do. No. 3, 105¼; do. 7s, 83¾; Massachusetts Central, 4½; do 6s, 40; Maine Central, 74; New York and New England 6s, 105¾; New Mexico and Southern Pacific 7s, 114½; Ogdensburgh and Lake Champlain consol. 6s, 91; Republican Valley 6s, 104; Sonora 7s, 105; Summit Branch 13; Toledo, Delphos and Burlington, 6s, 70; do. Branch inc., 18½; do. Southeast div. 6s, 69; Toledo, Cincinnati and St. Louis, 8¾; do. 6s, 67; Wisconsin Central, 16½; Atlantic Mining, 16; Allouez, 2½; Beaver Run Coal, 7½; Franklin, 16; Huron, 3⅜; National 2; Osceola, 34; Pewabic, 10¾; Sullivan, 2¾; Silver Islet, 17.

Philadelphia.—American Steamship Co., 20; do. 6s, 107½; Buffalo, Pittsburgh and Western pref., 26; Central Transp., 34¾; Cincinnati 7-30s, J. and J., 131; Camden and Burlington Co. 6s, 112; Huntingdon and Broad Top Mt. consol. 5s, 93; Norfolk and Western pref., 55¾; Nesquehoning Valley, 54½; Philadelphia City 6s, 1897, 129; Philadelphia, Wilmington and Baltimore 4s, 95; Pennsylvania Canal 6s, 93; Philadelphia and Reading R. R. scrip, 100; Philadelphia, Germantown and Norristown, 110½; Pennsylvania and New York Canal 7s, 1896, 122¾; Shamokin, Hazleton and Wilkesbarre 2d, 25; Texas and Pacific consol. mort. 6s, 95; do. Rio Grand div. 6s, 86¾; United Companies of New Jersey consol. 6s, 112; West Chester and Philadelphia consol. 7s, 119; Warren and Franklin 7s, 112; West Jersey 6s, 117. The latest quotations are: City 6s, 108@120; do. free of tax, 127@132; do. 4s, new, 108@114; Pennsylvania State 5s, new loan, 114@116½; do. 4s, old, 108@112; do. 4s, new, 114@116¾; Philadelphia and Reading Railroad, 31¼@31½; do. consol. mort. 7s, reg., 126@127; do. gen'l mort. 6s, coupon, 96@97; do. 7s, 1893, 121@121½; do. new conv., 75@75½; United New Jersey R. R. and Canal, 190½@191½; Buffalo, Pittsburg and Western, 21⅞@22; Pittsburgh, Titusville and Buffalo 7s, 94@94½; Camden and Amboy mort. 6s, 1889, 113@115; Pennsylvania R. R., 62⅝@62¾; do. general mort. 6s, coupon, 124@125; do. reg., 127@129; do. consol. mort. 6s, reg., 120@122; Little Schuylkill R. R., 57@58; Schuylkill Navigation pref., 13@13½; do. 6s, 1882, 91@92½; Elmira and Williamsport pref., 58@60; do. 5s, 100@101; Lehigh Coal and Navigation, 43½@43¾; do. 6s, 1884, 103@104; do. R. R. loan, 113@116; do. Gold Loan, 113@114; do. consol. 7s, 116@117; Northern Pacific, 51½@51¼; do. pref., 94½@94¼; North Pennsylvania, 63@64; do. 6s, 106¾@107¼; do. 7s, 120@123; do. 7s, General mort. reg., 122@123; Philadelphia and Erie, 19½@20; do. 7s, 113¼@115; do. 5s, 104@105; Minehill, 61½@62; Catawissa 23⅛@24½; do. pref., 55@55½; do. new pref., 54@54½; do. 7s, 1900, 120@—; Lehigh Valley, 62@62⅝; do. 6s, coupon, 122@123; do. reg., 122½@123; do. 7s, 131½@132½; do. consol. mort., 121@122; Fifth and Sixth streets (horse), 160@161; Second and Third, 112@114; Thirteenth and Fifteenth, 70@75; Spruce and Pine, 40@45; Green and Coates, 80@90; Chestnut and Walnut, 90@93; Germantown, 70@75; Union, 109@110; West Philadelphia, 105@115; People's 16½@17½; Continental, 103@105.

Baltimore.—Atlantic Coal, 1.20; Baltimore City 6s, 1890, 116; do. 6s, 1884, 104; do. 6s, 1886, 109½; do. 6s, 1900, 125½; do. 5s, 1916, 125; do. 5s, 1894, 115; Charlotte, Columbia and Augusta, 55; Canton Co. 6s, 102¾; Chesapeake and Ohio Canal 6s, 35; Maryland 6s, exempt, 110; Marietta and Cincinnati 1st Trust certificates, 128; do 2d do., 101½; do. 3d do., 56¾; Norfolk Water 8s, 135; Northern Central 5s, series A, 97½; do. B, 97½; Ohio and Mississippi, Springfield div. 1st, 121½; Philadelphia, Wilmington and Baltimore, 41; Sutro Tunnel, 0.50; Union R. R. 6s, end. by Canton Co., 116½; Virginia Midland 2d mort., 111; do. 5th mort., 95; Virginia Peelers, 36; Virginia 10-40 coupons. 66. The latest quotations are: Atlanta and Charlotte, 73@74; do. 1st, 108½@109½; Baltimore and Ohio, 194@195; do. 6s, 1885, 107@—; Baltimore City 6s, 1886, 108½@109; do. 6s, 1890, 116@—; do. 5s, 1894, 114½@115¾; do. 5s, 1916, 125@125½; do. 4s, 1920, 110@—; Baltimore City Passenger Railway, 41@42; Columbia and Greenville 1st, —@102; Canton Co. 6s, 102¾@102⅞; Marietta and Cincinnati 1st, 127¾@128½; do. 2d, 100¾@100½; do. 3d, 56¾@57; Northern Central, —@54¼; do. 6s, 1900, gold, 116¾@116⅝; do. 6s, 1904, gold, 114@115¾; do. 5s, Series A, 97@97½; do. B, —@97½; North Carolina, 4s, 79½@80; Norfolk and Western pref., 53½@56; Ohio and Mississippi, Springfield div. 6s, 120¾@121; Richmond and Danville, 6s, 1890, 99½@100; Virginia Midland 5th mort., 94⅝@95; do. inc., 70@75; Virginia consols. 60¾@60¾; do. 10-40s, 43⅜@43¼; Virginia and Tennessee 6s, 2d, 101¼@102.

The Coal Trade.

THE leading coal-carrying companies make the following reports of their tonnage for the week ending August 26, and for the year to that date, compared with their respective amounts carried to the same time last year:—

	Week.	1882.	1881.
Reading Railroad	199,116	5,787,108	5,540,065
Schuylkill Canal	21,905	276,898	355,527
Lehigh Valley	134,578	4,444,229	4,044,934
Delaware, Lackawanna and Western	110,062	2,852,134	2,677,747
Shamokin	29,279	712,283	602,394
Central R. R. of New Jersey	87,250	2,700,000	2,514,000
United R. R. of New Jersey	35,561	1,085,713	984,880
Pennsylvania Coal	36,122	862,617	846,527
Delaware and Hudson Canal	82,183	2,180,134	2,255,464
Huntingdon and Broad Top Mountain	5,840	266,714	322,296
Penn. and New York	24,986	1,047,516	1,062,372
Clearfield, Pa.	64,107	1,866,690	1,569,613

The total tonnage of anthracite coal from all the regions for the week ending Aug. 26, as reported by the several carrying companies, amounted to 668,913 tons, against 620,997 tons in the corresponding week last year, an increase of 47,916 tons. The total amount of anthracite mined for the year is 17,884,171 tons, against 17,192,006 tons for the same period last year, an increase of 692,165 tons. The quantity of bituminous coal sent to market for the week amounted to 80,732 tons, against 94,250 tons in the corresponding week last year, a decrease of 13,518 tons. The total amount of bituminous mined for the year is 2,671,846 tons, against 3,171,256 tons for the corresponding period last year, a decrease of 499,410 tons. The total tonnage of all kinds of coal for the week is 749,645 tons, against 715,247 tons in corresponding week last year, an increase of 34,398 tons, and the total tonnage for the coal year is 20,556,017 tons, against 20,363,262 tons to same date last year, an increase of 192,755 tons. The quantity of coal and coke carried over the Pennsylvania Railroad for the week ending August 26 was 211,913 tons, of which 164,496 tons were coal and 47,417 tons coke. The total tonnage for the year thus far has been 7,109,526 tons, of which 5,231,747 tons were coal and 1,877,779 tons coke. These figures embrace all the coal and coke carried over the road, east and west. The shipments of bituminous coal from the mines of the Cumberland coal region for the week ended Aug. 26 were 18,684 tons, and for the year to that date 628,463 tons, a decrease of 697,787 tons as compared with the corresponding period of last year. The shipments were: To the Baltimore and Ohio Railroad—For the week, 12,544 tons; year, 517,655 tons; decrease as compared with 1881, 339,552 tons. Chesapeake and Ohio Canal—Week, 4,284 tons; year, 30,278 tons; decrease as compared with 1881, 266,570 tons. Pennsylvania Railroad — Week, 1800 tons; year, 76,642 tons; decrease from last year, 94,767 tons. The Reading Railroad shipment for last week, ending September 2, was about 130,000 tons, of which 32,000 tons were sent to and 53,500 tons shipped from Port Richmond, and 8,600 tons sent to and 9,800 tons shipped from Elizabethport.—*Philadelphia Ledger, Sept.* 4.

THE Grand Jury of the Criminal Court, Baltimore, Md., previous to their retirement to their room for the transaction of business, were addressed by the Judge in reference to the blowing of steam whistles in East Baltimore. He spoke of the great annoyance to the residents of that and other sections of the city by the unnecessary and continuous blowing of the whistles connected with steam-engines in the factories and also on steam-tugs. He invoked their attention to the subject, that a remedy might be applied so as to abate the nuisance complained of. The foreman stated that he and his associates would take the subject into consideration.

GORDON & DUGGAN RAILWAY SWITCH.

The **Standard** on several and in use on twenty-five Railroads.

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Locomotives—Five Second-hand Narrow Gauge Engines in good order.
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One new 3ft. Gauge Passenger Engine, 22 tons, prompt delivery.
Six new 4ft. 8½ Gauge Locomotives, cylinders 17x24, weight 35 tons. August and September delivery.
One new 3ft. Gauge Saddle Tank Engine, delivery this month.
Cars—Passenger and Freight Cars of all descriptions for early delivery.
Three Second-hand Passenger Coaches in good order.
Rails—16lb., 30lb. and 56lb. Rails in store.
Car Wheels and Axles.
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Brakes can be applied to every Car in the longest train, from the engine or cabose, or from any car in the train. It can be readily attached to any car, and adapted to ordinary brake beams, shoes, etc. There is no possibility of damaging wheels by "sliding."

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3.00 P.M. CINCINNATI EXPRESS.

Pullman Sleeping Car attached, running through to Cincinnati without change. (Only Line running Pullman Cars from Boston.) This car runs *via* Erie Railway and N.Y., P. & O. R.R., making direct connection for Louisville, St. Louis, Kansas City, New Orleans, and all points in Texas and New Mexico.

3.00 P.M. ST. LOUIS EXPRESS.

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Through sleeping car for Buffalo, Toledo, Fort Wayne, Logansport, Lafayette, Danville Tolono, Decatur and St. Louis, making direct connection with through Express Trains for Kansas, Colorado, Texas, and all points in the

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The only line running a through sleeping car *via* Buffalo and Detroit without change, arriving at Chicago at 8.00 A.M. second morning, making sure connections with through Express Trains for Iowa, Nebraska, Kansas, Colorado, the Pacific Coast, Wisconsin, Minnesota and all points in the

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In effect January 9th, 1882, and subject to changes.

RAILROAD AND CANAL DIVIDEND STATEMENT.

Showing the amount of Stock Outstanding, the Dividend Periods and the date of last Dividend.

Marked thus(*)are leased roads.	Stock out-standing.	Divide'd Periods.	Last Dividend Payable.
Albany and Susq*....100	2,500,000	semi-an	July '82 2
Ashuelot.....100	210,000	q'arterly	Oct. '81 3½
Atch., Top. and S. Fe100	54,000,000	q'arterly	Aug. '82 1½
Atlanta and W. Point100	1,232 200	semi-an	Jan. '82 6
Atlantic and St. Law*100	5,840,000	semi-an	Mar. '82 3
Augusta and Savan'h100	1,022,900	semi-an	June'81 3½
Avon, Geneseo&MtM*100	225,000	semi-an	July '81 3
Baltimore and Ohio.100	14,792,566	semi-an	May '82 5
" " pref.100	5,000,000	semi-an	July '82 3
Washington Br....100	1,650,000	semi-an	Apl. '82 5
Berkshire*.....100	600,000	q'arterly	Apl. '82 1¾
Boston and Albany..100	20,000,000	q'arterly	Sept.'82 2
Bos.&N.Y.AirLine pf.100	2,795,227	q'arterly	June'82 1
Bos.,Cl.,F.&N.B.pref.100	1,750,100	.....	Apl. '82 3½
Bos.,Conc.&Mont.pf*100	800,000	semi-an	May '82 3
Boston and Lowell..500	3,940,000	semi-an	July '82 2
Boston and Maine...100	6,921,274	semi-an	May '82 4
Boston & Providence100	4,000,000	semi-an	May '82 4
Attleborough Br...100	131,700	semi-an	July '82 3½
Bos.,Revere B&Lynn100	419,400	semi-an	July '82 3½
Buffalo,N. Y. & Erie*.100	950,000	semi-an	June'82 3
Camden & Atlantic.. 50	377,400	q'arterly	Apl '80 3½
" " pref. 50	880,650	q'arterly	Apl '80 3½
Camden & Burl. Co..100	381,925	semi-an	July '82 3
Canada Southern....100	15,000,000	.....	Feb. '81 2½
Cape May &Millville* 50	447,000	semi-an	June'81 3
Catawissa*..... 50	1,159,500	annual	Oct.'81 1¼
" pref..... 20	2,200,000	semi-an	May '82 3½
" new pref.. 50	1,000,000	semi-an	May '82 3½
Cayuga and Susq.*.. 50	589,110	semi-an	July '81 4½
Cedar Rapids&Mo.R*100	6,850,400	q'arterly	Aug. '82 1½
" " pref.100	769,600	semi-an	Aug .'82 3½
Central of Georgia...100	7,500,000	semi-an	June '82 4
Central of New Jersey100	18,563,200	q'arterly	July '76 2½
Central Ohio*..... 50	2,437,950	semi-an	July '82 3
" pref.. 50	411,550	semi-an	July '82 3
Central Pacific 100	59,275,500	semi-an	Aug. '82 3
Chemung*..... 100	380,000	q'arterly	July '81 1½
Cheshire preferred ..100	2,155,300	semi-an	July '82 1½
Chicago and Alton...100	11,181,741	semi-an	Sept. '82 4
" " pref 100	2,245,400	semi-an	Sept. '82 4
Chi., Burl. & Quincy.100	55,337,455	q'arterly	Sept. '82 2
Chi., Iowa & Nebras*.100	3,916,200	semi-an	July '82 4
Chi., Mil. & St. Paul.100	20,404,261	semi-an	Oct. '82 3½
" pref 100	14,401,483	semi-an	Oct. '82 3½
Chi. & N. Western....100	14,988,257	semi-an	June'82 3½
" pref.100	21,525,353	q'arterly	Sept. '82 2
Chi., R. I. & Pacific..100	41,960,000	q'arterly	Aug. '82 1¾
Chi. and West Mich .100	6,151,000	semi-an	Feb. '82 2½
Chi.,St.P.,M.&O.pref.100	10,390,000	q'arterly	July '82 1¾
C., Ind., St. L. & Chi..100	6,000,000	q'arterly	July '82 1½
Cin., Sand. & Clev.pf. 50	429,037	semi-an	May '82 3
Clev. and Mahoning* 50	3,759,200	semi-an	Nov. '81 3½
Clev. and Pittsburg* 50	11,244,336	q'arterly	Sept. '82 1¾
Columbus & Xenia*. 50	1,786,200	q'arterly	June'82 2
Colum.&HockingVal.100	2,500,200	semi-an	Aug. '81 208
Concord 50	1,500,000	semi-an	May '82 5
Concord and Ports.*.100	350,000	semi-an	July '82 3½
Conn.& Passump.Riv100	2,244,400	semi-an	Aug '82 3
Connecticut River ..100	2,100,000	semi-an	July '82 4
Cumberland Valley.. 50	1,292,950	q'arterly	July '82 2½
" 1st pref 50	241,900	semi-an	Apl. '82 4
" 2d pref. 50	243,000	semi-an	Apl. '82 4
Danbury & Norwalk. 50	600,000	.....	Apl. '82 1½
Dayton and Mich.*.. 50	2,402,573	semi-an	Apl. '82 1¾
" " pref. 50	1,211,250	q'arterly	July '82 2
Delaware*..... 25	1,468,940	semi-an	July '82 3
Del. & Bound Brook*100	1,652,000	q'arterly	Aug. '82 1¾
Del., Lack.& Western 50	26,200,000	q'arterly	July 82 2
Denver & Rio Grande.100	29,160,000	q'arterly	Jan. '82 1½
Den.,South P. & Pac.100	3,500,000	.....	Aug.'80 4
Detroit, Lans. & Nor.100	1,825,600	semi-an	Aug.'80 2½
" " pref.100	2,508,380	semi-an	Aug. '82 3½
Dubuque&Sioux C'y*100	5,000,000	semi-an	Apl. '82 3
East Pennsylvania*., 50	1,709 550	semi-an	July '82 3
East Mahanoy*..... 50	392,950	semi-an	July '82 3
Eastern (N. H.).....100	492,500	semi-an	June'82 2½
Eel River.....100	3,000,000	q'arterly	Sept. '82 $1
Elmira.Jef.&Canand*100	500,000	annual	Sep. '80 5
Elmira&Williamsp't* 50	500,000	semi-an	May '82 1½
" " pref. 50	500,000	semi-an	July '82 3½
Erie and Pitsburg*.. 50	1,998,400	q'arterly	June '82 1¾
Evansville & Terre H.100	100,000	semi-an	Nov.'81 2
Fitchburg.....100	4,500,000	semi-an	July '82 3
F. & P. Marquette pf.100	6,500,000	semi-an	July '82 3
Ft.W. & Jackson pref.100	2,000,000	.....	May '82 2
Georgia. 100	4,200,000	q'arterly	July '82 2½
Granite 100	1,250,000	semi-an	July '82 3
Han. & St. Jo. pref .100	5,083,024	semi-an	Aug. '82 3½
Harrisbg&Lancaster 50	1,182,500	semi-an	July '82 3½
Housatonic pref. ...100	1,180,000	q'arterly	July '82 2
Illinois Central.....100	39,000,000	semi-an	Sept. '82 3½
Ia.Falls & Sioux City*100	4,623,500	q'arterly	Sept. '82 1¾
Iowa R. Land Co....100	7,620,000	q'arterly	Aug. '82 1
Jeffersonv. Mad.&Ind100	2,000,000	q'arterly	May '82 1¾
Joliet and Chicago*..100	1,500,000	q'arterly	June'82 1¾
Kan.C.,Ft.S.&Gulf...100	4,000,000	.....	Feb. '82 2
" " pref..100	2,750,000	semi-an	Aug. '82 4
Kentucky Central...100	500,000	semi-an	June'81 1
" " pref..100	5,583,500	semi-an	June'83 1
Lake Shore&Mich.So.100	49,466,500	q'arterly	Aug. '82 2
" (guar.)100	533,500	semi-an	Aug. '82 5
Lawrence*..... 50	450,000	q'arterly	July '82 2
Lehigh Valley..... 50	27,496,895	q'arterly	July 82 1½
" pref. 50	106,300	q'arterly	July'82 1½

Marked thus(*)are leased roads.	Stock out-standing.	Divide'd Periods.	Last Dividend Payable.
Little Miami..... 50	4,637)300	q'arterly	June'82 2
Little Rock & Ft. S..100	4,096,135	.....	July' 81 108
Little Schuylkill*.. . 50	2,646,100	semi-an.	July '82 3½
Louisville & Nashv..100	19,130,913	semi-an.	Feb. '82 3
Lowell & Andover...100	500,000	semi-an.	Jan. '82 3½
Lykens Valley.....100	600,000	q'rterly.	Oct.' 81 2½
Manchester & Law..100	1,000,000	semi-an.	May '82 5
Manhattan 100	13,000,000	.....	.....
" " 1st pref.100	6,500,000	q'rterly.	July '82 1½
" " 2d pref.100	6,500,000	q'rterly.	July '82 1½
Marietta& Cincinnati 50	1,386,350	.....	.....
" " 1st pref 50	8,105,600	semi-an.	Sep. '66 38
" " 2d pref 50	4,440,000	semi-an.	Sep. '66 38
Marq.Hout.&Ont.pf...100	2,259,026	.....	Aug. '82 4
Massawippi*..... 100	400,000	semi-an.	Aug. '82 3
Michigan Central....100	18,738,204	q'rterly.	Aug. '81 1
Middlesex Central...100	280,000	semi-an.	Aug. '82 3
Mill Creek&Minehill* 50	323,000	semi-an.	July '82 5
M.Hill& Schuyl.Hav* 50	4,022,500	semi-an.	July '82 3½
Missouri Pacific.....100	28,169,800	q'rterly.	July '82 1½
Mobile&Montgomery100	3,022,517	semi-an.	Feb. '80 2¼
Mont. & Wells River100	800,000	annual	Feb. '80 2
Morris and Essex.... 50	15,000,000	semi-an.	July '82 3½
Mt Carbon&PtCarbon 50	282,350	semi-an.	July '82 6
Nashua and Lowell..100	800,000	semi-an.	July '82 4
Nashua & Rochester.100	1,305,800	semi-an.	Apl. '82 1½
Nashv. & Decatur...100	1,827,000	semi-an.	June'81 3
Nash.,Chat.&StLouis 25	6,670,325	semi-an.	Apl. '82 1½
Naugatuck.....100	2,000,000	semi-an.	July '82 5
Nesquehoning Val'y* 50	1,300,000	semi-an.	Sept.'82 3
N.Castle&Beaver Val* 50	600,000	q'rterly.	Oct. '81 —
NewLondonNorth'n*100	1,500,000	q'rterly.	July '82 1½
N. Y. Cen. & Hud. R.100	89,428,330	q'rterly.	July '82 2
N. Y. and Harlem.....100	7,950,000	q'rterly.	July '82 4
" " pref.100	1,500,000	q'rterly.	July '82 4
" City Line.. —	....	annual	Apl. '82 3
N.Y.,LakeErie&West.100	77,083,900	.....	.....
" " pref.100	8,156,825	.....	Jan. '82 6
N. Y., N. H. & Hart..100	15,500,000	semi-an.	Jan. '82 5
N. Y., Prov. & Boston100	3,000,000	q'rterly.	Aug. '82 2
Niag.Bridg&Canand*100	1,000,000	semi-an.	July '81 3
North Carolina*.....100	3,000,000	semi-an.	Sep. '81 3
" " pref.100	1,000,000	semi-an.	Sep. '81 3
N. Eastern (S.C.) pref100	86,000	semi-an.	May '81 4
Norfolk & Western pref. 15	15,000,000	q'rterly.	Sept. '82 $1
North Pennsylvania. 50	4,527,150	q'rterly.	Aug. '82 1¾
Northern Central.... 50	6,142,000	semi-an.	July '82 3
Northern N. Hampsh100	3,068,400	semi-an.	June'82 3
Northern N. Jersey*.100	1,000,000	semi-an.	July '80 2½
Norwich&Worcester*100	2,604,400	semi-an.	July '82 5
Ohio 100	18,500,000	.....	.....
Ohio and Miss. pref..100	4,030,000	semi-an.	Mar.'75 3½
Old Colony.....100	7,333,800	semi-an.	July '82 3½
Oregon R'way&Nav.100	6,000,000	q'rterly.	Aug. '82 2
Oswego & Syracuse..100	1,320,400	semi-an.	Aug. '81 4½
Panama..... 100	7,000,000	.....	July '82 6½
Paterson & Hudson*.100	630,000	semi-an.	July '82 4
Paterson & Ramapo.100	248,000	semi-an.	July '82 4
Pember.&Hightst'n*. 50	342,150	semi-an.	Jan. '82 3
Pennsylvania..... 50	77,672,750	semi-an.	May '82 4
Pennsylvania Co..... 50	20,000,000	semi-an.	June'81 2½
Peoria & Bureau Val*100	1,200,000	semi-an.	Feb. '82 4
Philadelphia & Erie*. 50	7,013,700	semi-an.	.....
" " pfd 50	2,400,000	semi-an.	Jan. '75 4
Phil,Ger. &Norrist'n* 50	2,231,900	q'rterly.	Sept.'82 3
Phil. and Reading... 50	32,726,375	q'rterly.	Jan. '76 2½
" " pref. 50	1,551,800	q'rterly.	July '76 3½
Phila. and Trenton..100	1,250,100	q'rterly.	July'82 2½
Phila., Wil. and Balt. 50	11,585,750	semi-an.	July '82 4
Pittsb., Ft. W. & Chi.*100	19,714,285	q'rterly.	July'82 1¾
" Special Imp.100	6,770,900	q'rterly.	July'82 1¾
Pittsfield&N.Adams..100	450,000	semi-an.	July '82 2½
Portl., Saco & Portsm100	1,500,000	semi-an.	July '82 3
Providence & Worces.100	2,000,000	semi-an.	July '82 3
Rensselaer&Saratog.*100	7,000,000	semi-an.	July '82 4
Rhode Island& Mass..100	100,000	.....	Jan. '81 3
Richmond& Danv...100	3,866,000	q'rterly.	Aug. '82 2
Richmond & Petersb100	1,009,300	semi-an.	Jan. '81 3
Roch.&Genesee Val.*100	555,200	semi-an.	July '82 3
Rutland preferred.. 100	4,000,000	semi-an.	Sept. '82 1
St.L.,Alt. & T.Haute.100	2,300,000	.....	.....
" " pref.100	2,468,406	.....	May '82 3
St.L.&S.Fran.1st pref100	4,500,000	.....	Aug. '82 3½
St.L.,I.Mt.&South'n.100	21,459,921	semi-an.	Feb. '74 3
St.L.,Jac'ville & Chic.100	1,293,000	.....	Aug. '82 4½
" " " pref.100	1,034,000	.....	Aug. '82 4½
St. P. & Duluth pref.100	4,705,000	q'rterly.	June'82 1¾
St. P., Minn. & Man..100	20,000,000	semi-an.	Aug. '82 3½
Schuylkill Valley*... 50	576,050	semi-an.	July '82 2½
Seaboard & Roanoke.100	1,229,600	semi-an.	May '82 5
Shamokin V.&Pottsv 50	669,450	semi-an.	Feb.'82 3
Shore Line*.....100	1,000,000	semi-an.	July '82 4
Sioux C.&Pacific pref100	160,000	semi-an.	Apl. '82 3½
South Br. (N. J.)*....100	438,300	semi-an.	Jan. '82 3
South Western (Ga.)*100	3,892,300	semi-an.	Dec. '81 3½
Stockbridge&Pitts.*. 100	448,700	semi-an.	Oct. '81 1½
Syr.,Bingham&N.Y.*100	2,500,000	semi-an.	Feb. '81 2
Terre Haute & Ind...100	1,988,150	semi-an.	Aug. '82 4
Troy and Boston....100	1,609,000	semi-an.	Feb. '80 2
Union Pacific. 100	61,000,000	q'rterly.	Oct. '82 1¾
United Cos of N. J.*.100	20,490,000	q'rterly.	July '82 2½
Utica, Shenango&S V100	4,000,000	semi-an.	Nov.'81 3
Utica and Black Riv.100	1,772,000	semi-an.	Mar.'82 2
Vermont and Mass...100	3,050,000	semi-an.	Apl. '82 3
Wab. St.L.&Pac.pref.100	22,615,100	q'rterly.	Nov.'81 1½

Markedthus(*)are leased roads.	Stock out-standing.	Divide'd Periods.	Last Dividend Payable.
Ware River*.....100	750,000	semi-an.	July '82 3½
Warren (N. J.).....100	1,800,000	semi-an.	Apl. '82 3½
Warwick Valley.....100	340,000	semi-an.	July '82 2½
Westchest&Phil.pref100	821,300	semi-an.	July '80 2
West Jersey.....100	1,359,750	semi-an.	Sept. '82 3
Wilmingt'n&Weld'n.100	1,456,200	semi-an.	July '82 3
Wil., Col., & Aug 100	960,000	semi-an.	July '82 3
Winchester&Poto'c.*100	180,000	semi-an.	July '82 3
Winchester&Strasb.*100	74,700	semi-an.	July '82 3
Worcester & Nashua. 75	1,789,800	semi-an.	July '82 1½
HORSE-POWER R. R.			
Albany City.....100	200,000	annual	.....'80 5½
Baltimore City..... 25	1,000,000	semi-an.	July '82 3
Balt.,Cat.&El. Mills..100	....	semi-an.	July '82 2
BleeckerSt.&Ful.F'y.100	900,000	semi-an.	July '81 ¾
Boston&Chelsea pref. 50	110,000	semi-an.	Apl. '82 3
Broadway (Brooklyn)100	250,000	q'arterly	Oct. '81 3
B'way&7th Av,(N.Y.)100	2,100,000	q'arterly	Oct, '81 2
B'klyn&Hunter's Pt.100	400,000	semi-an.	Apl. '79 3
Brooklyn City.....100	2,000,000	q'arterly	Dec.'81 3½
Bushwick (Brooklyn)100	309,000	semi-an.	July '81 2½
Cambridge.....100	908,000	q'arterly	Apl. '82 4½
Cen.Park,N.& E.Riv.100	1,800,000	q'rterly.	July '82 2
Christoph'r&TenthSt100	650,000	semi-an.	Aug.'81 2½
Citizens' (Phil.)..... 50	192,500	q'rterly.	Jan. '82 2½
Citizens' (Pbg.)..... 50	200,000	annual.	....'80 14½
Coney Island&Bklyn100	500,000	semi-an.	Oct. '80 5
Continental (Phil.) .. 50	580,000	semi-an.	July '82 6
D.Dock,E.B'way&Bat100	1,200,000	q'arterly	Nov.'81 4
Eighth Av. (N. Y.)...100	1,000,000	q'rterly.	Oct. '81 3
42d St. & G. St. Ferry100	747,000	semi-an.	Nov.'81 6
Frankf.&Southw (Ph) 50	600,000	q'rterly.	Jan. '82 6
Germantown, (Ph.).. 50	572,800	q'rterly.	July '82 2½
Girard College (Ph.) . 50	500,000	semi-an.	July '71 3
Grand St. & Newton.100	170,091	semi-an.	July '81 2½
Green&Coates St.(Ph) 50	150,000	q'rterly.	July '82 3
Heston,Mantau&F'm 50	299,381	semi-an.	Jan. '75 4
Highland.....100	600,000	semi-an.	July '82 4
Lomb.&SouthSts(Ph) 25	195,000	semi-an.	Oct. '75 4
Lynn and Boston....100	200,000	semi-an.	May '82 4
Malden and Melrose.100	165,000	.....	.....
Metropolitan (Bost.). 50	1,500,000	semi-an.	July '82 4
Middlesex (Boston)..100	650,000	semi-an.	May '82 3½
N.Y.,Bay Ridge&Jam100	150,000	.....	Oct. '78 7
Ninth Av. (N. Y.)....100	797,320	.....	.....
Orange &Newark.....100	282,555	.....	.....
People's (Phila.) pref. 25	124,744	.....	July '82 2
Philadelphia City... 50	475,000	semi-an.	July '82 4
Phila. and Darby.... 20	200,000	semi-an.	July '81 3½
Phila.&Grey's Ferry. 50	308,000	semi-an.	Jan. '82 6
Pbg,Alleg.&Manches. 50	300,000	q'rterly.	Oct. '81 3
Ridge Avenue (Ph.).. 50	420,000	semi-an.	Oct. '81 11
Second Avenue (N.Y.)100	1,199,500	semi-an.	July '81 2½
Second&ThirdSt.(Ph) 50	771,076	q'rterly.	Jan. '82 4½
17th &19th sts (Ph.).. 50	250,000	semi-an.	July '81 3
Sixth Avenue (N. Y.)100	750,000	semi-an.	Oct. '81 5
Somerville (Boston).100	113,000	semi-an.	May '82 3
South Boston..... 50	600,000	semi-an.	July '82 4
Third Avenue, N. Y..100	2,000,000	q'rterly.	Nov.'81 5
13th and 15th sts.,Ph 50	334,529	q'rterly.	Jan. '82 4
23d street, N. Y.....100	600,000	semi-an.	Aug.'81 4
Union, Boston.....100	374,300	semi-an.	Jan. '82 4
Union, Phila..... 50	1,005,000	semi-an.	Jan. '82 7
West Philadelphia... 50	750,000	semi-an.	July '77 10
CANALS.			
Chesapeake and Dela 50	2,078,038	semi-an.	June'75 2
Delaware Division... 50	1,633,350	semi-an.	Aug. '82 $1
Delawa. and Hudson100	20,000,000	q'rterly.	Sept. '82 1¾
Delaware & Raritan*.100	5,847,400	q'rterly.	July '82 2½
Lehigh Coal and Nav 50	11,204,250	semi-an.	June'82 2
Monongahela Nav... 50	1,004,500	semi-an.	July '82$3
Morris, consolidated.100	1,025,000	semi-an.	Feb. '81 2
" preferred....100	1,175,000	semi-an.	Feb.'81 5
Pennsylvania..... 50	4,501,200	.....	.....
Schuyl. Nav., com.*. 50	859,100	annual..	Au. '81 50c.
" " pref... 50	3,200,000	annual..	Aug. '81 $1
MISCELLANEOUS.			
Adams Express.....100	12,000,000	q'rterly.	Sept.'82 2
American Express... 50	18,000,000	semi-an.	July '82 3
Amoskeag Manuf.Co.100	3,000,000	semi-an.	June'81 5
Calumet&HeclaMin'g 25	100,000	S. q'rterly.	Aug. '82 $5
Central Mining Co....100	.....	semi-an.	Feb.'82 2½
Consolidation Coal..100	10,250,000	semi-an.	Jan. '82 2
George's Creek C.&I.100	.....	semi-an.	Jan. '82 3
Maryland Coal.....100	4,400,000	semi-an.	Feb. '76 1½
Mariposa L. &Mining100	10,000,000	.....	.....
" pref100	5,000,000	.....	.....
Missouri Val.LandCo100	200,000	semi-an.	July '82 12
National Tube Works100	1,000,000	q'rterly.	July '82 3
Pac. Mail Steamship.100	20,000,000	q'rterly.	Sept.'69 3
Pennsylvania Coal... 50	5,000,000	q'rterly.	Aug. '82 3
Pullman Palace Car..100	10,032,800	q'rterly.	Aug. '82 2
Quicksilver, com.....100	5,708,700	.....	May '82 0.4
" pref....100	4,291,300	.....	May '82 6
Quincy Mining Co... 25	40,000 shs	semi-an.	Aug. '82 $5
Quincy R. R. Bridge.100	1,750,000	semi-an.	July '82 5
SiouxC.&I.F.L.&L.Co100	500,000	semi-an.	June'82 5
Spring Mt. Coal.....100	1,500,000	semi-an.	June '82 3½
Topeka Equip'n't Co.100	255,500	semi-an.	Apl. '82 5
United States Ex....100	7,000,000	q'rterly.	Aug. '82 1
Wells-Fargo & Co. Ex100	6,250,000	semi-an.	July '82 4
Western Union Tel..100	80,000,000	q'rterly.	July '82 1½

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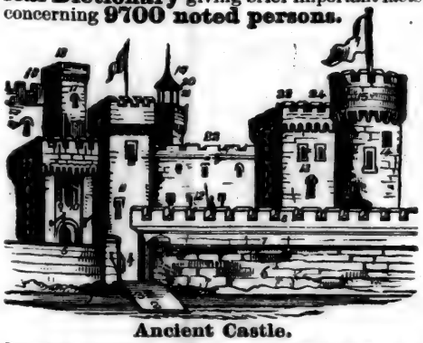
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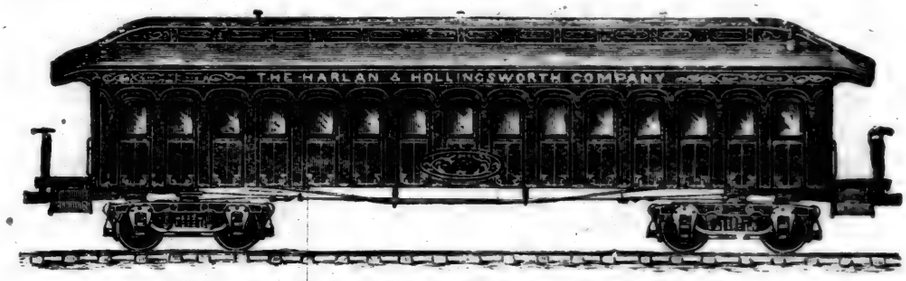
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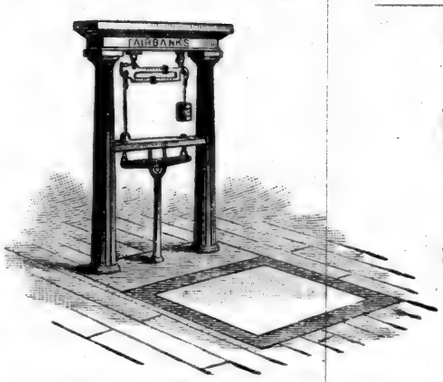
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	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total.
Burl., Cedar Rap. & Northern:													
1880	184,316	165,170	188,325	141,652	149,504	153,378	143,432	160,160	179,804	204,991	189,330	193,419	2,053,484
1881	167,750	124,510	148,551	184,680	165,630	205,912	174,351	209,112	221,801	221,748	203,880	232,812	2,259,937
1882	252,823	225,631	224,107	178,304	199,278	211,257	198,476	.....	.....	.....	.....	.....	.....
Central Pacific:													
1880	1,200,614	1,070,487	1,373,438	1,356,716	1,778,488	1,724,950	1,840,067	1,973,438	1,964,997	1,120,229	2,199,466	1,905,221	20,508,112
1881	1,602,907	1,454,218	1,709,637	1,872,370	2,091,410	2,159,381	1,899,346	2,059,000	2,293,000	2,514,000	2,267,000	2,110,000	23,947,951
1882	1,876,000	1,702,000	1,987.000	2,052,000	2,353,000	2,239,000	2,020,000	.....	.....	.....	.....	.....	.....
Chesapeake and Ohio:													
1880	202,335	198,681	222,762	221,559	199,443	214,352	238,236	259,110	247,303	211,820	240,795	218,000	2,674,368
1881	162,540	184,389	228,479	227,343	252,235	241,135	225,096	262,858	247,144	237,303	235,585	203,562	2,709,762
1882	210,455	209,708	208,981	267,454	255,939	260,753	306,831	.....	.....	.....	.....	.....	.....
Chicago and Alton:													
1880	534,054	497 013	626,473	542,961	616,128	617,524	708,906	761,120	767,349	785,199	696,776	574,695	7,718,198
1881	487,890	461.641	529,915	558,190	548,556	635,860	676,205	771,466	768,897	750,359	680,133	635,307	7,553,988
1882	579,447	530,480	584,483	561,787	553,412	613,886	671,537	.....	.....	.....	.....	.....	.....
Chicago and Northwestern:													
1880	1,154,632	1,131,683	1,361,725	1,294,573	1,875,608	1,671,177	1,609,686	1,767,938	2,020,245	2,105,217	1,855,671	1,477,902	19,416,007
1881	1,240,667	963,208	1,178,795	1,474,612	1,879,006	2,306,640	1,983,031	2,315,164	2,292,676	2,341,097	2,019,037	1,855,476	21,849,209
1882	1,620,336	1,471,945	1,696,568	1,634,819	2,058,133	2,022,700	2,025,736	2,099,755	.....	.....	.....	.....	.....
Chicago, Burlington and Quincy:													
1880	1,432,740	1,411,870	1,732,518	1,489,894	1,909,627	1,682,956	1,773,643	1,834,321	1,862,285	1,934,762	1,837,860	1,552,018	20,454,494
1881	1,307,948	1,034,821	1,418,149	1,574,371	1,679,455	2,083,803	1,888,552	2,173,945	2,262,981	2,031,001	1,816,133	1,905,490	21,324,150
1882	1,658,834	1,457,300	1,566,217	1,530,838	1,505,261	1,437,164	.....	.....	.....	.....	.....	.....	.....
Chicago, Milwaukee and St. Paul:													
1880	764,298	738,749	900,675	871,041	1,134,745	1,037,958	1,026,708	991,297	1,257,677	1,493,620	1,472,037	1,397,308	13,086,119
1881	990,847	682,717	916.989	1,259,946	1,538,491	1,729,831	1,568,706	1,678,361	1,645,000	1,590,000	1,569,000	1,855,000	17,025,462
1882	1,435,000	1,377,000	1,561,000	1,518,000	1,629,000	1,620,000	1,465,000	1,545,000	.....	.....	.....	.....	.....
Chicago, St. Paul, Minneapolis and Omaha:													
1880	193,827	173,078	259,783	259,208	232,146	218,093	236,995	251,013	300,833	342,052	342,894	312,173	3,122,097
1881	257,786	158,594	251,648	261,211	350,124	404,562	383,202	385,586	363,685	382,714	380,733	391,950	3,981,296
1882	307,498	315,100	405,779	356,558	406,420	363,109	331,480	394,556	.....	.....	.....	.....	.....
Cincinnati, Indianapolis, St. Louis and Chicago:													
1880	155,697	172,541	198,220	168,199	186.995	200,332	204,138	233,478	343,627	239,881	209,014	198,254	2,412,185
1881	182,523	171,511	191,005	183,710	191,056	192,209	177,161	229,858	219,977	212,606	194,805	192,623	2,296,916
1882	200,042	186,879	208,066	204,269	199,110	195,948	209,564	.....	.....	.....	.....	.....	.....
Denver and Rio Grande:													
1880	124,759	126,922	160,883	164,882	193,925	295,455	373,132	400,133	406,583	473,318	408,562	349,196	3,478,007
1881	307,476	317,681	398,493	433,111	514,767	584,230	548,284	606,193	620,643	665,686	566,819	643,417	6,206,812
1882	491,914	412,987	535,055	559,917	614,298	537,462	495,797	574,040	.....	.....	.... ..	.....	.....
Hannibal and St. Joseph:													
1880	176,079	166,965	216,061	206,735	191,317	179,396	224,312	238,081	233,448	242,214	207,147	279,635	2,561,366
1881	154,401	122,874	176,356	190,812	172,950	190,740	201,899	215,308	202,567	313,433	201,782	180,376	2,230,961
1882	138,284	154,717	168,798	148,913	154,917	155,030	184,347	.....	.....	.....	.....	.....	.....
Illinois Central:													
1880	595,212	613,806	613,008	535,732	665,120	681,736	724,095	732,755	806,836	880,211	783,120	673,182	8,304,812
1881	631,281	524,499	557,789	662,493	673,259	803,887	720,004	868,407	828,847	815,238	737 218	763,475	8,586,397
1882	728,173	689,387	695,371	674,603	674,749	663,746	752,251	.....	.....	.....	.....	.....	.....
Indiana, Bloomington and Western:													
1880	80,498	89,690	116,185	90,374	85,733	106,954	103,438	116,732	110,622	121,343	96,621	104,619	1,233,079
1881	90,283	83,261	192,085	203,677	200,064	199,846	199,125	117,956	195,307	181,674	160,826	156,697	.....
1882	195,824	175,755	206,235	205,934	182,554	186,133	206,072	.....	.....	.....	.....	.....	.....
Louisville and Nashville:													
1880	674,455	575,035	612,593	563,883	655,014	976,229	772,537	827,088	931,910	1,000,326	953,086	949,184	9,491,346
1881	816,960	805,124	947,959	850,862	828,726	1,227,885	817,135	876,192	951,566	1,002,950	1,065,223	1,122,285	11,326,859
1882	950,065	960,036	1,073,745	950,007	946,435	1,187,385	1,038,385	.....	.....	.....	.....	.....	.....
Mobile and Ohio:													
1880	250,116	204,094	168,301	140,091	129,249	121,855	131,621	140,593	184,246	264,714	251,368	287,373	2,373,621
1881	224,347	216,768	230,916	163,551	145,803	136,517	135,548	60,789	209,044	252,921	252,434	262,025	2,406,437
1882	161,433	158,154	152,651	145,272	137,645	132,572	136,398	140,443	.....	.....	.....	.....	.....
Nashville, Chattanooga and St. Louis:													
1880	205,633	191,154	169,457	155,466	158,839	144,155	151,594	169,326	167,473	178,266	182,087	175966	2,049,484
1881	178,143	190,866	207,710	183,525	104,430	154,549	150,430	168,317	179,979	172,131	152,059	173,127	2,075,256
1882	156,994	159,961	161,005	154,155	137,645	119,074	160,991	.....	.....	.....	.....	.....	.....
New York and New England:													
1880	164,232	149,907	183,845	179,689	183,701	219,891	205,056	249,885	235,642	215,491	210,856	198 108	2,396,302
1881	189,749	173,614	212,019	216,913	217,185	231,518	246,821	280,524	299,573	261,199	242,412	237,729	2,809,255
1882	213,840	217,261	265,222	263,544	283,244	290,060	308,920	353,726	.....	.....	.....	.....	.....
New York, Lake Erie and Western:													
1879	1,147,173	1,207,391	1,356,780	1,372,755	1,350,574	1,230,419	1,273,533	1,450,223	1,492,497	1,713,697	1,515,835	1,398,224	16,509,127
1880	1,296,381	1,252,218	1,644,958	1,643,151	1,592,544	1,661,812	1,580,976	1,606,874	1,786,417	1,899,910	1,799,338	1,726,788	19,149,361
1881	1,443,437	1,425,765	1,847,261	1,709,057	1,776,891	1,794,982	1,787,081	1,772,895	1,734,200	.....	.....	.....	.....
Northern Central:													
1880	334,494	330,860	415,325	386,130	320,788	419,193	450,298	453,923	464,093	512,918	459,054	494,310	5,050,387
1881	386,157	382,657	452,906	487,273	465,588	487,287	440,811	498,008	429,565	449,664	487,160	476,622	5,443,697
1882	407,368	413,551	430,194	435,129	482,607	482,762	509,683	.....	.....	.....	.....	.....	.....
Northern Pacific:													
1880	81,300	77,259	119,357	185,700	217,613	253,105	241,277	223,500	330,300	358,456	300,822	220,993	2,629,710
1881	116,508	78,803	162,984	216,210	312,705	412,024	393,260	434,085	490,096	565,485	428,903	434,331	4,044,576
1882	239,800	269,000	384,000	438,000	568,332	631,342	679,240	727,377	.....	.....	.....	.....	.....
Philadelphia and Erie:													
1880	224,307	245,372	327,678	334,947	311,470	331,024	308,699	347,532	322,737	367,082	324,966	281,919	3,727,733
1881	224,303	225,501	285,573	293,323	343,792	350,585	291,669	303,849	276,522	292,392	284,078	282,772	3,454,309
1882	252,727	246,246	265,311	277,851	341,415	341,614	377,206	.....	.....	.....	.....	.....	.....
St. Louis and San Francisco:													
1880	198,091	195,948	193,146	176,164	167,664	173,607	213,297	259,995	280,873	328,194	290,329	226,063	2,698,371
1881	212,435	178,234	262,050	265,298	283,399	260,254	252,333	286,373	279,064	308,569	284,320	287,914	3,160,245
1882	256,784	244,654	274,959	242,806	253,419	240,177	318,613	.....	.....	.....	.....	.....	.....
St. Louis, Alton and Terre Haute:													
1880	153,139	163,737	168,994	155,462	147,928	150,207	191,077	216,759	204,295	221,863	188,773	184,503	2,146,741
1881	175,725	166,012	201,137	197,447	172,177	165,896	165,393	189,295	187 299	179,921	162,544	153,852	2,112,801
1882	168,987	149,619	178,145	157,450	162,842	142,742	192,017	.....	.....	.....	.....	.....	.....
St. Louis, Iron Mountain and Southern:													
1880	555,983	490,195	451,560	408,241	349,053	363,454	432,655	565,869	671,219	688,365	632,052	656,951	6,265,597
1881	570,957	560,791	704,002	548,300	479,075	474,302	533,512	644,386	690,400	719,239	687,280	709.498	7,319,744
1882	516,370	501,127	585,008	581,977	519,120	529,700	515,519	.....	.....	.....	.....	.....	.....
St. Paul, Minneapolis and Manitoba:													
1880	180,239	137,645	261,798	333,014	281,899	243,407	272,089	232,579	274,188	345,057	300,675	297,641	3,160,231
1881	254,187	159,482	320,962	425,685	382,642	405,322	387,488	414,954	485,736	605,708	508,530	528,262	4,878,960
1882	395,461	418.358	531,004	570,890	858,902	856,417	853,296	.....	.....	.....	.....	.....	.....
Texas and Pacific:													
1880	245,785	219,165	215,070	174,177	141,083	153,066	195,711	226,073	266,570	303,666	312,184	301,858	2,754,408
1881	281,176	260,781	319,928	295,066	281,782	285,405	328,663	354,082	337,117	578,668	357,724	381,218	3,921,569
1882	310,785	255,644	332,911	359,543	409,228	384,713	367,215	.....	.....	.....	.....	.....	.....
Union Pacific Railway:													
1880	1,433,636	1,393,992	1,730,509	1,937,220	2,027,269	1,928,528	1,934,215	1,913,035	2,270,179	2,707,860	2,251.148	1,869,335	23,448,445
1881	1,339,709	1,374,740	1,674,860	1,766,894	2,319,238	2,884,774	2,528,826	2,638,659	2,844,357	3,289 350	2,773,608	2,267,004	27,451,831
1882	1,961,088	1,759,863	2,226,832	2,462,004	2,491,590	2,508,453	2,301,000	2,762,107	.....	.....	.....	.....	.....
Wabash, St. Louis and Pacific:													
1880	776,790	759,451	978,629	892,024	948,773	953,468	1,966,742	1,189,478	1,178,950	1,501,203	1,131,787	1,050,816	12,428,112
1881	811,617	818,922	1,121,592	1,023,482	1,144,660	1,308,993	1,131,752	1,542,838	1,490,027	1,396,300	1,399,555	1,328,278	14,461,570
1882	1,220,965	1 134 768	1,315,776	1,378,194	1,204,864	1,149,682	1,418,837	.....	.....	.....	.....	.....	.....

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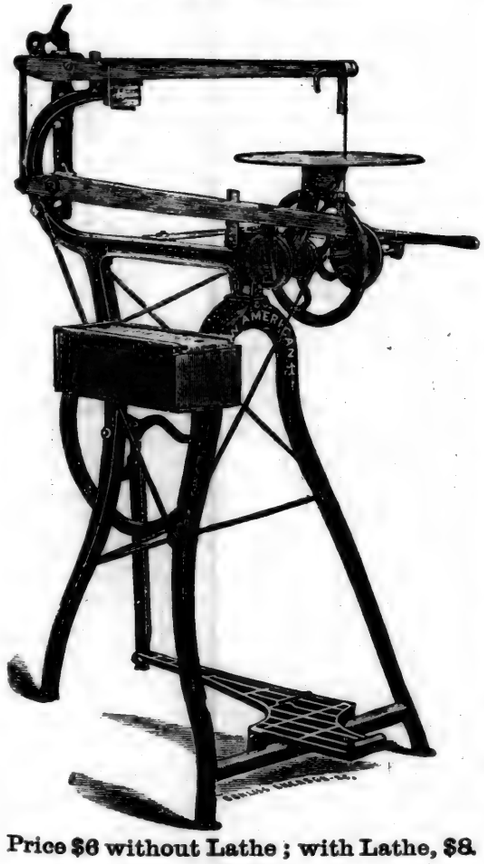
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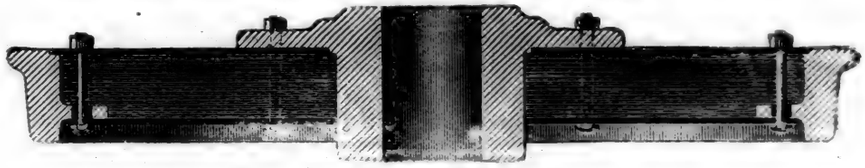
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Medical and Surgical Supplies on Railroad Trains.

It is a curious circumstance that the new roads in the West are generally the first to adopt the latest improvements and most advanced ideas in railroad matters.

Whether this is due to the superior energy and "go-ahead-ativeness" of the typical western man—characteristic of the pioneer in all newly settled regions—I will leave others to determine, but certain it is that it is not necessary to look very far for proofs.

The latest illustration is the recent action of the Denver and Rio Grande Railway Company in supplying all their passenger trains with a "Train Medicine Chest" containing the following drugs and surgical appliances:—

Laudanum, ammonia mixture, styplic collodion, bi-carbonate of soda, styplic cotton, surgical needles, silk, wax, sponges, adhesive plaster, bandages, lint, and scissors. Accompanying these articles is a printed circular, couched in the most concise language consistent with plainess, giving directions as to their use in the case of accident, and advice as to the immediate treatment of such contingencies as bleeding wounds, fractures, dislocations, burns and scalds, frostbite, rupture, fainting, shock, etc., so that in case no physicians are at hand, the cooler or more intelligent train-men or passengers can render immediate assistance and thus save much valuable time. What "crack" "nickle-plated" road in the East has ever thought of making any such provision for the emergencies which are likely to occur at any moment on the "best regulated" railroad, and *are* occurring daily? This is not the only feature worthy of imitation which this western road presents. It possesses a regularly organized staff of surgeons, whose duty it is to respond to every call from the employés of the road. Printed instructions furnished to the latter direct them that:—

"Whenever an accident occurs on the line, the conductor must immediately telegraph the surgeon in whose charge the injured person is to be placed, in order that time may be given to prepare for the reception of the patient."

The necessity for such provision in case of accident, and for the organization of surgical staffs on all our railroads, is being emphasized every day by the lamentable occurrences which are constantly taking place. The recent catastrophe near Long Branch, caused by the spreading of the rails and the falling of the train into a shallow stream, was followed by the usual delay in procuring assistance for the wounded, and the unfortunately too familiar scenes, which proclaim more forcibly than words the imperative necessity for the adoption of each and every measure which will conduce to the comfort, safety and health of the traveling public, and to their prompt relief and proper care in the event of disaster.

It is not too much to assert that many valuable lives might be saved at such times, or at any rate much needless suffering, could there be instantly obtained, the means for staunching blood, chloroform and morphine for the relief of pain, bandages, lint, etc. The percentage of deaths resulting from the contingencies of railroad service is sufficiently high. Let everything be done that is within human power to lower that rate. Dr. G. Maxwell Christine, of Philadelphia, in the last number of the *Medical and Surgical Reporter*, relates two instances which have very recently come within his own experience, as "illustrations of the importance of having upon railroad trains and within easy reach certain medicines and appliances in case of accident."

As a corroboration of the truth of my remarks, if such is needed, I transcribe a portion of his article:

"While running at quite a speed, along a prominent railroad, the engineer of our train espied a man lying upon the road, between the two tracks. The night was dark, and it appeared that a train going in the opposite direction had run into this person, who was walking on the track on his way home from work. The accident being unperceived by the train-hands, the train did not stop. For quite a while, therefore, until our train came along, did the man lie in suffering. We were not many miles from the city, and the conductor ordered the man to be taken upon the train and conveyed to the depot. The poor fellow was in terrible agony, and being stout, and the car steps high, it was painful to witness the suffering it caused the man in the attempt to place him in the car. Had the car been supplied with a stretcher, much time and trouble could have been saved, and the man made to feel his wounds less keenly. Somewhat belated, the train rushed along with considerable speed, and with every motion of the car I could see that the jolting gave the man pain. We were obliged to lay him upon the bare baggage car floor, with a chair cushion only under his head.

"Not a drop of medicine or stimulant was obtainable from the train-hands to relieve pain, or to strengthen him until the depot could be reached. Fortunately, however, I had my hypodermic syringe in my pocket, with which I injected into the man's arm a quarter of a grain of morphia, which gave him some ease. The other instance was furnished in the case of the baggage master of a train upon a branch of the same road. While leaning out of the baggage car side door, the baggage master was struck by a projection from a bridge and his skull fractured. I was summoned from the rear end of the train, and soon hastened to where the man lay. Not a thing except ice water was on hand, excepting, too, the whole-souled willingness of all hands to do what they could; but of what avail was all this without the means of keeping up the heart impulse and strength of the patient in hopes of eventually saving his life. I now make it a rule never to travel without my medicine satchel and instruments. On this occasion, they were fortunately with me. The man was pulseless; his heart beat so feebly as hardly to be heard. Another physician happening to be on board, and who ably assisted me in every effort, agreed with me that digitalis must be given the man or he would die before the depot was reached. An injection under the skin was made of a strong tincture of the drug, which I procured from my satchel with the hopeful result of bringing back the pulse and the respiration. Thus we worked with the medicines, etc. I had on hand."

If such precautions are necessary and imperatively demanded on the great thoroughfares of the East, within a few miles of our largest cities, with how much greater emphasis can it be predicated of the lines running through the more sparsely settled regions of the West, where many miles may have to be traversed and much valuable time lost before it is possible to procure surgical aid. I could relate several instances within my own experience, in which I have been notified by telegraph to be ready to attend a wounded man being brought with all speed from the scene of the accident, and on the arrival of the train found him (a brakeman, a passenger, or perhaps *only* "a poor old tramp") lying on the floor of the baggage car or the caboose, dead from hemorrhage or shock. In more than one of these cases only a single extremity had been crushed, rendering it reasonably probable that some styplic preparation, applied even by unskillful hands, or the administration of a stimulant, might have kept the vital spark alive until more efficient help could be procured. And yet even here in Central Iowa, along the line of the Chicago, Rock Island and Pacific Railway with towns of five hundred to as many thousand people every six or eight miles, we do not consider ourselves "out West" by any means, whatever you "Down-Easters" may imagine. "The West" is away "out west" of us considerably. It remained for one of these strictly "western" roads, as previously related, to inaugurate measures which, as I have shown, are equally necessitated by the exigencies and emergencies of railroad travel whether East or West.

W. C. S.

Marengo, Iowa, August 20, 1882.

Editor American Railroad Journal:

Dear Sir: In your valuable contribution of railway, mine and mill views of the 26th ult., I notice a statement that iron manufacturers complain of a scarcity of good hematite ore in Pennsylvania, naming Center county as having some fine specimens, but stating that they are not rich enough to warrant manufacturers in paying freight on them, and that the best magnetic ores used in Pennsylvania are now brought from Spain and Africa. As the assertion does not name the works or give figures, your readers are unable to form even an approximate estimate of the cost of handling the New Jersey magnetic and the Pennsylvania hematite ores, or of bringing them to this section. Judging by my observations I should say that the works were located by the "tow-path" rule, depending on wagon feeders from the mines to the railroads, which would cost not less than ten cents per ton for each mile; and the difference in wages in this country from those in the countries named must also be taken into account. The Central Pennsylvania hematite ores of Clinton, Center, Clearfield and other counties have a hundred fold greater acreage of stratified mines than are now worked, but their development is retarded by the trunk lines of railroad, which tap the surface-wash ores, neglecting the mining district of Sugar and Nutany valleys, which contains superior hematite ore between the limestone *and in paying quantities*, certainly yielding fifty per cent of iron in the blast furnace, and that too of A1 quality, for tin plate stamp iron or the finest wire, etc. And in Clearfield and adjoining counties westward we have ores in plenty to cheaply feed several Cambria or Johnstown iron and steel works. What is needed are railroad facilities — the ore is there.

Respectfully yours, Jas. Wolfenden,
Lock Haven, Clinton Co., Penn.
September 6, 1882.

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We give on editorial page our new subscription rates, which are so changed in the belief that it will not only prove acceptable to many who desire to become regular readers of the paper, but that it will meet with the hearty approval of our advertising patrons, who are rapidly filling up the pages offered to them since the improvements in the JOURNAL have been started.

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General Offices Bridgeport Ct. May 1, 1882.

Boston and New York Travel.

APROPO of the railroad service of New England, and particularly between Boston and New York, the Philadelphia *Railway World* makes the following comment, which shows that the subject is one open to criticism:—

"New England has not materially grown in the last decade, and while its people sleep their trade is going westward. The census returns for the last twenty years show that while its wealth is increasing, the rate of progress is much slower than that of the adjacent States lying further west. Take its leading trunk line out of New York, the New York, New Haven and Hartford, and Shore Line, running through a series of manufacturing towns and seaside resorts that ought to double their population and business every five or ten years, and yet they are sleeping away their lives under the smothering influence of a second-class road managed without energy or brains.

"Its roadside is strewn with broken granite over its entire length, yet it is ballasted with dirt, and its passengers wrapped in clouds of dust; its trains are run at a rate of speed so slow that they are a disgrace to the age we live in; its wheezy engines strew showers of cinders in their wake; the passenger cars are relics of bygone days, with windows that refuse to open to allow a passenger to enjoy the beautiful panorama stretched along the line, of which the eye would never weary, but it can be seen only through smoke and dirt-begrimed windows; its closets are proper subjects for a board of health; and as a substitute for water-coolers in the cars, dirty boys come through with tin cans and sullen manners at various intervals. Few of the trains have air-brakes; on none are the employés uniformed, and the stations are generally in charge of policemen, who seem to look upon the public as though they were escaped pirates, and treat them accordingly; the crowding and packing of the most people into the fewest cars has been brought down to a science. When an express train going from New York eastward is thinned out by the passengers stopping off at various stations, the brakemen are sent to drive the remaining ones into forward cars, and the rear ones are locked up in order that trainmen can smoke in them, while the first-class passengers are packed like herrings in the narrow seats with low backs and worn-out springs.

"If the men in control of this and other New England roads would waken up and raise the standard of their lines from third or fourth class to first-class affairs, and give the people the accommodations they need and can pay for, New England might share the prosperity that now advances other localities; and it is no exaggeration to suppose that 50,000 families would soon locate along the southern shore of Connecticut, whose heads, doing business in New York and vicinity, are now prevented from enjoying the air and climate which cannot be found except at the points around which the railroads are throwing all the possible barriers to keep out the public, and punish those who venture in in defiance of the wretched accommodations to which they are continually subjected.

"The steamboat men are reaping harvests by furnishing palatial accommodations on their routes parallel to the railroad, the Fall River Line being specially complete in all its appointments; and while they are taking the largest proportion of the travel, although more time is occupied in passing between the competing points, some of the New England railway managers are injuring their own interests and damaging the districts their lines traverse, by habitual neglect and inferior accommodations. None are so blind as those who will not see."

Another New Motor.

A NEW motor, which the inventor, George V. Sheffield, is confident will supersede steam as a power, was recently on exhibition at 174 Worth street, this city. As described by a reporter, it consists of an air pump, a vacuum reservoir, and a hollow iron cylinder with two rocker valves. The air pump exhausts the air and creates a vacuum in the reservoir. The reservoir is connected with the cylinder by two iron pipes, and by turning a stop-cock in each of these the air is allowed to pour through the valves of the cylinder into the reservoir, and in so doing it causes the wheel to revolve. The amount of the power exerted on the cylinder will depend entirely on the size of the wheel and the valve. The vacuum is created in the machine on exhibition by the application of steam to the air pump, but the inventor expects to apply the rise and fall of the tides to his air pumps, and thus to utilize a natural force in producing his power. By means of floats, to which a system of cog-wheels is to be attached, Mr. Sheffield claims that he can make a series of vacuums in reservoirs at distant points from the rivers, and that the power thus stored can be used at will. In the exhibition of the motor he uses steam to produce the vacuum, and the machine itself works to a charm. If the tides can really be used to supply the force by which vacuums can be created in reservoirs situated in different parts of the City, the new invention will prove a valuable one to its originator.

To shorten the waterway between the West and the Atlantic, two new canals are proposed in Congress. The first contemplates a connection between the Mississippi River and Lake Michigan, by a canal sixty-five miles long, between Rock Island and Hennepin on the Illinois River, there to connect with the existing Illinois and Michigan Canal, to Chicago. The cost of this canal would be close upon $4,000,000. The second canal is designed to provide a short cut across the State of Michigan, probably from Saugatuck to Detroit, a distance of 178 miles. The proposed course of the canal is along the Kalamazoo River to its head, thence eastward. The number of locks required would be twenty-two. Another line is talked of, running from a point near Chicago through northern Indiana and Ohio to Toledo. The estimated cost of a canal along the first described line is about $5,555,000. To insure an abundant traffic in grain by water eastward, it is further proposed to make the Erie Canal free.

SAFETY switches of the Tracey patent are being put down at the bridge over the Delaware River at Easton, on the line of the Lehigh Valley Railroad.

THE Bethlehem Iron Company have shipped from the Wallbridge Hematite Mine, in Madoc, Canada, from the 1st of March, 1882, to the 1st of August, 1882, 7,837 tons. The total shipment of the same company this season has been about 15,000.

THE Semaphore system of railway signals has been adopted at the Walpole junction of the New York and New England and Old Colony railroads. The system will supersede the ball signals, but all trains make the customary "know-nothing" stop at present.

THE largest locomotive ever built has just been completed at Paterson, and is one of twenty-five ordered by the Central Pacific Railroad Company. Its weight, without the tender, is sixty-two tons. The cylinders are twenty by thirty inches, and there are eight drivers and a four-wheeled truck.

THERE are few people probably aware that the signal tower of the Pennsylvania Railroad, on the Elevated railroad at Seventeenth and Filbert streets, Philadelphia, controls the passage of more trains within a given period than any other in the world. Even the famous railway junctions in and near London cannot equal the daily record of trains, full and empty, that move past and are controlled by the tower that regulates the traffic of the Broad street station. The *Ledger* is informed that about eleven hundred and forty trains pass that point every twenty-four hours, and yet so accurate is the system and so perfect the control exercised that this enormous traffic moves with thorough safety and without delay or stoppage, through the admirable switch and signal system that has been brought to a marvellous degree of perfection in that tower. The great interlocking switch, which puzzles all laymen who try to study its intricacies, so controls the traffic automatically that it is impossible for the men in charge to set the switches or signals erroneously, as they cannot move the levers when out of the necessary combinations for properly shifting the trains. "Thus," adds the *Ledger*, "we have in our own city, in connection with this station, the greatest railway traffic achievement of its kind that has been yet produced. The Pennsylvania Railroad, by concentrating so much of its passenger and freight traffic at this admirably located station, has found an arrangement of this kind necessary, and the interlocking switch and signal system, as there exhibited, is the result of the diligent labor during many months of the best railway minds of Europe and America. The passenger, as he glides into or out of the station, little realizes the intricate yet admirable system of switches, signals, levers and interlocking bars that are brought into requisition to direct the train aright and secure its swift and safe passage along the Elevated road. It is so constructed as to meet the requirements of the rapidly developing traffic of this great railway, and is, in fact, one of the leading railway curiosities our city has to exhibit."

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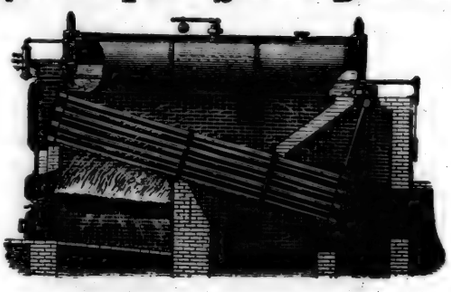
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Mexican Railroads.

CONTRARY to the generally received opinion that the people of Mexico are contributing but little financially toward the construction of railroads within their own borders, a Mexican paper says that of the twenty-seven lines of railroad now under construction there, thirteen are being built by Mexican capital furnished by Mexican companies organized in Mexico, and then adds:—

"While ready to confess that this spirit of enterprise, this desire to invest our native capital in railroads, is the result of seeing American enterprise and capital coming into our Republic, we claim that it is a notable sign of Mexico's progress, an unequivocal proof of the stability of our Government, and a fact that marks an era in our history. And while we look back upon our past as showing the ordeal through which Mexico has had to pass to regenerate herself from the many evils bequeathed to her by the old Colonial régime, we cannot refrain from here paying our tribute of gratitude to General Porfirio Diaz as the President who gave this new life to the Republic, and to General Gonzalez as the President who has so ably continued the noble work begun by his predecessor and comrade. Mexico is bound to have railroads, and railroads that will pay the shareholders handsome returns, if properly managed in the operation. We would make only one suggestion—and that is, that the companies should employ all the Mexicans they can."

Tehuantepec Railroad.

MR. EDWARD LEARNED, President of the Tehuantepec Railroad Company, has issued a circular in reference to the recent forfeiture of its charter, in which he says: "This forfeiture has been declared, regardless of the fact that an expenditure of $50,000 only is required to complete the unfinished section; that at the time of forfeiture there was due from the Government the sum of $75,000 for subsidy earned on an accepted section; that $100,000 of the guarantee deposit was held by the Government depository in Mexico. The expenditure for rails, ties and materials delivered, and for work done on other sections of the road, has been vastly in excess of the above estimated $50,000; that the outfit, supplies, material and work furnished by the company represented expenditures and liabilities of nearly $3,000,000; that the work, etc., is estimated to be equal to nearly one-third of the cost of the entire road; that the several extensions of time which have been granted by the Government were results of uncontrollable causes *(fuerza mayor)* provided for in the grant—hence not acts of favor, but of right. The Government having suffered no damage, the company claims that a forfeiture which imperils millions of foreign capital from a merely technical cause is unjust, illegal and without precedent or parallel where commercial treaties are recognized; that the default now alleged is largely attributable to adverse legislation—in violation of our concession and injurious to our financial negotiations. In case negotiations now pending for an amicable arrangement shall fail, the company is entitled to appeal to the tribunals of Mexico. The bondholders, whose rights are secured by a mortgage which covers all the property of the company—including the location of route—and which has been formally authorized, approved and registered by the Government, may invoke similar or other proper authorities to sustain their rights. If the forfeiture is insisted on and sustained by tribunals, the grant provides that the Government or new grantee 'shall be obliged to take the whole property, making such payment therefor as shall for that purpose be approved by experts appointed by both parties, and in case of disagreement, by a third expert selected by the other two. From the valuation placed upon the road shall be deducted the amount which may have been received by the company as a subsidy, and the balance shall be paid in cash or at a term of twenty-five years with interest at 10 per cent per annum.'"

The Power of the Penny.

THE importance in which that small coin, the penny, is held by a very large class of pleasure seekers in this community has recently been illustrated by the experiences of the Elevated railway at Coney Island, between Brighton and West Brighton. The road runs parallel with and directly behind the Concourse, the Park road between the same places. Its construction requires that passengers should climb two steep flights of stairs—a not attractive condition on a hot summer day. The wagons which convey passengers over the Concourse are low and very easy of access, and the drive, when the Concourse was kept in order, as it is not now, was a most pleasant one of nearly a mile. The fare both by the Elevated road and the Park wagons over the Concourse was five cents each way, apparently cheap enough. As long as the charges were the same by both lines the wagons did all the business, the road averaging not more than two or three passengers per trip, although the cars would comfortably seat 100 persons. The loss per day was at least $50 to the Elevated road. But about a week ago some wise head in the railway management reduced the fare to three cents per trip and five cents for excursion tickets. thus reducing the cost one-half and underbidding the Park wagons. The latter did not reduce rates. The consequence has been that the railway has been crowded at every trip in the busy part of the day. There is standing room only to be had as a rule, and many passengers are usually left on the platform to await the next car. The number of trips has been increased, and unexpectedly the road pays a profit at the reduced rate, the cars frequently carrying three and four dollars a trip, where they formerly had only ten or fifteen cents on board. On the other hand the Park wagon companies have had to employ runners at each end of the route to solicit passengers and to decry the railway which has so suddenly developed a damaging opposition.

WHEN the tracks of the Pennsylvania Railroad are straightened near Lancaster this fall, 3,500 feet will be saved in distance and 358 degrees of curvature.

Imports of Dry Goods at New York.

THE Imports of Foreign Dry Goods at New York for the month of August, were :—

ENTERED FOR CONSUMPTION.

	1880.	1881.	1882.
Manufs. of wool....	$3,071,107	$3,299,191	$3,501,727
Manufs. of cotton...	2,096,654	2,365,326	2,152,959
Manufs. of silk.....	4,033,289	3,987,174	4,058,739
Manufs. flax.....	995,888	1,459,694	1,326,232
Miscell. dry goods...	908,679	1,020,631	915,547
Total ent. for consumption.....	$11,165,617	$12,132,016	$12,555,204

WITHDRAWN FROM WAREHOUSE.

	1880.	1881.	1882.
Manufs. of wool.....	$1,414,586	$1,270,155	$1,228,404
Manufs. of cotton...	629,029	407,231	409,849
Manufs. of silk.....	994,025	709,256	888,576
Manufs. of flax.....	550,136	450,115	441,599
Miscell. dry goods..	187,774	210,034	160,843
Total withdr'n from warehouse.....	$3,766,550	$3,118,791	$3,129,271
Add ent. for con....	11,165,617	12,132,016	12,555,204
Total thrown on the market.....	$14,932,167	$15,250,807	$15,684,475

ENTERED FOR WAREHOUSING.

	1880.	1881.	1882.
Manufs. of wool....	$1,624,072	$1,055,504	$1,295,272
Manufs. of cotton..	402,023	312,281	400,550
Manufs. of silk.....	947,104	501,035	709,054
Manufs. of flax....	641,838	411,254	423,109
Mis. dry goods.....	397,227	220,485	258,347
Total ent. for warehouse	$4,102,324	$2,500,558	$3,086,992
Add entered for consumption	11,165,617	12,142,016	12,555,204
Total ent. at port....	$15,277,941	$14,632,574	$15,642,196

The Imports of Foreign Dry Goods at New York for eight months from January 1, were:—

ENTERED FOR CONSUMPTION.

	1880.	1881.	1882.
Manufs. of wool...	$14,716,888	$12,526,944	$16,176,739
Manufs. of cotton	16,652,986	15,485,039	17,485,401
Manufs. of silk....	21,572,072	19,242,739	25,783,835
Manufs of flax....	10,000,396	8,375,324	9,812,087
Mis. dry goods....	6,066,750	5,026,427	6,316,888
Total entered for consumption ...	$69,009,092	$61,257,073	$75,575,550

WITHDRAWN FROM WAREHOUSE.

	1880.	1881.	1882.
Manufs. of wool...	$4,926,896	$5,787,902	$5,065,181
Manufs. of cotton.	2,844,078	3,493,090	2,715,076
Manufs. of silk....	3,886,365	3,752,150	4,146,609
Manufs. of flax...	2,964,596	3,671,641	2,817,791
Mis. dry goods....	1,262,728	1,647,482	1,604,778
Total withdrawn from warehouse.	$15,884,663	$18,352,265	$16,349,435
Add entered for consumption ...	69,009,092	61,257,073	75,575,550
Total thrown on the market.....	$84,893,755	$79,609,338	$91,924,985

ENTERED FOR WAREHOUSING.

	1880.	1881.	1882.
Manufs. of wool...	$7,555,688	$4,480,069	$5,981,731
Manufs. of cotton.	3,386,556	2,889,531	3,037,010
Manufs. of silk....	4,494,372	3,327,728	4,233,931
Manufs. of flax....	4,569,077	2,911,563	2,875,044
Mis. dry goods....	1,673,098	1,790,047	1,714,399
Total entered for warehouse	$21,679,391	$15,764,937	$17,842,615
Add entered for consumption ...	69,009,092	61,257,073	75,575,650
Total ent. at port.	$90,688,483	$77,022,010	$93,418,165

IN the act of making appropriations for sundry civil expenses of the Government for the fiscal year ending June 30, 1883, is embodied a clause which reads as follows : "That all parties owning, occupying or operating bridges over any navigable river shall maintain at their own expense, from sunset to sunrise, throughout the year, such lights on their bridges as may be required by the Lighthouse Board for the security of navigation; and, in addition thereto, all persons owning, occupying or operating any bridge over any navigable river shall in any event maintain all lights on their bridge that may be necessary for the security of navigation."

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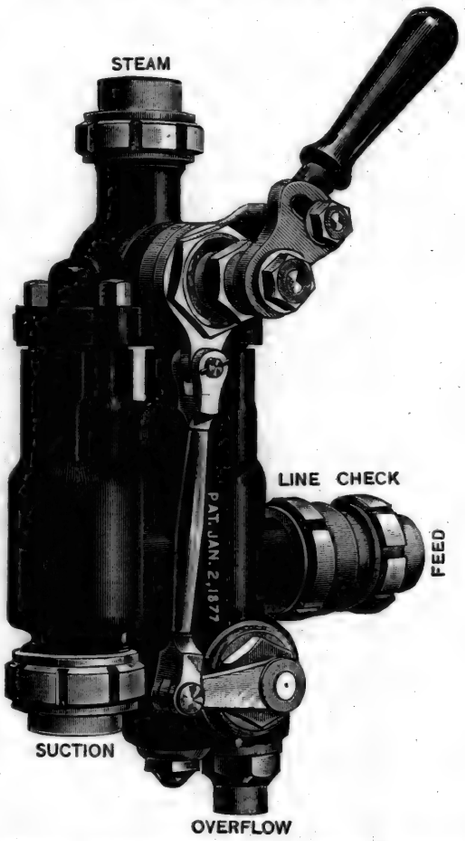
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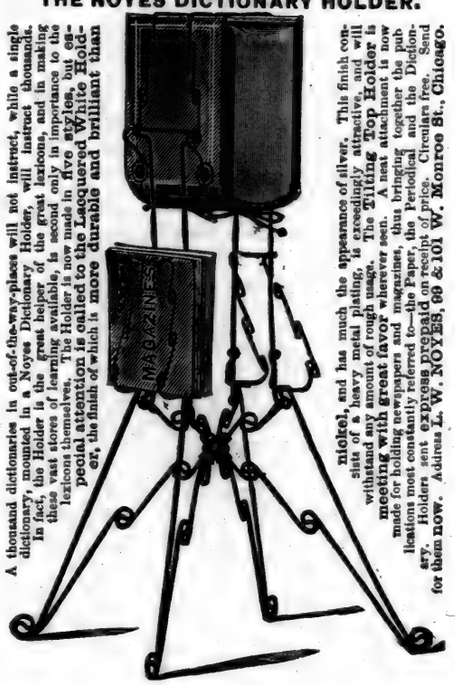
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Statement of the Public Debt of the United States, September 1, 1882.

DEBT BEARING INTEREST.

	Amount Outstanding.	Accrued Interest.
6 per cent loan 1863-'81 continued at 3½ per ct	$32,755,400 00	$191,073 17
5 per cent funded loan of 1881, continued at 3¼ per cent	491,496,900 00	1,171,032 62
4½ per cent funded loan of 1891	250,000,000 00	2,812,500 00
4 per cent funded loan of 1907	738,909,350 00	4,926,062 33
4 per cent refunding certificates	442,100 00	2,947 33
3 per cent navy pension fund	14,000,000 00	70,000 00
Aggregate of debt bearing interest	$1,437,603,750 00	$9,173,615 45
Interest due and unpaid		1,926,080 07

DEBT ON WHICH INTEREST HAS CEASED SINCE MATURITY.

	Amount Outstanding.	Interest due and unpaid.
4 to 6 per cent. old debt, 1837.	$57,665 00	$64,174 81
5 per cent. Mexican indemnity stock, 1846-'52	1,104 91	85 74
6 per cent. bonds, 1847-'67	1,250 00	22 00
6 per cent. bounty land scrip, 1847-'49	3,275 00	213 06
5 per cent. Texas indemnity stock, 1850-'64	20,000 00	2,945 00
5 per cent. bonds, of 1858-'74	7,000 00	875 00
5 per cent. bonds, of 1860-'71	10,000 00	600 00
6 per cent. 5-20 bonds, 1862, called	367,000 00	7,740 41
6 per cent. 5-20 bonds, June 1864, called	57,400 00	1,051 87
6 per cent, 5-20 bonds, 1865, called	70,550 00	18,521 11
5 per cent. 10-40 bonds, 1864, called	326,850 00	65,329 92
6 per cent. Consol. bonds, 1865, called	370,200 00	12,198 41
6 per cent. Consol. bonds, 1867, called	874,000 00	111,618 71
6 per cent. Consol. bonds, 1868, called	263,200 00	21,086 51
6 per cent. loan, Feb. 8, 1861, matured Dec. 31, 1880	77,000 00	4,830 00
5 per cent. funded loan 1881, called	955,650 00	12,086 64
Oregon War Debt, March 2, 1861, matured July 1, 1881	8,100 00	1,579 50
6 per cent loan of July 17 and Aug. 5, 1861, matured June 30, 1881	573,550 00	15,184 50
6 per cent loan of July 17 and Aug. 5, 1861, continued at 3½ per cent, matured Dec. 24, 1881, called	5,456,800 00	73,462 83
6 per cent. loan of March 3, 1863, matured June 30, 1881	164,200 00	5,724 00
6 per cent loan of March 3, 1863, continued at 3½ per cent, matured August 1, 1882, called	2,252,450 00	6,442 08
1-10 to 6 per cent. Treasury notes, prior to 1846	82,525 35	2,668 06
1-10 to 6 per cent. Treasury notes, 1846	5,900 00	200 60
6 per ct. Treasury notes, 1847	950 00	57 00
3 to 6 per cent. Treasury notes, 1857	1,700 00	99 00
6 per ct. Treasury notes, 1861	3,000 00	364 50
7 3-10 per cent. 3 years' Treasury notes, 1861	16,300 00	1,104 43
5 per cent. 1 year notes, 1863	41,935 00	2,098 85
5 per cent. 2 year notes, 1863	32,700 00	1,622 30
6 per ct. compound interest notes, 1863-64	219,860 00	44,920 47
7 3-10 per cent. 3 years' Treasury notes, 1864-65	138,850 00	20,422 62
6 per cent. certificates of indebtedness, 1862-63	4,000 00	253 48
4 to 6 per cent. temporary loan, 1864	2,960 00	244 19
3 per cent. certificates, called	5,000 00	394 31
Aggregate of debt on which interest has ceased since maturity	$12,472,725 26	$500,251 91

DEBT BEARING NO INTEREST.

Demand notes, 1861-62	$59,595 00	
Legal tender notes, 1862-63	346,681,016 00	
Certificates of Deposit	12,000,000 00	
Coin certificates, 1863	4,992,040 00	
Silver certificates, 1878	69,440,210 00	
Unclaimed interest		5,339 96
Fractional currency, 1862, 1863 and 1864 $15,408,000 77		
Less amount estimated as lost or destroyed, act of June, 21, 1879 8,375,934 00		
	7,032,066 77	
Aggregate of debt bearing no interest	$440,204,927 77	$5,339 96

RECAPITULATION.

	Amount Outstanding.	Interest.
Debt bearing interest in coin, viz:		
Bonds at 6 per cent., continued at 3¼ per cent.	$32,755,400 00	
Bonds at 5 per cent, continued at 3¼ per cent.	401,496,900 00	
Bonds at 4½ per cent.	250,000,000 00	
Bonds at 4 per cent.	438,909,350 00	
Refunding certificates	442,100 00	
Navy pension fund, 3 p.c	14,000,000 00	
	$1,437,603,750 00	$11,099,695 52
Debt on which interest has ceased since maturity	12,472,725 26	500,251 91
Debt bearing no int., viz:		
Old demand and legal-tender notes	$346,740,611 00	
Certificates of deposit	12,000,000 00	
Coin & silver certificates	74,432,250 00	
Fractional currency	7,032,066 77	
	$440,204,927 77	
Unclaimed interest		5,339 96
	$1,890,281,403 03	$11,605,287 39
Total debt, principal and interest to date, including interest due and unpaid	$1,901,886,690 42	

AMOUNT IN TREASURY.

Interest due and unpaid	$1,926,080 07
Debt on which interest has ceased	12,472,725 26
Interest thereon	500,251 91
Gold and silver certificates	74,432,250 00
U. S. notes held for redemption of certificates of deposit	12,000,000 00
Cash balance available Sept. 1, 1882	141,629,211 22
	$242,960,518 46
Debt, less am't in Treas'y Sept. 1, 1882	$1,658,926,171 96
Debt, less am't in Treasury Aug. 1, 1882	1,675,054,433 20
Decrease of debt during the month	$16,128,261 24
Decrease of debt since June 30, 1882	$29,988,288 76

BONDS ISSUED TO THE PACIFIC RAILROAD COMPANIES, INTEREST PAYABLE IN LAWFUL MONEY.

	Amount Outstanding.	Accrued Interest not paid.
Central Pacific bonds, 1862-64	$25,885,120 00	$258,851 20
Kansas Pacific bonds, 1862-64	6,303,000 00	63,030 00
Union Pacific bonds, 1862-64	27,236,512 00	272,365 12
Cent. Branch Union Pacific bonds, 1862-64	1,600,000 00	16,000 00
West'n Pacific Bonds, 1862-64	1,970,560 00	19,705 60
Sioux City & Pacific bonds, 1862-64	1,628,320 00	16,283 20
Totals	$64,623,512 00	$646,235 12

Interest paid by the United States, $55,344,682.74; interest repaid by transportation of mails, &c., $15,221,035.61; interest repaid by cash payments: 5 per cent net earnings, $655,198.87; balance of interest paid by United States, $39,468,448.26.

The foregoing is a correct statement of the public debt, as appears from the books and Treasurer's returns in the Department at the close of business, August 31, 1882.

CHARLES J. FOLGER,
Secretary of the Treasury.

Iron and Steel Industries of Pittsburgh.

MR. G. S. FOLLANSBEE, of Pittsburgh, Penn., has been collecting statistics relative to the commerce and industries of that city. Referring to the three important branches—iron, glass and steel—he says that they furnish employment to 34,702 hands, that the cash capital invested amounts to $40,065,000, and the value of the products for 1881 was $64,220,269, and then adds:—

"The first blast furnace erected in Pittsburgh was in 1792, and was operated only about two years. It was not until 1859 that the second blast furnace, and the first of the existing furnaces in Pittsburgh, was built. The pig iron industry of Pittsburgh is, therefore, less than twenty-three years old. There are now sixteen blast furnaces in Pittsburgh and immediate vicinity, and several more in progress or about ready to work. The extent of the business may be judged by the supply and receipts of ore. The increase is astonishing, being 44,900 tons in 1870 to 346,733 tons in 1880. The ore is brought to Pittsburgh from Marquette and Houghton, Mich., on Lake Superior, Wisconsin, Iron Mountain, Missouri, Canada, the interior counties of Pennsylvania and eastern Virginia, and the northern counties of New Jersey. Much of it comes from Blair, Lawrence and Butler counties, Pa. For four years past a large supply has been imported from Spain and Algiers, via Baltimore and Philadelphia.

"The manufacture of steel in Pittsburgh has increased in volume so rapidly the past quarter of a century that it may almost be considered a new industry. In 1850 there were but thirteen steel works in the whole of Pennsylvania, with an annnal product of 6,078 tons, of which six works, with a capacity of 3,278 tons, or nearly half the entire total, were in Pittsburgh. There are now in Allegheny county seventeen steel manufactories, employing 7,060 hands. The value of the product for 1881 was $18,378,837. The entire capital invested in the industry is $10,170,000. The amount of product last year was 139,073 tons of steel rails; steel in other forms 72,344 tons. Total, 211,417 tons of steel."

Orne's Patent Car Axle.

THIS axle, which has recently been patented, is intended to overcome the resistance of car wheels by their circumferential slipping in going around curves of railroads. It is made of few pieces, and it combines *strength*, *simplicity* and *reasonable* cost.

It is composed of the axle—which is made in three sections—it is surrounded by the hub—which is made in two horizontal half-round pieces; when these two halves are together, inclosing the axle, they are pressed by power into the wheel, which is bored correspondingly large to receive it; the end sections are steel, and revolve only with the wheel and hub; the middle section is wrought-iron pipe four inches outside diameter and one inch thick in the walls; the interior of the pipe is used as a reservoir for lubricant, which is fed to inside bearing of wheels; this middle section keeps the wheel to gauge, and a brass washer between middle and end sections takes up any wear at this place. This arrangement allows each wheel to move independently when rounding curves, and when running on a straight line both wheels and axle revolve together, which reduces the wear to a minimum.

A number of comparative tests have been made between axles with independent wheels and the rigid axles and wheels now in general use, to ascertain the difference in draft-power required to pull them; and it has been found that cars on independent wheels require from fifteen to thirty per cent less power to draw them around curves, than cars on rigid axles and wheels. Authentic information about tests can be given.

Drawings will be sent to railroads that may wish to see them.

Very reasonable terms will be made to the first railroad companies that adopt and use this patent. Edward B. Orne, 3935 Locust street, Philadelphia, Pa., is the patentee.

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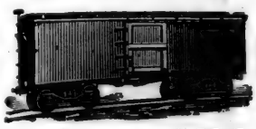
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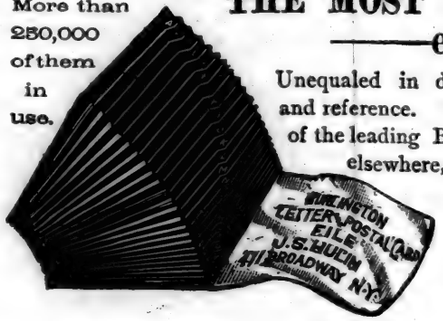
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Copper and Iron Mining in Michigan.

An interesting and valuable work on the Resources of Michigan has just been compiled by Mr. Frederick Morley, under the auspices of that State, from which we make the following extracts :—

COPPER MINING.

It is now forty years since Dr. Douglass Houghton, whose name is lastingly and most honorably identified with the history of northwestern development, presented to the Legislature his report upon the geology of the upper peninsula, the product of ten years' persistent and thoroughly scientific labor in an unkroken wilderness. It first asserted that the mineral wealth of the southern shore of Lake Superior offered a profitable field to enterprise and capital, and placed on record prophecies as to copper since amply fulfilled. Numerous exploring parties were soon busy on the Mineral Range, and in 1846 the fissure vein of the Cliff mine, near Eagle River, was yielding a remunerative product, the regularity of its dividends for many years proving a source of constant encouragement to struggling enterprises along the peninsula. Two years later the Minnesota commenced work, back of Ontonagon, upon the enormous masses of copper, one of them about five hundred tons in weight, which made it the bonanza mine of the day. Exploration was eventually pushed to Portage Lake, and the district to which it gives its name is now the busiest center of the copper mining interest as well as the most prosperous. The lake forms a spacious and accessible harbor, open by costly waterways to the largest vessels navigating the lakes; upon it lie the flourishing towns of Houghton and Hancock. Both shores of the Keweenaw peninsula are connected by this harbor and its inlets, and supplies for the mines as well as their products find easy transportation through the facilities thus afforded.

RICHEST COPPER MINE IN THE WORLD.

About 1865 the Calumet conglomerate was discovered twelve miles from Portage Lake, and the annals of mining enterprise contain no parallel to the history of the consolidated company now known as the Calumet and Hecla. With a total assessment for all purposes upon its shareholders of less than $1,000,000, it has built up a vast industry employing over 2,000 men, supporting two flourishing villages with a population of more than 5,000, has expended a vast amount of money in stamp-mills, machinery, and permanent improvements, and possesses a dividend account which exceeds the magnificent total of $20,000,000. More than one-third of the entire copper product of the upper peninsula has been taken from its levels. No mine, of any description, has ever returned such large *pro rata* dividends to its shareholders. The great Burra-Burra mine of South Australia did not yield during the twenty-one years of its profitable existence, as much pure copper as was taken from the Calumet and Hecla in 1880 and 1881. It pays quarterly dividends of $5 per share on 100,000 shares with great regularity, and its stock, the par value of which is $25, was quoted on February 1, 1882, at $230. Its total product of refined copper in 1881 was about 16,000 tons, or one-eighth of the estimated annual production of copper in the world.

PROFITABLE MINING.

Between the opening of the first mine and the close of 1881 the Lake Superior copper districts produced 330,000 tons of refined copper, representing a value in market of not less than $150,000,000. The total output of 1881 was about 38,000 tons, taken from 23 mines and valued at $10,000,000.

MICHIGAN IRON ORES.

The discovery of the valuable iron ore deposits was not due to the narratives of early travelers nor to geological exploration, but was the unforeseen result of the eager search for copper which followed Dr. Houghton's report of 1841. That paper merely said : "Although hematite ore is abundantly disseminated through all the rocks of the metamorphic group, it does not appear in sufficient quantity at any one point that has been examined to be of practical importance." In 1844 the attention of the United States surveyors who were at work about the present site of the city of Negaunee was drawn by the unusual variations of the needles of their solar compasses to outcroppings of magnetic iron ore. In the next year the agents of a copper mining company which had been formed at Jackson, explored the same region, and, becoming convinced that iron ore of merchantable quality was present in large quantity, secured what is now known as "the Jackson location." The first ore, three hundred pounds, was taken from this mine in 1846, and was smelted in the following winter in an old forge on Cucush prairie. The first iron made upon Lake Superior was in 1848, near Carp River. In 1849 the first opening was made at the location of the Cleveland mine, near Ishpeming, and in 1850 a few tons of ore were taken to New Castle, Pa., and made into bloom and bar iron, the quality proving excellent. In 1852 seventy tons of the Jackson ore were manufactured into pig iron at Sharon, Pa., and the attention of iron masters in Pennsylvania and Ohio was then more generally drawn to this new field of supply.

THE SAULT STE. MARIE CANAL.

It was in 1852 also that Congress granted to Michigan 750,000 acres of land to aid in the construction of a canal around the rapids of St. Mary's River. This was accepted in the following February, and a contract was promptly executed with an association of eastern capitalists, who pushed on their task with vigor in the face of many obstacles. As a result the State, in 1855, threw open to lake commerce the Sault Ste. Marie Ship Canal, a magnificent enterprise, representing an original outlay of $1,000,000. It has been of vast benefit in developing the great industries of the upper peninsula. Within the last ten years it has been materially enlarged by the general Government, to which it has been ceded by the State on condition that it shall be kept as a free national highway. With the opening of this canal commenced a new era in the mining history of Lake Superior. It was now possible during the season of navigation to readily reach a base of supplies and a market, and the growth of the country became rapid and constant.

VIGOROUS MINING.

In 1855 the shipments of ore began, and the unprofitable mine bloomaries were abandoned. In 1858 the first furnace (the Pioneer) commenced operations. In 1860 the entire ore product of the district exceeded 100,000 tons, and by this time all doubts as to the value and permanence of its mining interest had disappeared. New enterprises followed in quick succession, cities and villages sprang up and thrived, a railroad connecting the mines with lake ports, and then with the great northwestern lines, was built, and the work of exploration was vigorously pushed in every direction. Even the prostration of the iron industry of the United States by the panic of 1873 only retarded this development. In the calendar year of 1881 the producing iron mines of the upper peninsula were fifty-six in number and their yield was estimated by the *Marquette Mining Journal* to be 2,321,315 tons of ore. The same authority placed the value of this product when marketed (including rail and lake freights to Cleveland and other distributing points) at $18,835,000. The value, when placed in market, of the aggregate product of the Lake Superior iron districts between the date of the Jackson discovery and the close of 1881 the *Journal* estimated at $138,500,000.

The sixty locomotives building at the Baldwin works for the Pennsylvania Railroad Company are to be of the Modoc pattern and finished at the rate of two a week.

A. A. Talmage, General Manager of the Missouri Pacific, the Missouri, Kansas and Texas, and the Central Branch of the Missouri Pacific, was recently in this city on business connected with these roads, and during an interview is reported to have said that he had been over them all within the past few weeks. "Our capacity for doing business," he said, "has been largely increased, and we are well prepared to handle without delay or difficulty all the traffic that will come to us. We have added to our rolling-stock within the past two years 4,000 freight cars and about 100 locomotives of the newest and most improved patterns, besides increasing our terminal facilities at St. Louis, Kansas City and other important stations. The new elevator at Carondelet, with a capacity of one and a half millions of bushels, is ready for business and will assist us very much in taking care of grain and permit us to unload and return cars more rapidly. Steel rails have been laid and improvements made as rapidly as possible. On the Missouri, Kansas and Texas one hundred miles of steel rails were laid last year, and eighty have been already put down this year. All extensions in Texas have been laid with steel rails and built in the best possible manner. Little is left to be desired as to the material condition of our roads, and the Missouri Pacific is the best equipped line west of the Mississippi River. As to the barge line down the Mississippi, you can say that it will do a heavy business this season and will help us in moving our freight, since it furnishes the cheapest and best outlet for grain west of the river. There are about 100 barges and twelve towboats."

American Railroad Journal.

ESTABLISHED 1831.

Steam Navigation, Commerce, Finance, Banking, Machinery, Mining, Manufactures.

SECOND QUARTO SERIES.—VOL. XXXVIII., No. 36.] NEW YORK, SEPTEMBER 16, 1882. [WHOLE No. 2,421.—VOL. L.

ORGANIZATION.

THE directors of the Pullman Palace Car Company, elected on the 7th inst., are: Geo. M. Pullman, Chas. G. Hammond, Jno. Crerar, Marshall Field, J. W. Doane, Norman Williams and Henry C. Hulbert.

THE stockholders of the North Beach and Mission Railroad Company, at their annual meeting in San Francisco, Cal., on the 29th ult., elected the following directors: J. C. Wilmerding, J. T. Boyd, Jerome Sinclair, William Alvord, H. D. Cogswell, M. S. Kelly, Carl Appel and Albert Meyer.

THE directors of the Massawippi Valley Railroad Company elected at a meeting of the stockholders held at Rock Island, P. Q., on the 6th inst., are: Emmons Raymond, R. N. Hall, W. K. Blodgett, S. Foster, F. A. Peters, W. White, C. W. Pierce, W. S. Foster, C. H. Kathan. R. N. Hall was elected president; S. Foster, vice-president; W. S. Foster, secretary and treasurer, and E. Cleveland, clerk.

AT the annual meeting of the stockholders of the Connecticut and Passumpsic Rivers Railroad Company, held at the Memphremagog House, Newport, Vt., on the 7th inst., the following directors were elected: Emmons Raymond, W. K. Blodgett, Amos Barnes, Alden Speare, Stephen Foster, F. A. Peters, S. S. Thompson, Charles W. Pierce and T. P. Redfield. At a subsequent meeting of the directors Emmons Raymond was chosen president, W. K. Blodgett, vice-president; H. E. Folsom, superintendent.

AT a special meeting of the board of directors of the Hannibal and St. Joseph Railroad Company, held in this city on the 12th inst., Jay Gould, Russell Sage, Sidney Dillon and Frederick L. Ames, of Boston, were elected directors in place of Horace Porter, John Bloodgood, Austin G. Gorham and John R. Duff, resigned. These changes are in accordance with the passage of the control of the Hannibal and St. Joseph Railroad into the hands of Mr. Gould and his friends through the recent sale of Mr. Duff's common stock to them.

AT a meeting of the stockholders of the Connecticut Valley Railroad Company, held at Hartford, Conn., on the 12th inst., the following board of directors was elected: George H. Watrous and E. H. Trowbridge of New Haven; Henry C. Robinson and C. M. Pond, of Hartford; and William D. Bishop and Nathaniel Wheeler, of Bridgeport—all directors of the New York, New Haven and Hartford Railroad Company, to which the road has been transferred; and Samuel Babcock, of Middletown; D. C. Spencer, of Saybrook; and R. D. Hubbard, of Hartford, who were of the old board of directors of the Connecticut Valley Railroad.

AT the annual meeting of the stockholders of the Texas and Pacific Railway Company, held in this city on the 12th inst., the following gentlemen were elected directors for the ensuing year: Jay Gould, W. T. Walters, Russell Sage, James P. Scott, W. C. Hall, T. S. Bond, Charles O. Baird, Fred. L. Ames, J. C. Brown, H. M. Hoxie, R. S. Hays, T. T. Eckert, A. L. Hopkins, E. H. Perkins, Jr., E. B. Wheelock, D. Tilsenheld and George J. Gould. The directors then elected the following officers: President, Jay Gould; first vice-president, R. S. Hays; second vice-president, John C. Brown; third vice-president, H. M. Hoxie; secretary and treasurer, C. E. Satterlee.

CONSTRUCTION.

A NEW railroad is proposed in Ohio to run from Norwalk through Milan, connecting with Sandusky.

SURVEYS are in progress for the proposed extension of the Delaware and Hudson Railroad from Honesdale to Rondout.

THE Montreal, Portland and Boston Railway is now completed from West Farnham, Que., to East Franklin, Vt., and will soon be completed to Sheldon.

THE Genesee Valley Canal Railroad (Buffalo, New York and Philadelphia) will be completed on the 16th inst., when the directors will make an inspection trip over it.

THE Pennsylvania Railroad Company have completed the survey of one route for the proposed new road to Phœnixville and Reading. Three routes will be surveyed.

THE line of the New York, Lackawanna and Western Railway has been completed to Buffalo, and trains were run over it to that point for the first time on the 11th inst.

A FAVORABLE pass has been discovered for carrying the Canadian Pacific route through the Selkirk range of British Columbia. Millions of dollars, it is said, will be saved by this route.

THE Mexican Transatlantic Steamship Company has signed a contract in London for the construction of six first-class steamers, to be built on the Clyde, and to cost $700,000 each. They are to run between English and Italian ports and Vera Cruz. They will commence running within one year.

ROSEBURG, Oregon, is no longer the terminus of the Oregon and California Railroad. Trains now run through Roseburg to Myrtle Creek. Grading is completed on the extension for eight miles south of Roseburg.

THE officers of the Indiana, Bloomington and Western Railway have contracted with the Massillon Bridge Company for the construction of a composition bridge 400 feet long, over the Scioto River at Columbus.

ANOTHER cargo of steel rails has arrived at Quebec for the Lake St. John Railway, to be laid past St. Raymond, and an order for a bridge to cross the river there has been given to Clark, Reeves & Co., of Philadelphia.

THE New York and New England Railroad Company are constructing 1,600 feet of side track at Parkville, 1,600 feet at Cedar Oak Park, and the same amount at Clayton; also three-quarters of a mile at Plainville and a quarter of a mile at New Britain.

THE Harford (Md.) *Democrat* says it is reported that the managers of the Maryland Central Railroad have contracted for laying the track of the railroad from the Great Gunpowder, a distance of eight miles, the work to be done in seven weeks from date.

THE Coshocton and Straitsville extension of the Connotton Valley Railroad is now completed to the Cleveland, Tuscarawas Valley and Wheeling Railroad crossing, eighteen miles south of Canton. The work will progress southward as fast as money and men will permit.

FORTY prominent citizens of Chicago started from that city on the 11th inst., to examine the Mexican Central Railway at its opening from Paso del Norte (opposite El Paso, Texas), to Chihuahua; among the number were L. Z. Leitar, P. D. Arman, S. A. Kent and W. K. Sullivan.

TRACK on the Buffalo extension of the Buffalo, Pittsburgh and Western Railway has been laid into Buffalo to a connection with the Buffalo, New York and Philadelphia Railroad. The Salamanca division is finished to a point five miles from Salamanca, and the entire road is graded.

THE Utah division of the Denver and Rio Grande Railway was completed on the 9th inst.

to Montrose, on the Uncompahgre River, 252 miles from Denver. The link necessary to connect the Colorado and Utah systems is now reduced to 275 miles, for which distance work will be vigorously prosecuted.

THE Chatham (Canada) *Tribune* says that the Erie and Huron Railway will be completed from Blenheim to Wallaceburg and rolling-stock put upon it by the first of the year, providing a bonus or about $50,000 of $60,000 can be guaranteed by the different municipalities, to be paid at completion of the road."

THE Alexandria (Va,) *Gazette* states that the contract for building the Washington and Western Railroad from its present terminus, Round Hill, to Winchester, will be given out this week. There is, it is said, now no doubt that the road will be pushed ahead as fast as possible to its final terminus, the Ohio River.

IT is said that the Columbus and Eastern Railroad will be put under contract from Columbus to Selby's Pass in a short time. This, the Ohio *State Journal* says, will no doubt prove to be one of the most profitable mineral roads in the country. It will strike the coal fields at a shorter distance from Columbus than any other line.

THE California Southern road has been completed from National City, on San Diego Bay, northward to a connection with the Southern Pacific Railroad at Colton, 129 miles. This gives San Diego a railroad outlet for the first time. The distance by rail from the San Diego Bay terminus to Los Angeles is 187 miles, and to San Francisco 669 miles.

THE Quebec and Ontario Railway is being rapidly pushed onward, and it is confidently expected will be completed by this time next year, or perhaps a little later in that season. It will then be a matter of eight or nine hours between Montreal and Toronto, and the line will be a competitor with the Grand Trunk Railway for business West.

THE first regular track-laying on the new Pemigewasset Valley Railroad began at Plymouth, N. H., on the 11th inst., at the junction with the Boston, Concord and Montreal Railroad. Robert Caldwell, of Sheldon, Vt., is the contractor. The 20 miles to be laid to Woodstock will be finished about November 1. Nearly all the grading, bridges, etc. are now done.

THE first sod of the Selkirk branch of the Canadian Pacific Railway was turned on the 7th inst., at the town of Selkirk. The contractors are John Rowell & Co. The branch is 22 miles long, and has to be ready by the 1st of November for the track-layers. Hopes are entertained that this may yet be the link of opening up a great commercial highway to Europe by the Hudson's Bay route.

THE people of Prince Albert, Manitoba, determined to have a railway, have granted the Qu'Appelle, Saskatchewan Valley and Peace River Railway Company a land bonus, which at the present state of the real estate market is equal to $500,000. Operations are to commence on both ends of the line next spring, when the company will take an engine and rails to Prince Albert by the boats. The company are bound to have the line in running order from Prince Albert to the south branch of the Saskatchewan by the fall of 1883.

THE "Pennsylvania and Western" is to be the name of railroad to be constructed from a junction with the Jersey Shore, Pine Creek and Buffalo Railroad, along Beech Creek, in Clinton county, to Clearfield county, and unite with the Vanderbilt Southwestern Railroad, which has been surveyed in that direction from Pittsburgh. It is understood that the new road will tap valuable coal lands.

THE Pennsylvania Railroad Company has placed under contract a line of road from Frazers to Phœnixville. It runs from Louella station (formerly Wayne) to Conshohocken, and thence by the east side of the Schuykill to Phœnixville via Norristown. This plan, it is said, will take the place of the line from Philadelphia to Norristown via Chestnut Hill; the cost of the tunnel at the latter place and the building of an extensive bridge across the Wissahickon being reasons assigned for the abandonment of this road.

THE grading on the Kansas City, Springfield and Memphis Railroad will be finished in about six weeks as far as Walnut Ridge, Ark., 160 miles from Springfield, and a few miles east of the junction with the St. Louis, Iron Mountain and Southern Railway. Track-laying will recommence at Loveland, the present eastern terminus of the road, forty-four miles from Springfield, when the work will be pushed much more rapidly than during the summer. At the western end of the Springfield division of the road they are relaying portions of the track by substituting steel rails for iron ones. When this work is completed the road will be an all steel one, with, consequently, much easier running. On the Parsons Branch, which runs from Cherokee to Cherryvale, Kan., the track will be changed from narrow to standard gauge. It is thought that Memphis will be reached by June 1.

THE track of the Mexican National Railway reached 150 kilometres from the City of Mexico to the Pacific, by way of Toluca, on the 7th inst. This is the 93d mile-post out from the City of Mexico; and accepted track to this point entitles the company at once to the subventions on all accepted road built up to date, under the main concession. The number of miles built to date under this concession amounts to 270, and the subventions to $2,911,460. The subventions will hereafter be earned and payable as each successive section of 25 kilometres (16¼ miles) is constructed and accepted. The company have completed more than the 400 kilometres stipulated to be built in two years—which term does not expire until Oct. 14th. This fact will be communicated by President Gonzales in his annual message to the Mexican Congress which convenes on the date of this issue. The company has built so far under this concession 502 miles, of which 179 miles are in Texas.

THE Lehigh and Hudson River Railroad, over which a "tour of inspection" was made on the 7th inst., as noted elsewhere in this issue, is the first railroad built through the entire length of the picturesque Kittatinny Valley between the Delaware and Hudson rivers. Leaving Belvidere, on the first-named river, it crosses Warren and Sussex counties of New Jersey, and then Orange county, New York, over the Wallkill Valley line to Newburgh, running parallel to the mountain ranges on either side of it, and following the courses of the Pequest and Wallkill, which rise together in Sussex county and flow in opposite directions to the North and South rivers (as they are laid down on the early maps). The road is remarkable for its directness of alignment and lightness of grade, although the general surface of the valley is highly diversified. Having its terminus on the Hudson River (opposite Fishkill) the southern terminus of the New York and New England Railroad, all northern New England will be furnished with a direct line of transportation for the coal fields of Pennsylvania.

The New Tay Bridge.

PLANS for the new Tay Bridge are on exhibition in Edinburgh for inspection by intending contractors. The new bridge is to be built on the girder principle, four brick arches next the shore on the side, each having a span of 50 feet; the girder work commencing with a span of 118 feet from center to center of the piers, is continued with ten spans of 129 feet and thirteen spans of 145 feet; this reaches the navigable portion of the channel. Here are eleven spans of 245 feet and two spans of 227 feet; the first four of these spans are 77 feet above high water. From this point the bridge falls at a gradient of one in 114, there being one span of 162 feet, ten of 129 feet 6 inches and one of 127 feet 6 inches. The bridge is to be constructed for a double line of rails; foundation will be formed of wrought iron cylinders filled with concrete, with brick work 8 feet above high water mark. Two piers are then formed of wrought iron pillars, braced together, connected with each other near the top; the platform of the bridge is of wrought iron.

Steam Plough.

A TRIAL of the Stephenson Steam Plough was recently had on a farm near Winnipeg, Manitoba, in the presence of a large number of spectators. As described by the *Times* of that city, the plough weighs about seven tons, is worked by two engines of twenty-horse power but geared back so as to exert a force of forty-horse power on the driving-wheels, which are five feet in diameter, have a tire or face of three and a half feet, and are armed with about five hundred short, pyramid-shaped spikes, so as to enable this broad surface to secure a firm grip of the prairie for traction. The guiding wheels, which are placed together in front, are three feet in diameter, with two and a half feet tire. A particular feature of this machine, and which forms part of the patent, is an improved fan (the invention of Mr. Stephenson), which supplies a powerful blast under the fire-box, to enable it to burn grass or straw. During the trial green grass, which had been mown but an hour or two before, burnt with a fierce flame. The machine draws a frame in which are fixed ten ploughs, each of a fourteen and a half inch cut, and can turn over thirty acres a day. The *Times* states that the trial was a complete success.

Journal of Railroad Law.

SUPREME COURT OF PENNSYLVANIA.

THE PHILADELPHIA AND READING R. R. CO. v. TROUTMAN.

Negligence—Railway Company—Foot-path across defendant's track—Contributory negligence.

ERROR to the Court of Common Pleas of Berks county.

Case by Alice Troutman by her next friend, Samuel Shoup, against the Philadelphia and Reading Railroad Company.

The facts were briefly these: Alice Troutman was at the time of the accident a girl twelve and a half years of age. She lived as a hired servant in the family of John Shoup, at Sheridan, north of the railroad, which at that place runs east and west. On the day of the accident she was sent by Mrs. Shoup for some groceries on the other side of the railroad. She did not attempt to cross the railroad at the public crossing. There is a foot-path used by the furnace hands across the railroad, 106 feet from the public crossing. The girl stepped upon the track, about ten feet away from this foot-path. The northernmost track, and the one upon which the girl entered, is known as the Kauffman siding. Between that and the main road is another track. When the girl stepped upon the Kauffman siding, the employés of the company were engaged in running six six-wheeled cars, loaded with stones, into the Kauffman siding. It was done by means of a flying switch. An engine, with the six cars attached, was run along the main track, and at a distance of half a mile to three-quarters the engine was cut loose from the cars. After the engine had passed the switch, 159 feet from the foot-path, the conductor jumped off and turned the switch, and the engine continued on down the main track, and the cars ran down on the Kauffman siding. The girl got on the track of the Kauffman siding while the cars were still on the main track. While the engine was coming along on the main track, she stood on the siding looking at the engine until it stopped at and over the foot-path. She then walked along the siding to go around the engine, and, while so walking, the cars, loaded with stone, came along the Kauffman siding and struck the girl, and ran over her arm, injuring it so severely as to necessitate its amputation.

Verdict for plaintiff for $1150, and judgment thereon.

Defendant submitted, *inter alia*, the following points:—

2. There is no evidence of negligence in this case on the part of the defendant.

Ans. We fail to discover any direct and positive evidence of negligence, except such as may be inferred from all the evidence.

4. The plaintiff in this case was a trespasser, and therefore guilty of contributory negligence, and the verdict must be for the defendant.

Ans. The plaintiff was a trespasser, but if the defendant suffered such repetitions of trespass, which led the child over the path crossing the fact of her being there would negative the liability incurred by the negligence of her fault.

The refusal to affirm these points was, *inter alia*, assigned for error.

Opinion by GORDON, J. April 10, 1882.

Whilst there were many exceptions taken to the charge and ruling of the court below, the substance of them all may be considered in the disposition of the defendants' second and fourth points. These points were: 2. "That there was no evidence of negligence in the case on part of the defendants." 4. "The plaintiff was a trespasser, and therefore guilty of contributory negligence." Both these points were refused. The case turns mainly upon the last recited or fourth point. The place where the accident occurred was not in the open country, but in a small village of about fifty houses. On the north side of the railroad were a furnace and four or five dwellings; on the south, the depot, a hotel, store, &c. At this point, 106 feet from the public road crossing, there was an old and well-used foot-path leading over the railroad, and it was while attempting to cross by this path that the plaintiff, a child of twelve years of age, was injured.

The court below thought that a person using this path to pass over the defendants' tracks could not be regarded as a trespasser. We can discover nothing wrong in this conclusion. If this was a common and well known foot-path, used by the public for many years, it must certainly have been well known to the employés and officers of this company, and if without let or hindrance the use of it was permitted to persons desiring to cross and re-cross the roadway, we cannot see how one thus using it could be treated as a trespasser. Certainly if a private person had so permitted his land to be used, an action of trespass by him against one passing over it, without previous notice or prohibition, would meet with little favor. But we cannot, in this respect, clothe corporations with power superior to those of natural persons. Indeed, if we regard the case of the Pennsylvania Railroad Company v. Lewis as authority, even a trespasser has some rights which a railroad company is bound to respect, *a fortiori* as to a person who is on the roadway by permission. To hold otherwise would be but a poor comment upon our civilization and upon the wisdom of this court.

As to the negligence of the employés having charge of the cars by which the injury complained of was done, there can be, from the evidence, no doubt. A more perfect trap for the destruction of any one, more especially for a child of tender years and weak intellect, could scarcely have been devised. The train designed for the flying switch is cut from the engine some three-quarters of a mile from, and out of sight of, the crossing; the locomotive is run forward and stationed directly across the foot-path; the train comes down the track at a rapid rate, and when within 159 feet of the place where the child stood, by some slight of hand, unknown to persons not skilled in the management of railroads, and without warning of any kind, it is suddenly turned on to the switch. When, in addition to this, we understand that the hands upon and about this train paid no attention whatever to the track upon which it was running, and that the engineer actually saw the child in the act of approaching, and did nothing to warn her of the coming danger, we cannot understand how any one can have the face to say that there was no negligence on part of those having charge of this train, or, indeed, that they were not guilty of very gross negligence. As to the plaintiff's contributory negligence, we can find no evidence of it; certainly not of that conclusive kind which would require the court to take the question from the jury. The plaintiff herself testifies as follows: "When I got to the path I walked down toward the road; when I came to the track in the path, I stopped, then the engine came down; I went a piece down toward the road, and looked up and down the road and saw nothing but the engine; I think I took three steps; I was on the first track and the engine on the third track; when I got to the track or path, the engine was coming down on the third track, about fifty or sixty feet away; then I stood still until the engine stopped; then I walked down the engine about three paces to walk around the engine; I know that the engine stood on the path; but how much of the engine stood on the path I don't know." It is true that John North, an engineer of the company defendant, but not the one having charge of the engine then on duty, says he saw her when she first stepped on the siding, and that she remained upon it two or three minutes before she was struck. But in this there is no material contradiction of her testimony. In events of this kind, time is at best but a mere matter of guess work, and she was as likely to be correct as he. Be this, however, as it may, it is no serious reflection on the prudence of a child of her age, that she waited and watched until the locomotive had stopped, and until, so far as she could see, the track was entirely clear, even though standing upon the siding. To an ordinary observer, not aware that the flying switch movement was about to be executed, her position was one of no danger. North says: "If the conductor had not turned the switch, the girl would not have been hurt." Doubtless he, with all his skill in railway management, did not think she was in danger; otherwise, we can hardly understand why he did not attempt her rescue. Even had she seen the train moving upon the main track, how could she know that it would not continue on that track? How could this child tell that, by a single motion of a lever, the cars would be upon her within a space measured by some ten or fifteen seconds? This would be too much to ask of a grown person, much more of one of such tender years.

The charge of the learned judge of the court below, when considered as a whole, and not dislocated, as we find it in the assignments, is a fair one, and as favorable to the defendants as it had reason to expect; therefore, without further discussion, we refuse to sustain the exceptions to it.

The judgment is affirmed.

Jeff. Snyder and George F. Barr, Esqs., for plaintiff in error.

W. H. Livingood, Esq., for defendants in error.

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RAILROAD ERA IN MEXICO.

IT is only two years since the Republic of Mexico signalized its purpose to make an effort to keep pace with the civilized world, by encouraging a system of steam roads, and to-day she has a thousand miles more of road than then. The only considerable line in that country prior to this new departure was the road from Vera Cruz harbor inland to the Capital, and it was built by English capital at a great outlay. The example of the United States inspired the Governments of Presidents DIAZ and his successor GONZALES, to have some railroads built for military and commercial purposes. The presence of Mr. JAMES SULLIVAN, an American contractor, and J. SYMON, a speculator, was opportune, and they found little difficulty in persuading the authorities, legislative and executive, federal and State, to adopt the plan of granting money subsidies in much the same way as was tried with the original United States Pacific Railroad. Each of these men was given concessions; the latter for a road from the Capital north to El Paso 1,250 miles, where it should connect with the converging roads in the United States, and with branch lines to both the Atlantic and Pacific coasts. This grant was readily transferred to the Boston capitalists holding the line through Kansas and Colorado to El Paso, and it is now known as the Mexican Central. It has completed (including purchases) 260 miles to Leon, at the southern end, and 240 at the northern end, and is ambitious to close the gap of 750 miles by the end of 1883. It receives a subsidy of 15,000 silver dollars per mile or its equivalent in Custom House scrip. According to the announcements of its president it is to cost some $28,000 per mile average—this, however, is in stocks and bonds.

There have been other concessions granted in Mexico, some with subsidy and some without; among the aided lines one to Mr. DE GRESS, from Laredo to the City of Mexico along the Gulf coast, which is reported to have passed into the hands of JAY GOULD. But little progress is making with any of them, that under GEN. GRANT like the rest doing nothing. The principal competitor of the Central line is the Palmer-Sullivan route—now known as the Mexican National—at the head of which is Gen. W. J. PALMER, also of the Denver and Rio Grande, and formerly of the Kansas Pacific road. He is a sanguine, enterprising leader, and has, like the first-mentioned company, commenced at both ends, and has just completed 140 miles to Morelos and Toluca, and expects to complete 60 miles further to Maravatio within the present month of September. At the Rio Grande frontier he has also completed 140 miles to Monterey, and by purchase in part has obtained a gulf terminus at Corpus Christi, Texas, 160 miles east of the Laredo terminus proper. Being a narrow (3 feet) gauge, the subsidy is only $10,000 per mile, but as rails and machinery are admitted duty free this goes far toward paying the whole cost. This system embraces also some branch and side lines to the Pacific and Atlantic coast ports, and covers in all about 1,600 miles.

The National is however the shorter of the two trunk lines connecting Laredo with the Capital, via San Louis Potosi, being about 800 miles; as 340 are built or nearly so, it leaves less than 500 miles gap to be closed. Inasmuch as the subsidy nearly pays for the track, and it is claimed bonds have been negotiated in London sufficient for the equipment, the work is being pressed forward with great vigor at both ends.

It will be interesting to watch the efforts of these two competitors to see which first effects an unbroken line to the Aztec capital; and it is not doubted, apparently, that there will be business enough for both. The Mexican Central labors under the temporary disadvantage that it leads through 500 miles of desert country to El Paso which is not in the direct line to any point where either travel or freights would be likely to go, unless Chicago be so considered. The National, on the other hand, leads tolerably direct to Galveston, New Orleans, and through them to Washington and points north and east.

Should the narrow gauge system establish itself in Mexico, as now appears probable, it must lead (and it is no doubt the design of President PALMER) to its union with the narrow gauge system of Colorado, over which he presides, on the one hand, and eastward with the Paramore system to St. Louis, and the Ballou system reaching thence to Pittsburgh. In this view it leaves a thousand miles more of road in this country for Mr. PALMER to construct in order to connect his two networks. The Rio Grande and Pecos Railroad, extending from Laredo to Santa Fe, is that link, and work has been commenced on it at Laredo. The magnitude of the work or the vast sums of money to be raised are apparently no obstacles to this railroad chieftain, as he is at the same time engaged on a line from Denver to Salt Lake, 500 miles, which must compete sharply with the Union Pacific.

AN examination of the employés of the Pennsylvania Railroad Company for color-blindness is being conducted at Pittsburgh. At last accounts upward of 1,200 persons had been examined, and the percentage of those passing was 19 out of every 20.

Mr. Atkinson's Revelations.

THE address of Mr. Edward Atkinson at the opening of the Institute Fair will well repay careful reading. It would be hard to find an argument which furnished a more complete answer to the mass of vapory and theoretic assertion put forward by interested capitalists on the one hand and by socialistic agitators on the other. Mr. Atkinson bases his reasoning on two substantial foundations, one being that the aggregate production of this country, and, consequently, the net annual increase in wealth, is, per capita, a very small sum; the other, that freedom of individual action and freedom from restrictive and destructive taxation are requisite for the full development of our natural resources and the welfare of the people of this country.

It hardly seems possible, until reduced to an arithmetical statement, that the annual product of this country in every department of industry, does not exceed 50 cents per day for each man, woman and child. But this sum in the aggregate would represent nearly $10,000,000,000, which is a sufficiently high limit at which to put our yearly product. Out of this there is each year consumed in the process of existence not less than $9,000,000,000, and of the remaining $1,000,000,000 half is consumed in the work of maintaining existing capital in a working condition. Thus there is left to add to the wealth of the country about $500,000,000 per annum; that is to say, the country has this amount of additional wealth this year, represented in factories, railroads, improved lands, etc., that it did not have last year. But this sum, if divided per capita among the people of the entire country, would amount to only a little more than $9 per annum. It is upon this slender basis that our increase in wealth is founded, and yet the development of wealth is perhaps greater in this country than in any other in the world.

If we take from the annual aggregate product of the country the expenses of municipal, State and National Governments it is shown that there is left to a family of four persons, which is a fair unit of calculation, $600 as its proportion of the year's supply. The head of a household so constituted whose income exceeds this amount obtains it in consequence of the fact that others receive less than this sum. On the other hand, if an equal distribution were made of each year's productions, the situation of the intelligent laboring men who receive a fair day's pay for a fair day's work would not be much improved. The communistic notion seems to be that, if such a distribution were made, the poorer classes could live as the rich now do, when, as a matter of fact, there would be only a small addition made to the comforts and luxuries of even the poorest. Those who have wealth are but a small fraction of the community, and their possessions would give but a slight return if rigidly divided among the poorer millions. Equally at variance with facts is the notion of the oppressive power of capital. At the labor meeting in New York, a day or two since, resolutions were passed denouncing monopoly. Such denunciations are utterly meaningless when the particular monopoly and the causes of oppression are not given. Now the New York Central Railroad is, in the opinion of a great many, a monopoly under the control of the Vanderbilt family; but Mr. Atkinson points out that by this concentration of wealth the cost of transportation has been cut down more than half in the last fifteen years. Such a decline would be absolutely impossible if this vast railway system were cut up into small sections, each having its separate staff of employés and its distinct plan of equipment. A great capitalist may, at times, misuse his money, but in the main he must use it in legitimate business undertakings, and in so doing must aid in the development of the country, which implies an enlargement of the opportunities offered to all for profitable employment.

It is in what he said in relation to the burdensome effect of oppressive taxation upon the business interests of the country that Mr. Atkinson struck a chord of thought which should awaken inquiry in the minds of many of those who listened to him. From the first to the last of his address not a word is directly said about protection, but the indirect references were unmistakable. He quietly dismissed the theory that high wages would interfere with freedom of trade by showing that, where industries were largely carried on by the use of machinery and skilled labor required, as is generally the case in this country, the rate of wages tended to increase as the cost of production diminished. His reference to the disability incurred by sustaining a large standing army was an easy parallel to the disability which our country labors under by a system of taxation which increases to each wage earner the cost of living, by compelling him to sustain naturally unprofitable business enterprises. Where the margin between prosperity and want is so narrow the laws which take from a poor man a few cents out of each dollar that he uses in the support of his family is severely felt, and in the aggregate forms an enormous sum. He might have said that the tangible monopoly which the laboring classes should seek to overthrow, was that protection which deprived the country, in the form of indirect taxes, of hundreds of millions of dollars each year. If this could be saved the net annual gain of wealth to the country would be doubled, and in this way the work of each wage earner be made easier, and his means for supplying his wants would be increased.—*Boston Herald, Sept.* 9.

Construction of Competing Lines by the Pennsylvania Railroad.

THE Philadelphia *Ledger* says that the Pennsylvania Railroad Company, tired of the course pursued by the Philadelphia and Reading Railroad Company in tapping its territory for local traffic, and at the same time declining to furnish any through traffic to the West except to rival trunk lines, has determined to retaliate by building a new line between Philadelphia and Reading, and competing with the Philadelphia and Reading Railroad for all the local traffic of the Schuylkill Valley. The *Ledger* adds:

"There having been various reports as to the intentions of the Pennsylvania Railroad Company in reference to the proposed competing line to Germantown, Chestnut Hill and Norristown, inquiry in the proper quarter enables us to state that the Pennsylvania Railroad now has under construction a branch line from Frazer's Station (the junction of the West Chester branch with the main line) to Phœnixville, a distance of about twelve miles, which will enable the Pennsylvania Railroad to reach the large furnaces and iron manufacturing establishments at that point, in addition to bringing Phœnixville in direct communication with West Chester, its county town.

"Another branch road will at once be constructed by the Pennsylvania Railroad from a point near Upton, on the main line, 12 miles west of Philadelphia, to Conshohocken, thence along the east bank of the Schuylkill through Norristown to Phœnixville, there connecting with the Frazer branch. The distances by this new branch from Phœnixville, Norristown and Conshohocken to Philadelphia will be as nearly as possible the same as by the Reading Railroad, so that the Pennsylvania Railroad, with its centrally located passenger station and superior freight facilities in Philadelphia, will at once be able to command a large share of the business between this city and the important manufacturing centers in the Schuylkill Valley, and, what is of still more importance, the Pennsylvania Railroad will have direct access for the transportation of coke, coal, iron ores, etc., to the furnaces and mills in the valley of the Schuylkill. The natural result of this points to a still further extension of the line up the Schuylkill Valley at least as far as Reading, to which city, we understand, an engineer corps has been making surveys for some time past, and the extension will undoubtedly be built.

"In addition to these improvements, which, we are informed, are fully determined upon the Pennsylvania Railroad has about decided to construct a branch road from a point on the New York division, near Broad street, to Germantown and Chestnut Hill, which will bring these large and populous districts in connection with their system of roads.

"These movements of the Pennsylvania Railroad would seem to be a direct blow to the interests of the Reading Railroad, but, when reference is made to a railroad map of the State, it will be seen that the Reading Railroad have from time to time extended branches into the local districts of the Pennsylvania Railroad, until they at present reach every principal local center of traffic on the Pennsylvania lines between Philadelphia and Williamsport by as many as eight or nine branch lines, and the Reading Railroad are now engaged in building a line parallel with the Shamokin branch of the Northern Central Railway and the Philadelphia and Erie Railroad for a distance of about 30 miles, whilst the Pennsylvania Railroad have not heretofore had any branch leading into the Schuylkill Valley or the territory occupied by the Reading Railroad local traffic, all of which has been exclusively enjoyed by that company. The very close affiliation of the Reading with the New York Central and other trunk lines has diverted all the traffic of this large manufacturing district destined to western points and to New York by those lines, which was to a large extent previously enjoyed by the Pennsylvania Railroad. These movements will probably have an effect upon the local traffic of the Philadelphia and Reading Railroad, and the policy that company has been pursuing, in affiliating with other trunk lines to the exclusion of the Pennsylvania Railroad, is the cause of the Pennsylvania Railroad taking this course, in order to secure a share of the traffic of the Schuylkill Valley. The new lines are expected to be all finished by next autumn."

SKETCHES OF PROMINENT RAILROAD MEN.

BY "CURTIS."

GEN. JAMES H. WILSON,

PRESIDENT OF THE NEW YORK AND NEW ENGLAND RAILROAD COMPANY.

ONE of our most prominent railroad men, and one whose fame is not confined to railroad circles alone, but who is well-known in the annals of war and the fields of literature, is GEN. JAMES H. WILSON, President of the New York and New England Railroad Company. Born the 2d of September, 1838, in Gallatin county, Illinois, he was appointed to the United States Military Academy at West Point, from the ninth Illinois District, by Judge Marshal and served as a cadet there from July 1, 1855, to July 1, 1860, graduating with honor, and being promoted to Brevet 2d Lieutenant Topographical Engineers at once, finishing school just in time to enter, after a brief respite, the fierce struggle for the preservation of the Union, where he rapidly won his way to position and fame. The first six or eight months after graduating, he was attached to the Department of Oregon, being called from there when the ominous threatening of the war cloud made it necessary to call to the capital the best blood and brain of the Army to guard the nation in its hour of peril. He proceeded at once to recruit a company of engineer soldiers, being busy about that until October, 1861, when he was ordered to the Department of the South, taking an active part in the bombardment and capture of Fort Pulaski, near Savannah, for gallantry at which he was breveted a Major April 11, 1862, or only about six months after he had entered active service.

In October, 1862, he took part in the battle of South Mountain, and shortly afterwards at Antietam. Being placed with the then Major-General Grant, he was with him in his first marches towards Vicksburg; and as Chief Engineer and Inspector-General of the Army of the Tennessee, he undertook to turn Vicksburg by the Yazoo Pass and Moon Lake. His next promotion, a captaincy in the engineer corps, took place May 7, 1863, he still being engaged in the siege of Vicksburg and in eastern Tennessee. In October, 1863, he received his commission as Brigadier-General United States Volunteers, shortly afterwards taking part in the struggle at Missionary Ridge. In November of the same year we find him promoted again, this time to a Brevet Lieutenant-Colonelcy in the regular Army, for gallant and meritorious conduct at the battle of Chattanooga. While in pursuit of the enemy after that engagement, he gained notoriety for engineering skill by superintending the construction of a bridge over the Little Tennessee River in 32 hours, which was made entirely out of dismantled houses. In active service all the time, he was assigned to the command of the 3d cavalry division of the army of the Potomac, and captured Spotsylvania Court House on May 8, 1864, after being only three days previously breveted a Colonel for gallant conduct at the battle of the Wilderness. Here he showed great activity in cutting communication between various points in the South by destroying railroads, probably little thinking at that time that he would one day hold the foremost position on one of the great New England roads, which would grow and extend under his hand, even as these melted away and became useless under his destruction. It falls to the lot of but few soldiers to win promotion as rapidly as did J. H. Wilson, he being on October 5, 1864, breveted a Major-General of Volunteers for gallant and meritorious services during the rebellion.

Having been selected to command and reorganize the cavalry of the armies serving under Gen. Sherman, he took part in the battle of Nashville in December, 1865, where the rebel Gen. Hood made so stubborn a fight, and was brevetted Brigadier-General of the United States Army for gallantry in this battle. On April 2, 1865, he assaulted and captured Selma, Ala., with a large number of prisoners and stores. Again did a just government recognize his daring qualities and good judgment, and on March 13, 1865, he was breveted a Major-General in the United States Army, for gallantry at Selma. The surrender of Montgomery followed soon after this, then the capture of Columbus with a large amount of military supplies, and the capitulation of Macon followed. Thus in a brief campaign of 28 days, he captured 5 fortified cities, 23 stands of colors, 288 guns and 6,820 prisoners, finally capping the climax of his great honors by capturing Jefferson Davis, with a detachment of his forces. The war being ended, on January 8, 1866, he was mustered out of the volunteer service, being appointed July 28, 1866, Lieutenant Colonel of the 35th regular infantry. Soon after this he was assigned to the more peaceful occupation of superintending for the government the improving of the Rock and Illinois rivers, and of the improvement of the Des Moines and Rock Island rapids in the Mississippi River, being engaged in this up to December 31, 1870, at which time he was honorably discharged from the Army of the United States at his own request. About this time Gen. Wilson turned his attention towards railroading, and in 1870 accepted the position of Vice-President of the St. Louis and Southeastern Railroad, which position he held until 1876, when he was appointed Receiver and General Manager of it.

Gen. Wilson is one of those born to lead, and to whom it is natural for men to look up, he being again and again selected for important positions. In 1872, he was appointed Agent of the Commissioners to negotiate in Europe a loan for the Japanese Government. In 1874, he was appointed a member of the board of visitors to the Naval Academy, and was from January to September of 1876, the Chief Engineer of the Metropolitan Elevated Railroad in New York.

The General is of good size and light complexion, with a clear gray eye and a well-shaped head. He wears only a mustache, his manner is energetic and expressive of great determination.

During this time, although holding arduous and responsible positions, he managed to find time to bring to the eyes of the world sundry readable articles in the magazines of the day, and was one of the compilers of Appleton's American Enclycopædia in 1874. He also, shortly after the close of the war, published a life of Gen. Grant, founded on his near acquaintance and intimate association with him before Vicksburg, at Chattanooga, and in the Army of the Potomac.

Gen. Wilson might really be said to have commenced his railroad career with the St. Louis and South Eastern. While he was yet its receiver he accepted the position of Vice-President of the New York and New England Railroad in October, 1879, retaining also his receivership, till an advantageous lease was made of the St. Louis and South Eastern to the Louisville and Nashville. For nearly two years after his taking the vice-presidency of the New York and New England Railroad, under Wm. T. Hart, who was the first president of the corporation, his labors were very arduous, he assuming many of the duties of president and all of those of vice-president and general manager, having the supervision of the whole road, which he retained, after his succession to the presidency in January, 1881—upon the resignation of Mr. Hart—until January 1, 1882, when Mr. S. M. Felton, Jr., was appointed general manager, relieving Gen. Wilson of a portion of his labors. From the time he took the head of this corporation until its affairs were well organized, he exercised a personal supervision of every department. The General is a pusher, as may easily be seen in conversation with him, his restless and determined manner convincing an observer that he is one who could accomplish a great deal. When he first came to the road he went through every department and reorganized it in harmony with his ideas. The book of rules and regulations issued by him for the government of the company's employés is very complete. It holds each man responsible for the complete fulfilment of every duty, and clearly defines exactly how the business of each department shall be conducted. A great deal has been done since Gen. Wilson began to govern the New York and New England Railroad, showing that he, who was so successful in leading men in war, knew also how to lead and direct them in the arts of peace. This road, as is well known, was built up largely from the ruins of the old Boston, Hartford and Erie Railroad. Commencing where the Boston, Hartford and Erie left off, it has been extended from Waterbury, Conn., to the Hudson River, 79 miles. The Connecticut Central has been bought and a fine terminal made at Fishkill, where connection is made with the West and the coal fields of Pennsylvania. Some 15 miles of double track have been laid from Norwood to Franklin, and about two million dollars have been expended upon its fine terminals at South Boston, than which no finer are in existence. The equipment of the road has been much increased. The earnings of the New York and New England Railroad have increased right along, and the condition of its property has been improved. The new connection with the West at Newburg has brought a largely increased traffic, especially in coal, in which this road now has a trade second to none. It has always been Gen. Wilson's policy to get all the business which was possible for his road, on the

principle that small beginnings ofttimes result in large endings, and that demoralization of rates does not pay. During the last winter he was kept very busy with the legislatures of the States through which his road runs, his greatest move being to induce that of Massachusetts to vote to sell the $3,600,000 worth of stock which it held at a fair price, and in this he was entirely successful. The Boston, Hartford and Erie Company issued two million first mortgage bonds. These were known as the "Berdell" Bonds, and on the reorganization became exchangeable for the stock of the New York and New England Railroad Company at par. The State of Massachusetts early exchanged their bonds, obtaining $3,600,000 par value of stock.

When the act was passed authorizing the sale of this stock, there was a rush of the Berdell bondholders to exchange their bonds for stock at par, so as to obtain the privilege of subscribing for their pro rata share of this stock, which was to be put upon the market at $50 per share, the possessors of the old being allowed to purchase one new share for each four and a fraction of old ones owned by them. So many did this that at present the road has an issuance of $16,000,000 to $17,000,000 of stock, and from 3 to 4 million of unredeemed bonds good for stock, dollar for dollar. Of great financeering ability, Gen. Wilson is fast bringing his road into a sound financial condition. The future of the New York and New England Railroad can but be great. The New York, Ontario and Western, and the New York, West Shore and Buffalo will soon have built to Newburg, when new connections for the West will be ready to be developed; and Gen. Wilson has a happy faculty of being able to extend and form new connections with his road, and of keeping friendly with the old ones. Altogether it may justly be said that Gen. J. H. Wilson is a representative railroad President and one whose record will be great.

Silver City, Deming and Pacific R. R.

A COMPANY has recently been incorporated in accordance with the laws of New Mexico under the name of the "Silver City, Deming and Pacific Railroad Company," the object being to connect at Deming with the Atchison, Topeka and Santa Fe, the Southern Pacific, and the Texas and Pacific railroads. The road, which is now being graded to Silver City, 45 miles west of Deming, is broad gauge, but the intention is to connect it at Silver City with narrow gauge branches to Santa Rita, Fort Bayard, Georgetown and the Moggalon, Lake Valley Mines and the Clifton Mines. Silver City has a population of 3,000, Georgetown, 2,500, while Fort Bayard, Santa Rita and the Burro Mountains and Moggalon, Lake Valley and Clifton mining districts have a rapidly increasing population, and the county is growing more rapidly than any other part of the territory. The amount of freight hauled by teams from Deming to Silver City last year was estimated at three million pounds, and the passenger travel is large. It is designed by the present company to build next year narrow-gauge branch roads to Santa Rita and Georgetown, and to the Clifton copper mining district in Arizona. It is a matter of some surprise that none of the three large roads centering at Deming, have occupied this route, controlling as it will about all the business of Grant county, and which would prove an important feeder to any one of the main lines.

Pullman Palace Car Company.

AT the annual meeting of the Pullman Palace Car Company, held at Chicago on the 7th inst., a statement of the affairs of the company was presented by the president, which was received with marked gratification and approval. The stockholders were especially interested in and enthusiastic over the great plant of the company at the town of Pullman. It was shown that the company has made 15-year contracts with various important lines of railway during the year, covering 4,615 miles; that the number of cars operated was 773; number of passengers carried 1,964,000, increase of revenue over previous year, $742,000; number of miles run by Pullman cars, 54,104,000, without loss of life or serious injury to any passengers.

Northern Pacific Railroad.

THE Government Commissioners, consisting of H. M. Scott, A. R. Johnson and John P. Sanborn, appointed by the President to examine the section of the Northern Pacific Railroad from Glendive to Billings, report that in their judgment the road is constructed in the most scientific manner and of the best material. They believe it to be a good road-bed and will recommend it be accepted by the Government. They were more particularly struck with the rapidity of construction. Eight thousand men are at work on the western division and 7,000 on the northern. Track is being laid at the rate of 1½ miles a day west of Billings. Work is in progress on the road-bed the whole distance. Grading will be completed this season, and only track-laying will remain to do next year, and at the end of this season's job there will be only 300 miles. The road from Portland to Puget's Sound is being pushed rapidly, and at the end of this year will be completed to Columbia River, 45 miles from Portland. The road will be finished next year soon after the completion of the main line.

AN immense planer has been constructed at Pittsburgh capable of planing a piece of iron or other metal ten feet wide, ten feet high, twenty-four feet long, and so arranged that four cutting tools may operate on the work at one time, two being on the crosshead and one on each upright.

THE Sutro Tunnel, now completed, discharges 3,000,000 gallons of hot water daily from the Comstock mines. This water has a temperature of 195 deg., and is conveyed through a closed pine flume to prevent the escape of vapor. After a passage of four miles through the first tunnel it loses 70 deg. of heat. A second tunnel 1,100 feet long and an open waterway a mile and a half long conduct the water to Carson River. Along its course are hot-water baths and laundries, and a plan is on foot to conduct the hot water through pipes under ground to be made available for purposes of irrigation and for supplying artificial heat to hot-houses.

List of Patents for Inventions Relating to Railway Interests.

Bearing date of September 5, 1882.

263,694. Pumping Engine. HARVEY F. GASKILL, Lockport, N. Y. Filed May 8, 1882.

263,701. Boiler: DE WITT C. HILL, Willimantic, Conn., assignor of two-thirds to John Scott, same place, and William E. Barrows, Hartford, Conn. Filed September 30, 1881.

263,702. Boring and Tenoning Machine: CHESTER A. HODGE, Beloit, Wis. Filed April 1, 1882.

263,706. Device for Lighting the Steps of Cars or Carriages: GEORGE W. HUNT, Philadelphia, Pa. Filed July 21, 1882.

263,708. Smoke Consumer: SALMON JONES and GEORGE B. MARSHALL, Cincinnati, Ohio. Filed May 15, 1882.

263,711. Reversing-Valve for Engines: CHARLES N. LEONARD, Indianapolis, Ind. Filed May 23, 1882.

263,726. Car-Coupling-Tool: WILLIAM J. RILEY, Kansas City, Mo. Filed May 12, 1882.

263,732. Car Wheel: GEORGE S. SHEFFIELD, Three Rivers, Mich., assignor to the Sheffield Velocipede Car Company, same place. Filed June 15, 1882.

263,740. Railroad Switch: FRANK A. WHITE, Cortland Village, N. Y., assignor of one-half to Wm. B. Stoppard, same place. Filed February 13, 1882.

263,764. Car-Coupling: CHARLES F. CLAPP and EUGENE R. CLAPP, Hyde Park, Mass. Filed July 5, 1882.

263,765. Car-Coupling: ARTHUR W. COATS, Yuba City, Cal. Filed July 3, 1882.

263,769. Brake-Shoe: JOHN F. CURTICE, Fort Wayne, Ind., assignor to the Standard Brake Shoe Company, same place. Filed January 27, 1882.

263,786. Car-Ventilator: SAMUEL HURST, St. Louis, Mo. Filed June 21, 1882.

263,800. Car-Coupling: NATHAN D. MUSSEY, Reno, Nev. Filed June 23, 1882.

263,812. Crank-Shaft or Journal Bearing: EDWIN A. ROWLEY, Williamsport, Pa., assignor to Rowley & Hermance, same place. Filed June 5, 1882.

263,816. Car-Coupling: SOLOMON SCOTT, Paoli, Ind. Filed July 17, 1882.

263,836. Car-Coupling: ANDREW J. AVERY, Lynn, Mass. Filed April 13, 1882.

263,849. Car-Coupling; SAMUEL BROWN, Manton, Mich. Filed April 25, 1882.

263,867. Air-Brake Pump for Locomotives: DAVID J. DAMPMAN, Philadelphia, Pa., assignor to William H. Bilyeu and John Ambler, both of same place. Filed February 13, 1882.

263,879. Car-Coupling: CHARLES J. EDWARDS, Fairville, Mo. Filed June 13, 1882.

263,884. Controlling the Opening of Gates of Car Platforms: FRANK P. FISH, New York, N. Y. Filed May 22, 1882.

263,916. Car-Coupling: MARTIN V. KING, Bedford, Iowa. Filed July 17, 1882.

263,919. Railroad-Tie: CONRAD F. KREUZ, Milwaukee, assignor of one-half to Jerome D. Clarke, Madison, Wis. Filed May 11, 1882.

263,925. Car-Brake: SVEND LYKKE, Omaha, Neb. Filed April 18, 1882.

263,959. Railway and Depot: HENRY C. REW, Chicago, Ill. Filed February 10, 1882.

263,972. Car-Coupling: THEODORE M. SHARP, Salisbury Mo. Filed March, 30, 1882.

263,988. Car-Axle Lubricator: JOSEPH E. STEGER, New York, N. Y. Filed July 20, 1882.

263,990. Hand-Car: ALLEN M. STONER, New Albuquerque, New Mexico. Filed June 6, 1882.

263,997. Car-Brake: DOLPHUS TORREY, New York, N. Y., assignor to the Torrey Automatic Brake Company, same place. Filed October 11, 1881.

264,018. Stock-Car: SAMUEL C. WISER, Chicago, Ill. Filed April 10, 1882.

264,043. Governor for Steam Engines: JOSHUA P. MCCOOK, Richmond, Va., assignor of one-third to JAMES H. BRUCE, same place. Filed July 22, 1882.

264,045. Device for Attaching Torpedoes to Railway Rails: DANIEL R. MURPHY, Pittsburgh, Pa., assignor of two-thirds to Abraham O. Tinsman, same place. Filed March 25, 1882.

A FINAL consolidation of the New Orleans Pacific and the Texas and Pacific Railroads was effected on the 11th inst.

The Stock Exchanges and Money Market.

New York Stock Exchange.

Closing Prices for the week ending Sept. 13.

	Th. 7.	F. 8.	Sat. 9.	M. 11.	Tu. 12.	W. 13.
Adams Express	142½					
Albany and Susq.						
1st mortgage						
2d mortgage						
American Express				95½		96
Burl., C. R. & Nor.		82		82		
1st mortgage 5s	100½	101⅜		100¼	100	100⅜
Canada Southern	63⅞	64¼	64⅝	64⅞	66	64⅜
1st mortgage guar	93⅜		93⅛			93¼
Central of N. Jersey	79¼	79¾	79¾	81¼	81¼	79⅝
1st mort. 1890						
7s, consol. ass				110¼		
7s, convertible ass.			110		110½	
7s, Income						
Adjustment				110½	111	
Central Pacific	94	94¾	94	94	94⅛	93⅛
6s, gold						114⅜
1st M. (San Joaq)						
1st M. (Cal. & Or.)						
Land grant 6s						
Chesapeake & Ohio	24¾	24		24¾	24⅛	25
1st pref		38		38⅛		38⅛
2d pref	25	26	26⅛			28⅛
1st mort., series B	85⅞	86⅛	87	87		87⅞
Chicago and Alton		139	142⅛	142⅛	144½	144⅛
Preferred						
1st mortgage						
Sinking Fund						
Chi,, Bur. & Quincy		135	136½	136¼	135¾	134⅛
7s, Consol. 1903						
Chi., Mil. & St. Paul	125⅝	126½	127¾	128	127¼	126
Preferred	142⅜	142¾	143⅜	144½	144	143
1st mortgage, 8s						
2d mort., 7 3-10s					129	
7s, gold						
1st M. (La. C. div)					129	
1st M. I. & M. div.)					129	
1st M. (I. & D. ext.)						127
1st M. (H.&D. div.)						
1st M. (C. & M. div.)		128				
Consolidated S. F.	126½	127½	129	129	129	
Chi. & Northwestern	147⅛	147⅝	147⅞	148½	149¾	147¾
Preferred		108¼	108	170	170	166
1st mortgage						
Sinking Fund 6s		111¾			113	
Consolidated 7s				132		
Consol. Gold bo'ds	125½					
Do. reg						
Chi., R. Isl. & Pac.	136½	138⅜	139¼	140	139½	136¾
6s, 1917, c						
Clev.,Col.,Cin.&Ind.		82¾	83¼	83½		83½
1st mortgage						
Clev. & Pittsburg gr.						
7s, Consolidated					125½	
4th mortgage						
Col.,Chi.,& Ind. Cent	13¼	13	13	12¾	13½	13¼
1st mortgage						
2d mortgage						
Del. & Hud Canal.	115⅞	116⅞	116¼	117	116⅞	116¼
Reg. 7s, 1891						
Reg. 7s, 1884					106	
7s, 1894						
Del.,Lack.& Western	146⅞	147⅞	148⅜	149⅝	149⅜	147¾
2d mortgage 7s						
Consol. 1907						
Erie Railway						
1st mortgage						
2d mort. 5s, ext						
3d mortgage				101½	101	101¼ 101
4th mort. 5s, ext						
5th mortgage		111¾				
7s, Consol. gold	126½	126½			126	
Great West. 1st mort						
2d mortgage		104				
Hannibal & St. Jo						48
Preferred	90½	87½	87½	89	90⅜	90½
8s, Convertible						
Houston & Tex. Cen		83				
1st mortgage						
2d mortgage				125	125	
Illinois Central	138⅛	139⅜	142	142⅛	142⅛	141
LakeShore&MichSo	113⅜	112⅞	113⅜	114⅞	115	113⅜
Consol. 7s						
Consol. 7s, reg						126
2d Consolidated		125¾			126	126
Leh. & W. B. con.ass			105			
Long Dock bonds						
Louisville & Nash.	74¾	74⅞	74¾	74⅝	74½	73¾
7s, Consolidated						
Manhattan		52¾			53¼	53½
1st pref						91
Met. Elevated				92		
1st mortgage		99	99⅛	99¾	99¼	100
Michigan Central	100	100⅝	101¼	102½	103¾	102½
7s, 1902						
Morris & Essex	126	126¾	126½	127¾		127
1st mortgage						
2d mortgage						
7s of 1871						
7s, Convertible						
7s, Consolidated						
N.Y. Cen. & Hud. R.	135	135	135⅛	137½	136⅞	135⅞
6s, S. F. 1883	102¾					
6s, S. F., 1887						
1st mortgage		132				
1st mortgage, reg.					132	
N. Y. Elevated						
1st mortgage	115					114⅞
N. Y. & Harlem						
Preferred						
1st mortgage						132
1st mortgage, reg						
N. Y. Lake Erie & W	40	40⅝	42½	43⅜	43¾	41¾
Preferred	81	82	84¾	87	86½	86
2d Consolidated		98⅝	99⅞	99⅜	100⅛	100⅛
New 2d 5s fund	94½	94¾	95¼	96⅛	96⅜	97
N.Y.,N.Hav'n&Hart	182				180	
North Mo. 1st mort						
Northern Pacific	52¾	51⅞	52⅞	53⅛	53⅞	52¾
Preferred	96⅜	97¼	97⅛	99⅜	98⅜	99⅛
Ohio & Mississippi.	39	39½	40	39⅞	41	38¾
Preferred						
2d mortgage				123		122
Consolidated 7s						
Consol. S. Fund						
Pacific Mail S. S. Co	45½	45¾	45¾	45½	46¾	44¾
Pacific R. R. of Mo.						
1st mortgage			106¼			106
2d mortgage						
Panama						
Phila. & Reading	63⅞	64⅛	64⅛	64¾	65⅛	64¼
Pitts,Ft.W.&Chi.gtd			139			
1st mortgage						
2d mortgage						
3d mortgage						
Pullman Palace Car	134⅞	134⅜	132½	134½	134⅜	134⅜
Quicksil'r Min'g Co			11	10¾	10¾	
Preferred	45⅜					
St. Louis & San Fran		42		43	43	43
Preferred	60¾	62½	62½	63⅜	63¾	64
1st Preferred		99		99¾	100¼	100
St. L., Alt'n & T. H.	41	44	45	44¾	47	47
Preferred	85½	88	89	89	89	
1st mortgage					111½	
2d mort. pref						
Income bonds						
St. L., Iron Mt. & S						
1st mortgage	114					
2d mortgage						108
Toledo and Wabash					108	
1st mortgage						
2d mortgage			104½			
7s, Consolidated						
St. Louis Division						
Union Pacific	118	118⅜	116½	x116½	116¼	113⅝
1st mortgage			116		116	116½
Land Grant 7s						
Sinking Fund 8s		118	119		119	
United States Ex	74					
Wabash, St. L.& Pac	37⅞	38	37⅞	38¼	39¼	38
Preferred	67⅞	67⅞	67⅞	68¾	70¾	69½
New mort. 7s						
Wells-Fargo Ex			132			
Western Pacific b'ds						
Western Union Tel.	90⅞	90½	90¾	91⅞	92⅜	91⅛
7s., S.F conv., 1900	118½	118⅜				
FEDERAL STOCKS :—						
U. S. 4s, 1907, reg	118⅜				120	
U. S. 4s, 1907, coup		119⅞	120½		121	
U. S. 4½s, 1891, reg		113⅜			113⅞	
U. S. 4½s, 1891, coup						
U. S. 5s, cont'd at 3⅛	101				101⅜	101⅝
U. S. 6s cont'd at 3⅛						
Dt. of Col. 3-65s, reg						
Dt. of Col. 3-65s, coup						

Boston Stock Exchange.

Closing Prices for the Week Ending Sept. 13.

	Th. 7.	F. 8.	Sat. 9.	M. 11.	Tu. 12.	W. 13.
Atch.,Top.&San.Fe.	94⅞	95⅛	95	94⅞	94⅞	95⅛
1st mortgage						
Land Grant 7s						
Boston & Albany		170		170	171	
Boston and Lowell.	102				102	
Boston & Maine						
Boston & Providence				160		
Bos'n,Hart.& Erie7s	59	60½				
Burl.& Mo.R.L.G.7s	114¾					
Burl.& Mo.R.in Neb						
6s, exempt						
4s						
Chi.,Burl. & Quincy	135¾	135		135¾	135¾	135¾
Cin.,Sand&Clev($50)						
Concord ($50)						
Connecticut River						
Eastern	45	45⅛	45	46	45⅛	
New 6s, Bonds		110	110		110	
Fitchburg				130		131
N.Y. & New England	58¾	59½	57½	59	59	58¾
7s	116¼	116½	116¼		116¼	
Northern N. H						
Norwich&Worcester	160	159¾			159¾	
Ogden & Lake Cham						
Old Colony		133¼	133¼	133¼	133	133¼
Ph.,Wil.&Balt.($50)						
Portl'd,Saco & Ports						
Pueblo & Ark Val 7s		115				
Pullman Palace Car				134		134
Union Pacific	117⅞		118⅝	116¾		115
6s		115½				
Land Grant 7s						
Sinking Fund 8s	118¼	118½		118¼	118½	118¼
Vermont & Mass						
Worcester & Nashua				59		
Cambridge (Horse)						
Metropolitan(Horse)		75				
Middlesex (Horse)						
Cal.&Hecla Min'gCo	254½	254½		254		
Quincy	69	69	69¼	69	69	67

Philadelphia Stock Exchange.

Closing Prices for the Week Ending Sept. 12.

	W. 6.	Th. 7.	F. 8.	Sat. 9.	M. 11.	Tu 12
Allegh'y Val. 7 3-10s						
7s, Income		51	51½		51½	
Buff., Pitts & West.	21⅞	21¾	21⅞	22½	22¼	22½
Camd'n & Am. 6s, '83						
6s, 1889						
Mort. 6s, 1889						
Camden & Atlantic						
Preferred		53				
1st mortgage						
2d mortgage						
Catawissa						
Preferred				56		
2d pref				54	54	
7s, new						
Del. & Bound Brook						
7s						
Elmira&Williamsp't						
Preferred						
Hunt. & B. Top Mt.	16¼	16	16	16	10	
Preferred	30		29½			
2d mortgage						
Lehigh Navigation	43¾	43½	44¾	44¼	44¼	44¾
6s, 1884	103½					
Gold Loan				113		
Railroad Loan				115		
Conv. Gold Loan						
Consol. Mort, 7s	116¼					
Lehigh Valley	62⅝	62½	63	63⅛	63½	05½
1st mort. 6s, coup			122			
1st mort. 6s, reg		122				
2d mort. 7s						
Consol mort. 6s			121			
Consol.mtg.6s,reg	121					
Little Schuylkill						
Minehill&Sch.Hav'n						
North Pennsylvania						
1st mortgage 6s	107					
2d mortgage 7s						
Genl. mtg.7s,coup						
Genl. mtg. 7s, reg						
Northern Central	54¼	54⅜	55	55¼	56¼	56
5s	97	97			97	97½
Northern Pacific	52½	52	52	52¾	53½	53⅜
Preferred	96⅜	96¼	97½	97	99½	98¾
Pennsylvania R. R.	62⅜	63¼	63⅜	63⅜	64⅜	64¼
1st mortgage						
Gen'l mort						125⅞
Gen'l mort reg						
Consol. mort. 6s			121			
Consol. mort. reg						
Pa. State 5s, new						
do 4s, new	116¾		116½			
do 3½s, 1912						
Phila. & Reading	31⅛	31⅜		32⅜	32½	32¾
1st mortgage 6s						
7s of 1893		121½				
7s, new convert		76	76	77	77	77
Consol. mort. 7s		126¼				
Consol. mort. reg		126¼				
Gen'l mort. 6s	96¾	96¾	96¾	96¾	96¼	
Def. Income bonds						
Philadelphia & Erie			19¼	19¾		19⅞
1st mortgage 5s				105½		105
2d mortgage 7s						
Pittsb.,Cin.&St.L.7s	120	120				120
Pitts.,Tit.&Buff. 7s	94		94	94		95
Schuylkill Navi't'n						
Preferred						
6s, 1895						
6s, 1907			90			
United Co. of N. J.	190½	191			191½	191
Hestonville, (Horse)		15¾	15¾		17	
Chestnut&Walnut						

Baltimore Stock Exchange.

Closing Prices for the Week Ending Sept. 12.

	W. 6.	Th. 7.	F. 8.	Sat. 9.	M. 11.	Tu. 12.
Baltimore & Ohio	.....	195	.....	.....	195	.....
6s, 1885	.....	.....	.....	.....	.....	.....
Central Ohio ($50)	.....	.....	.....	.....	.....	.....
1st mortgage	.....	.....	.....	.....	.....	109
Marietta & Cincin'ti.	.....	.....	.....	.....	.....	.....
1st mortgage, 7s	.....	.....	.....	.....	.....	.....
2d mortgage, 7s	.....	.....	.....	.....	.....	.....
3d mortgage, 8s	.....	.....	.....	.....	.....	.....
Northern Cen. ($50)	54¼	54⅝	55	55	56	56⅛
2d mort. 6s, 1885	.....	.....	.....	.....	.....	.....
3d mort. 6s, 1900	.....	.....	.....	.....	.....	.....
6s, 1900, gold	.....	.....	.....	.....	.....	.....
6s, 1904, gold	.....	.....	.....	.....	.....	.....
Pitts. & Connelsv. 7s	122	.....	.....	.....	.....	.....
Virginia 6s Consol.	60	60⅜	.....	.....	60	60
Consol. coupons	.....	.....	.....	.....	.....	.....
10-40 bonds	43¾	43⅞	.....	.....	.....	43⅛
Def'd Certificates	.....	.....	12⅛	.....	.....	.....
Western Maryland	15¾	.....	.....	.....	.....	.....
1st M., end. by Balt	.....	.....	.....	.....	.....	.....
2d M., do.	.....	.....	.....	.....	.....	.....
3d M., do.	.....	.....	.....	.....	.....	.....
1st M., unendorsed	.....	.....	.....	.....	.....	.....
2d M., end. Wash Co	.....	.....	.....	.....	.....	.....
2d M., preferred	.....	.....	.....	.....	.....	.....
City Passenger R. R.	.....	.....	.....	.....	.....	.....

London Stock Exchange.

	Closing Prices			
	Aug. 25.		Sept 1.	
Baltimore and Ohio 5s, 1927	106	108	106	108
Central of N. J., $100 shares	85	90	85	90
Do. consol. mort.	112	114	112	114
Do. Income Bonds	92	96	92	96
Central Pacific of Cal., $100 shs.	94	95	95⅛	96¼
Do. 1st mort. 6s, 1895-'98	117	118	117	118
Det., G'd Haven & Mil. Equip bds.	116	118	116	118
Do. Con. M. 5p.c., till '83 after 6p.c.	114	116	114	116
Illinois Central $100 shares	130	141	140	142
Do. S. F. 5s, 1003	106	108	106	108
Lehigh Valley Cons. mort. 1923	115	119	115	119
Louisville and Nashville mort. 6s	97	99	97	99
Do. capital stock $100 shares	74	76	74	76
N. Y. Cen. & Hud. R. mort. bonds.	132	136	132	136
Do. $100 shares	136	137	136½	137½
Do. mort. bonds (stg.)	121	123	121	123
N. Y. Lake Erie & West. $100 shs.	39	39½	40¼	40¾
Do. 6 p. c, pref. $100 shares	79	81	81	83
Do. 1st Con. Mort. bonds (Erie).	126	129	126	129
Do. do. Funded Coupon bonds.	124	127	124	127
Do. 2d Consol. Mort. bonds	98	100	99	101
Do. do. Funded Coupon bonds.	95	97	95	97
N. Y., Pa. & Ohio 1st mort. bonds.	47	48	48	49
Do. Prior Lien bonds (sterling).	103	108	100	105
Pennsylvania $50 shares	63¼	63¾	63⅝	64¼
General Mortgage	123	125	123	125
Phil. & Erie Gen. mort. 6s, 1920	117	119	117	119
Philadelphia & Reading $50 shs.	30¾	31	30⅝	31¼
General Consol Mortgage	115	117	115	117
Do. Improvement Mortgage	104	106	104	106
Do. Gen. Mtg. '74, ex-def'd coup.	96	98	96	98
St. L. Bridge 1st mort. gold bond.	125	127	125	127
Do. 1st. pref. stock	97	100	97	100
S. P'fic of Cal., 1st mort 6s, 1905-6.	108	110	108	110
Union Pacific 1st mtg. 6s, 1896-9.	118	120	118	122
Wabash, St. L. & P. $100 shares	35⅛	36⅛	37½	38½
Do. $100 pref. shares	65	66	67	69
Do. gen. mort. bonds	85	87	86	88

AMERICAN RAILROAD JOURNAL.

Financial and Commercial Review.

THURSDAY EVENING, September 14, 1882.

The quotation for call loans on stocks this morning was 6@7 per cent, and on United States bonds 4@5 per cent. Time loans were 6 per cent, and prime mercantile paper 6@7 per cent. In the afternoon the quotation for call loans at the Stock Exchange was 6@7 per cent, which was the ruling rate for the day until near the close, when it fell to 4 per cent; the closing quotation for money was, however, 5@6 per cent.

The rate for demand sterling was 4.89½ nominally, and 4.88¾@4.89 actually; 60-day bills were 4.84½@4.85 nominally, and 4.83¾@4.84¼ actually. Cable transfers were 4.89¾@4.90. The actual rates for commercial bills were 4.82½@4.83. The actual rates for Continental bills are as follows: Francs, 5.20⅝@5.20 and 516⅞@5.16¼; Marks, 94⅛@⅜ and 95⅛@⅜; and Guilders, 40 and 40⅛.

There have been listed at the New York Stock Exchange $1,452,000 of the general consolidated railway and land grant mortgage 5 per cent bonds of the St. Louis, Iron Mountain and Southern Railway Company, numbered 32,551 to 34,002 inclusive. These bonds are issued on a branch line of railway extending from Knobel to Forest City, a distance of ninety-seven miles, now completed and in operation, and are at the rate of $15,000 per mile on said branch. Also, $1,379,000 of new bonds of the Missouri, Kansas and Texas Railroad Company. These are first 767 bonds of $1,000 each, numbers 39,015 to 39,781, both inclusive, issued at the rate of $20,000 per mile upon 38 38-100 miles of railway constructed and completed from Temple, in the State of Texas, to an intersection with the International and Great Northern Railroad at Taylor, in said State, and bonds number 39,782 to 40,411, both inclusive, issued upon 31½ miles of completed railway constructed from Greenville to McKinney, in the State of Texas, being an extension of the East Line and Red River Railroad.

It was reported at the meeting of the Finance Committee of the Northern Pacific Railroad Company on the 13th inst., that the amount due the preferred stockholders was a little over $4,500,000. The preferred stock outstanding is in amount about $42,000,000. These are the surplus earnings of the road since the date of the reorganization of the company, when the holders of the bonds issued under the Jay Cooke *regime* consented to convert the bonds into preferred stock.

Prior to February, 1882, there were no banks in Mexico. At that time a concession was given to a company of French bankers with a capital of $20,000,000. They were given the privilege of issuing bills to the amount of $60,000,000, and promised for the bank the business of the Government offices. In return for the concession the bank gives the Government credit for $10,000,000. There is now no fear of further revolutions in the country, as with this large credit the Government can at once find means to put down an uprising. In the past the difficulty has been a lack of means to support an army. A bank has also recently been established at Sonora, one-fifth of the capital of which is held by Boston parties.

At the annual meeting of the stockholders of the Texas and Pacific Railway Company, held in this city on the 12th inst., the report of the President for the fiscal year ending June 30, 1882, was presented, from which we learn that the amount of the capital stock of company is $28,127,700, and its bonded debt $34,974,000. The construction account is placed at $51,539,539.18, and the income account at $1,543,037.82. The report further states that the company had on the 30th of June assets (including $1,141,531 in securities) amounting to $2,375,773, and current liabilities (including $129,680 for the New Orleans Pacific coupons due on July 1) of $395,562.64. The cumulative interest-bearing debt of the company, exclusive of New Orleans Pacific bonds, is $26,128,000, on which the annual interest charge is $1,567,680. In addition it has outstanding $8,784,000 income and land grant bonds, secured by a first mortgage on 4,600,000 acres of land, principally lying along the line of the Rio Grande division. During the year 229 miles of road were completed and equipped. The company had at the end of the fiscal year 1,153 miles of completed road, with an equipment of 3,559 cars of all descriptions. The operations of the Eastern division from Shreveport to Fort Worth only are given, that being the only division completed at the beginning of the fiscal year. The operations of this division for thirteen months were: Gross earnings, $3,438,978; expenses, $2,629,352; net earnings, $809,126. The annual interest charge on this division is $786,000 or $851,500 for the thirteen months. There were 828,378 tons of freight transported against 641,295 tons for the corresponding period of the preceding year; and 293,753 passengers carried against 257,401. The report adds that these operations would have shown much better had it not been for the fact that large quantities of construction material were carried, from which was derived a very small revenue and which were given the right of way over all the other traffic in order to complete the Rio Grande division. The earnings of the latter division from February 1 to June 30 are given at $848,754.20, the expenses at $534,872.91 and the net earnings at $313,881.29. The percentage of expense to earnings was 63 per cent. Mention is made of the merging of the New Orleans Pacific Railroad with the Texas and Pacific, the former having a bonded debt at the rate of $20,000 per mile and a length of road of 336 miles. Its terminal facilities at New Orleans are stated to be extensive and valuable.

The formal celebration of the completion of several new railroads took place at Louisville, Ky., on the 12th inst. Business was entirely suspended, and all Louisville, with not less than 200,000 strangers, crowded the streets along which the great procession passed. The display of industries, commerce, fire and police departments, and the military was the grandest ever witnessed in the South. The parade was over ten miles in length, and was three hours in passing a given point.

From the report of the Cleveland, Columbus, Cincinnati and Indianapolis Railway for the year ending June 30, 1882, we learn that the net debt has been reduced $2,954,278.20, while at the same time 11,842—or 14.4 per cent—more passengers have been transported; the road has carried one person 5,035,774 miles, or 12.5 per cent further than last year; 227,504 tons, or 8.7 per cent, more freight has passed over the road, making the ton mileage 7,189,562, or 16 per cent more than last year. The rate per ton per mile has decreased from .767 cent in 1881 to .633 cent in 1882. The passenger rate has increased 100th of 1 per cent. There has been a change in the relative proportions of the different kinds of freight hauled, as the following shows: In 1881 coal made up 14.9 per cent of the total tonnage; in 1882, 16.6 per cent; lumber in 1881, 9.8 per cent; in 1882, 12.1 per cent; grain and flour in 1881, 29.4 per cent; in 1882, 19.8 per cent; merchandise in 1881, 20.5 per cent; in 1882, 22.5 per cent; stone, lime, etc., in 1881, 5.1 per cent; in 1882, 7.7 per cent.

The completion of the Chihuahua (or northern) division of the Mexican Central Railway is to be celebrated by grand festivities in the city of Chihuahua, Mexico, on the 16th inst. The completion of the road to that place from El Paso, Texas, 225 miles, is worthy of the eight days of fair and festival. In order to do justice to the occasion there will be illuminations, theatres, concerts, acrobatics, horseraces, military parades, music in the parks by day, serenades at night, balls and entertainments, all kinds of games permitted by law, and a general gala time. On the day of the completion of the railway the national colors will be unfolded at sunrise and saluted by salvos of artillery. State officials and military men will be escorted by cavalry and a detachment of Federal troops to a building specially erected for the day's exercises, where an oration will be delivered by an orator selected by the Governor. A grand excursion to the city is projected from Las Vegas and other New Mexican towns, and it is expected that the occasion will be celebrated with all possible eclat and magnificence. A party of Boston and Chicago gentlemen are now upon their way to take part in the festivities.

At the regular monthly meeting of the directors of the Baltimore and Ohio Railroad Company, held in Baltimore on the 13th inst., the President stated that the earnings of the road for August were $1,851,891.54, the largest revenue earned in any month in the history of the company. The large increase in power by the construction of 103 first-class locomotives and of gondola, box, live stock, and other cars, with the enlargement of the capacity of the freight plant generally and increased facilities of all description upon the lines of the company, enabled it to perform this great work with ease and facility. The organization and capacity of the company are now such that an important increase beyond the present heavy traffic can be handled promptly and successfully. The striking contrast was presented of the comparative earnings of the company for the year preceding the civil war, namely, $300,000 per month, and the result for August.

The quarterly statement of the Western Union Telegraph Company places the net revenues for the quarter ending with the close of the present month, based upon nearly completed returns for July, partial returns for August, and estimating the returns for September, at about $2,250,000. Added to this amount is a surplus of $1,664,240.13 on hand July 1, making a total of $3,914,240.13. From this sum is deducted $106,850 for interest on bonded debt and $20,000 on account of sinking funds, leaving a balance of $3,787,390.13. An appropriation of $1,199,770 is made for the payment of the current quarterly dividend of 1¾ per cent on the company's capital stock, leaving a surplus amounting to $2,587,620.13.

The lease of the European and North American Railroad to the Maine Central Railroad Company has been ratified by the stockholders of both companies.

An extra dividend of 1½ per cent has been declared by the Pullman Palace Car Company, out of the manufacturing profits for the past year, payable on and after October 2, to stockholders of record on the 16th inst.

The advance in the rate of interest on the bonds of the Eastern (Mass.) Railroad Company from 4½ to 6 per cent

which went into effect on September 1, will from this time forward necessitate an increased expenditure of $17,000 per month on interest account. Next year also, for the first time, $100,000 will have to be set aside for the sinking fund. The management, however, hopes next year to earn these extra charges and still be able to make nearly as good a showing as this year. The earnings for the current fiscal year, which closes at the end of the present month, will not be far from $3,400,000, or an increase of about ten per cent over those for 1881. The large expenditures for new equipment and important improvements during the past few months will, however, make the net earnings about the same as those of last year. The road is now, however, in a most excellent condition throughout its entire length; its equipment is first-class and its buildings are all in good shape, so that for several years to come no extraordinary expenditure will be required.

The following quotation of sales of railway and other securities, for the week, are in addition to those given elsewhere in our columns.

New York.—Allegheny Central, 32; Boston and New York Air Line pref., 79½; Cleveland and Toledo S. F., 107: Chicago and Northwestern S. F. 58, 102⅛; do. S. F. 78, 107, Chicago, St. Paul, Minneapolis and Omaha, 53¼; do. pref., 112; do. consol., 106¼; Cedar Falls and Minnesota, 25½; Chicago, St. Louis and New Orleans, 80; Columbia and Greenville pref., 73½; Chesapeake and Ohio 1st, Series A, 108; do, cur. 6s, 53½; do. pur. money fund, 114½; Chicago, St. Paul and Minneapolis 1st, 112; Chicago, Burlington and Quincy, Iowa div. 4s, 87½; Chicago, Milwaukee and St. Paul, La Crosse and Dav. div. 1st, 94: do. Chicago and Pacific West div. 1st, 93½; do. Southern Minn. div. 1st, 107½; Central Iowa 1st, 109; Columbus, Chicago and Indiana Central 1st trust Co. certif. ass., sup., 115; Danbury and Norwalk, 69; Denver and Rio Grande, 59½; do. consol., 99⅜; Denver, South Park and Pacific 1st, 102; East Tennessee, Virginia and Georgia 1i; do. pref., 19½; do. 5s, 74; do. inc., 45½; Evansville and Terre Haute, 85; do. consol., 96½; Fort Worth and Denver 1st, 98¼; Green Bay, Winona and St. Paul, 10¼; do. 1st, 83; do. inc., 24; Georgia, 155. Gulf, Colorado and Santa Fe 1st, 107¼; Hannibal and St. Joseph 6s, consol., 103¾; Houston and Texas Central genl. mort., 100; do. 1st, Western div., 108¾: Indiana, Bloomington and Western, 47½; do. 1st pref., 119; do. 1st, 91; do. Eastern div. 6s, 96; International and Gt. Northern 1st, 105½; do. coup. 6s, 84; Keokuk and Des Moines 1st, 104; Kansas Pacific 1st consols, 104⅜; do. 6s, 1895, 111; do. 6s, Denver div. ass., 109½; Louisville, New Albany and Chicago, 75½; do. 1st, 102½; Long Island, 61; do. 5s, 97¾; Lake Erie and Western, 42; do. 1st, 101½; Lafayette, Bloomington and Muncie 1st, 102; Lake Shore dividend bonds, 122½; Louisville and Nashville, Pensacola div. 6s, 95; do. genl. mort. 6s, 95; Marietta and Cincinnati 2d pref., 6; Michigan Central 5s, 98; Manhattan Beach, 21: Minneapolis and St. Louis, 33½; do. pref., 73; do. 1st Pacific ext., 102; do. 1st Southwestern ext., 111¼, Mobile and Ohio, 23; do. 1st deben., 80; do. 2d deben., 47½; do. 3d deben., 34; Missouri, Kansas and Texas, 40; do. consol. 7s, 106; do. genl. mort. 6s, 87; Missouri Pacific, 111¼; do. 1st consol., 101¾; do. 3d, 112; Memphis and Charleston, 58; Milwaukee, Lake Shore and Western, 57¼; do. 1st, 101½; do. inc., 81⅞; Metropolitan Elevated 2d, 90; New York, Penn. and Ohio inc., 53¾; New York City and Northern genl. mort., 55; New York, Chicago and St. Louis, 16¼; Nashville, Chattanooga and St. Louis, 60; New York, Ontario and Western, 27¼; Norfolk and Western pref., 58¼; Northern Pacific 1st, 103⅜; New Orleans Pacific 1st, 91½; Ohio Central, 18¾; do. 1st, 92½; do. inc., 38; Ohio Southern, 17; do. 1st, 85; do, inc., 32½; Oregon Transportation, 96¾; Oregon Railway and Nav., 162; do. 1st, 107½; Ohio and Mississippi, Springfield div. 1st, 119; Peoria, Decatur and Evansville, 36; Rochester and Pittsburgh, 26¼; do. 1st, 104½; do. inc., 50; Richmond, Danville and West Point, 63¼; Richmond and Danville 115¾; do. deben., 78; do. 1st, 100; Richmond and Alleghany, 20; do. 1st, 87; Rome, Watertown and Ogdensburg inc., 39¼; do. ext. 5s, 74; St. Louis, Kansas City and Northern, Omaha div. 1st, 113½; St. Paul and Duluth, 35½; do. pref., 92⅞; St. Paul, Minneapolis and Manitoba, 164¾; do. 1st, 110½; do. 2d, 112; do. Dakota ext. 1st, 108; South Carolina, 29; do. 1st, 102½; St. Louis Iron Mountain and Southern 5s, 83; do. Cairo and Fulton 1st, 107; do. Arkansas Branch 1st, 107; St. Louis and San Francisco 2d, Class A, 99; do. C, 90; St. Louis, Alton and Terre Haute div. consols, 62; Southern Pacific of California 1st, 106¼; St. Paul and Sioux City 1st, 113¾; Scioto Valley 1st, 95½; Texas and Pacific, 51; do. Rio Grande div. 1st, 85¼; Utah Southern ext., 1st, 92¾; Union Pacific collateral trust 6s, 105¼; Wabash, St. Louis and Pacific, gen'l mort. 6s, 88; do. Chicago div. 1st, 85¼; Louisiana consols, 70; Missouri 6s, 1886, 108; Tennessee 6s, 54½; do. Compromise bonds, 63¾; Virginia 6s, def., 13¼; Mutual Union Telegraph, 27; do. 6s, 78; Colorado Coal and Iron, 44; do. 6s, 86½; Maryland Coal, 20; New Central Coal, 21½; Domestic Mining, 18⅛; Ontario, 38¾, Standard, 8; Sutro Tunnel, ⅜.

Philadelphia.—American Steamship Co., 20; Belvidere-Delaware 2d, 105¼; Central Transp., 35; Huntingdon and Broad Top Mt. 1st, 119; Nesquehoning Valley, 54¼; Norfolk and Western pref., 58¾; Pennsylvania Canal 6s, 92; Philadelphia City 6s, 1897, 129; do. 1899, 131; do. 1892, 132½; do. 4s, series J, 107; do. series B, 112½; Pennsylvania and New York Canal 7s, 1896, 122¾; do. 1906, 124½; Philadelphia, Wilmington and Baltimore 4s, 96; Philadelphia and Reading scrip, 100; do. deben. 6s, 63; do. consol. mort. 6s, gold, 113⅛; Philadelphia, Germantown and Norristown, 111; Schuylkill Nav. 6s, 1897, 106⅜; Sunbury, Hazleton and Wilkesbarre 2d, 25; Union and Titusville 7s, 95; West Jersey 6s, 1883, 101. The latest quotations are: City 6s, 108 @120; do. free of tax, 127@132; do. 4s, new, 108 @114; Pennsylvania State 5s, new loan, 116@117; do. 4s, old, 108@113; do. 4s, new, 116@117; Philadelphia and Reading Railroad, 32⅛@32⅜; do. consol. mort. 7s, reg., 126@126½; do. gen'l mort. 6s, coupon 96¼@96½; do. 7s, 1893, 121@122; do. new conv., 76@78; United New Jersey R. R. and Canal, 192@195; Buffalo, Pittsburg and Western, 22⅜@22½; Pittsburgh, Titusville and Buffalo 7s, 94¾@95¼; Camden and Amboy mort. 6s, 1889, 113@115; Pennsylvania R. R., 64¼@64¾; do. general mort. 6s, coupon, 125@126; do. reg., 128@129; do. consol. mort. 6s, reg., 120½@121½; Little Schuylkill R. R., 57@58; Schuylkill Navigation pref., 13@13½; do. 6s, 1882, 90@92; Elmira and Williamsport pref., 58@60; do. 5s, 100@101; Lehigh Coal and Navigation, 44⅝@44⅞; do. 6s, 1884, 103@104; do. R. R. loan, 114@116; do. Gold Loan, 113@113¼; do. consol. 7s, 116@117; Northern Pacific, 53¾@53⅞; do. pref., 98¾@98⅞; North Pennsylvania, 63½@64¼; do. 6s, 106@107; do. 7s, 122@123; do. 7s, General mort. reg. 122@123; Philadelphia and Erie, 19¾@20; do. 7s, 113½ @115; do. 5s, 104½@105½; Minehill, 61½@62; Catawissa 23 @24; do. pref., 55@55½; do. new pref., 54@54¼; do. 7s, 1900, 118@—; Lehigh Valley, 65⅝@65¾; do. 6s, coupon, 122 @123; do. reg., 122@123; do. 7s, 131½@135; do. consol. mort., 121½@122½; Fifth and Sixth streets (horse), 160@161; Second and Third, 112¼@115; Thirteenth and Fifteenth, 70@75; Spruce and Pine, 42@44; Green and Coates, 80@90; Chestnut and Walnut, 89@90; Germantown, 70@75; Union, 108@110; West Philadelphia, 114¼@ 115½; People's 16½@17¼; Continental, 103@105.

Boston.—Atlantic and Pacific, 28; do. 6s, 97; do. inc., 28; do. blocks, 111¾; Atchison, Topeka and Santa Fe 5s, 98; Burlington and Missouri River in Neb. 6s, nonexempt, 103; Boston Water Power, 4½; Cedar Rapids and Missouri River, 109; Cincinnati, Sandusky and Cleveland 7s, 104⅛; Chicago, Burlington and Quincy 7s, 126¾; do. 4s, old, 85¾; do. 4s, Denver ext., 84⅝; Connotton Valley, 7¾; Connecticut and Passumpsic Rivers R. R. pref., 94; Chicago, Milwaukee and St. Paul, Dubuque div. 6s, 104; Detroit, Lansing and Northern, 77½; Flint and Pere Marquette, 22⅜; do, pref., 96; Iowa Falls and Sioux City, 92⅞; Kansas City, Ft. Scott and Gulf pref., 125; Kansas City, St. Joseph and Council Bluffs 7s, 115; Little Rock and Fort Smith, 55; Mexican Central, 28½; do. 7s, 85; do. blocks No. 3, 100; Marquette, Houghton and Ontonagon, 71; do. pref. 119; Massachusetts Central, 4¼; do. 6s, 39½; New York and New England 6s, 105⅛; New Mexico and Southern Pacific 7s, 114⅞; Ogdensburgh and Lake Champlain inc., 35; do. consol. 6s, 90; Oregon Short Line 6s, 103¾; Rutland, 3¾; do. pref. 23½; do. 6s, 99; Sonora 7s, 106¾; Summit Branch 13½; Toledo, Cincinnati and St. Louis, 8; do. 6s, 68; do Branch inc., 18¾; Toledo, Delphos and Burlington, Dayton div. 6s, inc., 19; Tarkio Valley 7s, 108; Wisconsin Central, 19¾; Atlantic Mining Company, 2⅝; Franklin, 17; Huron, 3¾; National 2; Osceola, 34; Pewabic, 11¾; Sullivan, 3.

Baltimore.—Atlantic Coal, 1.15; Baltimore City 6s, 1902, 126¼; do. 6s, 1890, 116; do. 5s, 1916, 125; Columbia-Charlotte and Augusta, 55½; Canton Co. 6s, 102¾; Columbia and Greenville pref., 70¼; Chesapeake and Ohio Canal 6s, 37; Maryland 6s, exempt, 110; Marietta and Cincinnati 2d Trust certificates, 101⅜; do. 3d do., 58¼; Northern Central 5s, series A, 97½; do. B, 97: Ohio and Mississippi, Springfield div. 1st, 120; Richmond and Danville 6s, 100; Virginia and Tennessee 2d, 101¾; Virginia Midland 2d mort., 107½; do. 5th mort., 95; Virginia 10-40 coupons. 66; Virginia Peelers, 35¾. The latest quotations are: Atlanta and Charlotte 1st, —109; Baltimore and Ohio, 194; do. 6s, 1885, 107¾@—; Baltimore City 6s, 1884, 102½@103¾; do. 6s, 1890, 114@—; do. 6s, 1902, 126@—; do. 5s, 1894, —@116; do. 5s, 1916, 125@—; Columbia and Greenville 1st, 101—@102; Canton Co. 6s, 102¾@103¾; Central Ohio pref., 51⅛@—; Marietta and Cincinnati 1st, 128@128¾; do. 2d, 101½ @101¾; do. 3d, 58⅛@58½; Northern Central, 56½@ 56⅜; do. 6s, 1904, gold, 115½@—; do. 5s, Series A, 97@ 97½; do. B, —@97¼; Virginia Midland 5th mort., 94@ 95; do. inc., 7c@75: Virginia consols. 60@61; do. 10-40s, 43@43¼; Wilmington Columbia and Augusta, 108@ 108½.

The Coal Trade.

THE leading coal-carrying companies make the following reports of their tonnage for the week ending Sept. 2, and for the year to that date, compared with their respective amounts carried to the same time last year:—

	Week.	1882.	1881.
Reading Railroad	129,446	5,916,554	5,726,671
Schuylkill Canal	16,270	293,168	376,796
Lehigh Valley	78,896	4,523,095	4,157,012
Delaware, Lackawanna and Western	78,500	2,930,635	2,769,185
Shamokin	28,810	741,094	710,209
Central R. R. of New Jersey	178,633	2,856,071	2,804,771
United R. R. of New Jersey	27,849	1,113,563	1,017,866
Pennsylvania Coal	24,005	886,623	879,857
Delaware and Hudson Canal	55,186	2,235,321	2,333,341
Huntingdon and Broad Top Mountain	12,635	279,349	345,744
Penn. and New York	24,511	1,072,028	1,092,015
Clearfield, Pa.	57,349	1,924,039	1,610,666

The total tonnage of anthracite coal from all the regions for the week ending Sept. 2, as reported by the several carrying companies, amounted to 475,666 tons, against 560,925 tons in the corresponding week last year, a decrease of 85,259 tons. The total amount of anthracite mined for the year is 18,359,837 tons, against 17,752,931 tons for the same period last year, an increase of 606,906 tons. The quantity of bituminous coal sent to market for the week amounted to 110,222 tons, against 92,697 tons in the corresponding week last year, an increase of 17,525 tons. The total amount of bituminous mined for the year is 2,787,709 tons, against 3,261,929 tons for the corresponding period last year, a decrease of 474,220 tons. The total tonnage of all kinds of coal for the week is 585,888 tons, against 653,622 tons in corresponding week last year, an increase of 67,734 tons, and the total tonnage for the coal year is 21,147,546 tons, against 21,014,860 tons to same date last year, an increase of 132,686 tons. The quantity of coal and coke carried over the Pennsylvania Railroad for the week ending Sept. 2, was 212,212 tons, of which 164,292 tons were coal and 47,920 tons coke. The total tonnage for the year thus far has been 7,321,738 tons, of which 5,396,039 tons were coal and 1,925,669 tons coke. These figures embrace all the coal and coke carried over the road, east and west. The shipments of bituminous coal from the mines of the Cumberland coal region for the week ended Sept. 2 were 44,540 tons, and for the year to that date 669,292 tons, a decrease of 696,038 tons as compared with the corresponding period of last year. The shipments were: To the Baltimore and Ohio Railroad—For the week, 21,664 tons; year, 539,259 tons; decrease as compared with 1881, 343,796 tons. Chesapeake and Ohio Canal—Week, 13,277 tons; year, 43,685 tons; decrease as compared with 1881, 259,615 tons. Pennsylvania Railroad — Week, 9,520 tons; year, 86,166 tons; decrease from last year, 16,783 tons. The Reading Railroad shipment for last week, ending September 9, was about 128,500 tons, of which 28,350 tons were sent to and 52,500 tons shipped from Port Richmond, and 10,540 tons sent to and 11,200 tons shipped from Elizabethport.—*Philadelphia Ledger, Sept.* 11.

GEO. A. SANDERSON has been appointed General Freight and Passenger Agent of the Northern division of the Mexican National Railway, to take effect Sept. 1, with headquarters at Laredo, Texas.

GORDON & DUGGAN
RAILWAY SWITCH.

The **Standard** on several and in use on twenty-five Railroads.

Combines Safety, Durability, Simplicity, and Low Cost, with **Fixed Rails.**

The only movable piece weighs 375 lbs., and is without a bolt or rivet.

E. GORDON, Treasurer,
No. 28 STATE STREET, BOSTON, MASS.

FOR SALE.

Locomotives—Five Second-hand Narrow Gauge Engines in good order.
One Second-hand "Tank" Narrow Gauge Engine, 10 tons.
Several Second-hand Standard Gauge Locomotives in good order, immediate delivery.
One new 3ft. Gauge Passenger Engine, 22 tons, prompt delivery.
Six new 4ft. 8½ Gauge Locomotives, cylinders 17x24, weight 35 tons. August and September delivery.
One new 3ft. Gauge Saddle Tank Engine, delivery this month.
Cars—Passenger and Freight Cars of all descriptions for early delivery.
Three Second-hand Passenger Coaches in good order.
Rails—16lb., 30lb. and 56lb. Rails in store.
Car Wheels and Axles.
Narrow-Gauge Rolling-stock a specialty.

BARROWS & CO.,
64 Broadway,
NEW YORK.

McCANN'S
EXCELSIOR SELF CAR COUPLING.

Patented August 3, 1880.

For Durability, Simplicity, and Practicability

IT HAS NO EQUAL

MARION W. McCANN,
Patentee and Proprietor,
DUBLIN, IND.

Continuous Automatic
FREIGHT BRAKES.

Requiring no other Connection between Cars than the ordinary Coupling-Link and Pin.

SIMPLE, DURABLE, AND EFFICIENT.

Brakes can be applied to every Car in the longest train, from the engine or cabose, or from any car in the train. It can be readily attached to any car, and adapted to ordinary brake beams, shoes, etc. There is no possibility of damaging wheels by "sliding."

PATENTED MAY 23, 1882.

☞Railroad and manufacturing companies, or parties able to co-operate with patentee in their manufactur and introduction, are invited to correspond with

WM. C. SCHULTZE,
Surgeon C., R. I. and P. Ry.
MARENGO, Iowa Co., Iowa.

NO OTHER LINE IS SUPERIOR TO THE
FITCHBURG RAILROAD
HOOSAC TUNNEL ROUTE
WEST.

6.30 A.M. ACCOMMODATION.

Connecting at Syracuse, N. Y., at 7.15 P.M., with through sleeping cars for Cincinnati, Cleveland, Toledo, *DETROIT AND CHICAGO.*

3.00 P.M. CINCINNATI EXPRESS.

Pullman Sleeping Car attached, running through to Cincinnati without change. (Only Line running Pullman Cars from Boston.) This car runs *via* Erie Railway and N.Y., P. & O. R.R., making direct connection for Louisville, St. Louis, Kansas City, New Orleans, and all points in Texas and New Mexico.

3.00 P.M. ST. LOUIS EXPRESS.

THE ONLY LINE which runs a THROUGH SLEEPING-CAR from

BOSTON TO ST. LOUIS WITHOUT CHANGE!

ARRIVING AT 8.00 A.M. SECOND MORNING.

Through sleeping car for Buffalo, Toledo, Fort Wayne, Logansport, Lafayette, Danville Tolono, Decatur and St. Louis, making direct connection with through Express Trains for Kansas, Colorado, Texas, and all points in the

SOUTHWEST.

6.00 P.M. PACIFIC EXPRESS.

The only line running a through sleeping car *via* Buffalo and Detroit without change, arriving at Chicago at 8.00 A.M. second morning, making sure connections with through Express Trains for Iowa, Nebraska, Kansas, Colorado, the Pacific Coast, Wisconsin, Minnesota and all points in the

WEST AND NORTHWEST.

THE ABOVE TRAINS RUN DAILY, SUNDAYS EXCEPTED.

This Great Short Line passes through the most celebrated scenery in the country, including the famous HOOSAC TUNNEL, four and three-quarters miles long, being the longest Tunnel in America, and the third longest in the world.

Tickets, Drawing-Room and Sleeping-Car Accommodations may be secured in Advance by Applying to or Addressing

250 WASHINGTON STREET, BOSTON. 250

JOHN ADAMS, General Superintendent. F. O. HEALD, Acting Gen'l Passenger and Ticket Agent.

In effect January 9th, 1882, and subject to changes.

RAILROAD AND CANAL DIVIDEND STATEMENT.

Showing the amount of Stock Outstanding, the Dividend Periods and the date of last Dividend.

Marked thus(*)are leased roads.	Stock outstanding.	Divide'd Periods.	Last Dividend Payable.
Albany and Susq*...100	2,500,000	semi-an	July '82 2
Ashuelot.....100	210,000	q'arterly	Oct. '81 3½
Atch., Top. and S. Fe100	54,000,000	q'arterly	Aug. '82 1½
Atlanta and W. Point100	1,232 200	semi-an	Jan. '82 6
Atlantic and St. Law*100	5,840,000	semi-an	Mar. '82 3
Augusta and Savan'h100	1,022,900	semi-an	June'81 3½
Avon, Genesee&MtM*100	225,000	semi-an	July '81 3
Baltimore and Ohio.100	14,792,566	semi-an	May '82 5
" " pref.100	5,000,000	semi-an	July '82 3
Washington Br....100	1,650,000	semi-an	Apl. '82 5
Berkshire*.....100	600,000	q'arterly	Apl. '82 1¾
Boston and Albany..100	20,000,000	q'arterly	Sept.'82 2
Bos.&N.Y.AirLine pf.100	2,795,227	q'arterly	June'82 1
Bos., Cl., F.&N.B.pref.100	1,750,100	.....	Apl. '82 3½
Bos., Conc.&Mont.pf*100	800,000	semi-an	May '82 3
Boston and Lowell..500	3,940,000	semi-an	July '82 2
Boston and Maine...100	6,921,274	semi-an	May '82 4
Boston & Providence100	4,000,000	semi-an	May '82 4
Attleborough Br...100	131,700	semi-an	July '82 3½
Bos., Revere B &Lynn100	419,400	semi-an	July '82 3½
Buffalo, N. Y. & Erie*.100	950,000	semi-an	June'82 3
Camden & Atlantic.. 50	377,400	q'arterly	Apl '80 38
" " pref. 50	880,650	q'arterly	Apl '80 3½s
Camden & Burl. Co..100	381,925	semi-an	July '82 3
Canada Southern....100	15,000,000	.....	Feb. '81 2½
Cape May & Millville* 50	447,000	semi-an	June'81 3
Catawissa*..... 50	1,159,500	annual	Oct.'81 $1½
" pref..... 20	2,200,000	semi-an	May '82 3½
" new pref.. 50	1,000,000	semi-an	May '82 3½
Cayuga and Susq.*.. 50	589,110	semi-an	July '81 4½
Cedar Rapids&Mo.R*100	6,850,400	q'arterly	Aug. '82 1½
" " pref.100	769,600	semi-an	Aug .'82 3½
Central of Georgia...100	7,500,000	semi-an	June '82 4
Central of New Jersey100	18,563,200	q'arterly	July '76 2½
Central Ohio*..... 50	2,437,950	semi-an	July '82 3
" pref.. 50	411,550	semi-an	July '82 3
Central Pacific 100	59,275,500	semi-an	Aug. '82 3
Chemung*..... 100	380,000	q'arterly	July '81 1½
Cheshire preferred ..100	2,155,300	semi-an	July '82 1½
Chicago and Alton...100	11,181,741	semi-an	Sept. '82 4
" " pref 100	2,245,400	semi-an	Sept. '82 4
Chi., Burl. & Quincy.100	55,337,455	q'arterly	Sept. '82 2
Chi., Iowa & Nebras*.100	3,916,200	semi-an	July '82 4
Chi., Mil. & St. Paul.100	20,404,261	semi-an	Oct. '82 3½
" " pref 100	14,401,483	semi-an	Oct. '82 3½
Chi. & N. Western...100	14,988,257	semi-an	June'82 3½
" pref.100	21,525,353	q'arterly	Sept. '82 2
Chi., R. I. & Pacific..100	41,960,000	q'arterly	Aug. '82 1¾
Chi. and West Mich .100	6,151,000	semi-an	Feb. '82 2½
Chi., St.P., M.&O.pref.100	10,390,000	q'arterly	July '82 1¾
C., Ind., St. L. & Chi..100	6,000,000	q'arterly	July '82 1½
Cin., Sand. & Clev.pf. 50	429,037	semi-an	May '82 3
Clev. and Mahoning* 50	3,759,200	semi-an	Nov. '81 3½
Clev. and Pittsburg* 50	11,244,336	q'arterly	Sept. '82 1¾
Columbus & Xenia*. 50	1,786,200	q'arterly	Sept. '82 2
Colum. & Hocking Val.100	2,500,200	semi-an	Aug. '81 208
Concord 50	1,500,000	semi-an	May '82 5
Concord and Ports.*..100	350,000	semi-an	July '82 3½
Conn. & Passump. Riv100	2,244,400	semi-an	Aug '82 3
Connecticut River ..100	2,100,000	semi-an	July '82 4
Cumberland Valley.. 50	1,292,950	q'arterly	July '82 2½
" 1st pref 50	241,900	semi-an	Apl. '82 4
" 2d pref. 50	243,000	semi-an	Apl. '82 4
Danbury & Norwalk. 50	600,000	.....	Apl. '82 1¾
Dayton and Mich.*.. 50	2,402,573	semi-an	Apl. '82 1¾
" " pref. 50	1,211,250	q'arterly	July '82 2
Delaware*..... 25	1,468,940	semi-an	July '82 3
Del. & Bound Brook*100	1,652,000	q'arterly	Aug. '82 1¾
Del., Lack.& Western 50	26,200,000	q'arterly	July 82 2
Denver & Rio Grande.100	29,160,000	q'arterly	Jan. '82 1½
Den., South P. & Pac.100	3,500,000	.....	Aug.'80 4
Detroit, Lans. & Nor.100	1,825,600	semi-an	Aug.'80 2½
" " pref.100	2,503,380	semi-an	Aug.'82 3½
Dubuque&Sioux C'y*100	5,000,000	semi-an	Apl. '82 3
East Pennsylvania*.. 50	1,709 550	semi-an	July '82 3
East Mahanoy*..... 50	392,950	semi-an	July '82 3
Eastern (N. H.).....100	492,500	semi-an	June'82 2½
Eel River.....100	3,000,000	q'arterly	Sept. '82 $1
Elmira, Jef.&Canand*100	500,000	annual	Sep. '80 5
Elmira&Williamsp't* 50	500,000	semi-an	May '82 1½
" " pref. 50	500,000	semi-an	July '82 3½
Erie and Pitsburg*.. 50	1,998,400	q'arterly	June '82 1¾
Evansville & Terre H.100	100,000	semi-an	Nov.'81 2
Fitchburg..... ..100	4,500,000	semi-an	July '82 3
F. & P. Marquette pf.100	6,500,000	semi-an	July '82 3
Ft. W. & Jackson pref.100	2,000,000	.....	May '82 2
Georgia. ..... .100	4,200,000	q'arterly	July '82 2½
Granite 100	1,250,000	semi-an	July '82 3
Han. & St. Jo. pref .100	5,083,024	semi-an	Aug. '82 3½
Harrisbg&Lancaster 50	1,782,500	semi-an	July '82 3½
Housatonic pref. ...100	1,180,000	q'arterly	July '82 2
Illinois Central.....100	39,000,000	semi-an	Sept. '82 3½
Ia. Falls & Sioux City*100	4,623,500	q'arterly	Sept. '82 1¾
Iowa R. Land Co....100	7,620,000	q'arterly	Aug. '82 1
Jeffersonv. Mad.&Ind100	2,000,000	q'arterly	May '82 1¾
Joliet and Chicago*..100	1,500,000	q'arterly	June'82 1¾
Kan.C., Ft.S.&Gulf...100	4,000,000	.....	Feb. '82 2
" " pref..100	2,750,000	semi-an	Aug. '82 4
Kentucky Central...100	500,000	semi-an	June'81 1
" " pref..100	5,583,500	semi-an	June'83 1
Lake Shore&Mich.So.100	49,466,500	q'arterly	Aug. '82 2
" (guar.)100	533,500	semi-an	Aug. '82 5
Lawrence*..... 50	450,000	q'arterly	July '82 2
Lehigh Valley..... 50	27,496,895	q'arterly	Oct. '82 2
" pref. 50	106,300	q'arterly	Oct. '82 2
Little Miami..... 50	4,637)300	q'arterly	Sept. '82 2
Little Rock & Ft. S..100	4,096,135	.....	July' 81 108
Little Schuylkill*.. . 50	2,646,100	semi-an.	July '82 3½
Louisville & Nashv..100	19,130,913	semi-an.	Feb. '82 3
Lowell & Andover...100	500,000	semi-an.	Jan. '82 3½
Lykens Valley.....100	600,000	q'rterly.	Oct.' 81 2½
Manchester & Law..100	1,000,000	semi-an.	May '82 5
Manhattan 100	13,000,000	.....	.....
" " 1st pref.100	6,500,000	q'rterly.	Oct. '82 1½
" " 2d pref.100	6,500,000	q'rterly.	Oct. '82 1½
Marietta& Cincinnati 50	1,386,350	.....	.....
" " 1st pref 50	8,105,600	semi-an.	Sep. '66 38
" " 2d pref 50	4,440,000	semi-an.	Sep. '66 38
Marq.Hout.&Ont.pf..100	2,259 026	.....	Aug. '82 4
Massawippi*.....100	400,000	semi-an	Aug. '82 3
Metropolitan 100	6,500,000	q'rterly-	Oct. '82 1½
Michigan Central....100	18,738,204	q'rterly.	Aug. '81 1
Middlesex Central...100	280,000	semi-an.	Aug. '82 3
Mill Creek& Minehill* 50	323,000	semi-an.	July '82 5
M. Hill& Schuyl. Hav* 50	4,022,500	semi-an.	July '82 3½
Missouri Pacific.....100	28,169,800	q'rterly.	Oct. '82 1¾
Mobile&Montgomery100	3,022,517	semi-an.	Feb. '80 2¼
Morris and Essex.... 50	15,000,000	semi-an.	July '82 3½
Mt Carbon&PtCarbon 50	282,350	semi-an.	July '82 6
Nashua and Lowell..100	800,000	semi-an.	July '82 4
Nashua & Rochester.100	1,305,800	semi-an.	Apl. '82 1½
Nashv. & Decatur...100	1,827,000	semi-an.	June'81 3
Nash., Chat.&StLouis 25	6,670,325	semi-an.	Apl. '82 1½
Naugatuck.....100	2,000,000	semi-an.	July '82 5
Nesquehoning Val'y* 50	1,300,000	semi-an.	Sept.'82 3
N.Castle&Beaver Val* 50	600,000	q'rterly.	Oct. '81 —
NewLondonNorth'n*100	1,500,000	q'rterly.	July '82 1¾
N. Y. Cen. & Hud. R.100	89,428,330	q'rterly.	Oct. '82 2
N. Y. and Harlem....100	7,950,000	q'rterly.	July '82 4
" " pref.100	1,500,000	q'rterly.	July '82 4
" City Line.. —	.....	annual	Apl. '82 3
N.Y.,LakeErie&West.100	77,083,900	.....	.....
" " pref.100	8,156,825	.....	Jan. '82 6
N. Y., N. H. & Hart..100	15,500,000	semi-an.	Jan. '82 5
N.Y., Prov. & Boston100	3,000,000	q'rterly.	Aug. '82 2
Niag.Bridg&Canand*100	1,000,000	semi-an.	July '81 3
North Carolina*.....100	3,000,000	semi-an.	Sep. '81 3
" " pref.100	1,000,000	semi-an.	Sep. '81 3
N. Eastern (S.C.) pref100	86,000	semi-an.	May '81 4
Norfolk & Western pref.	15,000,000	q'rterly.	Sept. '82 $1
North Pennsylvania. 50	4,527,150	q'rterly.	Aug. '82 1¾
Northern Central.... 50	6,142,600	semi-an.	July '82 3
Northern N. Hampsh100	3,068,400	semi-an.	June'82 3
Northern N. Jersey*.100	1,000,000	semi-an.	July '80 2½
Norwich&Worcester*100	2,604,400	semi-an.	July '82 5
Ohio 100	18,500,000	.....	.....
Ohio and Miss. pref...100	4,030,000	semi-an.	Mar. '75 3½
Old Colony.....100	7,333,800	semi-an.	July '82 3½
Oregon R'way&Nav..100	6,000,000	q'rterly.	Aug. '82 2
Oswego & Syracuse..100	1,320,400	semi-an.	Aug. '81 4½
Panama..... 100	7,000,000	.....	July '82 6½
Paterson & Hudson*.100	630,000	semi-an.	July '82 4
Paterson & Ramapo.100	248,000	semi-an.	July '82 4
Pember.&Hightst'n*. 50	342,150	semi-an.	Jan. '82 3
Pennsylvania..... 50	77,672,750	semi-an.	May '82 4
Pennsylvania Co..... 50	20,000,000	semi-an.	June'81 2½
Peoria & Bureau Val*100	1,200,000	semi-an.	Feb. '82 4
Philadelphia & Erie*. 50	7,013,700	semi-an.	.....
" " pfd 50	2,400,000	semi-an.	Jan. '75 4
Phil, Ger. & Norrist'n* 50	2,231,900	q'rterly.	Sept.'82 3
Phil. and Reading... 50	32,726,375	q'rterly.	Jan. '76 2½
" " pref. 50	1,551,800	q'rterly.	July '76 3½
Phila. and Trenton..100	1,250,100	q'rterly.	July'82 2½
Phila., Wil. and Balt. 50	11,585,750	semi-an.	July '82 4
Pittsb., Ft. W. & Chi.*100	19,714,285	q'rterly.	July'82 1¾
" Special Imp.100	6,770,900	q'rterly.	July'82 1¾
Pittsfield&N. Adams..100	450,000	semi-an.	July '82 2½
Portl., Saco & Portsm100	1,500,000	semi-an.	July '82 3
Providence & Worces.100	2,000,000	semi-an.	July '82 3
Rensselaer&Saratog.*100	7,000,000	semi-an.	July '82 4
Rhode Island& Mass.100	100,000	.....	Jan. '81 3
Richmond& Danv...100	3,866,000	q'rterly.	Aug. '82 2
Richmond & Petersb100	1,009,300	semi-an.	Jan. '81 3
Roch. & Genesee Val.*100	555,200	semi-an.	July '82 3
Rutland preferred.. 100	4,000,000	semi-an.	Sept. '82 1
St.L., Alt. & T.Haute.100	2,300,000	.....	.....
" " pref.100	2,468,406	.....	May '82 3
St.L.&S.Fran.1st pref100	4,500,000	.....	Aug. '82 3½
St.L., I.Mt.&South'n.100	21,459,921	semi-an.	Feb. '74 3
St.L., Jac'ville & Chic.100	1,293,000	.....	Aug. '82 4½
" " " pref.100	1,034,000	.....	Aug. '82 4½
St. P. & Duluth pref.100	4,705,000	q'rterly.	June'82 1¾
St. P., Minn. & Man..100	20,000,000	semi-an.	Aug. '82 3½
Schuylkill Valley*... 50	576,050	semi-an.	July '82 2½
Seaboard & Roanoke.100	1,229,600	semi-an.	May '82 5
Shamokin V.&Pottsv 50	669,450	semi-an.	Feb. '82 3
Shore Line*.....100	1,000,000	semi-an.	July '82 4
Sioux C.&Pacific pref100	169,000	semi-an.	Apl. '82 3½
South Br. (N. J.)*....100	438,300	semi-an.	Jan. '82 3
South Western (Ga.)*100	3,892,300	semi-an.	Dec. '81 3½
Stockbridge&Pitts.*.100	448,700	semi-an.	Oct. '81 1½
Syr., Bingham&N.Y.*100	2,500,000	semi-an.	Feb. '81 2
Terre Haute & Ind....100	1,988,150	semi-an.	Aug. '82 4
Troy and Boston....100	1,609,000	semi-an.	Feb. '80 2
Union Pacific. 100	61,000,000	q'rterly.	Oct. '82 1¾
United Cos of N. J.*.100	20,490,000	q'rterly.	July '82 2½
Utica, Shenango&S V100	4,000,000	semi-an.	Nov. '81 3
Utica and Black Riv.100	1,772,000	semi-an.	Mar. '82 2
Vermont and Mass. 100	3,050,000	semi-an.	Apl. '82 3
Wab. St.L.&Pac.pref.100	22,615,100	q'rterly.	Nov. '81 1¼
Ware River*.....100	750,000	semi-an.	July '82 3½
Warren (N. J.)..... .100	1,800,000	semi-an.	Apl. '82 3½
Warwick Valley.....100	340,000	semi-an.	July '82 3½
Westchest&Phil.pref100	821,300	semi-an.	July '80 2
West Jersey.....100	1,359,750	semi-an.	Sept. '82 3
Wilmingt'n&Weld'n.100	1,456,200	semi-an.	July '82 3
Wil., Col., & Aug 100	960,000	semi-an.	July '82 3
Winchester&Poto'c.*100	180,000	semi-an.	July '82 3
Winchester&Strasb.*100	74,700	semi-an.	July '82 3
Worcester & Nashua. 75	1,789,800	semi-an.	July '82 1¾
HORSE-POWER R. R.			
Albany City.....100	200,000	annual	.....'80 5½
Baltimore City..... 25	1,000,000	semi-an.	July '82 3
Balt., Cat.&El. Mills...100	.....	semi-an.	July '82 2
BleeckerSt.&Ful.F'y.100	900,000	semi-an.	July '81 ¾
Boston&Chelsea pref. 50	110,000	semi-an.	Apl. '82 3
Broadway (Brooklyn)100	250,000	q'arterly	Oct. '81 3
B'way&7th Av, (N.Y.)100	2,100,000	q'arterly	Oct, '81 2
B'klyn&Hunter's Pt.100	400,000	semi-an.	Apl. '79 3
Brooklyn City.....100	2,000,000	q'arterly	Dec. '81 3½
Bushwick (Brooklyn)100	300,000	semi-an.	July '81 2½
Cambridge.....100	008,000	q'arterly	Apl. '82 4½
Cen. Park, N.& E. Riv.100	1,800,000	q'rterly.	July '82 2
Christoph'r&TenthSt100	650,000	semi-an.	Aug.'81 2½
Citizens' (Phil.)..... 50	192,500	q'rterly.	Jan. '82 2½
Citizens' (Phg.)..... 50	200,000	annual.	.....'80 14½
Coney Island&Bklyn100	500,000	semi-an.	Oct. '80 5
Continental (Phil.).. 50	580,000	semi-an.	July '82 6
D. Dock, E. B'way&Bat100	1,200,000	q'arterly	Nov.'81 4
Eighth Av. (N. Y.)....100	1,000,000	q'rterly.	Oct. '81 3
42d St. & G. St. Ferry100	747,000	semi-an.	Nov.'81 6
Frankf.&Southw (Ph) 50	600,000	q'rterly.	Jan. '82 6
Germantown, (Ph.).. 50	572,800	q'rterly.	July '82 2½
Girard College (Ph.) . 50	500,000	semi-an.	July '71 3
Grand St. & Newton..100	170,000	semi-an.	July '81 2½
Green&Coates St.(Ph) 50	150,000	q'rterly.	July '82 3
Heston, Mantau&F'm 50	299,381	semi-an.	Jan. '75 4
Highland.....100	600,000	semi-an.	July '82 4
Lomb.&SouthSts(Ph) 25	195,000	semi-an.	Oct. '75 4
Lynn and Boston....100	200,000	semi-an.	May '82 4
Malden and Melrose.100	165,000	.....	.....
Metropolitan (Bost.). 50	1,500,000	semi-an.	July '82 4
Middlesex (Boston)..100	650,000	semi-an.	May '82 3½
N.Y., Bay Ridge&Jam100	150,000	.....	Oct. '78 7
Ninth Av. (N. Y.)....100	707,320	.....	.....
Orange & Newark....100	282,555	.....	.....
People's (Phila.) pref. 25	124,744	.....	July '82 2
Philadelphia City.... 50	475,000	semi-an.	July '82 4
Phila. and Darby.... 20	200,000	semi-an.	July '81 3½
Phila. & Grey's Ferry. 50	308,000	semi-an.	Jan. '82 6
Phg, Alleg. & Manches. 50	300,000	q'rterly.	Oct. '81 3
Ridge Avenue (Ph.).. 50	420,000	semi-an.	Oct. '81 11
Second Avenue (N.Y.)100	1,100,500	semi-an.	July '81 2½
Second&ThirdSt.(Ph) 50	771,076	q'rterly.	Jan. '82 4½
17th &19th sts (Ph.).. 50	250,000	semi-an.	July '81 3
Sixth Avenue (N. Y.)100	750,000	semi-an.	Oct. '81 5
Somerville (Boston).100	113,000	semi-an.	May '82 3
South Boston..... 50	600,000	semi-an.	July '82 4
Third Avenue, N. Y..100	2,000,000	q'rterly.	Nov.'81 5
13th and 15th sts., Ph 50	334,520	q'rterly.	Jan. '82 4
23d street, N. Y.....100	600,000	semi-an.	Aug.'81 4
Union, Boston.....100	374,300	semi-an.	Jan. '82 4
Union, Phila..... 50	1,005,000	semi-an.	Jan. '82 7
West Philadelphia... 50	750,000	semi-an.	July '77 10
CANALS.			
Chesapeake and Dela 50	2,078,038	semi-an.	June'75 2
Delaware Division... 50	1,633,350	semi-an.	Aug. '82 $1
Delawa. and Hudson100	20,000,000	q'rterly.	Sept. '82 1¾
Delaware & Raritan*.100	5,847,400	q'rterly.	July '82 2½
Lehigh Coal and Nav 50	11,204,250	semi-an.	June'82 2
Monongahela Nav... 50	1,004,500	semi-an.	July '82 $3
Morris, consolidated.100	1,025,000	semi-an.	Aug. '81 2
" preferred....100	1,175,000	semi-an.	Aug. '81 5
Pennsylvania..... 50	4,501,200	.....	.....
Schuyl. Nav., com.*. 50	850,100	annual..	Au. '81 50c.
" " pref... 50	3,200,000	annual..	Aug. '81 $1
MISCELLANEOUS.			
Adams Express.....100	12,000,000	q'rterly.	Sept.'82 2
American Express... 50	18,000,000	semi-an.	July '82 3
Amoskeag Manuf.Co.100	3,000,000	semi-an.	June'81 5
Calumet&HeclaMin'g 25	100,000 S.	q'rterly.	Aug. '82 $5
Central Mining Co....100	.....	semi-an.	Feb. '82 2½
Consolidation Coal..100	10,250,000	semi-an.	Jan. '82 2
George's Creek C.&I.100	.....	semi-an.	Jan. '82 3
Maryland Coal.....100	4,400,000	semi-an.	Feb. '76 1½
Mariposa L. &Mining100	10,000,000	.....	.....
" pref100	5,000,000	.....	.....
Missouri Val.LandCo100	200,000	semi-an.	July '82 12
National Tube Works100	1,000,000	q'rterly.	July '82 3
Pac. Mail Steamship.100	20,000,000	q'rterly.	Sept.'69 3
Pennsylvania Coal... 50	5,000,000	q'rterly.	Aug. '82 3
Pullman Palace Car..100	10,032,800	extra	Sept. '82 1½
Quicksilver, com.....100	5,708,700	.....	May '82 0.4
" pref.....100	4,291,300	.....	May '82 6
Quincy Mining Co... 25	40,000 shs	semi-an.	Aug. '82 $5
Quincy R. R. Bridge.100	1,750,000	semi-an.	July '82 5
SiouxC.&I.F.L.&L.Co100	500,000	semi-an.	June'82 5
Spring Mt. Coal.....100	1,500,000	semi-an.	June '82 3½
Topeka Equip'nt Co.100	255,500	semi-an.	Apl. '82 5
United States Ex....100	7,000,000	q'rterly.	Aug. '82 1
Wells-Fargo & Co. Ex100	6,250,000	semi-an.	July '82 4
Western Union Tel..100	80,000,000	q'rterly.	Oct. '82 1½

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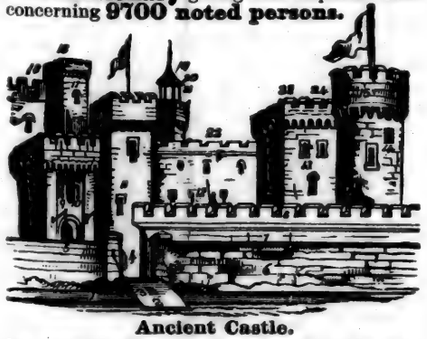
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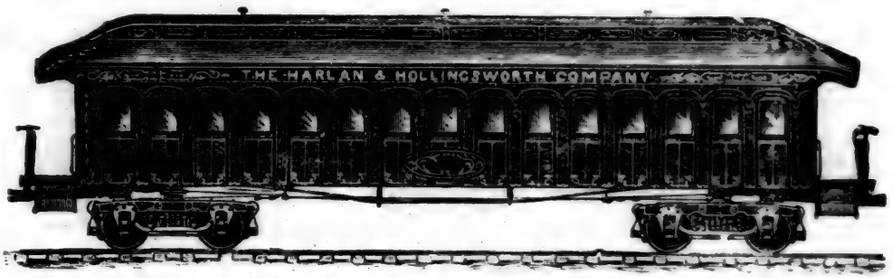
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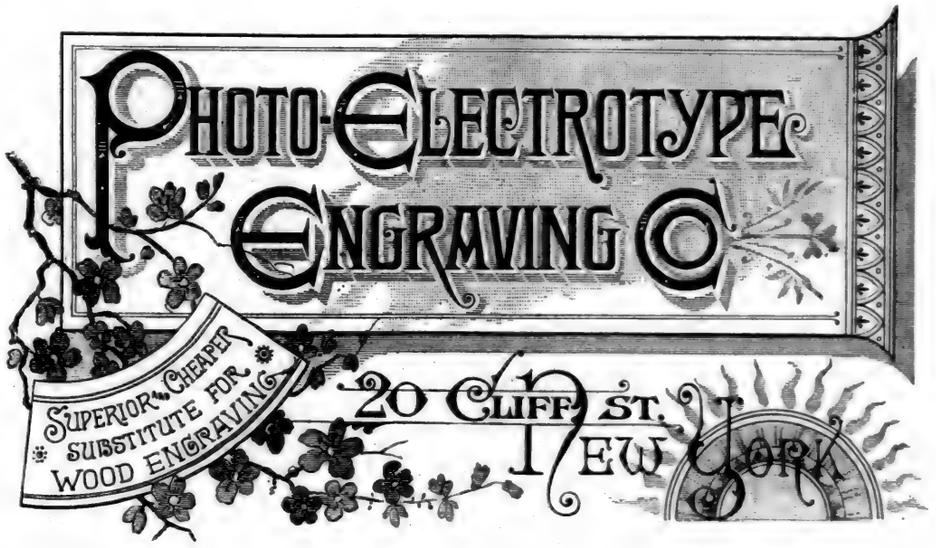
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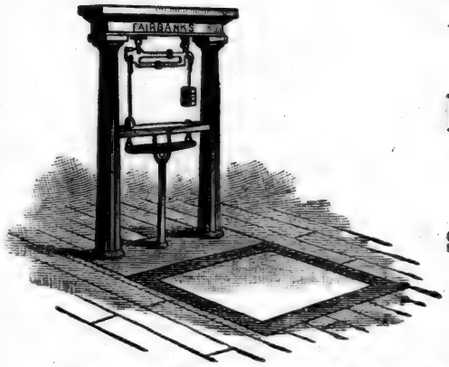
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	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total.
Burl., Cedar Rap. & Northern:													
1880	184,316	165,170	188,325	141,652	149,504	153,378	143,432	160,160	179,804	204,991	189,330	193,419	2,053,484
1881	167,750	124,510	148,551	184,680	165,630	205,912	174,351	209,112	221,801	221,748	203,880	232,812	2,259,037
1882	252,823	225,631	224,107	178,304	199,278	211,257	198,276	224,921	.....	.....	.....	.....	.....
Central Pacific:													
1880	1,200,614	1,070,487	1,373,438	1,356,716	1,778,488	1,724,950	1,840,067	1,973,438	1,964,997	1,120,229	2,199,466	1,905,221	20,508,112
1881	1,602,907	1,454,218	1,709,637	1,872,370	2,091,410	2,159,381	1,899,346	2,088,518	2,293,000	2,514,000	2,267,000	2,110,000	23,947,951
1882	1,876,000	1,702,000	1,987,000	2,052,000	2,353,000	2,239,000	2,020,000	2,277,000	.....	.....	.....	.....	.....
Chesapeake and Ohio:													
1880	202,335	198,681	222,762	221,559	199,443	214,352	238,236	259,110	247,303	211,820	240,795	218,000	2,674,308
1881	162,540	184,389	228,479	227,343	252,235	241,135	225,096	262,858	247,144	237,303	235,585	203,562	2,702,762
1882	210,455	209,708	208,981	267,454	255,939	260,753	306,831	371,175	.....	.....	.....	.....	.....
Chicago and Alton:													
1880	534,054	497 013	626,473	542,961	616,128	617,524	708,906	761,120	767,349	785,199	696,776	574,695	7,718,198
1881	487,890	461,641	529,915	558,190	548,556	635,860	676,205	769,751	768,897	750,359	680,133	635,307	7,553,988
1882	570,447	530,480	584,483	561,787	553,412	613,886	671,537	800,624	.....	.....	.....	.....	.....
Chicago and Northwestern:													
1880	1,154,632	1,131,683	1,361,725	1,294,573	1,875,608	1,671,177	1,699,686	1,767,938	2,020,245	2,105,217	1,855,671	1,477,902	19,416,007
1881	1,240,667	963,208	1,178,795	1,474,612	1,879,006	2,306,640	1,983,031	2,315,164	2,292,676	2,341,097	2,019,037	1,855,476	21,849,209
1882	1,620,336	1,471,945	1,696,568	1,634,819	2,058,133	2,022,700	2,025,736	2,099,755	.....	.....	.....	.....	.....
Chicago, Burlington and Quincy:													
1880	1,432,740	1,411,870	1,732,518	1,489,894	1,909,627	1,682,956	1,773,643	1,834,321	1,862,285	1,934,762	1,837,860	1,552,018	20,454,494
1881	1,307,948	1,034,821	1,418,149	1,574,371	1,679,455	2,083,803	1,888,358	2,173,945	2,262,981	2,031,001	1,816,133	1,905,490	21,324,150
1882	1,658,834	1,457,300	1,566,217	1,530,838	1,505,261	1,437,164	1,625,006	.....	.....	.....	.....	.....	.....
Chicago, Milwaukee and St. Paul:													
1880	764,298	738.749	900,675	871,041	1,134,745	1,037,958	1,026,708	991,297	1,257,677	1,493,620	1,472,037	1,397,308	13,086,119
1881	990,847	682,717	916.989	1,259,946	1,538,491	1,729,811	1,568,706	1,678,361	1,645,000	1,590,000	1,569,000	1,855,000	17,025,462
1882	1,435,000	1,377,000	1,561,000	1,518,000	1,629,000	1,620,000	1,465,000	1,545,000	.....	.....	.....	.....	.....
Chicago, St. Paul, Minneapolis and Omaha:													
1880	193,827	173,078	259,783	259,208	232,146	218,093	236,995	251,013	300,833	342,052	342,894	312,173	3,122,097
1881	257,786	158,594	251,648	261,211	350,124	404,562	383,202	385,586	363,685	382,714	380,733	391,950	3,981,296
1882	307,498	315,100	405,779	356,558	406,420	363,109	331,480	394,555	.....	.....	.....	.....	.....
Cincinnati, Indianapolis, St. Louis and Chicago:													
1880	155,697	172,541	198,220	168,199	186,995	200,332	204,138	233,478	343,627	239,881	209,014	198,254	2,412,185
1881	182,523	171,511	191,005	183,710	191,056	192,299	177,161	229,858	219,977	212,606	194,805	192,623	2,296,916
1882	200,042	186,879	208,066	204,269	199,110	195,948	209,564	.....	.....	.....	.....	.....	.....
Denver and Rio Grande:													
1880	124,759	126,922	160,883	164,882	193,925	295,455	373,132	400,133	406,583	473,318	408,562	349,196	3,478,007
1881	307,476	317,681	398,493	433,111	514,767	584,230	548,284	606,193	620,643	665,686	566,819	643,417	6,206,812
1882	491,914	412,987	535,055	559,917	614,298	537,462	495,797	574,040	.....	.....	.....	.....	.....
Hannibal and St. Joseph:													
1880	176,079	166,965	216,061	206,735	191,317	179,396	224,312	238,081	233,448	242,214	207,147	279,635	2,561,366
1881	154,401	122,874	176,356	190,812	172,950	190,740	201,899	210,240	202,567	313,433	201,782	180,376	2,230,961
1882	138,284	154,717	168,798	148,913	154,917	155,030	184,347	258,628	.....	.....	.....	.....	.....
Illinois Central:													
1880	595,212	613,806	613,008	535,732	665,120	681,736	724,095	732,755	806,836	880,211	783,120	673 182	8,304,812
1881	631,281	524,499	557,789	662,493	673,259	803,887	720,004	868,407	828,847	815,238	737 218	763,475	8,586,397
1882	728,173	689,387	695,371	674,603	674,749	663,746	752,251	813,600	.....	.....	.....	.....	.....
Indiana, Bloomington and Western:													
1880	80,498	89,690	116,185	90,374	85,733	106,954	103,438	116,732	110,622	121,343	96,621	104,619	1,233,079
1881	90,283	83,261	192,085	203,677	200,064	199,846	199,125	272,114	195,307	181,674	160,826	156,697	.....
1882	195,824	175,755	206,235	205,934	182,554	186,133	206,072	278,814	.....	.....	.....	.....	.....
Louisville and Nashville:													
1880	674,455	575,035	612,593	563,883	655,014	976,229	772,537	827,088	931,910	1,000,326	953,086	949,184	9,491,346
1881	816,960	805,124	947,959	850,862	828,726	1,227,885	817,135	876,192	951,566	1,002,950	1,065,223	1,122,285	11,326,859
1882	950,065	960,036	1,073,745	950,007	946,435	1,187,385	1,038,385	1,030,385	.....	.....	.....	.....	.....
Mobile and Ohio:													
1880	250,116	204,094	168,301	140,091	129,249	121,855	131,621	140,593	184,246	264,714	251,368	287,373	2,373,621
1881	224,347	216,768	230,916	163,551	145,803	136,517	135,548	160,789	209,044	252,921	252,434	262,025	2,406,437
1882	161,433	158,154	152,651	145,272	137,645	132,572	136,398	140,443	.....	.....	.....	.....	.....
Nashville, Chattanooga and St. Louis:													
1880	205,633	191,154	169,457	155,466	158,839	144,155	151,594	169,326	167,473	178,266	182,087	175966'	2,049,484
1881	178,143	190,866	207,710	183,525	104,430	154,549	150,430	168,317	179,979	172,121	152,059	173,127	2,075,256
1882	156,994	159,961	161,005	154,155	137,645	119,074	160,991	1,03c,385	.....	.....	.....	.....	.....
New York and New England:													
1880	164,232	149,907	183,845	179,689	183,701	219,891	205,056	249,885	235,642	215,491	210,856	198 108	2,396,302
1881	189,749	173,614	212,019	216,913	217,185	231,518	246,821	280,524	299,573	261,199	242,412	237,729	2,809,255
1882	213,840	217,261	265,222	263,544	283,244	290,060	308,920	353,726	.....	.....	.....	.....	.....
New York, Lake Erie and Western:													
1879	1,147,173	1,207,391	1,356,780	1,372,755	1,350,574	1,230,419	1,273,533	1,450,223	1,492,497	1,713,697	1,515,835	1,398,224	16,509,127
1880	1,296,381	1,252,218	1,644,958	1,643,151	1,592,544	1,661,812	1,580,976	1,606,874	1,786,417	1,899,910	1,799,338	1,726,788	19,149,361
1881	1,443,437	1,425,765	1,847,261	1,709,057	1,776,891	1,794,982	1,787,081	1,772,895	1,734,200	.....	.....	.....	.....
Northern Central:													
1880	334,494	330,860	415,325	386,130	329,788	419,193	450,298	453,923	464,093	512,918	459,054	494,310	5,050,387
1881	386,157	382,657	452,906	487,273	465,588	487,287	440,811	498,008	429,565	449,664	487,160	476,622	5,443,697
1882	407,368	413,551	430,194	435,129	482,607	482,762	509,683	.....	.....	.....	.....	.....	.....
Northern Pacific:													
1880	81,300	77,259	119,357	185,700	217,613	253,105	241,277	223,500	330,300	358,456	300,822	220,993	2,629,710
1881	116,508	78,803	162,984	216,210	312,705	412,024	393,260	434,085	490,096	565,485	428,903	434,331	4,044,576
1882	239,800	269,000	384,000	438,000	568,332	631,342	679,240	727,377	.....	.....	.....	.....	.....
Philadelphia and Erie:													
1880	224,307	245,372	327,678	334,947	311,470	331,024	308,699	347,532	322,737	367,082	324,966	281,919	3,727,733
1881	224,303	225,501	285,573	293,323	343,792	350,585	291,669	303,849	276,522	292,392	284,078	282,772	3,454,309
1882	252,727	246,246	265,311	277,851	341,415	347,614	377,206	.....	.....	.....	.....	.....	.....
St. Louis and San Francisco:													
1880	198,091	195,948	193,146	176,164	167,664	173,607	213,297	259,995	280,873	328,194	290,329	226,063	2,698,371
1881	212,435	178,234	262,050	265,298	283,399	260,254	252,333	286,373	279,064	308,569	284,320	287,914	3,160,245
1882	256,784	244,654	274,959	242,806	253,419	240,177	318,613	381,637	.....	.....	.....	.....	.....
St. Louis, Alton and Terre Haute:													
1880	153,139	163,737	168,994	155,462	147,928	150,207	191,077	216,759	204,295	221,863	188,773	184,503	2,146,741
1881	175,725	166,012	201,137	197,447	172,177	165,896	165,393	189,180	187 299	179,921	162,544	153,852	2,112,801
1882	168,987	149,619	178,145	157,450	162,842	142,742	192,017	236,137	.....	.....	.....	.....	.....
St. Louis, Iron Mountain and Southern:													
1880	555,983	490,195	451,560	408,241	349,053	363,454	432,655	565,869	671,219	688,365	632,052	656,951	6,265,597
1881	570,957	560,791	704,002	548,300	479,075	474,302	533,512	644,386	690,400	719,239	687,280	709 498	7,319,744
1882	516,370	501,127	585,008	581,977	519,120	529,700	515,519	675,981	.....	.....	.....	.....	.....
St. Paul, Minneapolis and Manitoba:													
1880	180,239	137,645	261,798	333,014	281,899	243,407	272,089	232,579	274,188	345,057	300,675	297,641	3,160,231
1881	254,187	159,482	320,962	425,685	382,642	405,322	387,488	414,954	485,736	605,708	508,530	528,262	4,878,960
1882	395,461	418 358	531,004	570,890	858,902	856,417	853,296	801,759	.....	.....	.....	.....	.....
Texas and Pacific:													
1880	245,785	219.165	215,070	174,177	141,083	153,066	195,711	226,073	266,570	303,666	312,184	301,858	2,754,408
1881	281,176	260,781	319,928	295,066	281,782	285,405	328,063	381,331	337,117	578,668	357,724	381,218	3,921,569
1882	310,785	255,644	332,911	359,543	409,228	384,713	367,215	439,918	.....	.....	.....	.....	.....
Union Pacific Railway:													
1880	1,433,636	1,393,992	1,730,509	1,937,220	2,027,269	1,928,528	1,934,215	1,913.035	2,270,179	2,707,860	2,251.148	1,869,335	23,448,445
1881	1,339,799	1,374,740	1,674,860	1,766,894	2,319,238	2,884,774	2,528,826	2,638,659	2,844,357	3,289 350	2,773,608	2,267,004	27,451,831
1882	1,961,088	1,759,863	2,226,832	2,462,004	2,491,590	2,508,453	2,301,000	2,762,107	.....	.....	.....	.....	.....
Wabash, St. Louis and Pacific:													
1880	776,790	759,451	978,629	892,024	948,773	953,468	1,966,742	1,189,478	1,178,950	1,501,203	1,131,787	1,050,816	12,428,112
1881	811,617	818,922	1,121,592	1,023,482	1,144,660	1,308,993	1,131,752	1,542,838	1,490,027	1,396,300	1,399,555	1,328,278	14,461,570
1882	1,229,965	1 134 768	1,315,776	1,378,194	1,204,864	1 149 632	1 418,837	1,772,554	.....	.....	.....	.....	.....

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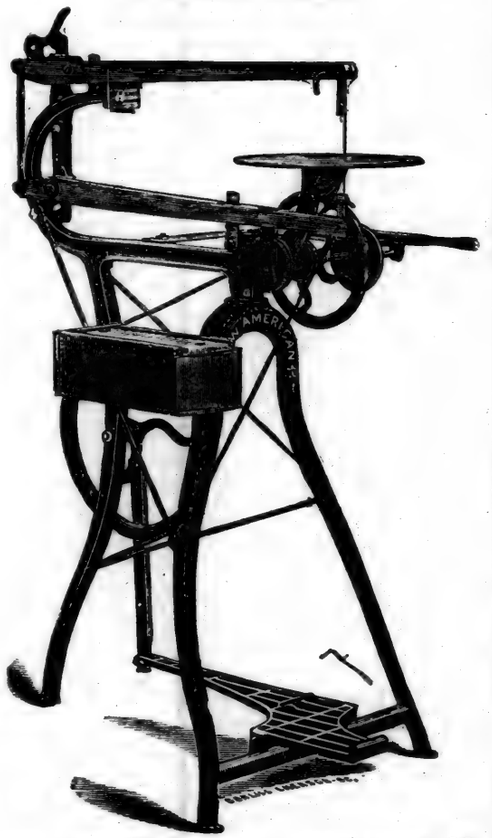
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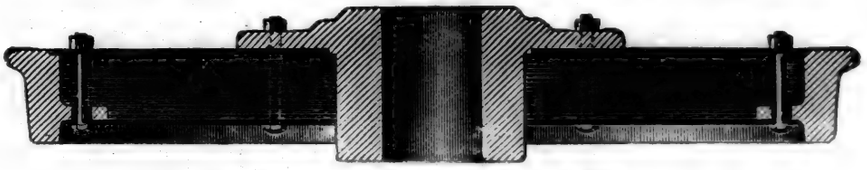
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The Education of Locomotive Engineers.

Editor American Railroad Journal:

In my last communication I proposed to indicate a plan for a school to educate youths for locomotive engineers. Since it was written, I find in the September number of the *Popular Science Monthly* an article bearing directly on this subject, and describing a school which has been in operation at St. Louis for two years. The article is entitled "An American Manual Training School, and was written by Prof. C. M. Woodward, Ph. D., of the Washington University, St. Louis, who appears also to be connected with the Manual Training School. Among the teachers are "a first-class machinest and an expert blacksmith."

There is also at Boston a School of Mechanic Arts, differing from the St. Louis school in being equipped with shops and tools only, and not with study and recitation rooms; and in having a two-years' course, instead of three.

The St. Louis school has five parallel courses of instruction, viz: 1, Pure mathematics; 2, Science and applied mathematics; 3, Language and literature; 4, Penmanship and drawing; 5, Tool-work in woods and metals.

It might be presumed that a boy having in view the occupation of locomotive engineer would have acquired enough knowledge in the first and third courses, before entering the training-school, to answer the needs of his calling, so that three years would give time to gain considerable proficiency in the other three courses.

It is to be observed that the institution does not undertake to manufacture anything for sale, nor to teach completely any particular trade. Graduates will have gained a great start in the acquisition of mechanical skill applicable to speedy perfection in any of the useful arts; for their teaching has special reference to rapid improvement in the use of tools, and not the production of articles for profit. It is therefore probable that the young graduate could perfect himself in the art of building any particular kind of machinery by one year's constant service in the shop, under the careful supervision of a competent foreman. Having then become an expert machinist, he ought to learn how to drive an engine perfectly in six months more. Commencing at the age of fourteen in the training-school, in less than five years the boy would acquire a good education and a skill in handicraft fit for building and running a locomotive, and for learning rapidly to construct any other machinery of iron and steel. Such men need never be out of employment of some kind.

Before meeting the article referred to, I had in mind the Agricultural and Mechanical Colleges, which have been established in most of the States upon the foundation of lands granted by Congress in 1862 on the basis of population. The larger States consequently have been able to give these colleges a liberal support. It seems to me practicable for an organization possessing the numbers and power of the Brotherhood of Locomotive Engineers, to induce the managers of some of these institutions to put in operation a training-school something like the one at St. Louis, and to make an arrangement with one of the great locomotive works for a special course of instruction following the other. Before leaving the training-school, the boys would be skillful enough not to damage tools nor materials, and they might earn enough for their support. The Brotherhood would not find it too expensive to pay the salary of a skilled mechanic, apt to teach, for the purpose of superintending and instructing the cadet engineers in locomotive building.

The course of instruction should conclude with a thorough examination, and diplomas should be conferred on those who pass successfully. This examination might include tests of sight and hearing and soundness of the heart, lungs and large blood vessels, for those intending to drive locomotives. Those who fail in the physical examination only, would still be eligible for the workshop, and those who succeed could always face the worsteds without flinching.

A scheme like the one here briefly outlined would enable locomotive engineers to give their sons an entrance into a useful and respectable avocation and to elevate it gradually to the dignity of a profession. I believe this would be practicable, under good management; and it would be found that money thus expended would benefit their class and calling vastly more, in the long run, than funds raised and appropriated for sustaining labor strikes.

S. S. H.

New Orleans, September 9, 1882.

Earthquake in the City of Mexico.

Editor American Railroad Journal:

On the 19th of July I was sitting at my desk here talking to a young Mexican friend, when I felt the house trembling and thought a very heavy cart was passing, but it continued to get stronger, and at once it struck me what it was.

I turned to Sr. Garcia, Chief-Engineer's clerk, and said in Spanish, "Esta tremblor." (Is it an earthquake?) He was at his desk, about half asleep, but no sooner were the words out of my mouth, than he shot out of the door, with the messenger boy after him. Of course all this only occupied a few seconds, but by this time the house was swinging round so much that we staggered like drunken men, and with difficulty could keep our feet. Franco (my friend) said, in Spanish, "Here, Jack, come under this door, it is the safest place."

So we went and braced ourselves under a side door in the room, and waited to see which way the house would fall. You could hardly imagine the feelings and scene. The houses on the other side of the street rocked and rolled about as if they would fly into a thousand pieces. The walls above us cracked and groaned, the doors swung open and shut, and the floor was no more stable that the deck of a vessel on the sea, in a heavy swell. In fact many persons became sea-sick, and I was more so than at any time coming down on the ship. People rushed into the street, dropped on their knees, prayed aloud, and confessed their sins.

Horses stopped and spread their feet as far apart as they could, and stood like marble.

The last shock was the hardest, and if it had lasted many seconds longer our houses would have fallen. It was the heaviest shock Mexico has had since 1845, and a very queer motion, the waves traveling in circles. You can imagne it looked funny, if it had not been so serious, to see a cobble-stoned street heave like the swell of the ocean.

O.

The second annual report of the Chicago Railway Weighing Association shows that during the past year 550,000 cars were weighed, carrying nearly 20,000,000 pounds of freight. The savings to the fifteen roads interested are estimated at twenty-five per cent of the gross earnings.

In France, a law dated July 8, 1882, has just been published, declaring of "public utility" the construction of the Junction Canal between the Meuse and the Scheldt. The cost of the works is estimated at 67 million francs, which sum will be included in the ordinary expenditure of the budget.

The Union Switch and Signal Company, of Pittsburgh, Penn., have recently placed, or are now placing, their interlocking apparatus in towers on the Boston and Albany Railroad; at Rockville, on the Pennsylvania Railroad; at Cleveland, on the Cleveland, Columbus, Cincinnati and Indianapolis (forty-four levers); on the Eastern Railroad of Massachusetts; and at Wayne Junction, on the Philadelphia and Reading Railroad system.

The largest fly-wheel of a stationary engine ever constructed in the United States was completed on the 12th inst. by Watts & Campbell, Newark, N. J., for Clark's Thread Works, in that city. The wheel is built in seven sections, each weighing seven tons. It is twenty-five feet in diameter and its "face" is seven feet six inches. It has three crowns on which three twentyfour inch belts run. The lathe was two weeks running, night and day, in turning off the face of the monster wheel, and five tons of chips were planed from the surface. It took 5 minutes 55 seconds for the wheel to make one revolution on the lathe. The total weight of the wheel is forty-nine tons.

The Pardee Car and Machine Works, at Watsontown, Pa., are about finishing up a contract with the New York, Susquehanna and Western Railroad Company, for gondola and caboose cars. The superiority of the work turned out is beginning to be appreciated. Although but recently commencing business, they take rank with the oldest firms in the country. They have now numerous inquiries, for cars of different kinds, and letters, asking them to make bids on contracts. The Kelly Turn-table, manufactured by this firm, for cheapness and durability cannot be surpassed. They are putting them up for railroads all over the country, from Canada to Texas. Their low price, combined with their other excellences, brings them within the reach of the smallest companies.

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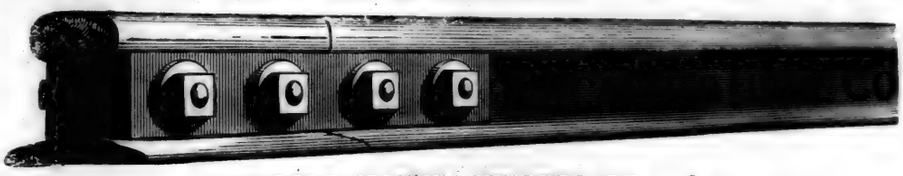
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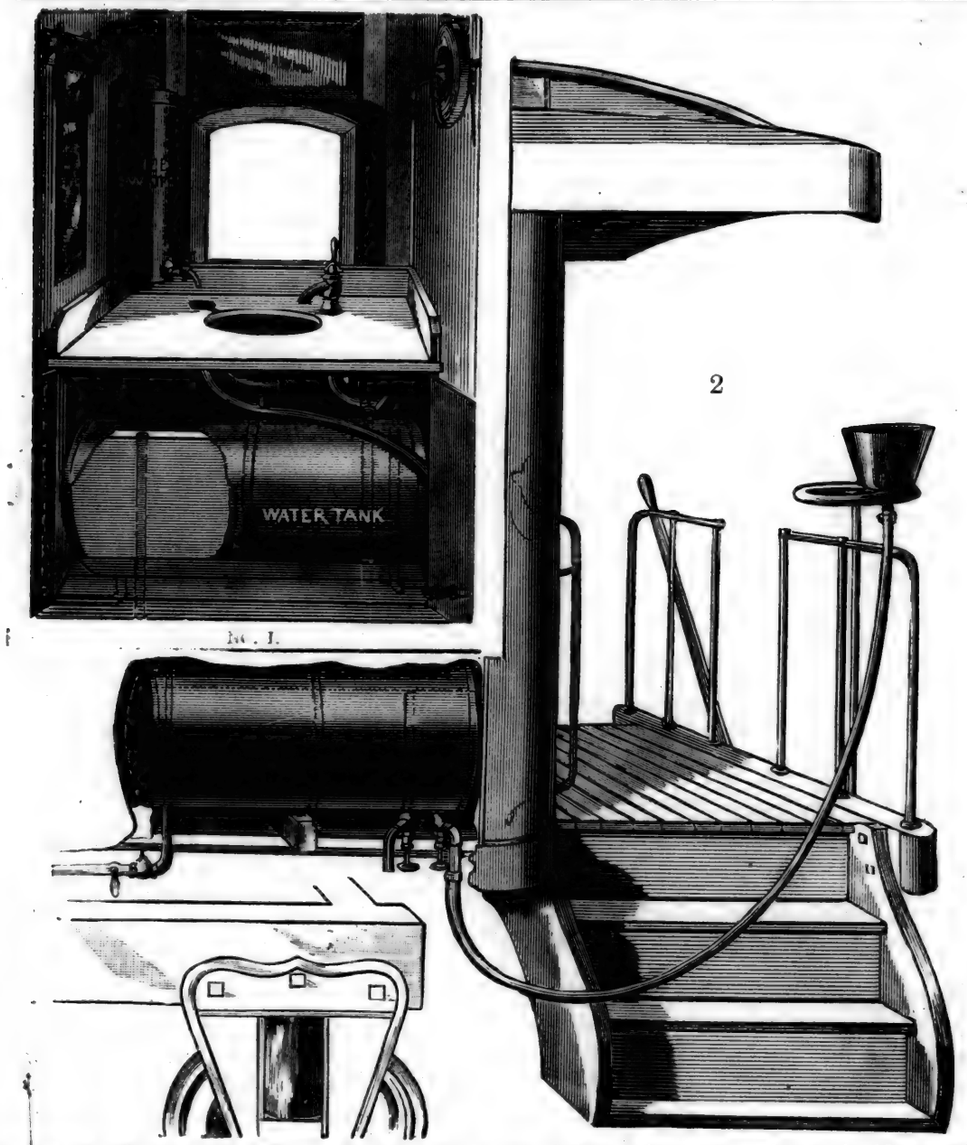
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General Offices Bridgeport Ct. May 1, 1882.



Granger's System of Water Supply for Railroad Cars.

THE engravings herewith illustrate Granger's method of supplying water, under air-brake pressure, to the wash bowl, fire hose and water closet of a railway passenger coach.

Figs. 1, and 2 represent the system as applied in the three latest cars built for the through passenger traffic of the Fitchburg Railroad.

Fig. 1 shows the water tank under marble slab and wash bowl, with part of its side cut away in front of the pipe which admits air pressure from air-brake pipes for use in expelling the water either through the pipe to the hose reel, the wash basin, or across the car to the water closet. The air supply is delivered above the water in tank. The water pipe at the right starts from bottom of tank, as indicated by dotted lines through the word "tank."

The fire hose reel above the slab is of brass, nickel plated, and runs loose upon the body of valve, which may be opened by its wheel in front to admit water to the hose, said hose being intended for fire purposes only. The reel contains 50 feet best quality ¾ linen hose, and is wound double. When unreeled, the bite falls from center hook of reel, and the hose, with one end attached to valve, will be entirely released, and is of sufficient length to reach the extreme end of this or the next car, for use inside or out, as emergency requires. The fire protective feature will commend itself to all.

Fig. 2 shows exterior end of car, with side cut away showing position of tank, valves and piping, with hose connected for filling tank with water by use of funnel placed in brake wheel. It will be observed that the cock in air pipe to the left is closed, to keep back air supply in automatic reservoir, and the valve of overflow pipe, shown by dotted lines in extreme right, is open to let out air from tank, till water fills to level of top of overflow pipe, as indicated by dotted lines. Both the filling and overflow valves, by their stems, are opened outward from within the tank, and when closed all water drains out, and none is left for action of frost. The air pipe also extends above water line, so as never to be affected by contents of tank. The short hose and funnel here shown are carried in closet of tank for use only where hydrant pressure cannot be obtained. Ordinary hydrant hose coupling would attach to filling valve, and under hydrant pressure tank would fill rapidly, say in two minutes. When the tank has been filled and valves closed, the cock in air pipe is to be opened, admitting air pressure from automatic reservoir for use in supplying what water may be required before making up of the train and re-supplying pressure from locomotive.

Further particulars may be obtained by addressing the inventor, A. M. Granger, 177 Devonshire street, Boston, Mass.

Railways in Ireland.

STATISTICS prove that there has hitherto been a most unaccountable absence of railway and commercial enterprise in Ireland, and that there is ample room for great expansion. Proportionately to other parts of the United Kingdom the extension of the railway system in Ireland has been very small indeed. There has been no material improvement in trade and commerce, or commensurate development of its colleries or mining industries for many years past, while there is a positive decrease in population. In the year 1801, when the union with England was effected, the population of England was 9,334,549, while last year it had increased to 25,968,286. In Ireland, in 1801, the population was 5,319,867, while last year it was only 5,159,839, so that while England has nearly trebled its population within the past 80 years, Ireland has lost nearly 200,000. This decreased population, and the stagnation of trade and commerce, is unquestionably due to the absence of railways and of commercial enterprise. Again, the total length of the railways open in Ireland on Dec. 31, 1881, was only 2,370 miles, the nominal capital being only £33,741,058, the gross receipts £2,695,272, and the net revenue £1,230,635. Thus for the whole of that extensive country the total capital expended on its railways and their total revenue is scarcely one-third of the amount expended and earned upon one of the great railway systems in England. The nominal capital of the London and Northwestern Railway Company is no less than £92,456,537, and its gross receipts were, in 1880, £9,827,022. The nominal capital of the Great Western is £66,693,695 and the gross receipts £7,281,329. The Midland nominal capital is £67,807,681 and the total receipts £6,771,384. The nominal share capital of the Northeastern is £55,137,019 and the gross receipts £6,436,852. Compared with other of our English lines, those of our sister isle would bear equally significant results. These facts prove there is ample room for almost any expansion of railways, and the outlay of English and resident capital if anything like Government guarantee could be obtained for a fair return thereon. It might be added as an inducement to capitalists to turn their attention to Ireland for the investment, that the cost of railway work there is most moderate, owing to the almost entire absence of tunnels, that the average cost of the lines constructed was only about £16,000 per mile, while the last official returns showed that, notwithstanding the adverse circumstances under which they labored, the dividends averaged £3 14s. 9d. per annum for the past year. The whole of the Irish lines are exempt from the payment of Government passenger duty.—*London Mining Journal.*

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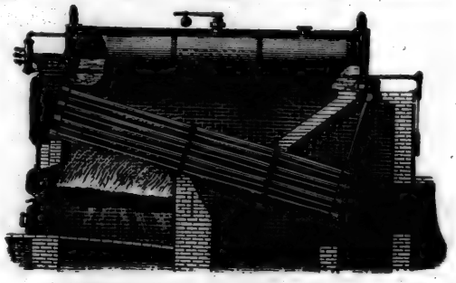
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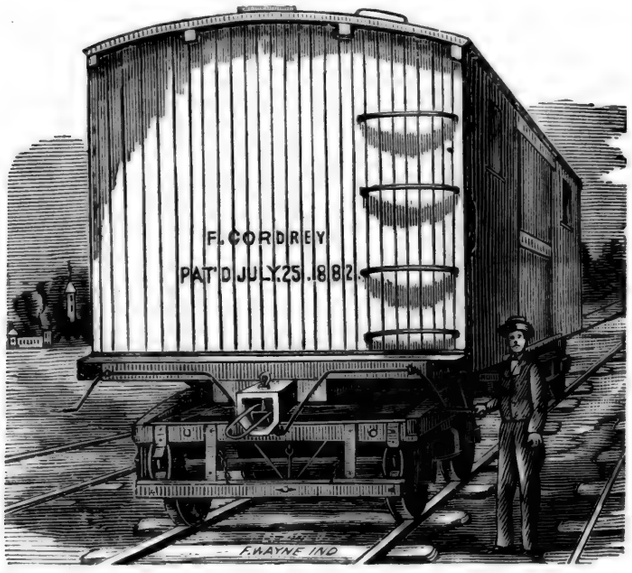
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Car Coupling.



In view of the fact that thousands of men are annually multilated and killed under the present system of coupling cars, which is no less cruel than the infernal-machines used in the eastern Continent for blowing up men, the patentee respectfully calls the attention of railroad companies to patent number 261,683, issued to Francis Cordrey, July 25th, 1882. This arrangement, though simple, is in itself a model of perfection. So completely can the car link be operated with this invention that the beholder, on first viewing its work, will cry "Perfect," and we think that a fair estimate of the additional cost of attaching it to a car—two ends—will not exceed $1.20, as will be seen by this engraving.

It only consists of a $\frac{5}{8}$ or a $\frac{3}{4}$ bar of iron, a crank-handle formed on either end, and crank-bail passing under the draw-bar, to which is attached a shove-tongue passing up through the under lip of the draw-head and, when operated, elevates the link to any required position. Two bearings fasten it to the car bed or platform, and it is operated from either side of the car, doing away with bent links; making any coupling that can be made by hand, placing the entire person out of danger.

We do, for the sake of humanity, earnestly ask that an investigation and a fair trial of this invention be made. Information will promptly be given by the patentee, Francis Cordrey, Fort Wayne, Ind.

The Speed of Modern Steamships.

[From the *Century* Magazine.]

Thirty years ago sixteen days was a fair allowance for the passage between England and New York by steam. By gradual steps the point was reached when eleven days was the minimum, and this startled the world. Then began a rivalry between the Inman and White Star lines, attended by a succession of runs showing a gradual increase of speed, which proved a great advertisement for these lines. In 1871 the average time of twenty-four crack voyages by these lines was eight days, fifteen hours and three minutes The Adriatic's best westward time was forty-three minutes less. It should be remembered that the westward passage is generally longer than in the other direction, owing to westerly winds and the Gulf Stream. In emulation of this speed, in 1877 the City of Berlin, of the Inman Line, made the trip to Queenstown from New York in seven days, fourteen hours and twelve minutes, and in the same year the Britannic, of the White Star Line, crossed from Queenstown in seven days, ten hours and fifty-three minutes. In 1879 a new rival appeared in this field, the Arizona, of the Guion Line. This steamship made the eastward passage in 1880 in seven days, ten hours and forty-seven minutes, and in one trip in 1881 she lessened this time about three hours. This seemed to be about the best that could be expected of these superb ships, when the new Guion steamship Alaska, after a number of astonishing runs accomplished the westward passage between the two ports on April 18, 1882, in seven days, six hours and twenty minutes, actual time, against heavy seas. In a subsequent trip eastward she ran the distance in six days and twenty-two hours, actual time. In this, the quickest passage ever made across the Atlantic, the Alaska traveled 2,895 knots, being about an average of 418½ knots per day for seven successive days. It will be observed that the increase of speed has been graduated in proportion to the gradual increase in size. The ships of 1850 were rarely much over 2,500 tons, and were barely 300 feet long. Now the average length of ocean steamers is upward of 400 feet, while 500 feet is not uncommon. The City of Rome is 587 feet long, and registers 8,826 tons; the Servia is 530 feet, and 8,500 tons; the Alaska is 520 feet and 6,932 tons; the Austral, intended for the Australian trade, is 474 feet long and 48 feet 3 inches broad, and registers 9,500 tons. The measurement of this vessel and of the new Cunarder, Cephalonia, which is 440 feet long by 46 feet beam, indicate that the reaction against extreme length has already commenced in the great shipyards of Great Britain, being in each of these cases less than ten beams to the length.

Lehigh and Hudson River Railroad.

A "tour of inspection," under the guidance of President Burt and Superintendent Anderson, was made on the 7th inst., over the entire route of the recently completed Lehigh and Hudson River Railroad. The party was composed of railroad officials and stockholders to the number of 175. The road is 63 miles in length, extending from Belvidere, N. J., (where a junction is formed with the Belvidere-Delaware division of the Pennsylvania Railroad) via Easton, Penn., to Greycourt, N. Y., where it connects with the Newburgh branch of the New York, Lake Erie and Western Railroad, and through that branch (at Newburgh) with the New York and New England Railroad, running thence to Boston. A connection is also made at Easton with the Lehigh Valley and the Central Railroad of New Jersey.

The main purpose of the Lehigh and Hudson River Railroad, in which it is understood the Pennsylvania Railroad Company has a large interest, is the transportation of coal to the eastern States without breaking bulk. The future of the road as a carrier of coal to the eastern market is said to be very promising, taking not only a large tonnage for this destination from the Pennsylvania but also from the Lehigh Valley, the Central of New Jersey, the Delaware, Lackawanna and Western Railroads. The time saved by the new route will be at least two days over the present method of sending coal to New York and Philadelphia, and shipping to the East by vessel. The New York and New England Railroad reaches all the principal points in New England where coal is distributed, and it was stated by several railroad officials that the Lehigh and Hudson River and the New York and New England companies would make rates, owing to the saving in time, to meet and perhaps beat those by the other route. The advantages to shippers offered by the new roads is in quickness of delivery and avoiding the waste that occurs in the frequent handling of coal. For local traffic the company will depend largely upon the mines, forty of which are already opened along its immediate line, and new ones are being discovered every week. The prospect for passenger travel is also good, the road being practically a straight line from Harrisburg to Newburgh, and having two connections with Philadelphia.

The Lehigh and Hudson River Railroad has been built on what was the route of the post riders and other messengers that passed between Newburgh and Trenton, and Philadelphia in the time of the Revolutionary war. The route is a natural pass through the mountains, and was the the only inland path between the Upper Hudson and the Delaware. It was much used when the British occupied the lower portion of the former river by the messengers of Washington, and it was on this route, at the furnaces and forges which even then existed at Andover, N. J., that supplies of iron were obtained and made into steel for the manufacture of arms for Washington's army. The Marquis de Chastellux, a Major-General in the French forces, who served under the Count de Rochambeau, published a work on his return to France immediately after the revolution, in which he described a journey on horseback by this route in December, 1782, from the headquarters of Washington at Newburgh to Belvidere, N. J., and Easton and Bethlehem, Penn., by way of Chester, Warwick, the Sussex Court House, (which was then at what is now known as Johnsonburg), and Moravian Mill, (now Hope), nine miles east of Belvidere. It took the Marquis three days and a half to make the trip, but it is needless to say that the railroad officers made it in a few hours.

"Isn't this shirred bonnet just too sweet for anything?" asked Mrs. Smith of her husband. "I shirred think it was," answered Mr. Smith, as he inspected the bill.—*Unidentified Exchange.*

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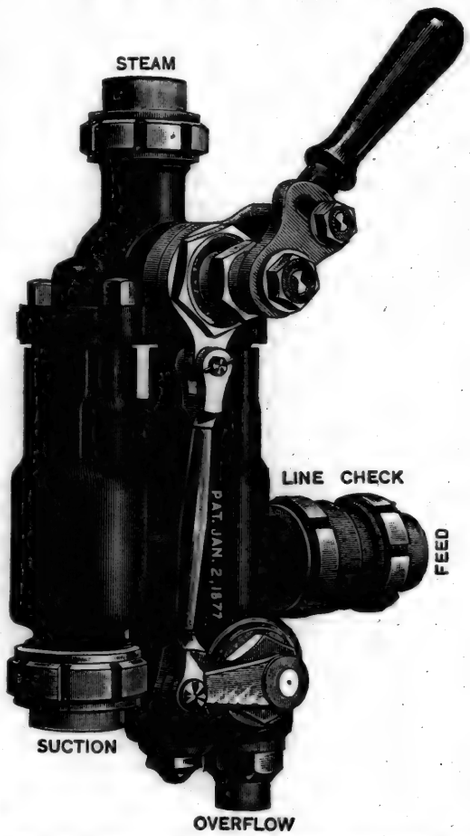
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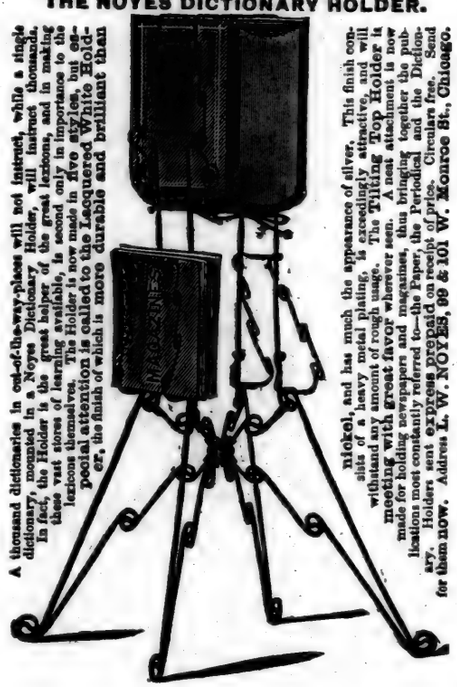
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DEBT BEARING INTEREST.

	Amount Outstanding.	Accrued Interest.
6 per cent loan 1863-'81 continued at 3½ per ct	$32,755,400 00	$191,073 17
5 per cent funded loan of 1881, continued at 3½ per cent	491,496,900 00	1,171,032 62
4½ per cent funded loan of 1891	250,000,000 00	2,812,500 00
4 per cent funded loan of 1907	738,909,350 00	4,926,062 33
4 per cent refunding certificates	442,100 00	2,947 33
3 per cent navy pension fund	14,000,000 00	70,000 00
Aggregate of debt bearing interest	$1,437,603,750 00	$9,173,615 45
Interest due and unpaid		1,926,080 07

DEBT ON WHICH INTEREST HAS CEASED SINCE MATURITY.

	Amount Outstanding.	Interest due and unpaid.
4 to 6 per cent. old debt, 1837.	$57,665 00	$64,174 81
5 per cent. Mexican indemnity stock, 1846-'52	1,104 91	85 74
6 per cent. bonds, 1847-'67.	1,250 00	22 00
6 per cent. bounty land scrip, 1847-'49	3,275 00	213 06
5 per cent. Texas indemnity stock, 1850-'64	20,000 00	2,945 00
5 per cent. bonds, of 1858-'74	7,000 00	875 00
5 per cent. bonds, of 1860-'71	10,000 00	600 00
6 per cent. 5-20 bonds, 1862, called	367,000 00	7,740 41
6 per cent. 5-20 bonds, June 1864, called	57,400 00	1,051 87
6 per cent, 5-20 bonds, 1865, called	70,550 00	18,521 11
5 per cent. 10-40 bonds, 1864, called	326,850 00	65,329 92
6 per cent. Consol. bonds, 1865, called	370,200 00	12,198 41
6 per cent. Consol. bonds, 1867, called	874,000 00	111,618 71
6 per cent. Consol. bonds, 1868, called	263,200 00	21,086 51
6 per cent. loan, Feb. 8, 1861, matured Dec. 31, 1880	77,000 00	4,830 00
5 per cent. funded loan 1881, called	955,650 00	12,086 64
Oregon War Debt, March 2, 1861, matured July 1, 1881.	8,100 00	1,579 50
6 per cent loan of July 17 and Aug. 5, 1861. matured June 30, 1881	573,550 00	15,184 50
6 per cent loanof July 17 and Aug. 5, 1861, continued at 3½ per cent, matured Dec. 24, 1881, called	5,456,800 00	73,462 83
6 per cent. loan of March 3, 1863, matured June 30, 1881.	164,200 00	5,724 00
6 per cent loan of March 3, 1863, continued at 3½ per cent, matured August 1, 1882, called	2,252,450 00	6,442 08
1-10 to 6 per cent. Treasury notes, prior to 1846	82,525 35	2,668 06
1-10 to 6 per cent. Treasury notes, 1846	5,900 00	200 60
6 per ct. Treasury notes, 1847	950 00	57 00
3 to 6 per cent. Treasury notes, 1857	1,700 00	99 00
6 per ct. Treasury notes, 1861.	3,000 00	364 50
7 3-10 per cent. 3 years' Treasury notes, 1861	16,300 00	1,104 43
5 per cent. 1 year notes, 1863	41,935 00	2,098 $5
5 per cent. 2 year notes, 1863.	32,700 00	1,622 30
6 per ct. compound interest notes, 1863-64	219,860 00	44,920 47
7 3-10 per cent. 3 years' Treasury notes, 1864-65	138,850 00	20,422 62
6 per cent. certificates of indebtedness, 1862-63	4,000 00	253 48
4 to 6 per cent. temporary loan, 1864	2,960 00	244 19
3 per cent. certificates, called.	5,000 00	394 31
Aggregate of debt on which interest has ceased since maturity	$12,472,725 26	$500,251 91

DEBT BEARING NO INTEREST.

Demand notes, 1861-62	$59,595 00	
Legal tender notes, 1862-63	346,681,016 00	
Certificates of Deposit	12,000,000 00	
Coin certificates, 1863	4,992,040 00	
Silver certificates, 1878	69,440,210 00	
Unclaimed interest		5,339 96
Fractional currency, 1862, 1863 and 1864 $15,408,000 77		
Less amount estimated as lost or destroyed, act of June, 21, 1879 8,375,934 00		
	7,032,066 77	
Aggregate of debt bearing no interest	$440,204,927 77	$5,339 96

RECAPITULATION.

	Amount Outstanding.	Interest.
Debt bearing interest in coin, viz:		
Bonds at 6 per cent., continued at 3½ per cent.	$32,755,400 00	
Bonds at 5 per cent, continued at 3½ per cent.	401,496,900 00	
Bonds at 4½ per cent.	250,000,000 00	
Bonds at 4 per cent.	438,909,350 00	
Refunding certificates	442,100 00	
Navy pension fund, 3 p.c	14,000,000 00	
	$1,437,603,750 00	$11,099,695 52
Debt on which interest has ceased since maturity.	12,472,725 26	500,251 91
Debt bearing no int., viz:		
Old demand and legal-tender notes	$346,740,611 00	
Certificates of deposit	12,000,000 00	
Coin & silver certificates.	74,432,250 00	
Fractional currency	7,032,066 77	
	$440,204,927 77	
Unclaimed interest		5,339 96
	$1,890,281,403 03	$11,605,287 39
Total debt, principal and interest to date, including interest due and unpaid	$1,901,886,690 42	

AMOUNT IN TREASURY.

Interest due and unpaid	$1,926,080 07	
Debt on which interest has ceased	12,472,725 26	
Interest thereon	500,251 91	
Gold and silver certificates	74,432,250 00	
U. S. notes held for redemption of certificates of deposit	12,000,000 00	
Cash balance available Sept. 1, 1882	141,629,211 22	
	$242,960,518 46	
Debt, less am't in Treas'y Sept. 1, 1882	$1,658,926,171 96	
Debt, less am't in Treasury Aug. 1, 1882	1,675,054,433 20	
Decrease of debt during the month	$16,128,261 24	
Decrease of debt since June 30, 1882	$29,988,288 76	

BONDS ISSUED TO THE PACIFIC RAILROAD COMPANIES, INTEREST PAYABLE IN LAWFUL MONEY.

	Amount Outstanding.	Accrued Interest not paid.
Central Pacific bonds, 1862-64	$25,885,120 00	$258,851 20
Kansas Pacific bonds, 1862-64	6,303,000 00	63,030 00
Union Pacific bonds, 1862-64	27,236,512 00	272,365 12
Cent. Branch Union Pacific bonds, 1862-64	1,600,000 00	16,000 00
West'n Pacific Bonds, 1862-64	1,970,560 00	19,705 60
Sioux City & Pacific bonds, 1862-64	1,628,320 00	16,283 20
Totals	$64,623,512 00	$646,235 12

Interest paid by the United States, $55,344,682.74; interest repaid by transportation of mails, &c., $15,221,-035.61; interest repaid by cash payments: 5 per cent net earnings, $655,198.87; balance of interest paid by United States, $39,468,448.26.

The foregoing is a correct statement of the public debt, as appears from the books and Treasurer's returns in the Department at the close of business, August 31, 1882.

CHARLES J. FOLGER,
Secretary of the Treasury.

An Improved Steering Gear.

MR. JOHN GORMAN, of Philadelphia, has invented a valuable improvement on the ordinary ship's tiller and steering gear. It is a very common experience that the "send" of the sea in heavy weather often puts such a sudden strain on the tiller-ropes of a large ship as to snap them and leave the ship unmanageable at a most critical and dangerous moment. The "play" of the rudder and tiller causes this difficulty, and Mr. Gorman's invention consists of a combination of wheel and pinion, with springs in the yoke of the rudder-head, so arranged that, although the rudder will give slightly, when struck, it will at once return to its place without transmitting any strain to the tiller-ropes or steering gear. It is a complete lock against such an accident as the parting of the wheel-ropes from a shock on the rudder, and against the other danger to the helmsmen of being thrown under or over the wheel. Mr. Gorman is an employé of the Edison Electric Light Company, but lacks capital for the development of his invention, which has received the approval of a great many experienced practical seamen.

THE Cairo and St. Louis Railway Company have constructed at Cairo, Ill., what is termed a "declinator." It is for the purpose of loading bulk grain into barges from cars. The cars are run into the large river warehouse of the road, and the grain is dropped through the floor into barges faster than it could be handled by an elevator.

MESSRS. L. R. HAMMERSLEY Co., & of Philadelphia, will shortly publish "A Chronological History of Steam Navigation," by Rear Admiral George H. Preble, U. S. N. This is a compilation of a series of articles styled "Notes for a History of Steam Navigation," which have appeared in the "United Service" magazine, and which have been revised and rearranged. We have found the notes interesting and full of information, and the book itself cannot fail to be of great interest to many of our readers.

THE Harlan and Hollingsworth Company, Wilmington, Del., are building a fine steamer for the Eastern Shore Steamboat Company, which it is expected will be placed on the line early next spring. Her measurements are: length, 175 feet; breadth of beam, 85 feet; and depth of hold, 10 feet 6 inches. Her freight capacity will be much larger than any of the other boats belonging to the company, and her passenger accommodations will be first-class. She will be commanded by Captain George A. Rogers.

THE steamship "Queen of the Pacific" arrived at San Luis Obispo on the 22d ult., with a cargo of steel rails for the Pacific Coast Railroad. She left Philadelphia June 7th; arrived at Rio June 28th; at Valparaiso July 27th; left the latter port August 3d, making 5,000 miles in sixteen days and twenty-two hours. Her running time from Philadelphia was fifty-two days, having been delayed at Rio, Straits of Magellan and Valparaiso from the machinery not working well. She is a model of perfection in every particular, and the finest American steamship afloat. She is supplied throughout with the electric light and many other modern improvements, far eclipsing any ship that ever sailed in Pacific waters. After discharging her cargo she sailed for San Francisco.

A NEW speed register for railway trains, invented by John C. Henry, was recently tried on the Kansas City, Fort Scott and Gulf road. One of the machines was placed on the engine and one in the car. It consists of a dial like that of a steam gauge, with an index which marks the increase or decrease of speed, and a registering instrument something like the anemometer used by the signal service for registering the velocity and direction of the wind. This register is furnished with a coil of paper divided into squares by lines, those running lengthwise showing the height of speed, and the transverse lines dividing the record off into miles. Mr. Henry claims that it affords a complete check by indicating to the engineer at all times just how fast his train is running, and making a record of same for the inspection of the road officials.

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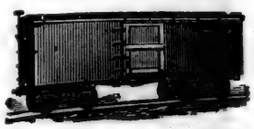
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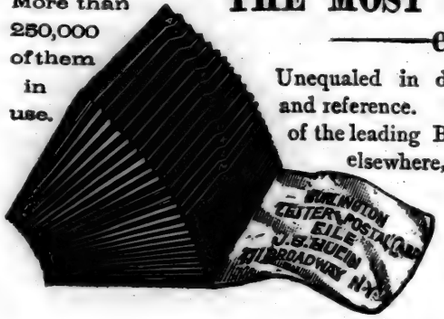
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Tunnels Beneath Rivers.

THE following is an extract from the address of John Fowler, president of the Mechanical Science Section:—

"Tunnels under broad navigable rivers and estuaries have been a subject of discussion by engineers for at least a century, but the only one at present completed is the unfortunat and costly Thames tunnel. Two importants works of the class are, however, now well in hand—namely, the Severn tunnel at Portskewet and the Mersey tunnel at Liverpool. One lesson enforced by the Thames tunnel was the necessity of leaving a reasonable thickness of ground between the water and the tunnel. In the Severn tunnel the maximum thickness is 40 feet, and in the Mersey tunnel 22 feet. The width of the river at the point of crossing of the former tunnel is 2¼ miles and the maximum depth of the rails below high water 163 feet. In the case of the Mersey tunnel the width is nearly three-quarters of a mile and the depth 144 feet. The Thames tunnel, as almost every one knows, was carried on by means of a special contrivance termed by Brunel a "shield." No special appliances have been adopted in the case either of the Severn or the Mersey tunnel. Both are driven in the ordinary way, but, of course, enormous pumping power is required and has been provided. Where no special appliances are used in the construction of a subaqueous tunnel, it will be clear that unknown risk is encountered. All may go well, and the engineer will then justly receive congratulations from every one for his boldness and success. But, on the other hand, something may go wrong, even at the last moment, and the engineer then would be abused by the unthinking public for his temerity and consequent failure. In many cases of tunnels under estuaries, special appliances could be used which would obviate all risk and make the successful completion of the work a mathematical certainty.

"A tunnel over a mile in length, now in progress under the Hudson River at New York, is being driven through a silty stratum by the aid of compressed air, and with a certain amount of success, as only some 20 men have been drowned up to the present time. The principle upon which the compressed air is used is, however, a false one, since it is merely forced into the tunnel with a view to uphold the ground by its pressure, like so much timbering, and not to keep out the water on the principle of a diving-bell. It is clear, therefore, that the completion of the Hudson River tunnel, if the present system be persevered in, is purely a matter of conjecture, and all we can do is to hope for the best. The same remark applies, of course, to the Severn tunnel and the Mersey tunnel, although in those cases the character of the ground is such that the contingencies are small in comparison with those encountered in the construction of the Thames tunnel and the Hudson River tunnel. Nevertheless, unless special appliances of the nature of the pneumatic process be used, a subaqueous tunnel, whether it be the Channel tunnel itself or one but a few yards in length, must necessarily present an unknown risk. The prototype of all these tunnels is the one commenced at Rotherhithe in 1809, which was successfully driven a distance of 900 feet under the Thames, and failed when within little more than 100 feet of the opposite shore.

'A tunnel about one and a half miles in length was commenced about 10 years ago under the Detroit River in America, but was abandoned in a similar manner. So far good fortune has attended both the Severn and the Mersey tunnels, and there is, I am glad to say, every chance of its continuing. Only a few months ago I became aware of the fact that a scheme identical in all its main features with my Humber tunnel project had been suggested for adoption in the case of the Thames tunnel, in lieu of the plan proposed by Brunel. Fifty-nine years ago a working smith named Johnson proposed to construct the Thames tunnel without coffer-dams by making it in parts, 28 feet in length, each length having the ends temporarily stopped up, and being constructed on the same principle as the diving-bell. If another tunnel be constructed under the Thames, which is far from improbable, as the requirements of below-bridge traffic necessitate some such means of communication, it will be built in accordance with the plan suggested 59 years ago by the working smith, and not on that of Brunel's Thames tunnel, or of any other tunnel yet carried out."

Measurement of the Great Lakes.

THE following measurements of the great lakes have been taken by Government surveyors: The greatest length of Lake Superior is 335 miles, its greatest breadth is 160 miles; mean depth, 688 feet; elevation, 827 feet; area, 82,000 square miles. The greatest length of Lake Michigan is 300 miles; its greatest breadth, 108 miles; mean depth, 690 feet; elevation, 506 feet; area, 23,000 square miles. The greatest length of Lake Huron is 300 miles; its greatest breadth is 60 miles; mean depth, 600 feet; elevation, 274 feet; area, 20,000 square miles. The greatest length of Lake Erie is 250 miles; its greatest breadth is 80 miles; its mean depth is 84 feet; elevation, 261 feet; area, 6,000 square miles. The greatest length of Lake Ontario is 180 miles; its greatest breadth is 65 miles; its mean depth is 500 feet; elevation, 261 feet; area, 6,000 square miles. The total of all five is 1,265 miles, covering an area of upward of 135,000 square miles.

THE Austin *Siftings*, in its comic history of Texas, says that in the old colonial days "there was very little money in Texas. Cattle were the circulating medium of the country. A year-old steer was the basis of circulation in all matters of trade." This is pretty near the literal truth. Paschal Borden, a brother of Gail, Thomas and John P. Borden, once told a gentleman now connected with the *News* that when he and his bride rode to the parsonage of Padre Muldoon to be married they drove before them a cow and a calf as the fee of the priest. In the early days of Virginia tobacco was the medium of exchange, and in some of the new States of the West it used to be said that raccoon skins were a legal tender.

No Dogs Allowed on the Cars.

IT happened the other day on the D. & H. C. Co. Railway. The train had just left Albany and the conductor was making his first round, when he observed a small white dog with a bushy tail and bright black eyes sitting cosily on the seat beside a young lady so handsome that it made his heart roll over like a lopsided pumpkin. But duty was duty, and he remarked in his most deprecatory manner:

"I'am very sorry, madam, but it's against the rules to have dogs in the passenger cars."

"Oh! my? is that so," and she turned up two lovely brown eyes at him beseechingly. "What in the world will I do? I can't throw him away. He's a birthday present from my aunt."

"By no means, miss. We'll put him in the baggage car, and he'll be just as happy as a robin in spring."

"What, put my nice dog in a baggage car?"

"I'm awful sorry, miss, I do assure you, but the rules of this company are as inflexible as the laws of the Medes and them other fellows, you know. He shall have my overcoat to lie on, and the brakeman shall give him grub and water every time he opens his mouth."

"I jest think it's awful mean, so I do; and I know somebody will steal it, so they will," and she showed a half notion to cry that nearly broke the conductor's heart, but he was firm, and sang out to the brakemen, who was playing a solo on the stove:—

"Here, Andy, take this dog over into the baggage car, and tell Dudley to take just the best kind of care of him."

The young lady pouted, but the brakeman reached over and picked the dog up as tenderly as though it was a two weeks' old baby, but as he did so a strange expression came over his face, and he said hastily to the conductor:

"Here, you just hold him a minute till I put this poker away," and he trotted out at the car door and held on to the brake wheel, shaking like a man with the ague.

The conductor no sooner had his hands on the dog than he looked around for a hole to fall through.

"Wh-wh-why, this is a worsted dog!"

"Yes sir," said the little miss, demurely. "Didn't you know that?"

"No, I'm most awful sorry to say that I didn't know that;" and he laid the Christmas dog down in the owner's lap and walked out on the platform, where he stood half an hour in the cold trying to think of a hymn-tune to suit the worst sold man we ever saw on the D. & H. C. Co.'s road.—*Cincinnati Commercial.*

MORSE, who invented the telegraph, and Bell, the inventor of the telephone, both had deaf-mute wives, which leads a wag to observe: "Just see what a man can do when everything is quiet."

A CHARTER has been granted for a bridge over the Monongahela River at Pittsburgh that is to be 1,174 feet in length. The framework will be of wrought iron, and will be supported by steel wire cables 2½ inches in diameter. It will have a double roadway 18 feet wide, and sidewalks for foot passengers.

AMERICAN Railroad Journal.

ESTABLISHED 1831.

Steam Navigation, Commerce, Finance, Banking, Machinery, Mining, Manufactures.

SECOND QUARTO SERIES.—VOL. XXXVIII., No. 37.] NEW YORK, SEPTEMBER 23, 1882. [WHOLE No. 2,422.—VOL. L

ORGANIZATION.

AT the annual meeting of the Ohio Central Railroad Company, held at Toledo on the 13th inst., the following board of directors was elected: M. D. Carrington, Toledo; Daniel P. Eels, Cleveland; Samuel Shethar, New York; J. G. Martin and George I. Seney, Brooklyn, three years; J. T. French, New York. H. S. Terrell, Cleveland; Joseph S. Miller, Charleston, West Virginia, and Charles Foster, Fostoria, two years; C. S. Brice, Lima; Samuel Thomas, Columbus, and M. D. Carrington and J. T. Martin, Toledo, one year.

INCORPORATION.

ARTICLES of incorporation were filed at Albany, N. Y., on the 15th inst., of the Hoyt's Corners, Ovid and Willard Railroad Company, of Ovid; capital, $40,000. The road is to run from Willard to form a junction with the Geneva, Ithaca and Sayre Railroad.

ARTICLES of association for the Arkansas and Indian Territory Railroad were filed with the Secretary of State of Arkansas on the 14th inst. The capital is $1,000,000. The road is to begin in Sevier or Polk county, on the Indian Nation line, and to run southeast to Washington, in Hempstead county.

THE organization of the Puget Sound Short Railroad Company was perfected in Seattle, W. T., on the 1st inst. The object of the new company is to build a railroad from Seattle to a point of connection with the Northern Pacific, and also to build from Seattle north. Seattle is made the principal place of business of the company.

ARTICLES of incorporation of the Arkansas and Louisiana Railway Company have been filed in Little Rock, Ark. The capital stock is $1,200,000. The directors are John D. Beardsley, Thomas H. Simms, Paul Beardsley, Abner B. Williams and Robert B. Williams. The road is to begin at Hope, on the St. Louis, Iron Mountain and Southern Railroad, and run in a southeasterly direction by Magnolia, Columbia county, to the line between Arkansas and Louisiana. It will be sixty miles in length.

ARTICLES of incorporation of the New York and Richmond County Ferry Company were filed in the County Clerk's office on the 9th inst. The purpose of the new company is to maintain ferries between this city and the eastern and southern shores of Staten Island. Its capital stock is $10,000, divided into 100 shares, but provision is made for an increase to $500,000. The directors of the company for the first year are Charles A. Clegg, Edward C. Bridgman and William Keutgen. The period of the company's existence is limited to 25 years.

ARTICLES of incorporation of the Sparta, Chester and St. Louis Railway Coal and Coke Company have been filed in the office of the Secretary of State of Illinois. It is proposed to construct a railway from Chester, Randolph county, Ill., to Sparta in the same county, thence to Centralia, Ill. The capital stock is $500,000, and the incorporators and first board of directors are Henry Seligman, of New York, President; Alfred Wild, of New York, Secretary; Robert Roseborough, of Sparta, Vice-President and Managing Director; Robert Johnston, of Newark, N. J., Treasurer. The principal business office of the company is to be maintained at Sparta.

ARTICLES of incorporation of the Illinois, Iowa and Minnesota Railway Company have been filed with the Circuit Clerk at Streator, Ill. The object of the new company is to construct a railway from Streator to the Mississippi River at or near Clinton, Ia., with such branches as may be required to reach any coal-shaft that may be located within two miles of the railway in Illinois. The capital is placed at $2,000,000, divided into 2,000 shares of $100 each. The incorporators are R. Plumb and E. Evans, Streator; E. Baldwin, Farm Ridge; J. D. Harvey, Chicago; E. H. Thayer, Clinton, Ia; A. Campbell and A. Means, La Salle.

CONSTRUCTION.

THE Cincinnati Northern Railroad is to be extended to Waynesville.

THE Northern Pacific Railroad reached Park City, Montana, 24 miles west of Billings, on the 16th inst.

THE first train on the Oregon Railway and Navigation Company's line reached Pendleton on the 1st inst.

ONE thousand hands are at work on the Chattahoochee extension of the Savannah, Florida and Western Railway.

THE Utah division of the Denver and Rio Grande Railway is now completed to Montrose, 352 miles from Denver.

THE extension of the Chesapeake and Ohio Railroad from Newport News to Fortress Monroe was completed on the 12th inst. Through trains to the West will be put on about October 1.

THE track laying on the Pensacola and Atlantic Railroad has reached Shoal River, 54 miles east of Pensacola, Florida.

THE Thunder Bay Branch of the Canadian Pacific Railway was opened for freight and passenger traffic on the 15th inst.

THE President accepted on the 16th inst., the 225 miles of the Northern Pacific Railroad reported upon by the commissioners.

THE last spike in the Mexican Central Railway connecting Chihuahua with El Paso, was driven on the 16th inst., amid salvos of artillery and great enthusiasm.

IT is stated that over four miles per day are being laid down by the contractors on the Canadian Pacific Railway west of Winnipeg. And it is expected the foot of the Rocky Mountains will be reached this fall.

THE new owners of the Lizinsky Copper Mines, at Clifton, Arizona (recently sold to English capitalists for $3,000,000, cash), will, in a short time, build a railroad from the mines to the Southern Pacific Railroad.

GRADING on the Toledo, Cincinnati and St. Louis Narrow Gauge Railway is finished to within 9 miles of East St. Louis. The track is laid to within 70 miles of East St. Louis, and the chief engineer states that by the 1st of October it will be finished to within 40 miles of that city.

A SURVEY for a railroad between Long Beach and Manahawkin has been made so as to secure direct railroad communication with Long Beach and the several seaside resorts between Barnegat and Sea Haven. Surveys are also to be made for an air line direct from Philadelphia to Long Beach. These roads will open an entirely new section of the New Jersey seacoast.

THE Oxford and Pugwash branch of the Great American and Short Line Railway has been let out at contract in three sections. The contractors intend going right on with the work, and have it finished before winter sets in. The railway company will have their offices fixed at Pugwash, N. S., for the winter, and expect in spring to move them to Pictou, where the workshops are to be erected.

E. A. C. PEW has completed his arrangements and signed a contract with the Souris and Rocky Mountain Railway Company, to

build their line from a point on the Canadian Pacific Railway, 100 miles west of Winnipeg, to the Rocky Mountains. Mr. Pew has also purchased a controlling interest in the company. The Souris and Rocky Mountain Railway runs in a northwesterly direction through Rapid City, Ellice, Battleford and Edmonton.

THE Cincinnati and Eastern Railroad Company have closed a contract with Dewey & Campbell for the construction of that portion of the road lying between the Ohio canal and the Scioto Valley Railroad, including the bridge across the Scioto River. The remainder of the road into Portsmouth will be let at no distant date. The bridge over the Scioto River will be about one mile and a half above Portsmouth, at a point known as Bailey's.

THE construction of the Michigan, Indiana and St. Louis Railroad will shortly be commenced. It will be 166 miles in length and will run from Sturgis, Mich., to Danville, Ill., where it will connect with the Danville and East St. Louis Railroad to St. Louis. The capital stock is $2,500,000. The officers of the road are: President, John Lee, of Crawfordsville; vice-president, W. H. Beckwith, of Danville; secretary, S. E. Thomas, of Michigan.

WHEN the Baltimore and Potomac Railroad Company began the work of laying another track from Washington to Baltimore, in the early part of the present season, there were already 17 miles of double track on the line. It is now announced that rails for the second track will probably be laid before winter sets in, except for seven miles between Bowie and Odenton, where the work may be delayed by heavy cuts and filling and by the enlargement of bridges.

WORK at the Southern end of the Northeastern (Miss.) Railroad is progressing slowly. At the northern, or Meridian, end of the line the work is much more forward, and trains are running nine miles south of Meridian, Miss., the present end of the road. The piles of the bridge across Lake Pontchartrain, from Point Aux Herbes to St. Tammany Parish, are being driven as rapidly as possible. The bridge will be six miles and a half long, and will be the largest trestlework known, and it is said it will cost in the neighborhood of $3,000,000.

THE Eastville (Va.) *Herald* states that the work of construction of the Peninsula Railroad has actually commenced, and it hopes in the course of a few months to see the road completed from one end of the peninsula to the other. The *Herald* adds that the company is in earnest about the work, and states that the prospective road from Pocomoke City to Cherrystone, Va., will make an air-line from Florida to Maine, and put the products of the peninsula into the New York and Philadelphia markets twenty-four hours earlier than at present.

THE South Pennsylvania Railroad Company still have their engineers at work, but they now announce that the entire route from the Susquehanna to the Youghiogheny is located; that it will be a double track road, making a connection at Harrisburg with the Philadelphia and Reading Railroad, and, by a branch running south, with the Western Maryland. The road passes through Perry, Bedford, Somerset and Fayette counties, making connection at the Youghiogheny River with the Pittsburgh, McKeesport and Youghiogheny Railroad, and by this road reaches Pittsburgh. A southern branch leaves Youghiogheny and passes direct to Wheeling, W. Va. The announcement is further made that this is Vanderbilt's road, and that before the winter is over the entire road will be under contract, and will be constructed as rapidly as possible.

Baltimore and Ohio Telegraph Co.

THE new cable of the Baltimore and Ohio Telegraph Company between Fort Hamilton and Fort Wadsworth, across the Narrows, was successfully laid on the 20th inst. under the supervision of C. W. Price, the manager. This is the heaviest cable that has ever been laid in this country, being two and a half inches in diameter and weighing eighteen tons to a length of 6,500 feet. It is covered with iron and contains seven conductors consisting of No. 14 copper wires insulated with kerite, a new substitute for gutta percha. The reason for laying the cables across the Narrows is that the cable crossings in the North River are constantly interfered with by steamers of heavy draught and dredging scows. The water in the Narrows is from 75 to 106 feet deep, and the character of the bottom does not permit of vessels anchoring, as the anchors will not hold. The cable, however, is so strong that it will stand the strain of the largest steamer's anchor without giving way. Instead of connecting with New Jersey via the North River, the Baltimore and Ohio wires now cross the Brooklyn Bridge, thence to Fort Hamilton and over to Fort Wadsworth. A line extends down Staten Island to Clifton, whence the wires follow the route of the railway to Tottenville, crossing the Kill Von Kull at its narrowest point and reaching the line of the Pennsylvania Railroad at South Amboy. The wires will be strung close to this railway as far as Philadelphia, but the poles are erected on private ground through which the right of way has been secured. The new cable cost $8,000, and was towed down to Fort Hamilton on a barge at 10 o'clock in the morning. The whole time occupied in connecting it with the opposite shore was not over 25 minutes, and a message was sent over it to the company's office in Broadway to show that the circuit was perfect.

The Therm Motor.

A TRIP over the Fitchburg Railroad from Boston to Waltham and return, was made by a number of railroad men on the 16th inst., for the purpose of examining the practical working of the Therm Motor, invented and patented by Dr. Elbridge Baker. Engine 22 had been fitted up for the trial, and two cars were attached to it for the benefit of the guests. The invention, briefly stated, is simply a method of using petroleum instead of coal for fuel. A coil of perforated pipe occupied the fire box, and connection was made by rubber pipes with a tank in the tender filled with petroleum. The petroleum was forced into the perforated pipes by the pressure of the Westinghouse brake arrangement. When the train left the station on Causeway street, the fire box was filled with an intensely hot flame, and the steam-gauge indicated 130 pounds. When the engine was put to work, however, the pressure went down steadily until it reached 40 pounds, but, before the 10 miles between Boston and Waltham were covered, the gauge showed 60 pounds, though it should be said that the last part of the way the engine did not have much to do. On the return to Boston the result was substantially the same. When the engine was working the pressure steadily decreased, and when it eased up the pressure increased. So far as furnishing sufficient power for a long run or for hauling a heavy train is concerned, the trial on Saturday would not indicate that the Therm Motor is as yet a success, though improvements may bring perfection in that respect. The expense of using petroleum is said to be much less than coal, and one great blessing to travelers is to be credited to it—the smoke and cinders from a common locomotive, which make it almost impossible to stand upon a car platform or open a car window, were lacking in this case, and the freedom from that annoyance must tell largely in its favor.

THE Evans Artificial Leather Company, of Boston, have, by a change of machinery, succeeded in even more closely imitating the grain of leather than ever before. At the same time a slight change in the composition applied has increased its durability. All who use leather for seats, upholstery, shoes, or in fact almost any purpose, will find this Artificial Leather well worth examination.

AT a meeting of the Board of Directors of the Pennsylvania Railroad Company, held on the 13th inst., the resignations of A. J. Cassatt, first vice-president, and J. Mc. C. Creighton, general freight agent, were accepted, and the following official changes confirmed: First vice-president, Edmund Smith; second vice-president, Frank Thomson; third vice-president, J. N. DuBarry; fourth vice-president, John P. Green; general manager, Chas. E. Pugh; general superintendent, S. M. Provost; superintendent Philadelphia Division, W. J. Latta; superintendent Altoona Division, Jas. Reed; general superintendent motive power of the lines east of Pittsburgh and Erie, Theodore N. Ely.

THE Pennsylvania Railroad Company has just tested, with satisfactory results, a system of electric lighting for passenger coaches by means of a Faure accumulator. On Monday evening a passenger car provided with seven lamps of two burners each was attached to a regular train from Jersey City to Philadelphia, and a number of railroad officials and electricians made the trip. It was the unanimous opinion that the experiment was an entire success. The lamps gave a soft, clear and steady light. The accumulator, which was placed under the middle of the car, transmitted electricity to the carbons by wires on either side. Dr. Dudley, electrician of the Pennsylvania Company, who conducted the experiment, will doubtless make a favorable report.

Finely Tempered Swords.

The art shown in sword making was not by any means confined to beautiful forms and elaborate ornamentation. The greatest skill was exercised in the manufacturing and tempering of the blade, which, in the days when swords were not only worn but used, was more important than any other part of this weapon. In Europe, the sword manufacturers of Spain first began to have a reputation for producing work of a superior quality, and the armorers of Toledo stood foremost among their countrymen. A "Toledo blade" was considered to be a weapon of great value, and, even now, when we wish to speak of something remarkable, fine-tempered and sharp, we compare it to one of these swords. The peculiarity of the Toledo blade was not only its extreme hardness, which enabled it to receive and retain the sharpest and most delicate edge, but its elasticity, which allowed it to be bent without being broken. Some of the most famous of these swords could be bent so that the points touched the hilts, and yet they would spring back to a perfectly straight line. It is said that in Toledo sword-blades have been seen in the cutlers' shops coiled in boxes like watch springs; although they might remain in this position for some time, they would become perfectly straight when taken out. Other places in Europe were also famous for producing good swords. Many excellent weapons were made in Italy, and Andrea Ferrara, the Italian sword maker, was better known throughout Europe than any other of his craft. To possess a genuine Ferrara blade was considered a great thing by the nobles of France and England.

But it is to the East that the world owes the production of the most finely-tempered swords it has ever seen; and the steel of Damascus has been celebrated for many hundred years as superior to any other metal that has ever been made into sword blades. Even the cutlers of Toledo doubtless owed their skill and knowledge to the Moors, who brought from Damascus the art of making blades as hard as diamonds, as sharp as razors and as elastic as whalebone.

Wonderful stories are related of these Damascus swords. We have been told that with one of them a full-grown sheep could be cut in half at a single blow, a heavy iron chain could be severed without turning the delicate edge of the sword, and a gauze veil floating in the air could be cut through by one gentle sweep of the glittering blade. These wonderful scimitars are not manufactured now, but their fame has exceeded that of any other weapon of their kind, and it is quite certain that their extraordinary excellence has not been exaggerated. It is probable that the workers in steel of the present day might be able to discover the peculiar methods by which the Damascus steel was made, but as there would be little use or demand for the blades after they had been produced, it is not likely that their manufacture will be attempted. We should consider, however, that although the present age is pre-eminent as an inventive and manufacturing period, there are some things which have been produced by the ancients and the artificers of the Middle Ages which we of the present day have not been able to equal. It is possible, therefore, that our steelworkers might never be able to make a Damascus blade, even if they wanted to.

Some of the swords of Japan are said to possess wonderful qualities of hardness and sharpness. The story is told that if one of these celebrated blades is held upright in a running stream the leaves floating gently down with the current will cut themselves in two when they reach the keen edge of the sword.

But these Japanese swords, some of which were held in such high esteem that they were worshipped, and temples were built in their honor, were only hard and sharp; they had no elasticity, they could not bend and they might break, and in this respect they were far inferior to the splendid scimitars of the Moors and Saracens.—*St. Nicholas.*

Egyptian Railway Material.

The principal if not the only depot of rolling-stock belonging to the Egyptian railways is at Boulak, a suburb of Cairo, and it is there that the workshops for repairs have been erected. In these shops there are about 650 fitters, 60 foremen, and 400 carpenters for repairing wagons. There are some 60 European drivers, 60 native drivers, 200 firemen and 120 cleaners. The total consumption of coal on the Egyptian railways is about 100,000 tons per annum. The gauge of all the railways in Egypt is the ordinary 4ft. 8½in. gauge, so that any railway stock from the lines in England will be suitable for use there. The total number of locomotives in Egypt is 240, exclusive of 34 light engines which are used on the agricultural lines. The greater part of these locomotives were supplied to the Egyptian Government by Stephenson, of Newcastle; Sharp & Stewart, of Manchester; Kitson, of Leeds; and Schneider, of Creusot. The stock of wagons and carriages, etc., which has been considerably increased of late years, amounts now in all to about 6,000. Among these are some wagons which were for the purpose of carrying specie, on account of which they were lined with iron plating, and were thus rendered bullet proof. Egypt is so flat a country, and lends itself so favorably to the construction of railways, that it is calculated that even if the metals were torn up, they could be replaced with ease at the rate of ten miles a day.

Central Asian Railway.

A report by M. von Schultz has been recently laid before the Imperial Russian Geographical Society on a survey made, by order of General Struve, along the proposed southeastward extension of the Orenburg railway, and the result is to show that the best line is by way of the valley of the Ilek, across the southern part of the Mugodjar Hills to Tetse-bash Bay, on the northwestern shores of Lake Aral. Another party at the same time started from Kara-Turgai and Kazalensk, and working across the Kara-Kum desert to the northwest, examined the country east of the Great Barsuk sands; but this was found far less favorable than the Tetse-bash line, which is better populated, has more water, and a better supply of materials requisite for the construction of a railway; it is only 480 miles in length, terminating at Tetse-bash Bay, which makes a good harbor, while from the sea of Aral the rivers Oxus and Jaxartes are navigable for the distance of 1,600 and 1,300 miles respectively.

A trial was recently made at Dundee, Scotland, of a gun for throwing a line to a wrecked vessel. The gun is about two feet long, and has a bore of two and a half inches in diameter, and the cord is coiled in the form of a cop and put inside a steel canister, which is fired out of the gun, leaving the line streaming behind it. Two ounces of gunpowder carried the end of the line at least 400 yards, and would have taken it further if the line had been longer.

The Burlington route from Kansas City to Denver was opened for business on Sunday, September 10th, with daily through trains leaving Kansas City Union Depot at 9.40 P. M. after arrival of all lines, running a solid train into Union Depot at Denver at 9.40 P. M. next day, being the only line running a fast train for Colorado leaving Kansas City in the evening. The General Ticket Agent says: "Ours will be the same liberal policy which has always characterized the Burlington lines, and I bespeak for the new train your good will and our share of the Colorado business through Kansas City and Atchison."

A decision which would be of considerable importance to the National Banks, should a similar case ever occur again, has just been made by the Secretary of the Treasury at Washington. The facts of the case are as follows: The First National Bank of Detroit, Mich., now in liquidation, had stolen from it on June 23, 1881, $2,030 in incomplete $10 circulating notes which had been received by it from the Treasury Department. These notes had been signed by the president of the bank, but not by the cashier, and were fraudulently put in circulation. At the bank's request, and in accordance with the uniform ruling of the Department, these notes, when presented to the United States Treasurer for redemption, were rejected, for the reason that they were not obligatory promissory notes of the bank by which they purport to have been issued, not having been signed by both officers of the bank. Upon the bank going into liquidation, in order to obtain its bonds pledged as security of its circulating notes, it was required to deposit with the Treasurer of the United States lawful money equal to the amount of its circulating notes outstanding, which included the $2,080 stolen notes. The Secretary of the Treasury, to whom the facts in the case were made known, informed the Treasurer that there would be no objections to the notes in question being redeemed provided proper authority in writing should be first obtained from the officers of the bank. The Treasurer has now been furnished by the officers of the bank with the written authority consenting to the redemption of the notes in question, and they will be redeemed on presentation at his office.

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INVENTOR EDISON tells a reporter that he does not believe a submarine telephone comes within the region of possibilities. He says: "The present condition of the art will not permit sound to be audible by submarine or underground conveyance more than a few miles. It is all they can do to talk across the English channel, and that with the best instrument yet constructed."

THE St. Gothard Line not only has the longest tunnel in the world but twenty-four miles, or more than one-fifth of the whole line, consists of tunnels. Many of these have had to be constructed in spiral or corkscrew fashion, whereby, while making the necessary rapid ascent from the valleys to a higher elevation, the line is perfectly protected against the avalanches which are frequent at those spots.

IT is the prevailing impression that the stocks of our financial institutions are held chiefly by men of great wealth; but the facts in regard to two of our most powerful banks are wholly adverse to this theory. Of the 1,829 holders of the shares of the National Bank of Commerce of this city 778 are women, who hold more than one-fourth of the $5,000,000. Again, of the 20,000 shares of the Bank of New York 18,270 shares are held by 247 women, 52 trustees of estates, and 19 charitable institutions.

THERE is a gardener employed on each of the three divisions of the Pennsylvania Railroad between Philadelphia and Pittsburgh. The duties of each are to lay out the flower-beds at the stations on his division and to trim the flowers. The grass-cutting and the watering of the flowers are left to employés of the road. The prettiest flower-bed is said to be at Tuscarora, between Harrisburg and Altoona. The management of the road thinks of establishing rewards to be offered for the best flower-beds.

MR. ABRAM S. HEWITT has favored the Tariff Commission with his opinion about the duty on iron ore. He said: "iron ore was simply an earth, having no labor on it except that of digging it out. The freight on the foreign iron ore was greater than the whole cost of digging it in this country and putting it on cars or boats. The Lake Superior iron ore men had asked for an increase of duty, and yet the freight from the east to Chicago and Cleveland, the great markets for the Lake Superior iron ore, was greater than the whole cost of the Lake Superior ore put upon the cars. He could not understand, therefore, how they needed protection. Every ton of foreign ore made a market for a ton of American ore, which would not otherwise be mined. The foreign ore did not reduce the price of American ore, but made a better price for it by enlarging the market. There was no conceivable circumstance under which a duty should be placed on iron ore, nor could any conceivable benefit come to American ore from such duty. On the contrary, the duty was a positive damage."

RAILROADS AND THE MONEY SUPPLY.

IT is estimated that fully ten thousand miles of railroad will be added to the facilities of the United States during the year 1882. This is exclusive of a considerable addition of lines in Canada and Mexico, in which American capital is interested; in the latter alone there are fully 2,500 miles under contract, and taking the continent together it is not unreasonable to suppose that we are under obligations for the cost of fully 12,500 miles of road this year, a greater extent next year, and so on as long as the supply of loanable capital holds out. Much of the road now building is in either the old and settled country or in the inaccessible wild West; some of it is double track, and most of it laid with steel rails, and an uncommon proportion of it in rugged and mountainous *terrain*. A fair estimate of cost would not be far from $25,000 per mile. This involves an outlay of from three hundred to three hundred and fifty millions of dollars per annum for a single form of internal transportation improvement. Can the country stand such a drain upon its industry and income? This is altogether a different question from that whether the expenditure is, on the whole, a provident one. We can in one sense, afford it; but can we pay as we go? If not, can we get credit at fair rates? Where is the money to come from? The greater part of the whole expenditure is to pay for labor, and labor in these times, or in this part of the earth, must be paid—paid much more than is needed to sustain life. One effect, moreover, of such a prodigious exertion in this direction is to put up the prices of labor and all supplies into which it enters.

Those who have roads to build and securities to sell are exulting over good crops, the large importations, the full National Treasury, and the activity of manufactures. The good grain crop is no doubt a real blessing, but while breadstuffs are plenty Europe needs but very little, and hence prices rule low to the farmer. At the same time flesh meats are uncommonly high, and rents equally so. The great sums drawn by the Treasury, so far from being acquisitions of wealth are really indications of a

generally wasteful expenditure. Two-thirds of the whole is indirect taxation by customs import, and of this one-half is for the consumption of articles which we should manufacture at home, or still better do without. The other third of the National revenue represents the enormity of the great National infirmity—call it an indulgence, or vice, as we may, the appetite for liquor and tobacco. These are not subjects for congratulation but for humiliation. The money disbursed to pay war debt, pensions, deepen rivers and harbors, and to build United States Court Houses, is money taken from the pockets of the taxpayer to put into generally unproductive and unprofitable schemes. True, some of them would not have made so good a use of it; but others would have made better. The activity of the manufacturers brings with it the tendency to "strikes," and so we are hemmed in by limitations to all enterprise.

We shall be able to borrow some railroad money from the old countries of Europe, but this is not frequent; it only puts off the payment to a time when we shall be no better able to pay than now, and perhaps not nearly so able.

Let it be freely admitted that our new roads are needed and will, with scarcely an exception, sometime justify their construction by paying full interest. There is nevertheless a danger of overdoing the railroad business and exhausting the supply of that kind of capital. When that time comes, or rather before it comes, the banks take the alarm and begin to curtail loans. Usually at this season the rate for the use of money reaches its maximum, and cautious investors are on the lookout for storm signals. The general feeling, as nearly as we can make out, is that while we may have high rates for time loans it is on the whole healthy. There is such a thing as having too much credit, and a three and four per cent interest rate only stimulates unhealthy inflation of prices, leads to illegitimate undertakings and a gambling spirit generally.

The Kiernan bill, which swept away the penalties for loaning money at more than the usual legal rate on this kind of capital, undoubtedly did good service in attracting to New York some loans which would not have come here under the old usury law; and while this may not prevent the rate for call loans, to stockbrokers reaching 8 or 10 per cent per annum it will be all the better if the competition for railroad money shall cause the rate to be kept up to full six per centum. Less than that will only precipitate a crash, which may come soon enough under any circumstances.

ADVERTISE in the RAILROAD JOURNAL.

Tennessee Copper Mines.

OLD MINES NOW IDLE—HOW THE RAILROAD WILL REVIVE THEM.

A CORRESPONDENT of the Boston *Herald* writes from Hiwassee, Tenn., as follows: "The Ducktown mining district occupies some dozen miles of the territory in the sharp corner of this State which lies next the Georgia and North Carolina borders. Thirty-three years ago that part of the district where the Hiwassee mine was opened, the first from which copper ore was taken, was sold by its owner for a rifle, but the purchaser soon tired of his bargain, and traded off his 160 acres for an Indian pony. Nine years later a prospector named John Caldwell, while washing for gold, found in the gravel a lump of native copper. John thought he had a large nugget of the precious metal, and was much disgusted when he ascertained its true character. That discovery was the beginning of an industry which developed rapidly. The Hiwassee Mining Company was organized and went to work. Eleven other companies operated in the same territory, more than 300 men were employed, smelting furnaces, ore sheds, pumping works, and all the machinery for reducing the ores were built, and the farmers in a dozen counties of the three States found here a ready market for their surplus products. Then came misfortunes, partly from hard times, partly from bad management, but largely from the heavy cost of freightage, and one after another the companies failed, until, several years since, the last one suspended. Now the mines and the country around them are scenes of complete desolation, and the plants, representing an enormous cost, are falling to pieces. The copper ores here were of almost every variety known to the geologist—carbonites, oxides and combinations of many kinds. Some of them carried but 5 per cent of metal, while the best assayed 30 per cent. Surveying the landscape from the summit of a high ridge, near the village, one can see that the timber was destroyed for many miles in all directions to furnish fire-wood and charcoal for the smelting furnaces. The nearest railroad station is at Cleveland, on the East Tennessee and Virginia Railroad, more than forty miles distant, and through an exceedingly rough country. It was this that made freightage costly enough to eat up the mining companies' profits. Five miles east of this region, beginning at the Georgia line, is another rich copper belt of considerable extent. The ore is a black oxide that has in some instances assayed 75 per cent of metal. Although there are many trial holes in the belt, and one or two shafts have been sunk, no extensive mining has been done there. The ores all lie near the surface, however, and can easily be examined. The Western Extension Railroad from Asheville, when connected with a line to Cleveland, will bring the Ducktown mines into prominence once more, and the Marietta and North Georgia will enable the owners of the black oxide veins to develop their properties next year. An expert who accompanied your correspondent on his trip through both districts was especially pleased with the Georgia properties, and predicted for them a rapid appreciation in value as soon as railroad transportation was within reach."

Iron That India Has.

IT is officially intimated that the Government of India have for some time past had under their special consideration the importance of developing the iron industry in India. In Assam, Kuch Behar, Burmah, and the Kumaon ranges the prospects are promising to a greater or less extent. In lower Bengal, the Ranigunj district, Sonthalia, and Chutia Nagpur; in the central Provinces, Sumbalpur, and Chanda; in central India, the ranges near Gwalior, and in the Punjab numerous localities are found to be specially endowed with all the requisites for successful production. In recalling these facts and inviting the consideration of capitalists, the Viceregal Government states that in quality the ores are mostly found to be extremely pure, and where the proportion of impurities is large recently invented processes have removed all obstacles to their successful elimination. It appears, therefore, that India possesses the means of supplying all her wants in respect of cast iron, wrought iron, and steel, and the supply could be produced remuneratively on a strictly commercial basis. Nothing appears to be necessary in order to attract private enterprise to so eligible an opening except the collection and diffusion of sufficient information and the grant of such facilities as the State may legitimately and reasonably afford to a young and growing industry. The Indian Government point out, however, that private enterprise in this matter, must evidently be on a large scale, and not confined to one locality alone. The distances in India are so great and the railway system now so extended that the cost of conveying material to the spot where it is needed is an important factor in every calculation. It has been proved that unless works were established in four different localities the cost of sending old rails and tires to be worked up afresh would exceed that of obtaining new ones from England. Toward the development of the industry in the Ranigunj district the attention of the Government has in the first instance been directed in consequence of the fact that a private company was established a few years ago, but after a short time it fell into difficulties. After carefully investigating the causes of failure the Government of India came to the conclusion that the only way in which the works could be at an early date placed in the hands of experienced persons having an adequate demand of capital was by an intermediate purchase on the part of the State. The Bengal Ironworks, have, therefore, been purchased for the sum of 430,761 rupees, and the Viceroy now announces that his Council will be ready to transfer them for that sum, together with any further indispensable outlay, to any parties who may establish satisfactorily that they are in possession of sufficient skill and resources, and who are prepared to carry on the manufacture of iron and steel upon a scale commensurate with the probable needs of that portion of British India which is within a reasonable distance of the works. The Governor-General in Council will be further prepared to enter into an engagement for 10 years at fixed prices to be agreed upon.—*Manchester Guardian.*

WHEN the tracks of the Pennsylvania Railroad are straightened near Lancaster this fall, 3,500 feet will be saved in distance and 358 degrees of curvature.

Hon. Chas. P. Johnson.

St. Louis, August 29, 1882.

In a former letter I gave you an account of the fight against the gambling ring in this city and the feeling against Gov. Crittenden for pardoning those convicted under the "Johnson law."

There is no longer any question about the efficacy of that law. Public gambling is suppressed, and a crowd of bold, daring and unscrupulous men, who essayed to run the city and even to select Governors, have been shorn of power and relegated to merited obscurity. As you may well imagine, the fight was a bitter one; but the author of the bill, who declared one year ago that the law should be enforced, is a man well able not only to take care of himself but to champion a just cause to a triumphant issue against the most desperate opposition.

Reflecting upon the consequences of so marked a reformatory movement in a city of four hundred thousand inhabitants, and the character of the struggle in achieving it, I thought it might be of some interest to your readers of the East to know something about the leader of the movement. Here he is personally known, I may say by everybody, and his reputation as a speaker, legislator, statesman and lawyer is by no means confined to Missouri.

Chas. P. Johnson was born in Lebanon, St. Clair county, Illinois, on the 18th day of January, 1836. His ancestors were from Virginia and Pennsylvania, and among the pioneers to the Western territory. His mother, whose strong characteristics he inherits, was born in Kaskaskia, and saw much of frontier life. Contiguous to Lebanon is the now City of Belleville, where he was reared. His education was obtained mostly at the common schools, though he was a student at McKendree College for one year immediately preceding his locating in St. Louis. The best part of his education, however, he claims to have procured at "the case," having not only thoroughly learned the printers' trade, but also published in his eighteenth year a weekly paper in the town of Sparta, Ill. In 1855 he located in St. Louis and commenced the study of the law, and was admitted to the bar in 1857. Party spirit ran high at this period in Missouri, and in St. Louis the political contests were exceedingly bitter. An advance had been made on Mr. Benton's position—his teachings had culminated in a definite anti-slavery party confined almost entirely to St. Louis, and they had to meet the local attacks backed by the State power and influence of the pro-slavery party. As might have been expected, a young man of Mr. Johnson's character could not keep out of the conflict. He joined the free-soil party and became an active worker under the leadership of Frank P. Blair and his associates. In the spring of 1859 he was elected to the office of City Attorney, his term expiring in April, 1861. During the Presidential campaign of the preceding year he supported Mr. Lincoln. When the war broke out he enlisted under the first call for troops, and served as lieutenant for three months in the 3d Missouri regiment. During this time he was actively engaged with Morgan L. and Giles F. Smith in raising the 8th Missouri regiment, which he tendered to Mr. Lincoln in person. He was also the bearer of dispatches from General Lyon to President Lincoln. The officers of the 8th Missouri elected him to the majorship of the regiment, but he declined because of delicate health and his lack of military knowledge.

In 1862 a division occurred in the ranks of the Republican party in St. Louis, growing out of an attempt to conserve slave property in opposition to the declared policy of General Fremont, then in command of the Western Department. The Congressional nominating Convention divided, one wing nominating Frank P. Blair as a candidate for Congress, the other nominating Chas. P. Johnson. Mr. Johnson declined the nomination in a speech before the Convention, in which he contended that an older and more experienced standard-bearer should be chosen (he was then barely eligible), and presented the name of Samuel Knox. Mr. Knox was elected over Mr. Blair. At the same time he accepted the candidacy to and headed the Legislative ticket. In the Legislature he was assigned to what at that time was the most important position in the body—the Chairmanship of the Committee on Emancipation. His zeal, energy, and powers as a debator soon gave him the leadership of the House. Failing in his efforts to get the pro-slavery party to accept the reasonable proposition of Mr. Lincoln, to pay the loyal slave owners for their property, he took the advanced stand for immediate emancipation without compensation, and presented the bill for the calling of a State convention. In the Senatorial fight of this session he was the determined supporter of B. Gratz Brown, and rather than yield his position joined forces with the supporters of Jno. S. Phelps and precipitated an adjournment, which prevented an election. At the adjourned session, 1863–64, the Convention bill became a law. In the fall of 1864 Mr. Johnson was nominated for Congress, but Mr. Sam Knox running as an independent candidate, he was defeated by Hon. John Hogan. In the early part of January, 1865, the State Convention assembled at St. Louis. Their first act was the passage of an ordinance freeing the slaves. After this they proceeded to frame a Constitution, which was submitted to the people for ratification or rejection in May, 1865.

This was the celebrated "Drake Constitution." As the slavery question was already settled by independent ordinance. Mr. Johnson took his stand in opposition to the new Constitution, because of its harsh and intolerant provisions. He canvassed the State on that issue, and ran for the Legislature again, from St. Louis county at large. He was elected by an overwhelming majority, but the constitution was carried by a small majority. He served one winter in the Legislature and in the fall of 1866 accepted the appointment of Circuit or State's Attorney for the city and county of St. Louis. For six years he filled this position in a manner that gained for him universal approbation. During this time he laid the foundation for his since brilliant career at the bar. Two years preceding the expiration of his Circuit Attorneyship, the liberal Republican movement was inaugurated in Missouri, and Mr. Johnson entered into it with his usual zeal and determination.

He was a delegate to the first Convention convened in Missouri to elect delegates to the Cincinnati Convention, and was a staunch advocate for the nomination of Greeley and Brown. In the selection of the joint Democratic and liberal Republican ticket of 1872, he was presented as a candidate for Lieutenant Governor. He was elected, and during the two years he served became noted for his marked ability as a parliamentarian and presiding officer. It was during this session that he made a reformatory fight which attracted wide attention. An unsuspecting legislature had given St. Louis a charter in which a power was granted to regulate houses of ill-repute. Under this grant was passed the celebrated Social Evil ordinance, which was simply a copy of the former European system of licensing prostitution. Its establishment and the perceptible evil consequences flowing from it soon aroused the determined antagonism of the moral element of the community, and a movement was made to repeal the obnoxious law. The subject was introduced before the Legislature and its abrogation advocated by Mr. Johnson, the then Lieutenant-Governor, with marked success. On the expiration of his term of office Mr. Johnson returned to his law business, and devoting his entire attention to it soon reached the first rank in his profession. His practice has not only brought him honor, but has been lucrative. He has been employed on one side or the other in every criminal case of importance that has engaged the attention of the St. Louis Court for the last ten years, and he is frequently called to professional engagements in other parts of the State.

His reputation as an advocate is not confined to Missouri, but has extended throughout the great West. In no case of importance has he ever been vanquished. And though the acknowledged head of the criminal bar he still is not confined in his practice to that branch alone. For some time he has been associated with Mr. J. D. Johnson and Joseph G. Lodge, lawyers standing high in the profession both as civil and criminal lawyers, the three composing a firm that does an extensive business in every branch of the law.

Two years ago Mr. Johnson's interest was aroused in opposition to the evils of public gambling in St. Louis. As detailed to you in a former letter, they had become a ruling element in the politics of this city. For this purpose Mr. Johnson became a member of the Legislature, and the consequences of his work in that body are matters of history. No one will gainsay that he accomplished one of the greatest achievements ever undertaken in this country by the legislator or social reformer. In his public career Mr. Johnson has shown himself to be a man of broad and liberal views, and progressive and reformatory in his intellectual development.

In addition it may be said that he posseses in a rare degree the power to embody in legislative enactment what is necessary for a practical accomplishment of desired ends. He has

been a zealous supporter of every measure or movement looking to the development and advancement of his State, takes great interest in the improvement of its railroad system, was one of the principal workers in getting together the great Immigration Convention which met in St. Louis on the 13th day of April, 1880, and delivered the opening address before that body on the "Valley of the Mississippi," saying in advocacy of governmental appropriations, "that the expenditure on our river of the money and labor that constructed those great highways leading from the most distant parts of the Roman empire to its capital, or upon those huge aqueducts of the same period, or upon the gardens and palaces of Niniveh, or on the grand wall of China, or the pyramids of Egypt, or the expenditure of a tithe as much as that wasted on the modern fortifications of Europe, would jewel our stream with magnificent ports, dot it with costly arsenals of trade, control it with extended levees, and channel it to bear upon its bosom the outgoing and incoming commerce of the world."

From the above epitome of Mr. Johnson's life, you may know how active it has been. He is yet young, having barely reached his prime, and though not robust, is active, vigorous and healthy. He is temperate, studious, cultivated and eminently domestic in his habits, being devotedly attached to his family.

In concluding this hurried sketch let me say that the friends of the subject thereof expect much of good work from him yet, and your correspondent has an idea that they will not be greatly disappointed, and it is not altogether unlikely that a future letter of his will contain as a matter news, that Chas. P. Johnson has been elected Governor of Missouri. T.

Railway Speed.

In the matter of speed of trains, the countries (England and America) are much on a par as regards the great trunk lines, but on the local service the English is quicker. The fastest train run out of London is the western morning express, or "Flying Dutchman," as it is called—an even more realistic definition being that of an enthusiastic American who traveled by it from London to Bristol, and spoke of it as "hell in harness." The "Dutchman" leaves Paddington station at 11:45 A. M. and arrives at Swindon, 77 miles distant, at 1:12, occupying but 87 minutes on the journey. For the first 9 miles it can run little more than 35 miles an hour, owing to the numerous junctions in the suburbs, but on many parts of the road the train has been timed to 70 miles an hour for miles together. A corresponding train on the Great Northern, known as the "Flying Scotchman," leaves London at 5 o'clock and reaches Peterboro in Northamptonshire, 78 miles distant, in one hour and thirty minutes. The Irish mail, leaving London 7:15 A. M., arrives at Rugby, 86 miles distant, in one hour and forty-five minutes. The Manchester express trains, on the competing lines—the Great Northern, the Midland and the Northwestern—accomplish the journey, 200 miles, in five hours, and return in the same period, giving the traveler three hours in the northern country commercial center.—*Baltimore Day.*

List of Patents for Inventions Relating to Railway Interests.

Bearing date of September 12, 1882.

264,062. Ditching Machine: JOHN P. BONNELL, Green Village, N. J. Filed July 30, 1881.

264,063. Variable Self-Adjusting Engine: WILLIAM H. CLARK, Chicago, Ill. Filed June 30, 1882.

264,070. Spring Scale: CHARLES FORSCHNER, New York, N. Y. Filed November 29, 1881.

264,071. Machine for Coiling Springs: OSCAR S. FOSTER and WILLIAM S. FOSTER, Utica, N. Y. Filed July 10, 1882.

264,075. Car Coupling: JOSEPH B. GOODWIN, Lowell, Mass. Filed March 31, 1882.

264,078. Railway Guard: SAMUEL J. GRAY, Fort Gratiot, Mich., assignor of one-half to Joseph Tucker, same place. Filed July 21, 1882.

264,087. Valve: JAMES JONES, St. Louis, Mo. Filed June 6, 1882.

264,107. Ratchet Drill: WILLIAM SANDIFORD, Joliet, Ill. Filed December 31, 1882.

264,108. Car Coupling: DAVID J. SCHULTE, Beatty, Pa. Filed July 1, 1882.

264,116. Hot-Water Heating Apparatus: HENRY SWINDELL, Allegheny, Pa. Filed December 10, 1881.

264,119. Car Starter: FREDERICK E. ALLEN, Grafton, Mass. Filed April 27, 1882.

264,124. Car Starter: MERRICK M. BARNES, Boston, Mass. Filed January 21, 1882.

264,129. Railway Crossing Alarm and Signal: JACOB BIEDER, Ashtabula, Ohio. Filed April 20, 1882.

264,132. Machine for Making Links; JOHN BRIDGE, Detroit, Mich. Filed February 21, 1882.

264,134. Steam Pump: PATRICK BROWN, TIMOTHY PARFERY and ANTHONY HEALY, Scranton, Pa. Filed July 10, 1882.

264,136. Locomotive Boiler: JOHN CAMPBELL, Bay View, Wis. Filed February 20, 1882.

264,142. Nut Lock: WALTER H. FARRA, Mount Jackson, Va., assignor of one-half to Leonidas Triplett, Jr., same place. Filed August 8, 1882.

264,149. Guard for Circular Saws; JOSEPH G. GROFF, Connersville, Ind. Filed November 23, 1881.

264,151. Portable Arch for Steam Boilers: JOHN C. HAAG, Lansing, Mich. Filed July 5, 1882.

264,158. Smoke and Gas Consuming Furnace: DE WITT C. HILL, Willimantic, Conn., assignor of two-thirds to John Scott, same place, and William E. Barrows, Hartford, Conn. Filed August 25, 1881.

264,162. Railroad Track: SAMUEL W. HUDSON, Hudsondale, Pa. Filed June 22, 1882.

264,172. Wall Safe for Cars: JOHN H. LASKEY, Boston, Mass., assignor of one-half to Isaac F. Dobson, same place. Filed December 7, 1881.

264,176. Lubricator: JOHN B. LOW, Falls Village, Conn. Filed July 17, 1882.

264,179. Stone and Ore Crusher: SAMUEL L. MARSDEN, New Haven, Conn. Filed April 7, 1882.

264,181. Car Coupling: JAMES E. MENDENHALL, Fort Wayne, Ind. Filed July 19, 1882.

264,182. Removing and Preventing Scale in Steam Boilers: ISAAC L. MERRELL, San Francisco, Cal. Filed June 15, 1882.

264,188. Car Axle: GEORGE W. MILTIMORE, Chicago, Ill., assignor to the Miltimore Car Axle Company, of New York, N. Y. Filed February 3, 1882.

264,191. Traction Engine: JAMES E. MUSTARD, Glen Hall, Ind. Filed May 15, 1882.

264,209. Boiler Feeder: DAVID C. WALTER, Toledo, Ohio. Filed May 31, 1882.

264,220. Bridge: THOMAS BARLAND, Eau Claire, Wis. Filed October 16, 1880.

264,221. Car Starter: WILLIAM H. BARNES, Chicago, Ill., assignor of one-half to John F. Gainty, same place. Filed June 17, 1882.

264,251. Axle Lubricator: NATHAN H. DAVIS, Philadelphia, Pa., assignor of two-thirds to Louis C. Gratz and A. B. Davis, both of same place. Filed June 24, 1882.

264,288. Car Coupling: SAMUEL A. V. HARTWELL, Valley Center, Kan. Filed July 22, 1882.

264,339. Beam Calipers: JOSEPH A. REECE, Springfield, Mass. Filed May 2, 1882.

264,335. Locomotive Furnace: HOWARD M. SMITH, St. Louis, Mo. Filed April 14, 1882.

264,368. Cross-Head for Engines, etc.: JOHN E. SWEET, Syracuse, N. Y. Filed December 16, 1881.

264,384. Tuyere: AUGUST WERNER, Leadville, Col. Filed January 12, 1882.

264,389. Car Brake: JOHN R. WILHELM, Addison, N. Y., assignor of one-fourth to Edward C. Paxton, same place. Filed May 29, 1882.

264,400. Feed-Water Heater: AUGUSTUS R. Young, Stillwater, Minn, Filed April 22, 1882.

264,401. Shaft Coupling: CHARLES BARBER, Meaford, Ontario, Canada, assignor of one-half to Thomas Harris, same place. Filed March 7, 1882.

264,412. Saw Guard: HENRY F. KUHLMANN, Indianapolis, Ind., assignor of one-half to John H. Grube, same place. Filed June 21, 1882.

264,413. Rope Railway: JOEL B. LOW and ABRAHAM K. GRIM, San Francisco, Cal. Filed May 2, 1882.

264,417. Lock Catch for Railroad Switch Levers: JACKSON RICHARDS, Philadelphia, Pa., assignor to himself and Thomas Shaw, same place. Filed May 24, 1882.

10,194. Car Truck: SIDNEY D. KING, Pittston, assignor, by mesne assignments, to John B. Smith, Dunmore, and Antoinette L. King, West Pittston, Pa. Reissue filed July 24, 1882. Original No. 227,792, dated May 18, 1880.

Commerce of New York.

THE foreign imports at New York for the month of August were :—

	1880.	1881.	1882.
Ent. for cons.....	$20,804,135	$20,683,448	$25,708,839
Do. for warehousing	8,688,329	7,354,500	8,221,084
Free goods.....	9,939,602	11,841,129	10,914,574
Specie and bullion..	9,492,530	5,287,804	469,051
Total ent. at port....	$48,924,596	$48,166,881	$45,313,548
Withdrawn from warehouse.....	10,044,739	9,682,684	10,701,036

The foreign imports at New York for eight months from January 1, were :—

	1880.	1881.	1882.
Ent. for cons.....	$164,803,772	$148,563,427	$177,933,354
Do. warehouse....	86,149,389	61,673,279	72,419,827
Free goods.....	82,755,641	81,536,535	87,273,584
Specie and bullion.	14,660,862	35,672,559	2,582,696
Total ent. at port..	$348,369,154	$327,445,800	$340,209,491
Withdrawn from warehouse	57,779,686	64,603,716	63,359,493

Received for Customs at the Port of New York :—

	1880.	1881.	1882.
In Jan.....	11,960,677 78	10,572,559 15	13,387,515 96
In Feb.....	12,254,602 24	11,217,766 87	13,585,053 25
In March....	14,469,557 65	13,122,964 03	13,999,138 76
In April.....	11,901,071 43	11,678,760 93	11,906,105 45
In May.....	9,752,873 54	11,055,935 39	11,981,893 08
In June.....	10,699,840 52	10,993,452 70	11,428,930 11
In July.....	13,360,394 37	12,079,573 95	13,730,752 87
In August..	14,492,361 87	15,205,469 58	16,483,260 62
Total 8 mos.	$98,891,279 40	$95,925,482 60	$106,502,650 10

The exports from New York to foreign ports for the month of August, were :—

	1880.	1881.	1882.
Dom. produce.....	$35,937,898	$34,497,963	$32,401,340
For. free goods.....	113,355	419,315	585,120
Do. dutiable.....	398,094	301,682	375,031
Specie and bullion.	400,029	967,739	2,217,427
Total exports.....	$36,849,376	$36,186,699	$36,078,818
Do. exclusive of specie.....	36,449,347	35,218,960	33,361,491

The exports from New York to foreign ports for eight months from January 1, were :—

	1880.	1881.	1882.
Dom. produce.....	$265,802,243	$243,090,097	$212,822,303
For. free goods....	1,774,108	5,820,260	3,906,559
Do. dutiable.....	3,036,700	4,028,617	4,263,614
Specie and bullion	5,580,011	8,367,988	44,209,859
Total exports.....	$276,193,062	$261,306,962	$265,202,335
Do. exclusive of specie.....	270,613,051	252,938,974	220,992,476

THE Hempstead Railroad, extending from Valley Stream to Hempstead, in which town Garden City is situated, has been purchased for the A. T. Stewart estate. The price paid was $10,450. The road was a part of the old South Side Railroad. It is thought that it will now be used as a connecting line between Garden City and Pearsall's, to afford the residents of Garden City and Hempstead direct communication with the watering-places.

The Stock Exchanges and Money Market.

New York Stock Exchange.

Closing Prices for the week ending Sept. 20.

	Th.14.	F.15.	Sat.16.	M.18.	Tu.19.	W.20.
Adams Express	142⅛	142½	.....	.....	143	.....
Albany and Susq	.....	.....	.....	.....	.....	.....
1st mortgage	.....	.....	.....	.....	.....	.....
2d mortgage	.....	.....	.....	.....	.....	.....
American Express	92⅛	95⅛	95	94¼	94	95
Burl., C. R. & Nor	.....	84	84	.....	80	.....
1st mortgage 5s	.....	100¾	100¾	100¾	.....	101
Canada Southern	65¼	65	65¼	64	65	66
1st mortgage guar	93⅛	.....	93⅛	.....	93⅛	93⅛
Central of N. Jersey	81⅝	80¾	80	79⅛	80	80
1st mort. 1890	116	.....	.....	.....	.....	.....
7s, consol. ass	.....	.....	109½	.....	110	110
7s, convertible ass	.....	110¼	110	.....	110	.....
7s, Income	.....	.....	.....	.....	.....	.....
Adjustment	.....	.....	.....	.....	.....	110
Central Pacific	94	93½	93⅜	93⅛	93⅜	93
6s, gold	114⅜	115	114¾	....	114⅞	114⅛
1st M. (San Joaq)	.....	.....	.....	.....	.....	.....
1st M. (Cal. & Or.)	.....	.....	.....	.....	.....	.....
Land grant 6s	.....	106½	.....	.....	.....	.....
Chesapeake & Ohio	25⅞	25⅜	26¼	25½	25⅜	25
1st pref	40¾	41⅜	40	39¼	39⅛	39½
2d pref	28	28½	.....	.....	27½	27¼
1st mort., series B	87½	88	.....	88	87	87
Chicago and Alton	141	.....	142½	.....	140	.....
Preferred	.....	.....	.....	.....	.....	.....
1st mortgage	.....	.....	.....	.....	.....	.....
Sinking Fund	.....	.....	.....	.....	.....	.....
Chi,, Bur. & Quincy	135	134½	134½	133½	133¾	133¾
7s, Consol. 1903	.....	.....	.....	127⅞	127½	.....
Chi., Mil. & St. Paul	127	110¾x	110⅞	110⅜	110¾	110⅜
Preferred	143	125½x	126	125¾	124½	125
1st mortgage, 8s	.....	.....	.....	.....	.....	.....
2d mort., 7 3-10s	.....	.....	.....	.....	.....	.....
7s, gold	.....	.....	.....	.....	.....	.....
1st M. (La. C. div)	.....	.....	.....	127½	.....	.....
1st M. I. & M. div.)	.....	.....	.....	.....	.....	.....
1st. M. (I. & D. ext.)	.....	.....	.....	.....	.....	.....
1st M. (H.&D. div.)	.....	.....	.....	.....	.....	117½
1st M.(C. & M.div.)	.....	.....	.....	.....	.....	.....
Consolidated S. F.	.....	.....	125½	.....	.....	.....
Chi. & Northwestern	148¾	148¾	148¾	147	147½	147½
Preferred	169¼	168	166½	166¾	166¾	166½
1st mortgage	.....	.....	.....	.....	.....	.....
Sinking Fund 6s	.....	.....	.....	.....	.....	.....
Consolidated 7s	133	133	.....	.....	.....	.....
Consol. Gold bo'ds	.....	.....	.....	.....	.....	.....
Do. reg	.....	.....	.....	.....	.....	.....
Chi., R. Isl. & Pac	137¾	137⅞	138	138¼	136¾	136¾
6s, 1917, C	.....	.....	.....	.....	.....	126
Clev.,Col.,Cin.&Ind	.....	84	84	84	83¾	.....
1st mortgage	.....	.....	.....	.....	.....	.....
Clev. & Pittsburg gr	.....	139	.....	.....	.....	.....
7s, Consolidated	.....	.....	.....	.....	.....	.....
4th mortgage	.....	.....	.....	.....	.....	.....
Col.,Chi.,& Ind. Cent	13¼	12½	12½	12¾	12⅜	11⅜
1st mortgage	.....	.....	.....	.....	121	.....
2d mortgage	.....	.....	.....	.....	.....	.....
Del. & Hud Canal	116¾	116⅞	116⅝	116½	115¾	116
Reg. 7s, 1891	.....	.....	.....	.....	.....	.....
Reg. 7s, 1884	.....	.....	.....	.....	106	.....
7s, 1894	.....	.....	.....	.....	.....	.....
Del.,Lack.& Western	148¾	148⅝	148	147¼	147¾	146⅜
2d mortgage 7s	.....	.....	.....	.....	.....	.....
Consol. 1907	.....	.....	.....	.....	.....	.....
Erie Railway	.....	.....	.....	.....	.....	.....
1st mortgage	.....	.....	.....	.....	.....	.....
2d mort. 5s, ext	.....	.....	.....	.....	.....	.....
3d mortgage	.....	.....	.....	100½	.....	100⅜
4th mort. 5s, ext	.....	.....	.....	.....	.....	.....
5th mortgage	.....	.....	.....	.....	.....	.....
7s, Consol. gold	.....	126½	126½	.....	.....	.....
Great West. 1st mort	.....	.....	.....	.....	.....	.....
2d mortgage	.....	.....	.....	.....	.....	.....
Hannibal & St. Jo	.....	52	51½	.....	49	.....
Preferred	90¾	.....	90	90	90½	.....
8s, Convertible	.....	.....	.....	.....	.....	105
Houston & Tex. Cen	84	.....	85	86	....	84
1st mortgage	.....	.....	100	.....	.....	.....
2d mortgage	125	.....	.....	125	.....	.....
Illinois Central	142	141⅜	142⅛	141⅜	141⅛	141
LakeShore&MichSo	114⅞	115⅛	115¼	115	115⅞	116¾
Consol. 7s	.....	.....	.....	.....	.....	.....
Consol. 7s, reg	.....	.....	.....	.....	.....	.....
2d Consolidated	.....	.....	.....	.....	.....	124⅜x
Leh. & W. B. con.ass	.....	.....	.....	.....	.....	.....
Long Dock bonds	116	.....	.....	.....	116	.....
Louisville & Nash.	74¾	73⅞	73¾	74	74	72⅝
7s, Consolidated	.....	.....	120	.....	.....	.....
Manhattan	.....	52⅜	52⅜	51	50	50
1st pref	90	.....	.....	.....	86½	.....
Met. Elevated	.....	91	.....	93	.....	.....
1st mortgage	100	100	100	100	100	100
Michigan Central	103⅜	103¾	104	103	103¾	104⅜
7s, 1902	125¼	.....	.....	.....	.....	.....
Morris & Essex	128	.....	127½	127	127	.....
1st mortgage	.....	.....	.....	.....	.....	.....
2d mortgage	.....	.....	.....	.....	.....	113¾
7s of 1871	.....	.....	.....	120	.....	.....
7s, Convertible	.....	.....	.....	.....	.....	.....
7s, Consolidated	.....	.....	.....	.....	125½	.....
N. Y. Cen. & Hud. R.	137⅛	134¾x	135	134½	134⅛	134⅛
6s, S. F. 1883	102¾	.....	.....	102¾	.....	.....
6s, S. F., 1887	.....	.....	.....	.....	.....	.....
1st mortgage	132	.....	.....	.....	132	.....
1st mortgage, reg	.....	.....	.....	.....	.....	.....
N. Y. Elevated	.....	.....	.....	.....	.....	.....
1st mortgage	.....	114¾	115½	115	.....	115½
N. Y. & Harlem	.....	.....	.....	.....	.....	.....
Preferred	.....	.....	.....	.....	.....	.....
1st mortgage	.....	.....	.....	.....	.....	.....
1st mortgage, reg	.....	.....	.....	.....	.....	.....
N. Y. Lake Erie & W	43⅛	42⅞	43	42⅞	42⅞	42⅞
Preferred	85¾	87⅛	87⅝	87¼	.....	87
2d Consolidated	.....	100½	100⅛	100	.....	100⅞
New 2d 5s fund	100½	.....	97⅛	.....	97⅛	.....
N.Y.,N.Hav'n&Hart	.....	182	.....	.....	181	.....
North Mo. 1st mort	.....	.....	.....	.....	.....	.....
Northern Pacific	53⅜	52	51½	50⅜	50⅜	50⅜
Preferred	100¼	98⅝	97¼	96⅜	97	96⅞
Ohio & Mississippi	40	39¾	39⅝	39	39⅛	38⅞
Preferred	.....	.....	.....	.....	.....	.....
2d mortgage	.....	.....	.....	.....	.....	.....
Consolidated 7s	.....	.....	.....	.....	.....	.....
Consol. S. Fund	.....	.....	.....	115	.....	.....
Pacific Mail S. S. Co	46¾	46⅛	46⅞	47	47¼	45⅝
Pacific R. R. of Mo.	.....	.....	.....	.....	.....	.....
1st mortgage	.....	.....	106⅞	.....	.....	.....
2d mortgage	.....	.....	.....	.....	.....	.....
Panama	.....	.....	.....	.....	.....	.....
Phila. & Reading	65⅛	65¼	65¼	64⅛	64⅜	64¼
Pitts,Ft.W.&Chi.gtd	.....	.....	.....	.....	.....	.....
1st mortgage	.....	.....	.....	.....	.....	.....
2d mortgage	.....	.....	.....	.....	.....	.....
3d mortgage	.....	.....	.....	.....	.....	.....
Pullman Palace Car	.....	134½	.....	132x	.....	131
Quicksil'r Min'g Co	.....	.....	.....	.....	.....	.....
Preferred	.....	.....	.....	.....	.....	.....
St. Louis & San Fran	.....	.....	.....	.....	.....	.....
Preferred	62¾	62½	63¾	62⅛	61½	61⅜
1st Preferred	99⅜	100	.....	.....	.....	.....
St. L., Alt'n & T. H.	48¾	47¾	47	46	45	48
Preferred	88⅛	90⅛	91	.....	.....	89
1st mortgage	.....	.....	.....	.....	.....	.....
2d mort. pref	.....	.....	.....	.....	.....	.....
Income bonds	99	.....	.....	.....	.....	.....
St. L., Iron Mt. & S	.....	.....	.....	.....	.....	.....
1st mortgage	.....	.....	.....	.....	.....	.....
2d mortgage	107¾	.....	.....	.....	108	.....
Toledo and Wabash	.....	.....	.....	.....	.....	.....
1st mortgage	.....	.....	.....	.....	107½	.....
2d mortgage	.....	.....	.....	.....	.....	.....
7s, Consolidated	.....	.....	.....	.....	.....	.....
St. Louis Division	.....	.....	.....	.....	.....	.....
Union Pacific	115¾	114¾	114¼	113¾	113⅞	113
1st mortgage	116½	116⅞	.....	116⅞	116	115⅞
Land Grant 7s	.....	.....	.....	.....	.....	.....
Sinking Fund 8s	.....	.....	.....	.....	.....	.....
United States Ex	.....	.....	.....	73	.....	72
Wabash, St. L.& Pac	38⅞	38½	37⅞	37⅝	37¾	37¾
Preferred	70¾	69¾	69¾	68¾	68¾	68¾
New mort. 7s	.....	.....	.....	.....	.....	99
Wells-Fargo Ex	.....	.....	.....	.....	.....	132
Western Pacific b'ds	.....	.....	.....	.....	.....	.....
Western Union Tel.	92¾	92⅛	92¼	92	91⅞	90⅛x
7s., S.F conv., 1900	.....	.....	.....	.....	.....	.....
FEDERAL STOCKS :—						
U. S. 4s, 1907, reg	119	119¼	.....	.....	119⅛	.....
U. S. 4s, 1907, coup	120¼	.....	.....	.....	120⅜	.....
U. S. 4½s, 1891, reg	.....	.....	.....	.....	113⅛	.....
U. S. 4½s, 1891, coup	.....	.....	.....	.....	.....	113
U. S. 5s, cont'd at 3½	.....	101¼	101¼	101⅛	.....	.....
U. S. 6s cont'd at 3½	.....	.....	.....	.....	.....	.....
Dt. of Col. 3-65s, reg	.....	.....	.....	.....	.....	.....
Dt. of Col.3-65s,coup	.....	.....	.....	.....	.....	.....

Boston Stock Exchange.

Closing Prices for the Week Ending Sept. 20.

	Th.14.	F.15.	Sat.16.	M.18.	Tu.19.	W.20.
Atch.,Top.&San.Fe.	95⅛	95⅛	95	94	94	93⅞
1st mortgage	120	.....	.....	.....	120	120
Land Grant 7s	.....	.....	.....	.....	.....	.....
Boston & Albany	170	171	.....	172	.....	171½
Boston and Lowell	.....	.....	.....	.....	.....	.....
Boston & Maine	.....	155	.....	157	158	.....
Boston& Providence	.....	161	.....	.....	.....	.....
Bos'n,Hart.& Erie7s	.....	.....	.....	.....	.....	.....
Burl.& Mo.R.L.G.7s	.....	.....	.....	.....	.....	.....
Burl.& Mo.R.in Neb	.....	.....	.....	.....	.....	.....
6s, exempt	.....	.....	.....	.....	.....	.....
4s	.....	.....	.....	.....	.....	.....
Chi.,Burl. & Quincy	134¾	135	134	134⅜	134	133¾
Cin.,Sand&Clev($50)	.....	28¾	.....	28⅞	.....	.....
Concord ($50)	.....	.....	.....	.....	.....	.....
Connecticut River	.....	.....	.....	4	.....	.....
Eastern	45	44	44	44	44	.....
New 6s, Bonds	110	.....	.....	.....	110	110¾
Fitchburg	.....	131	.....	130	131	.....
N.Y. & New England	58⅜	58¾	58¾	58	57¾	57
7s	.....	.....	116½	116¾	116¼	.....
Northern N. H	.....	111½	.....	.....	.....	.....
Norwich&Worcester	.....	.....	.....	.....	160	.....
Ogden & Lake Cham	.....	.....	.....	.....	.....	.....
Old Colony	133	133	.....	133½	133½	.....
Ph.,Wil.&Balt.($50)	.....	.....	.....	.....	.....	.....
Portl'd,Saco & Ports	.....	.....	.....	.....	.....	.....
Pueblo & Ark Val 7s	115	.....	115	114½	.....	.....
Pullman Palace Car	134	.....	.....	133x	.....	131½
Union Pacific	115	.....	115	114½	.....	113½
6s	.....	.....	.....	.....	114	.....
Land Grant 7s	.....	.....	.....	.....	.....	.....
Sinking Fund 8s	118¼	.....	.....	.....	.....	.....
Vermont & Mass	.....	.....	.....	.....	.....	.....
Worcester & Nashua	.....	.....	.....	58	.....	.....
Cambridge (Horse)	.....	.....	.....	.....	.....	.....
Metropolitan(Horse)	.....	.....	.....	.....	75¾	.....
Middlesex (Horse)	.....	.....	.....	.....	.....	.....
Cal.&Hecla Min'gCo	.....	.....	251	.....	.....	249
Quincy	.....	68	68½	.....	68½	86½

Philadelphia Stock Exchange.

Closing Prices for the Week Ending Sept. 19.

	W.13.	Th.14.	F.15.	Sat.16.	M.18.	Tu.19.
Allegh'y Val. 7 3-10s	.....	.....	.....	.....	.....	.....
7s, Income	.....	.....	.....	.....	.....	.....
Buff., Pitts & West.	22½	22¾	22¼	22½	21¾	21¾
Camd'n & Am. 6s, '83	.....	.....	.....	.....	.....	.....
6s, 1889	.....	.....	.....	.....	.....	.....
Mort. 6s, 1889	.....	.....	.....	.....	.....	.....
Camden & Atlantic	.....	.....	.....	.....	.....	.....
Preferred	.....	.....	.....	58	.....	.....
1st mortgage	.....	.....	.....	.....	.....	.....
2d mortgage	.....	.....	.....	.....	.....	.....
Catawissa	.....	.....	.....	.....	.....	.....
Preferred	56	.....	.....	.....	56½	.....
2d pref	54½	.....	54½	.....	.....	.....
7s, new	.....	.....	.....	.....	.....	.....
Del. & Bound Brook	.....	.....	130	130	.....	.....
7s	.....	.....	.....	.....	.....	.....
Elmira&Williamsp't	.....	.....	.....	.....	.....	.....
Preferred	.....	.....	.....	.....	.....	60
Hunt. & B. Top Mt.	16	16	16¾	16¾	16¾	16
Preferred	.....	30	31½	.....	31	31
2d mortgage	.....	.....	.....	.....	.....	.....
Lehigh Navigation	44⅝	45¼	45¼	45¼	45	45
6s, 1884	.....	.....	104	.....	.....	.....
Gold Loan	.....	.....	.....	.....	.....	.....
Railroad Loan	.....	.....	.....	.....	.....	.....
Conv. Gold Loan	.....	.....	.....	.....	.....	.....
Consol. Mort, 7s	.....	.....	.....	.....	.....	107
Lehigh Valley	66⅞	67⅜	66⅞	67½	67⅜	66¾
1st mort. 6s, coup	.....	122	.....	.....	.....	.....
1st mort. 6s, reg	.....	.....	.....	.....	.....	.....
2d mort. 7s	.....	.....	.....	.....	134	134
Consol mort. 6s	.....	.....	.....	.....	.....	.....
Consol.mtg.6s,reg	.....	.....	.....	.....	.....	.....
Little Schuylkill	.....	.....	.....	.....	.....	.....
Minehill&Sch.Hav'n	.....	.....	.....	.....	62	64¾
North Pennsylvania	.....	.....	.....	.....	.....	.....
1st mortgage 6s	65	.....	.....	.....	.....	.....
2d mortgage 7s	.....	.....	.....	.....	.....	.....
Genl. mtg.7s,coup	.....	.....	.....	.....	.....	.....
Genl. mtg. 7s, reg	.....	.....	.....	.....	.....	.....
Northern Central	56	56¾	56¾	56¾	.....	56
5s	.....	.....	.....	.....	.....	97¾
Northern Pacific	52⅜	53⅛	52⅛	51⅜	50⅜	50⅜
Preferred	99⅜	100¼	98¾	97⅜	96½	97⅛
Pennsylvania R. R.	64½	64½	64¾	65	64⅜	64⅜
1st mortgage	.....	.....	.....	.....	.....	.....
Gen'l mort	125	.....	.....	.....	.....	.....
Gen'l mort reg	.....	.....	.....	.....	.....	.....
Consol. mort. 6s	.....	.....	.....	.....	.....	.....
Consol. mort. reg	.....	.....	.....	.....	.....	.....
Pa. State 5s, new	.....	.....	117	.....	.....	.....
do 4s, new	.....	.....	.....	.....	.....	.....
do 3½s, 1912	.....	.....	.....	.....	.....	.....
Phila. & Reading	32½	32⅝	32⅝	32⅝	32¼	32½
1st mortgage 6s	121	.....	.....	.....	.....	.....
7s of 1893	.....	.....	.....	.....	.....	.....
7s, new convert	73	77	77	77	.....	.....
Consol. mort. 7s	.....	.....	.....	.....	.....	.....
Consol. mort. reg	.....	.....	.....	.....	.....	.....
Gen'l mort. 6s	96½	96¼	96½	96½	96½	96½
Def.Income bonds	.....	.....	.....	.....	.....	.....
Philadelphia & Erie	21	21¼	21¼	22½	23¼	22½
1st mortgage 5s	.....	105½	.....	.....	.....	.....
2d mortgage 7s	.....	.....	.....	.....	.....	.....
Pittsb.,Cin.&St.L.7s	.....	.....	.....	.....	.....	120¾
Pitts.,Tit.&Buff. 7s	95	94	.....	.....	.....	.....
Schuylkill Navi't'n	.....	.....	.....	.....	.....	.....
Preferred	.....	.....	14	14	.....	.....
6s, 1895	.....	.....	.....	.....	.....	.....
6s, 1907	.....	.....	.....	.....	.....	90½
United Co. of N. J.	193	.....	.....	.....	192	192
Hestonville, (Horse)	.....	.....	.....	.....	.....	.....
Chestnut&Walnut)	.....	.....	.....	.....	.....	.....

Baltimore Stock Exchange.

Closing Prices for the Week Ending Sept. 19.

	W. 13.	Th. 14.	F. 15.	Sat. 16.	M. 18.	Tu. 19.
Baltimore & Ohio....	.....	195	195	.....	195	.....
6s, 1885.....	.....	.....	.....	.....	.....	.....
Central Ohio ($50)...	.....	.....	.....	40	.....	.....
1st mortgage.....	109	.....	.....	.....	109	108¾
Marietta & Cincin'ti.	.....	.....	.....	.....	.....	.....
1st mortgage, 7s..	.....	.....	.....	.....	.....	.....
2d mortgage, 7s....	.....	.....	.....	.....	.....	.....
3d mortgage, 8s..	.....	.....	.....	.....	.....	.....
Northern Cen. ($50).	56	56¼	56½	56¼	56	56
2d mort. 6s, 1885..	.....	.....	...	.....	.....	105½
3d mort. 6s, 1900..	.....	.....	.....	.....	.....	.....
6s, 1900, gold.....	.....	.....	116¼	116¼	.....	116¼
6s, 1904, gold.....	.....	.....	.....	.....	.....	.....
Pitts. & Connelsv. 7s.	.....	.....	.....	.....	.....	121½
Virginia 6s Consol..	60¼	59⅝	59¼	59¾	.....	.....
Consol. coupons...	60¼	.....	59¼	.....	59⅜	.....
10-40 bonds.....	.....	43⅜	43	43	.....	.....
Def'd Certificates.	.....	.....	.....	.....	.....	.....
Western Maryland..	...	...	...	.....	.....	.....
1st M., end. by Balt	.....	.....	.....	.....	.....	.....
2d M., do.	.....	.....	...	.....	.....	.....
3d M., do.	.....	.....	.....	.....	.....	.....
1st M., unendorsed	.....	.....	.....	...	.....	.....
2d M., end. Wash Co	.....	.....	.....	.....	.....	.....
2d M., preferred...	.....	.....	.....	.....	.....	.....
City Passenger R. R.	.....	.....	.....	.....	.....	.....

London Stock Exchange.

	Closing Prices—Sept. 8.		Sept 1.	
Baltimore and Ohio 5s, 1927.....	107	109	106	108
Central of N. J., $100 shares.....	85	90	85	90
Do. consol. mort.....	112	114	112	114
Do. Income Bonds.....	92	96	92	96
Central Pacific of Cal., $100 shs..	95½	96⅛	95⅛	96⅛
Do. 1st mort. 6s, 1895–'98.....	117	119	117	119
Det., G'd Haven & Mil. Equip bds.	116	118	116	118
Do. Con. M. sp. c., till '83 after 6p. c.	114	116	114	116
Illinois Central $100 shares.....	141	143	140	142
Do. S. F. 5s, 1003.....	106	108	106	108
Lehigh Valley Cons. mort. 1023...	115	119	115	119
Louisville and Nashville mort. 6s	97	90	97	90
Do. capital stock $100 shares...	74	76	74	76
N. Y. Cen. & Hud. R. mort. bonds.	132	136	132	136
Do. $100 shares.....	137	138	136½	137⅛
Do. mort. bonds (stg.).....	121	123	121	123
N. Y. Lake Erie & West. $100 shs.	40⅜	41¼	40¼	40¾
Do. 6 p. c. pref. $100 shares....	81	83	81	83
Do. 1st Con. Mort. bonds (Erie).	126	120	126	129
Do. do. Funded Coupon bonds.	124	127	124	127
Do. 2d Consol. Mort. bonds....	100	102	99	101
Do. do. Funded Coupon bonds.	95	97	95	97
N. Y., Pa. & Ohio 1st mort. bonds.	53½	54½	48	40
Do. Prior Lien bonds (sterling).	100	105	100	105
Pennsylvania $50 shares.....	64⅛	65	63¾	64¼
General Mortgage.....	123	125	123	125
Phil. & Erie Gen. mort. 6s, 1920...	117	119	117	119
Philadelphia & Reading $50 shs..	31¾	32¼	30¾	31¼
General Consol Mortgage.....	115	117	115	117
Do. Improvement Mortgage....	104	106	104	106
Do. Gen. Mtg. '74, ex-def'd coup.	97½	98½	96	98
St. L. Bridge 1st mort. gold bond.	125	127	125	127
Do. 1st. pref. stock.....	97	100	97	100
S. P'fic of Cal., 1st mort 6s, 1905–6.	108	110	108	110
Union Pacific 1st mtg. 6s, 1896–9..	120	124	118	122
Wabash, St. L. & P. $100 shares..	38⅛	39⅛	37½	38½
Do. $100 pref. shares.....	69⅛	70⅛	67	69
Do. gen. mort. bonds.....	88	90	86	88

AMERICAN RAILROAD JOURNAL.

Financial and Commercial Review.

THURSDAY EVENING, September 21, 1882.

In the money market this morning call loans on stocks were quoted at 6@8 per cent (7 per cent being the ruling rate) and 4 to 6 per cent on United States bonds (5 per cent being the ruling rate.) Prime mercantile paper was 6@7 per cent. In the afternoon the rate for call loans on stocks was 7 per cent, but in the last hour advanced to 10 per cent.

The posted rates for prime bankers' sterling were 4.84@4.88½; the actual rates were 4.82½@4.83 and 4.87½@4.88, with cables 4.88½@4.89, and prime commercial bills 4.81¼@¼. The actual rates for Continental bills are as follows: Francs, 5.22½@5.21⅞@5.18¼@5.17½; marks, 94⅛@⅝ and 95⅜@½; and Guilders, 40@40¼

At a meeting of the directors of the Northern Pacific Railroad Company, held in this city on the 14th inst., a resolution was adopted authorizing a scrip dividend of 11.1 per cent of the preferred stock to be issued to preferred stockholders only. The obligation to be given therefor will be dated January 1, 1883, will bear 6 per cent interest, payable annually, and will be due at the end of five years, but redeemable after one year at the pleasure of the company upon giving thirty days' notice. The amount redeemed at any one time cannot be less than 20 per cent of the principal. This dividend is made in full settlement of all claims on account of the net earnings of the company from its reorganization to July 1, 1882. The amount of these earnings, which have been diverted to construction, has been found by the accounting officers of the company to be $4,667,490.68. The dividend also includes interest from July 1 to the date of the scrip. The certificates of obligation will be delivered January 15, 1883. The terms of the reorganization scheme under which this dividend was declared are as follows: "Preferred stock shall be created and issued to the amount of $51,000,000, being in all $51,000,000 (being a majority of the share capital), for the following purposes: To retire the principal of the outstanding 7-3 per cent bonds, and the interest thereon due and to become due up to and including July 1, 1878, at the rate of 8 per cent currency per annum. And also to retire the principal and interest, to and including January 1, 1875, of the land warrant bonds; to pay the floating debt not protected under the existing orders of the Court, and generally, for the purpose of carrying into effect this plan. The preferred stock shall have all the rights and privileges of the common stock, with the right to vote, and the holders thereof shall be entitled to dividends, not exceeding 8 per cent per annum, as the net earnings, hereinafter defined, in each calendar year, may suffice to pay, and before any dividends shall be paid on the common stock. After and during the time the income of the road shall be sufficient to pay 8 per cent dividends on both the preferred and the common stock, the surplus shall be divided on both alike per share, according to the number of shares issued of each. The words "net earnings," as above used, shall be construed to mean such surplus earnings of the said railroad as shall remain, after paying all expenses of operating the said railroad and carrying on its business, including all taxes and assessments and payments on encumbrances, and including the interest and sinking fund on the first mortgage bonds, the expenses of repairing or replacing the said railroad, its appurtenances, equipments or other property, so that the same shall be in high condition, and of providing such additional equipment as the company shall deem necessary for the business of said railroad."

The Philadelphia and Reading Railroad Company will purchase on the 1st of October the interest coupons of the Schuylkill Navigation Company's loan of 1895, which fell due July 1st, at the rate of five per cent per annum. They will also buy, on the 17th of October, the year's dividend to the Schuylkill Navigation Company due last July at the rate of one dollar per share on the preferred and fifty cents per share on the common stock.

The Committee on Finance presented to the Common Council of this city on the 16th inst, a report stating that the total valuation of the real estate and personal property for 1882 was $1,233,476,698,33, an increase of $47,528,299.37 as compared with the valuation of 1881. The rate of tax upon the aggregate valuations of real and personal estates in the city of New York, amounting to $1,203,329,324.33, with the rate of $2.25 per centum, together with the rate of $2.0152 upon the aggregate assessed valuations of personal estates of such corporations joint stock companies or associations as are subject to local taxation, amount to $29,547,074, and will produce the sum of $27,684,427.26. The rate of tax levy last year was at the rate of $2.62, against $2.25 this year.

From the report of the Chief of the Bureau of Statistics we learn that the total value of the exports from the United States of domestic provisions during the month of August, 1882, was $6,238,317, and during the month of August, 1881, $10,395,992; the exports of domestic provisions during the eight months ending August 31, 1882, were valued at $65,923,185, against $93,107,833 for the corresponding period of 1881. The value of the exports of provisions and tallow for the ten months ending August 31, 1882, was $75,852,679, against $103,441,137 for the ten months ending August 31, 1881. The value of dairy products exported for four months ending August 31, 1882, was $7,116,816, and for four months ending August 31, 1881, $10,621,276.

According to the annual report of the Controller which has just been completed, the gross debt of the city of New York July 31, 1882, was $136,538,807.57, against $135,100,907.07, on the 31st of July, 1881—showing an increase of $1,437,900.52. The net debt July 31, 1881, was $99,399,974.49, against $97,503,308.88, on the 31st of July, 1882—showing a decrease of $1,896,665.61. The sinking fund for the redemption of the city debt increased $5,334,566.33 during the year. The amount of revenue bonds outstanding at the end of the year was $16,109,529.40.

The chief of the Bureau of Statistics at Washington reports that the total values of the exports of petroleum and petroleum products in the month of July, 1882, were $5,128,313, and in July, 1881, $4,684,801; for the seven months ended July 31, 1882, $27,247,416, and a like period in 1881, $24,227,301.

As stated elsewhere, the first cable connecting Long Island and Staten Island was laid on the 20th inst. by the Baltimore and Ohio Telegraph Company between Forts Hamilton and Wadsworth. The cable is 6,500 feet long, weighs 18 tons, is 2½ inches in diameter, and is one of the largest cables ever made in the United States. The cost, including the laying was $8,000. The laying occupied only twenty-five minutes and was accomplished by the aid of a tug-boat and a barge.

The October dividend of the Nashville, Chattanooga and St. Louis Railway Co. has been passed as a matter of expediency, large outlays having been made on the road. The company holds $800,000 of the Fayettevill and Duck River Branches, both of which will soon be completed.

Exports of domestic breadstuffs for August, 1882, $28,864,987; same time in 1881, $25,547,251. Two months ended Aug. 31, 1882, $45,159,462: same period in 1881 $45,524,288. Eight months ended Aug. 31, 1882, $110,015,753; same period in 1881, $157,505,205.

The following quotation of sales of railway and other securities, for the week, are in addition to those given elsewhere in our columns.

New York.—Allegheny Central, 31¾; Boston, Hartford and Erie 1st, 58; Boston and New York Air Line pref., 77; Buffalo, New York and Erie 1st, 1916, 132; Chicago, St. Louis and New Orleans, 79½; do. 5s, 104¾; Chicago, St. Paul, Minneapolis and Omaha, 52¾; do. pref., 111; do. consol., 106¼; Central Iowa, 30½; do 1st, 109; Columbia and Greenville pref., 73½; Chesapeake and Ohio 1st, Series A, 107¾; do. cur. 6s, 54; do. 6s, 1911, 102; do. pur. money fund, 114½; Chicago, Milwaukee and St. Paul, Chicago and Pacific div. 1st, 110; do. Chicago and Pacific West div. 1st, 93⅜; do. Southern Minn. div. 1st, 107¾; Chicago and Northwestern S. F. 5s, 101⅞; Columbus, Chicago and Indiana Central 1st trust Co. certif. ass., sup., 115; do. inc., 50; Chicago, Burlington and Quincy, Iowa div. 4s, 87¾; Cairo and Fulton 1st, 107¼; Chicago and Eastern Illinois 1st, 99; Denver, South Park and Pacific 1st, 102; Denver and Rio Grande, 59; do. 1st, 115; do. consol., 99; Danbury and Norwalk, 70; Dubuque and Sioux City, 92½; do. 1st, 111; East Tennessee, Virginia and Georgia 10½; do. pref., 17¾; do. inc., 45; do. 1st, 113¾; do, 5s, 73; Evansville and Terre Haute, 84; do. 1st consol., 96; Elizabethtown, Lexington and Big Sandy 6s, 95; Fort Worth and Denver 1st, 97½; Green Bay, Winona and St. Paul 1st, 84; Gulf, Colorado and Santa Fe 1st, 107⅞; Hannibal and St. Joseph 6s, consol., 103¾; Indiana, Bloomington and Western, 47; do. con. inc., 59½; do. 1st, 90; do. Eastern div. 6s, 95¾; International and Gt. Northern coup. 6s, 84; do. 1st, 106; Kansas Pacific 1st consol., 104¾; do. 6s, Denver div. ass., 108¼; Keokuk and Des Moines 1st, 104¾; Long Island, 63¾; Lake Erie and Western, 40½; do. 1st, 102; Louisville, New Albany and Chicago, 78; do. 1st, 103½; Lafayette, Bloomington and Muncie 1st, 102; Louisville and Nashville, genl. mort. 6s, 95¼; do. Cecelian Branch 1st, 106½; Milwaukee, Lake Shore and Western 1st, 101; do. inc., 82; Marietta and Cincinnati 2d pref., 6¼; Minneapolis and St. Louis, 33½; do. pref., 73⅜; do. Iowa ext. 1st, 112; do. Southwest ext. 1st, 111½; do. Pacific ext. 1st, 102; Mobile and Ohio, 23; Missouri, Kansas and Texas, 39⅝; do. consol. 7s, 106; do. 2d, 67⅛; do. genl. mort. 6s, 87½; Missouri Pacific, 107⅛; do. 1st consol., 102; do. 3d, 112; Memphis and Charleston, 57¾; Manhattan Beach, 22; Midland New Jersey 4-5-6s, 86; Michigan Central 5s, 98; New York, Chicago and St. Louis, 15¾; do. pref., 35⅛; do. pref., 93¾; Nashville, Chattanooga and St. Louis, 60¾; do. 1st, 116; New York, Ontario and Western, 28; Norfolk and Western, 21; do. pref., 58½; do. Gen'l mort., 103; Northern Pacific 1st, 103½; New Orleans Pacific 1st, 92; New York City and Northern Gen'l mort., 56; Ohio Central, 17⅝; do. 1st, 92; Oregon Railway and Nav., 160; do. 1st, 108¼; Oregon Trans., 97; Ohio Southern, 19; do, inc., 33; do

1st, 85; Oregon Short Line 6s, 103; Peoria, Decatur and Evansville, 35½; do. 1st, 104¼; do. Evansville div. 1st, 100; Rochester and Pittsburgh, 26; do. 1st, 104½; do. inc., 49½; Richmond and Alleghany, 20; Richmond and Danville 113; do. deben., 76⅛; do. 1st, 100; Richmond, Danville and West Point, 61¼; Rome, Watertown and Ogdensburg extended 5s, 75; do. inc., 40; St. Paul and Duluth, 35; do. 1st, 95½; St. Paul, Minn. and Man., 160; do. 1st, 111; do. 2d, 113; do. Dakota ext. 1st, 108½; St. Louis, Iron Mt. and Southern 5s, 80¾; do. Arkansas Branch 1st, 107; do. Cairo, Ark. and Texas 1st, 106; Southern Pacific of Cal. 1st, 106⅞; St. Louis, Kansas City and Northern, Omaha div. 1st, 131½; South Carolina, 1st. 102½; Texas and Pacific, 5o; do. inc. L. G., 65; do. consol. 92; do. Rio Grande div. 1st, 84½; Toledo, Peoria and Warsaw 1st, 110, Utah Southern ext. 1st, 101; Winona and St. Peter 2d, 127; Wabash, St. Louis and Pacific gen'l mort. 6s, 88¼; do. Iowa div. 1st. 90; do. Havana div. 1st, 190; do. Chicago div. 1st, 85½; Alabama, class A, 80; North Carolina Consol. 4s, 75; Tennessee 6s, 53¾; do. Compromise bonds, 61; Mutual Union Telegraph, 26¾; do. 6s, 77; Sutro Tunnel, ⅜; Cameron Coal, 25; Colorado Coal and Iron, 44¾; do. 6s, 87½; New Central Coal, 23; Homestake Mining, 18½; Ontario, 39; Standard, 8.

Boston.—Atlantic and Pacific, inc, 28; do. 6s, 97; do. blokcs 110; Atchison, Topeka and Santa Fe plain 5s, 88; Boston Land, 7⅝; Boston Water Power, 5⅞; Boston, Clinton, Fitchburgh and New Bedford, 58; Burlington and Missouri River in Nebraska 6s, non-exempt, 103; Counotton Valley, 7¾; do. 6s, 63; do. 5s, 61; Central of Iowa, 30¾; Cincinnati, Sandusky and Cleveland 7s, 103½; Chicago, Burlington and Quincy 7s, 126; do. 4s, old 85⅝; do. Denver exten. 4s, 84; Chicago, Milwaukee and St. Paul, Dubuque div. 6s, 104; Flint and Pere Marquette, pref., 96; Iowa Falls and Sioux City, 92; Jackson, Lansing and Saginaw 8s, 107¾; Kansas City, St. Joseph and Council Bluffs 7s, 115; Kansas City, Fort Scott and Gulf, 85; Little Rock and Ft. Smith, 59; Metropolitan Horse, 7s, 103⅝; Mexican Central 2?; do. 7s, 83¼; do. block No. 3, 105½; Michigan Central, 103; Marquette, Houghton and Ontonagon, 71; Maine Central, 80; Massachusetts Central, 4¼; New York and New England 6s, 105⅞; New Mexico and Southern Pacific 7s, 114½; Oregon Short Line 6s, 102¾; do. Subscriptions, 120; Ogdensburgh and Lake Champlain consol. 6s, 92; Portsmouth Gt. Falls and Conway, 27⅛; Southern Kansas and Western 7s, 110; Sonora 7s, 107; St. Johnsbury and Lake Champlain, 2½; do. pref., 12; Toledo, Delphos and Burlington trust certif., 104; do. Branch line inc. 17¾; Toledo, Cincinnati and St. Louis, 7⅜; do. 6s, 66; do. Branch line inc., 18; Wisconsin Central, 18¾ do. pref., 32½; do. 7s, 1st series, 80; do. 2d series, 50; Allouez Mining Co., 3?; Atlantic, 16¼; Brunswick Antimony, 10; Franklin, 17; Harshaw, 1⅛; Hnron, 3⅝; National; 2¼; Osceola, 34¾; Pewabic, 11¼;

Philadelphia.—American Steamship Co. 6s, 107; Buffalo, Pittsburgh and Western pref., 28¼; Central Transp., 34⅞; Huntingdon and Broad Top Mt. consol. mort., 58, 94½; Nesquehoning Valley, 54¼; Philadelphia, Wilmington and Baltimore 4s, 96; Philadelphia City 6s, 1886, 109½; Philadelphia, Germantown and Norristown, 111; Pittsburgh W. L. 7s, 1896, 126¼; Philadelphia and Reading scrip, 100⅞; do. deben. 6s, 64¼; Pennsylvania and New York Canal 7s, 1896, 122¾; St. Paul and Duluth, 33¾; Sunbury, Hazleton and Wilkesbarre 6s, 95; Texas and Pacific consol. mort. 6s, 94; do. Rio Grande div. 6s, 85½; Union and Titusville 7s, 95. The latest quotations are: City 6s, 108 @120; do. free of tax, 127@132; do. 4s, new, 108 @114; Pennsylvania State 5s, new loan, 116½@117¼; do. 4s, old, 108@113; do. 4s, new, 116@117; Philadelphia and Reading Railroad, 32¼@32⅜; do. consol. mort. 7s, reg., 126@127; do. gen'l mort. 6s, coupon 96@97; do. 7s, 1893, 121@122; do. new conv., 76@78; United New Jersey R. R. and Canal, 192@192¼; Buffalo, Pittsburg and Western, 21⅞@22; Pittsburgh, Titusville and Buffalo 7s, 93½@94¼; Camden and Amboy mort. 6s, 1889, 113@115; Pennsylvania R. R., 64¾@64½; do. general mort. 6s, coupon, 124½@125½; do. reg., 127@129; do. consol. mort. 6s, reg., 120½@121½; Little Schuylkill R. R., 57@58; Schuylkill Navigation pref., 13@15; do. 6s, 1882, 90@91; Elmira and Williamsport pref., 59½@60¼; do. 5s, 100@101; Lehigh Coal and Navigation, 45@45⅛; do. 6s, 1884, 103½@104; do. R. R. loan, 114@116; do. Gold Loan, 113@114; do. consol. 7s, 116½@118; Northern Pacific, 50¾@50⅞; do. pref., 97⅛@97¼; North Pennsylvania, 64½@65; do. 6s, 106@107; do. 7s, 122@123; do. 7s, General mort. reg. 120½@122½; Philadelphia and Erie, 22½@23; do. 7s, 114 @115; do. 5s, 105@106; Minehill, 61½@62; Catawissa 22 @24; do. pref., 55@56; do. new pref., 54@55; do. 7s, 1900, 117@—; Lehigh Valley, 66⅝@66¾; do. 6s, coupon, 121½@123; do. reg., 122@123; do. 7s, 133⅛@134¼; do. consol. mort., 121@122; Fifth and Sixth streets (horse), 170@171; Second and Third, 114@115; Thirteenth and Fifteenth, 70@75; Spruce and Pine, 42@44; Green and Coates, 80@90; Chestnut and Walnut, 90@93; Germantown, 70@75; Union, 110@111; West Philadelphia, 111@ 115; People's, 16@17; Continental, 103@105.

Baltimore.—Baltimore City 6s, 1890, 115¾; do. 5s, 1894, 114¼; do. 5s, 1916, 125⅛; Baltimore and Ohio 2d pref., 122; Columbia and Greenville 1st, 101; Canton Co. 6s, 103; Maryland Defense 6s, 106; Marietta and Cincinnati 1st Trust certificates, 128; do. 2d do., 101¼; do. 3d do., 57⅝; Northern Central 5s, series A, 97¼; do. B, 96¾; Ohio and Mississippi, Springfield div. 1st, 120; Richmond and Allegheny, 21; Union Canal 6s, end. by Canton Co., 116½; Virginia Black scrip, 37; do. 10-40 coupons, 6o; Virginia Midland pref., 105; do. 5th mort., 95; Virginia and Tennessee 2d, 101½. The latest quotations are: Atlanta and Charlotte, 7s@73; do. 1st, 107¼ @109; Baltimore and Ohio, 195@—; do. 6s, 1885, 107¼ @—; Baltimore City 6s, 1890, 115@116; do. 5s, 1916, 125@—; do. 4s, 1920, 111½@—; Canton Co. 6s, 102¾@ 102⅞; Columbia and Greenville 1st, —@101; Central Ohio 1st, 108¼@109; George's Creek Coal, 97@—; Marietta and Cincinnati 1st, 127⅞@128¼; do. 2d, 101¼ @101⅝; do. 3d, 57⅛@57¾; Northern Central, 55⅞@ 56; do. 6s, 1900, gold, 116@116¾; do. 6s, 1904, gold, 115@115½; do. 5s, Series A, 97@—; Ohio and Mississippi, Springfield div. 1st, 120@121; Pittsburgh and Connellsville 7s, 121½@121⅝; Virginia Midland 5th, 94@95; do. inc., 68@72; Virginia consols, 59¼@59½; do. 10-40s, 43@43⅛; Western Maryland 2d pref., 108@108¾.

The Coal Trade.

THE leading coal-carrying companies make the following reports of their tonnage for the week ending Sept. 9, and for the year to that date, compared with their respective amounts carried to the same time last year :—

	Week.	1882.	1881.
Reading Railroad	126,212	6,042,766	5,912,221
Schuylkill Canal	8,795	301,863	398,174
Lehigh Valley	85,021	4,608,116	4,277,682
Delaware, Lackawanna and Western	60,618	2,901,253	2,858,291
Shamokin	24,781	765,878	733,467
Central R. R. of New Jersey	49,516	2,905,586	2,929,301
United R. R. of New Jersey	24,089	1,137,652	1,052,641
Pennsylvania Coal	23,336	909,957	912,198
Delaware and Hudson Canal	36,810	2,272,131	2,413,183
Huntingdon and Broad Top Mountain	14,839	294,188	358,519
Penn. and New York	19,835	1,091,863	1,122,439
Clearfield, Pa	48,007	1,972,046	1,656,451

The total tonnage of anthracite coal from all the regions for the week ending Sept. 9, as reported by the several carrying companies, amounted to 398,783 tons, against 608,316 tons in the corresponding week last year, a decrease of 209,533 tons. The total amount of anthracite mined for the year is 18,758,620 tons, against 18,561,247 tons for the same period last year, an increase of 197,373 tons. The quantity of bituminous coal sent to market for the week amounted to 98,083 tons, against 84,357 tons in the corresponding week last year, an increase of 13,726 tons. The total amount of bituminous mined for the year is 2,643,944 tons, against 3,066,857 tons for the corresponding period last year, a decrease of 422,913 tons. The total tonnage of all kinds of coal for the week is 496,866 tons, against 692,673 tons in corresponding week last year, a decrease of 195,807 tons, and the total tonnage for the coal year is 21,302,564 tons, against 21,628,104 tons to same date last year, a decrease of 325,540 tons. The quantity of coal and coke carried over the Pennsylvania Railroad for the week ending Sept. 9, was 205,262 tons, of which 153,517 tons were coal and 51,745 tons coke. The total tonnage for the year thus far has been 7,527,000 tons, of which 5,549,556 tons were coal and 1,977,444 tons coke. These figures embrace all the coal and coke carried over the road, east and west. The shipments of bituminous coal from the mines of the Cumberland coal region for the week ended Sept. 9 were 49,468 tons, and for the year to that date 722,581 tons, a decrease of 685,386 tons as compared with the corresponding period of last year. The shipments were: To the Baltimore and Ohio Railroad—For the week, 26,670 tons; year, 565,900 tons; decrease as compared with 1881, 346,234 tons. Chesapeake and Ohio Canal—Week, 17,427 tons; year, 61,110 tons; decrease as compared with 1881, 247,817 tons. Pennsylvania Railroad — Week, 5,168 tons, year, 91,331 tons; decrease from last year, 95,520 tons. The Reading Railroad shipment for last week, ending September 16, was about 211,000 tons, of which 58,000 tons were sent to and 52,500 tons shipped from Port Richmond, and 15,300 tons sent to and 13,000 tons shipped from Elizabethport.—*Philadelphia Ledger, Sept.* 18.

Automatic Alarm Signals.

AN automatic alarm signal for railway trains has been patented by the inventor, Henry E. Judkins, a conductor on the Maine Central Railroad, which is intended to take the place of the bell ropes, which have never rendered anything like perfect service, and which are practically useless five cars back from the locomotive. The following is a description of the system:

A common salt battery is located in an upper corner of the locomotive cab, from which runs an insulated wire that is permanently attached to each passenger coach, and is coupled between the engine and first coach and between the other coaches with automatic couplers. At convenient and accessible points in each coach are push knobs for the purpose of transmitting to the engineer any desired signal. A pressure of one of these knobs or buttons rings a gong in the locomotive cab. The signals thus transmitted are as quick as lightning and are accurate; by them the engineer is informed when to start, stop or back the train. The signal can be given from the rear end of a train of 50 cars as readily and surely as from the first car, and it can be applied to freight as well as passenger trains. In the case of a long freight train breaking apart, this signal would be of the greatest importance, for the instant the break occurred, both conductor and engineer would receive notice. The adoption of this electric system of alarm signals may result in saving many lives and much valuable property. The system will soon be practically tested on one of the New England railroads.

The Burton Stock Car.

IT is claimed for this car that it entirely does away with the difficulties, evils and cruelties so often known in the present mode of transporting cattle from the West to the Atlantic. This car is divided into two or three compartments as may be required, and in each compartment, there is sufficient room for six cattle without crowding, the animals standing lengthwise in the car. Each compartment is also divided into two stalls, each stall having ample room for three cattle, and in front of the cattle are the feed and water troughs. In the top of the car there is a pipe running lengthwise, and to this pipe there are others attached running downward into each tank in every stall. The main pipe can be connected with the others and all supplied with water from one inlet. The car is so constructed that no trampling nor crowding is possible, as is now the case upon the jerking and moving of the train. The Burton car is run on the suspension car truck and may be run at passenger speed, thus reducing the time for transit. Each animal can lie down separately, have sufficient space and air, and be fed and watered in the car. The Burton car has been very highly commended by prominent railroad men cattle dealers, etc.

GORDON & DUGGAN
RAILWAY SWITCH.

The **Standard** on several and in use on twenty-five Railroads.

Combines Safety, Durability, Simplicity, and Low Cost, with **Fixed Rails.**

The only movable piece weighs 375 lbs., and is without a bolt or rivet.

E. GORDON, Treasurer,
No. 28 STATE STREET, BOSTON, MASS.

FOR SALE.

Locomotives—Five Second-hand Narrow Gauge Engines in good order.
One Second-hand "Tank" Narrow Gauge Engine, 10 tons.
Several Second-hand Standard Gauge Locomotives in good order, immediate delivery.
One new 3ft. Gauge Passenger Engine, 22 tons, prompt delivery.
Six new 4ft. 8½ Gauge Locomotives, cylinders 17x24, weight 35 tons. August and September delivery.
One new 3ft. Gauge Saddle Tank Engine, delivery this month.
Cars—Passenger and Freight Cars of all descriptions for early delivery.
Three Second-hand Passenger Coaches in good order.
Rails—16lb., 30lb. and 56lb. Rails in store.
Car Wheels and Axles.
Narrow-Gauge Rolling-stock a specialty.

BARROWS & CO.,
64 Broadway,
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McCANN'S
EXCELSIOR SELF CAR COUPLING.

Patented August 3, 1880.

For Durability, Simplicity, and Practicability
IT HAS NO EQUAL

MARION W. McCANN,
Patentee and Proprietor,
DUBLIN, IND.

Continuous Automatic
FREIGHT BRAKES.

Requiring no other Connection between Cars than the ordinary Coupling-Link and Pin.

SIMPLE, DURABLE, AND EFFICIENT.

Brakes can be applied to every Car in the longest train, from the engine or cabose, or from any car in the train. It can be readily attached to any car, and adapted to ordinary brake beams, shoes, etc. There is no possibility of damaging wheels by "sliding."

PATENTED MAY 23, 1882.

☞ Railroad and manufacturing companies, or parties able to co-operate with patentee in their manufactur and introduction, are invited to correspond with

WM. C. SCHULTZE,
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NO OTHER LINE IS SUPERIOR TO THE
FITCHBURG RAILROAD
HOOSAC TUNNEL ROUTE
WEST.

6.30 A.M. ACCOMMODATION.

Connecting at Syracuse, N. Y., at 7.15 P.M., with through sleeping cars for Cincinnati, Cleveland, Toledo, *DETROIT AND CHICAGO.*

3.00 P.M. CINCINNATI EXPRESS.

Pullman Sleeping Car attached, running through to Cincinnati without change. (Only Line running Pullman Cars from Boston.) This car runs *via* Erie Railway and N.Y., P. & O. R.R., making direct connection for Louisville, St. Louis, Kansas City, New Orleans, and all points in Texas and New Mexico.

3.00 P.M. ST. LOUIS EXPRESS.

THE ONLY LINE which runs a THROUGH SLEEPING-CAR from

BOSTON TO ST. LOUIS WITHOUT CHANGE!

ARRIVING AT 8.00 A.M. SECOND MORNING.

Through sleeping car for Buffalo, Toledo, Fort Wayne, Logansport, Lafayette, Danville Tolono, Decatur and St. Louis, making direct connection with through Express Trains for Kansas, Colorado, Texas, and all points in the

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6.00 P.M. PACIFIC EXPRESS.

The only line running a through sleeping car *via* Buffalo and Detroit without change, arriving at Chicago at 8.00 A.M. second morning, making sure connections with through Express Trains for Iowa, Nebraska, Kansas, Colorado, the Pacific Coast, Wisconsin, Minnesota and all points in the

WEST AND NORTHWEST.

THE ABOVE TRAINS RUN DAILY, SUNDAYS EXCEPTED.

This Great Short Line passes through the most celebrated scenery in the country, including the famous HOOSAC TUNNEL, four and three-quarters miles long, being the longest Tunnel in America, and the third longest in the world.

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JOHN ADAMS, General Superintendent. F. O. HEALD, Acting Gen'l Passenger and Ticket Agent.

In effect January 9th, 1882, and subject to changes.

RAILROAD AND CANAL DIVIDEND STATEMENT.

Showing the amount of Stock Outstanding, the Dividend Periods and the date of last Dividend.

Marked thus(*)are leased roads.	Stock out-standing.	Divide'd Periods.	Last Dividend Payable.
Albany and Susq*...100	2,500,000	semi-an	July '82 2
Ashuelot.....100	210,000	q'arterly	Oct. '81 3½
Atch., Top. and S. Fe100	54,000,000	q'arterly	Aug. '82 1½
Atlanta and W. Point100	1,232 200	semi-an	Jan. '82 6
Atlantic and St. Law*100	5,840,000	semi-an	Mar. '82 3
Augusta and Savan'h100	1,022,900	semi-an	June'81 3½
Avon,Geneseo&MtM*100	225,000	semi-an	July '81 3
Baltimore and Ohio.100	14,792,566	semi-an	May '82 5
" " pref.100	5,000,000	semi-an	July '82 3
Washington Br....100	1,650,000	semi-an	Apl. '82 5
Berkshire*.....100	600,000	q'arterly	Apl. '82 1¾
Boston and Albany..100	20,000,000	q'arterly	Sept.'82 2
Bos.&N.Y.AirLine pf.100	2,795,227	q'arterly	June'82 1
Bos.,Cl.,F.&N.B.pref.100	1,750,100	.....	Apl. '82 3½
Bos.,Conc.&Mont.pf*100	800,000	semi-an	May '82 3
Boston and Lowell.100	3,940,000	semi-an	July '82 2
Boston and Maine...100	6,921,274	semi-an	May '82 4
Boston & Providence100	4,000,000	semi-an	May '82 4
Attleborough Br...100	131,700	semi-an	July '82 3½
Bos.,Revere B&Lynn100	419,400	semi-an	July '82 3½
Buffalo,N. Y. & Erie*.100	950,000	semi-an	June'82 3
Camden & Atlantic..50	377,400	q'arterly	Apl '80 38
" " pref.50	880,650	q'arterly	Apl '80 3½8
Camden & Burl. Co..100	381,925	semi-an	July '82 3
Canada Southern....100	15,000,000	.....	Feb. '81 2½
Cape May &Millville* 50	447,000	semi-an	June'81 3
Catawissa*.....50	1,159,500	annual	Oct.'81 $1½
" pref.....20	2,200,000	semi-an	May '82 3½
" new pref..50	1,000,000	semi-an	May '82 3½
Cayuga and Susq.*..50	589,110	semi-an	July '81 4½
Cedar Rapids&Mo.R*100	6,850,400	q'arterly	Aug. '82 1½
" " pref.100	769,600	semi-an	Aug .'82 3½
Central of Georgia...100	7,500,000	semi-an	June '82 4
Central of New Jersey100	18,563,200	q'arterly	July '76 2½
Central Ohio*.....50	2,437,950	semi-an	July '82 3
" pref..50	411,550	semi-an	July '82 3
Central Pacific.....100	59,275,500	semi-an	Aug. '82 3
Chemung*.....100	380,000	q'arterly	July '81 1½
Cheshire preferred ..100	2,155,300	semi-an	July '82 1½
Chicago and Alton...100	11,181,741	semi-an	Sept. '82 4
" " pref.100	2,245,400	semi-an	Sept. '82 4
Chi., Burl. & Quincy.100	55,337,455	q'arterly	Sept. '82 2
Chi., Iowa & Nebras*.100	3,916,200	semi-an	July '82 4
Chi., Mil. & St. Paul.100	20,404,261	semi-an	Oct. '82 3½
" " pref 100	14,401,483	semi-an	Oct. '82 3½
Chi. & N. Western...100	14,088,257	semi-an	June'82 3½
" pref.100	21,525,353	q'arterly	Sept. '82 2
Chi., R. I. & Pacific..100	41,960,000	q'arterly	Aug. '82 1¾
Chi. and West Mich .100	6,151,000	semi-an	Feb. '82 2½
Chi.,St.P.,M.&O.pref.100	10,390,000	q'arterly	Oct. '82 1¾
C., Ind., St. L. & Chi..100	6,000,000	q'arterly	July '82 1½
Cin., Sand. & Clev.pf. 50	420,037	semi-an	May '82 3
Clev. and Mahoning* 50	3,759,200	semi-an	Nov. '81 3½
Clev. and Pittsburg* 50	11,244,336	q'arterly	Sept. '82 1¾
Columbus & Xenia*. 50	1,786,200	q'arterly	Sept.'82 2
Colum.&HockingVal.100	2,500,200	semi-an	Aug. '81 208
Concord 50	1,500,000	semi-an	May '82 5
Concord and Ports.*.100	350,000	semi-an	July '82 3½
Conn.& Passump.Riv100	2,244,400	semi-an	Aug '82 3
Connecticut River ..100	2,100,000	semi-an	July '82 4
Cumberland Valley..50	1,292,950	q'arterly	July '82 2½
" 1st pref 50	241,900	semi-an	Apl. '82 4
" 2d pref. 50	243,000	semi-an	Apl. '82 4
Danbury & Norwalk. 50	600,000	.....	Apl. '82 1½
Dayton and Mich.*.. 50	2,402,573	semi-an	Apl. '82 1¾
" " pref. 50	1,211,250	q'arterly	July '82 2
Delaware*.....25	1,468,940	semi-an	July '82 3
Del. & Bound Brook*100	1,652,000	q'arterly	Aug. '82 1¾
Del., Lack.& Western 50	26,200,000	q'arterly	July '82 2
Denver & Rio Grande.100	20,160,000	q'arterly	Jan. '82 1½
Den.,South P. & Pac.100	3,500,000	.....	Aug.'80 4
Detroit, Lans. & Nor.100	1,825,600	semi-an	Aug. '80 2½
" " pref.100	2,503,380	semi-an	Aug. '82 3½
Dubuque&Sioux C'y*100	5,000,000	semi-an	Oct. '82 3
East Pennsylvania*., 50	1,700 550	semi-an	July '82 3
East Mahanoy*.....50	392,950	semi-an	July '82 3
Eastern (N. H.).....100	402,500	semi-an	June'82 2½
Eel River.....100	3,000,000	q'arterly	Sept. '82 $1
Elmira,Jef.&Canand*100	500,000	annual	Sep. '80 5
Elmira&Williamsp't* 50	500,000	semi-an	May '82 1½
" " pref. 50	500,000	semi-an	July '82 3½
Erie and Pitsburg*.. 50	1,068,400	q'arterly	June '82 1¾
Evansville & Terre H.100	100,000	semi-an	Nov. '81 2
Fitchburg.....100	4,500,000	semi-an	July '82 3
F. & P. Marquette pf.100	6,500,000	semi-an	July '82 3
Ft.W. & Jackson pref.100	2,000,000	.....	May '82 2
Georgia. 100	4,200,000	q'arterly	July '82 2½
Granite 100	1,250,000	semi-an	July '82 3
Han. & St. Jo. pref .100	5,083,024	semi-an	Aug. '82 3½
Harrisbg&Lancaster 50	1,182,500	semi-an	July '82 3½
Housatonic pref. ...100	1,180,000	q'arterly	July '82 2
Illinois Central.....100	39,000,000	semi-an	Sept. '82 3½
Ia.Falls & Sioux City*100	4,623,500	q'arterly	Sept. '82 1¾
Iowa R. Land Co,...100	7,620,000	q'arterly	Aug. '82 1
Jefferson v. Mad.&Ind100	2,000,000	q'arterly	May '82 1¾
Joliet and Chicago*..100	1,500,000	q'arterly	June'82 1¾
Kan.C.,Ft.S.&Gulf...100	4,000,000	.....	Feb. '82 2
" " pref..100	2,750,000	semi-an	Aug. '82 4
Lentucky Central...100	500,000	semi-an	June'81 1
" " pref. 100	5,583,500	semi-an	June'81 1
Lake Shore&Mich.So.100	49,466,500	q'arterly	Aug. '82 2
" (guar.)100	533,500	semi-an	Aug. '82 5
Lawrence*.....50	450,000	q'arterly	July '82 2
Lehigh Valley.....50	27,496,895	q'arterly	Oct. '82 2
" pref. 50	106,300	q'arterly	Oct. '82 2

Marked thus(*)are leased roads.	Stock out-standing.	Divide'd Periods.	Last Dividend Payable.
Little Miami..... 50	4,637)300	q'arterly	Sept.'82 2
Little Rock & Ft. S..100	4,096,135	.....	July' 81 108
Little Schuylkill*.. 50	2,646,100	semi-an.	July '82 3½
Louisville & Nashv..100	19,130,913	semi-an.	Feb. '82 3
Lowell & Andover....100	500,000	semi-an.	Jan. '82 3½
Lykens Valley.....100	600,000	q'rterly.	Oct.' 81 2½
Manchester & Law..100	1,000,000	semi-an.	May '82 5
Manhattan 100	13,000,000	.....	.....
" " 1st pref.100	6,500,000	q'rterly.	Oct. '82 1½
" " 2d pref.100	6,500,000	q'rterly.	Oct. '82 1½
Marietta& Cincinnati 50	1,386,350	.....	.....
" " 1st pref 50	8,105,600	semi-an.	Sep. '66 38
" " 2d pref 50	4,440,000	semi-an.	Sep. '66 38
Marq.Hout.&Ont.pf...100	2,259 026	.....	Aug. '82 4
Massawippi*.....100	400,000	semi-an.	Aug. '82 3
Metropolitan 100	6,500,000	q'rterly.	Oct. '82 1½
Michigan Central....100	18,738,204	q'rterly.	Aug.'81 1
Middlesex Central...100	280,000	semi-an.	Aug.'82 3
Mill Creek&Minehill* 50	323,000	semi-an.	July '82 5
M.Hill& Schuyl.Hav* 50	4,022,500	semi-an.	July '82 3½
Missouri Pacific.....100	28,169,800	q'rterly.	Oct. '82 1¾
Mobile&Montgomery100	3,022,517	semi-an.	Feb. '80 2½
Morris and Essex,... 50	15,000,000	semi-an.	July '82 3½
Mt Carbon&PtCarbon 50	282,350	semi-an.	July '82 6
Nashua and Lowell..100	800,000	semi-an.	July '82 4
Nashua & Rochester.100	1,305,800	semi-an.	Apl. '82 1½
Nashv. & Decatur...100	1,827,000	semi-an.	June'81 3
Nash.,Chat.&StLouis 25	6,670,325	semi-an.	Apl. '82 1½
Naugatuck.....100	2,000,000	semi-an.	July '82 5
Nesquehoning Val'y* 50	1,300,000	semi-an.	Sept.'82 3
N.Castle&Beaver Val* 50	600,000	q'rterly.	Oct. '81 —
NewLondonNorth'n*100	1,500,000	q'rterly.	July '82 1½
N. Y. Cen. & Hud. R.100	89,428,330	q'rterly.	Oct. '82 2
N. Y. and Harlem....100	7,950,000	q'rterly.	July '82 4
" " pref.100	1,500,000	q'rterly.	July '82 4
" City Line.. —	....	annual	Apl. '82 3
N.Y.,LakeErie&West.100	77,083,900	.....	.....
" " pref.100	8,156,825	.....	Jan. '82 6
N. Y., N. H. & Hart..100	15,500,000	semi-an.	Jan. '82 5
N. Y., Prov. & Boston100	3,000,000	q'rterly.	Aug. '82 2
Niag.Bridg&Canand*100	1,000,000	semi-an.	July '81 3
North Carolina*.....100	3,000,000	semi-an.	Sep. '81 3
" " pref.100	1,000,000	semi-an.	Sep. '81 3
N. Eastern (S.C.) pref100	86,000	semi-an.	May '81 4
Norfolk & Western pref.	15,000,000	q'rterly.	Sept. '82 $1
North Pennsylvania. 50	4,527,150	q'rterly.	Aug. '82 1¾
Northern Central.... 50	6,142,000	semi-an.	July '82 3
Northern N. Hampsh100	3,068,400	semi-an.	June'82 3
Northern N. Jersey*.100	1,000,000	semi-an.	July '80 2½
Norwich&Worcester*100	2,604,400	semi-an.	July '82 5
Ohio 100	18,500,000	.....	.....
Ohio and Miss. pref..100	4,030,000	semi-an.	Mar.'75 3½
Old Colony.....100	7,333,800	semi-an.	July '82 3½
Oregon R'way&Nav.100	6,000,000	q'rterly.	Aug. '82 2
Oswego & Syracuse...100	1,320,400	semi-an.	Aug.'81 4½
Panama.....100	7,000,000	.....	July '82 6½
Paterson & Hudson*.100	630,000	semi-an.	July '82 4
Paterson & Ramapo.100	248,000	semi-an.	July '82 4
Pember.&Hightst'n*. 50	342,150	semi-an.	Jan. '82 3
Pennsylvania.....50	77,672,750	semi-an.	May '82 4
Pennsylvania Co..... 50	20,000,000	semi-an.	June'81 2½
Peoria & Bureau Val*100	1,200,000	semi-an.	Feb. '82 4
Philadelphia & Erie*. 50	7,013,700	semi-an.	.....
" " pfd 50	2,400,000	semi-an.	Jan. '75 4
Phil,Ger.&Norrist'n* 50	2,231,900	q'rterly.	Sept.'82 3
Phil. and Reading... 50	32,726,375	q'rterly.	Jan. '76 2½
" " pref. 50	1,551,800	q'rterly.	July '76 3½
Phila. and Trenton..100	1,250,100	q'rterly.	July'82 2½
Phila., Wil. and Balt. 50	11,585,750	semi-an.	July '82 4
Pittsb. Ft. W. & Chi.*100	10,714,285	q'rterly.	July'82 1¾
" Special Imp.100	6,770,900	q'rterly.	July'82 1¾
Pittsfield&N.Adams..100	450,000	semi-an.	July '82 2½
Portl., Saco & Portsm100	1,500,000	semi-an.	July '82 3
Providence &Worces.100	2,000,000	semi-an.	July '82 3
Rensselaer&Saratog.*100	7,000,000	semi-an.	July '82 4
Rhode Island& Mass.100	100,000	.....	Jan. '81 3
Richmond& Danv...100	3,866,000	q'rterly.	Aug. '82 2
Richmond & Petersb100	1,009,300	semi-an.	Jan. '81 3
Roch.&Genesee Val.*100	555,200	semi-an.	July '82 3
Rutland preferred.. 100	4,000,000	semi-an.	Sept. '82 1
St.L.,Alt. & T.Haute.100	2,200,000	.....	.....
" " pref.100	2,468,406	.....	May '82 3
St.L.&S.Fran.1st pref100	4,500,000	... .	Aug. '82 3½
St.L.,I.Mt.&South'n.100	21,459,921	semi-an.	Feb. '74 3
St.L.,Jac'ville & Chic.100	1,293,000	... .	Aug. '82 4½
" " " pref.100	1,034,000	.....	Aug. '82 4½
St. P. & Duluth pref.100	4,705,000	q'rterly.	June'82 1¾
St. P., Minn. & Man..100	20,000,000	semi-an.	Aug. '82 3½
Schuylkill Valley*... 50	576,050	semi-an.	July '82 2½
Seaboard & Roanoke.100	1,220,600	semi-an.	May '82 5
Shamokin V.&Pottsv 50	669,450	semi-an.	Feb.'82 2
Shore Line*.....100	1,000,000	semi-an.	July '82 4
Sioux C.&Pacific pref100	160,000	semi-an.	Apl. '82 3½
South Br. (N. J.)*....100	438,300	semi-an.	Jan. '82 3
South Western (Ga.)*100	3,802,300	semi-an.	Dec. '81 3½
Stockbridge&Pitts.*.100	448,700	semi-an.	Oct. '81 1½
Syr.,Bingham&N.Y.*100	2,500,000	semi-an.	Feb. '81 2
Terre Haute & Ind....100	1,688,150	semi-an.	Aug. '82 4
Troy and Boston....100	1,600,000	semi-an.	Feb. '80 2
Union Pacific 100	61,000,000	q'rterly.	Oct. '82 1¾
United Cos of N. J.*.100	20,490,000	q'rterly.	July '82 2½
Utica, Shenango&S V100	4,000,000	semi-an.	Nov. '81 3
Utica and Black Riv.100	1,772,000	semi-an.	Mar. '82 2
Vermont and Mass. 100	3,050,000	semi-an.	Apl. '82 3
Wab. St.L.&Pac.pref.100	22,615,100	q'rterly.	Nov.'81 1½

Markedthus(*)are leased roads.	Stock out-standing.	Divide'd Periods.	Last Dividend Payable.
Ware River*.....100	750,000	semi-an.	July '82 3½
Warren (N. J.).....100	1,800,000	semi-an.	Apl. '82 3½
Warwick Valley.....100	340,000	semi-an.	July '82 2½
Westchest&Phil.pref100	821,300	semi-an.	July '80 2
West Jersey.....100	1,350,750	semi-an.	Sept. '82 3
Wilmingt'n&Weld'n.100	1,456,200	semi-an.	July '82 3
Wil., Col., & Aug 100	960,000	semi-an.	July '82 3
Winchester&Poto'c.*100	180,000	semi-an.	July '82 3
Winchester&Strasb.*100	74,700	semi-an.	July '82 3
Worcester & Nashua. 75	1,789,800	semi-an.	July '82 1½
HORSE-POWER R. R.			
Albany City.....100	200,000	annual	.....'80 5½
Baltimore City..... 25	1,000,000	semi-an.	Oct. '82 3
Balt.,Cat.&El.Mills..100	....	semi-an.	July '82 2
BleeckerSt.&Ful.F'y.100	900,000	semi-an.	July '81 ¾
Boston&Chelsea pref. 50	110,000	semi-an.	Apl. '82 3
Broadway (Brooklyn)100	250,000	q'arterly	Oct. '81 3
B'way&7th Av.(N.Y.)100	2,100,000	q'arterly	Oct, '81 2
B'klyn&Hunter's Pt.100	400,000	semi-an.	Apl. '79 3
Brooklyn City.....100	2,000,000	q'arterly	Dec. '81 3¾
Bushwick (Brooklyn)100	300,000	semi-an.	July '81 2½
Cambridge..... 100	608,000	q'arterly	Apl. '82 4½
Cen.Park,N.& E.Riv.100	1,800,000	q'rterly.	July '82 2
Christoph'r&TenthSt100	650,000	semi-an.	Aug.'81 2½
Citizens' (Phil.)..... 50	102,500	q'rterly.	Jan. '82 2½
Citizens' (Phg.)..... 50	200,000	annual..	....'80 14½
Coney Island&Pklyn100	500,000	semi-an.	Oct. '80 5
Continental (Phil.).. 50	580,000	semi-an.	July '82 6
D.Dock,E.B'way&Bat100	1,200,000	q'arterly	Nov.'81 4
Eighth Av. (N. Y.)...100	1,000,000	q'rterly.	Oct. '81 3
42d St. & G. St. Ferry100	747,000	semi-an.	Nov.'81 6
Frankf.&Southw (Ph) 50	600,000	q'rterly.	Jan. '82 6
Germantown, (Ph.).. 50	572,800	q'rterly.	July '82 2½
Girard College (Ph.) . 50	500,000	semi-an.	July '71 3
Grand St. & Newton..100	170,091	semi-an.	July '81 2½
Green&Coates St.(Ph) 50	150,000	q'rterly.	July '82 3
Heston,Mantau&F'm 50	299,381	semi-an.	Jan. '75 4
Highland.....100	600,000	semi-an.	July '82 4
Lomb.&SouthSts(Ph) 25	105,000	semi-an.	Oct. '75 4
Lynn and Boston....100	200,000	semi-an.	May '82 4
Malden and Melrose.100	165,000	... .	.....
Metropolitan (Bost.). 50	1,500,000	semi-an.	July '82 4
Middlesex (Boston)..100	650,000	semi-an.	May '82 3½
N.Y.,Bay Ridge&Jam100	150,000	.....	Oct. '78 7
Ninth Av. (N. Y.)....100	707,320	....	.....
Orange &Newark.... 50	289,555	... .	.....
People's (Phila.) pref. 25	124,744	.....	July '82 2
Philadelphia City... 50	475,000	semi-an.	July '82 4
Phila. and Darby.... 20	200,000	semi-an.	July '81 3½
Phila.& Grey's Ferry. 50	308,000	semi-an.	Jan. '82 6
Phg.Alleg.&Manches. 50	300,000	q'rterly.	Oct. '81 3
Ridge Avenue (Ph.).. 50	420,000	semi-an.	Oct. '81 11
Second Avenue(N.Y.)100	1,100,000	semi-an.	July '81 2½
Second&ThirdSt.(Ph) 50	771,076	q'rterly.	Jan. '82 4¼
17th &19th sts (Ph.).. 50	250,000	semi-an.	July '81 3
Sixth Avenue (N. Y.)100	750,000	semi-an.	Oct. '81 5
Somerville (Boston).100	112,000	semi-an.	May '82 3
South Boston..... . 50	600,000	semi-an.	July '82 4
Third Avenue, N. Y..100	2,000,000	q'rterly.	Nov.'81 5
13th and 15th sts.,Ph 50	224,520	q'rterly.	Jan. '82 4
23d street, N. Y.....100	600,000	semi-an.	Aug.'81 4
Union, Boston.....100	374,300	semi-an.	Jan '82 4
Union, Phila..... 50	1,005,000	semi-an.	Jan. '82 7
West Philadelphia... 50	750,000	semi-an.	July '77 10
CANALS.			
Chesapeake and Dela 50	2,078,028	semi-an.	June'75 2
Delaware Division... 50	1,623,350	semi-an.	Aug. '82 $1
Delawa. and Hudson100	20,000,000	q'rterly.	Sept. '82 1¾
Delaware & Raritan*.100	5,847,400	q'rterly.	July '82 2½
Lehigh Coal and Nav 50	11,204,250	semi-an.	June'82 2
Monongahela Nav... 50	1,004,500	semi-an.	July '82 3
Morris, consolidated.100	1,025,000	semi-an.	Aug. '81 2
" preferred....100	1,175,000	semi-an.	Aug.'81 5
Pennsylvania..... 50	4,501,200	.....	.....
Schuyl. Nav., com.*. 50	850,100	annual..	Oct.'82 50c.
" " pref... 50	3,200,000	annual..	Oct. '82 $1
MISCELLANEOUS.			
Adams Express.....100	12,000,000	q'rterly.	Sept.'82
American Express... 50	18,000,000	semi-an.	July '82 3
Amoskeag Manuf.Co.100	3,000,000	semi-an.	June'81 5
Calumet&HeclaMin'g 25	100,000	S. q'rterly.	Aug. '82 $5
Central Mining Co....100	.....	semi-an.	Feb. '82 2½
Consolidation Coal..100	10,250,000	semi-an.	Jan. '82 2
George's Creek C.&I.100	.....	semi-an.	Jan. '82 3
Maryland Coal.....100	4,400,000	semi-an.	Feb. '76 1½
Mariposa L. &Mining100	10,000,000	.....	.....
" pref100	5,000,000	.....	.....
Missouri Val.LandCo100	200,000	semi-an.	July '82 12
National Tube Works100	1,000,000	q'rterly.	July '82 3
Pac. Mail Steamship.100	20,000,000	q'rterly.	Sept.'69 3
Pennsylvania Coal.. 50	5,000,000	q'rterly.	Aug. '82 3
Pullman Palace Car..100	10,032,800	extra.	Sept.'82 1½
Quicksilver, com.....100	5,768,700	.....	May '82 0.4
" pref....100	4,201,300	... .	May '82 6
Quincy Mining Co... 25	40,000 shs	semi-an.	Aug. '82 $5
Quincy R. R. Bridge.100	1,750,000	semi-an.	July '82 5
SiouxC.&I.F.I.&L.Co100	500,000	semi-an.	June '82 5
Spring Mt. Coal.....100	1,500,000	semi-an.	June '82 3½
Topeka Equip'nt Co.100	255,500	semi-an.	Apl. '82 5
United States Ex....100	7,000,000	q'rterly.	Aug. '82 1
Wells-Fargo & Co. Ex100	6,250,000	semi-an.	July '82 4
Western Union Tel..100	80,000,000	q'rterly.	Oct. '82 1½

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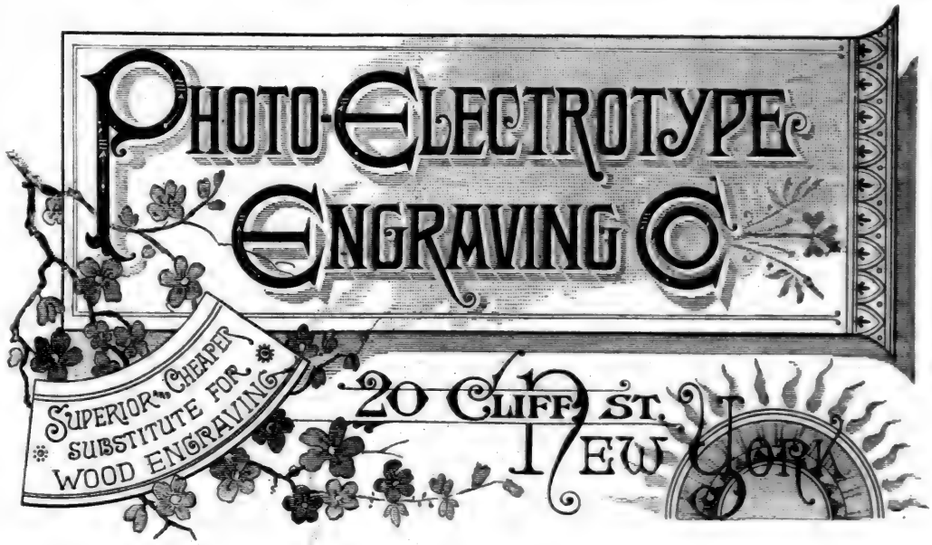
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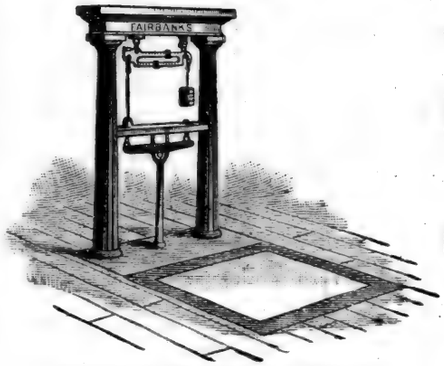
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	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total.
Burl., Cedar Rap. & Northern:													
1880	184,316	165,170	188,325	141,652	149,504	153,378	143,432	160,160	179,804	204,991	189,330	193,419	2,053,484
1881	167,750	124,510	148,551	184,680	165,630	205,912	174,351	209,112	221,801	221,748	203,880	232,812	2,259,037
1882	252,823	225,631	224,107	178,304	199,278	211,257	198,276	224,921	.....	.....	.....	.....	.....
Central Pacific:													
1880	1,200,614	1,070,487	1,373,438	1,356,716	1,778,488	1,724,950	1,840,067	1,973,438	1,964,997	1,120,229	2,199,466	1,905,221	20,508,112
1881	1,602,907	1,454,218	1,709,637	1,872,370	2,091,410	2,159,381	1,899,346	2,088,518	2,293,000	2,514,000	2,267,000	2,110,000	23,947,951
1882	1,876,000	1,702,000	1,987.000	2,052,000	2,353,000	2,239,000	2,020,000	2,277,000	.....	.....	.....	.....	.....
Chesapeake and Ohio:													
1880	202,335	198,681	222,762	221,559	199,443	214,352	238,236	259,110	247,303	211,820	240,795	218,009	2,674,308
1881	162,540	184,389	228,479	227,343	252,235	241,135	225,096	262,858	247,144	237,303	235,585	203,562	2,702.762
1882	210,455	209,708	208,981	267,454	255,939	260,753	306,831	371,175	.....	.....	.....	.....	.....
Chicago and Alton:													
1880	534,054	497 013	626,473	542,961	616,128	617,524	708,906	761,120	767,349	785,199	696,776	574,695	7,718,198
1881	487,890	461,641	529,915	558,190	548,556	635,860	676,205	769,751	768,897	750,359	680,133	635,307	7,553,988
1882	579,447	530,480	584,483	561,787	553,412	613,886	671,537	800,624	.....	.....	.....	.....	.....
Chicago and Northwestern:													
1880	1,154,632	1,131,683	1,361,725	1,294,573	1,875,608	1,671,177	1,699,686	1,767,938	2,020,245	2,105,217	1,855,671	1,477,902	19,416,007
1881	1,240,667	963,208	1,178,795	1,474,612	1,879,006	2,306,640	1,983,031	2,315,164	2,292,676	2,341,097	2,019,037	1,855,476	21,849,209
1882	1,620,336	1,471,945	1,696,568	1,634,819	2,058,133	2,022,700	2,025,736	2,099,755	.....	.....	.....	.....	.....
Chicago, Burlington and Quincy:													
1880	1,432,740	1,411,870	1,732,518	1,489,894	1,909,627	1,682,956	1,773,643	1,834,321	1,862,285	1,934,762	1,837,860	1,552,018	20,454,494
1881	1,307,948	1,034,821	1,418,149	1,574,371	1,679,455	2,083,803	1,888,358	2,173,945	2,262,981	2,031,001	1,816,133	1,905,490	21,324,150
1882	1,658,834	1,457,300	1,566,217	1,530,838	1,505,261	1,437,164	1,625,006	.....	.....	.....	.....	.....	.....
Chicago, Milwaukee and St. Paul:													
1880	764,298	738,749	900,675	871,041	1,134,745	1,037,958	1,026,708	991,297	1,257,677	1,493,620	1,472,037	1,397,308	13,086,119
1881	990,847	682,717	916,989	1,259,946	1,538,491	1,729,811	1,568,706	1,678,361	1,645,000	1,590,000	1,569,000	1,855,000	17,025,462
1882	1,435,000	1,377,000	1,561,000	1,518,000	1,629,000	1,620,000	1,465,000	1,545,000	.....	.....	.....	.....	.....
Chicago, St. Paul, Minneapolis and Omaha:													
1880	193,827	173,078	259,783	259,208	232,146	218,093	236,995	251,013	300,833	342,052	342,894	312,173	3,122,097
1881	257,786	158,594	251,648	261,211	350,124	404,562	383,202	385,586	363,685	382,714	380,733	391,950	3,981,296
1882	307,498	315,100	405,779	356,558	406,420	363,109	331,480	394,555	.....	.....	.....	.....	.....
Cincinnati, Indianapolis, St. Louis and Chicago:													
1880	155,697	172,541	198,220	168,199	186,995	200,332	204,138	233,478	343,627	239,881	209,014	198,254	2,412,185
1881	182,523	171,511	191,005	183,710	191,056	192,299	177,161	229,858	219,977	212,606	194,805	192,623	2,296,916
1882	200,042	186,879	208,066	204,269	199,110	195,948	209,564	.....	.....	.....	.....	.....	.....
Denver and Rio Grande:													
1880	124,759	126,922	160,883	164,882	193,925	295,455	373,132	400,133	406,583	473,318	408,562	349,196	3,478,007
1881	307,476	317,681	398,493	433,111	514,767	584,230	548,284	606,193	620,643	665,686	566,819	643,417	6,206,812
1882	491,914	412,987	535,055	559,917	614,298	537,462	495,797	574,040	.....	.....	.....	.....	.....
Hannibal and St. Joseph:													
1880	176,079	166,965	216,061	206,735	191,317	179,396	224,312	238,081	233,448	242,214	207,147	279,635	2,561,366
1881	154,401	122,874	176,356	190,812	172,950	190,740	201,893	210,240	202,567	313,433	201,782	180,376	2,230,961
1882	138,284	154,717	168,798	148,913	154,917	155,030	184,347	258,628	.....	.....	.....	.....	.....
Illinois Central:													
1880	595,212	613,806	613,008	535,732	665,120	681,736	724,095	732,755	806,836	880,211	783,120	673.182	8,304,812
1881	631,281	524,499	557,789	662,493	673,259	803,887	720,004	868,407	828,847	815,238	737 218	763,475	8,586,397
1882	728,173	689,387	695,371	674,603	674,749	663,746	752,251	813,606	.....	.....	.....	.....	.....
Indiana, Bloomington and Western:													
1880	80,498	89,690	116,185	90,374	85,733	106,954	103,438	116,732	110,622	121,343	96,621	104,619	1,233,079
1881	90,283	83,261	192,085	203,677	200,064	199,846	199,125	272,114	195,307	181,674	160,826	156,697	.....
1882	195,824	175,755	206,235	205,934	182,554	186,133	206,072	278,814	.....	.....	.....	.....	.....
Louisville and Nashville:													
1880	674,455	575,035	612,593	563,883	655,014	976,229	772,537	827,088	931,910	1,000,326	953,086	949,184	9,491,346
1881	816,960	805,124	947,959	850,862	828,726	1,227,885	817,135	876,192	951,566	1,002,950	1,065,223	1,122,285	11,326,859
1882	950,065	960,036	1,073,745	950,007	946,435	1,187,385	1,038,385	1,030,385	.....	.....	.....	.....	.....
Mobile and Ohio:													
1880	250,116	204,094	168,301	140,091	129,249	121,855	131,621	140,593	184,246	264,714	251,368	287,373	2,373,621
1881	224,347	216,768	230,916	163,551	145,803	136,517	135,548	160,789	209,044	252,921	252,434	262,025	2,406,437
1882	161,433	158,154	152,651	145,272	137,645	132,572	136,398	140,443	.....	.....	.....	.....	.....
Nashville, Chattanooga and St. Louis:													
1880	205,633	191,154	169,457	155,466	158,839	144,155	151,594	169,326	167,473	178,266	182,087	175966	2,049,484
1881	178,143	190,866	207,710	183,525	104,430	154,549	150,430	168,317	179,979	172,121	152,059	173,127	2,075,256
1882	156,994	159,961	161,005	154,155	137,645	119,074	160,991	1,03c,385	.....	.....	.....	.....	.....
New York and New England:													
1880	164,232	149,907	183,845	179,689	183,701	219,891	205,056	249,885	235,642	215,491	210,856	198 108	2,396,302
1881	189,749	173,614	212,019	216,913	217,185	231,518	246,821	280,524	299,573	261,199	242,412	237,729	2,809,255
1882	213,840	217,261	265,222	263,544	283,244	290,060	308,920	353,726	.....	.....	.....	.....	.....
New York, Lake Erie and Western:													
1879	1,147,173	1,207,391	1,356,780	1,372,755	1,350,574	1,230,419	1,273,533	1,450,223	1,492,497	1,713,697	1,515,835	1,398,224	16,509,127
1880	1,296,381	1,252,218	1,644,958	1,643,151	1,592,544	1,661,812	1,580,976	1,606,874	1,786,417	1,899,910	1,799,338	1,726,788	19,149,361
1881	1,443,437	1,425,765	1,847,261	1,709,057	1,776,891	1,794,982	1,787,081	1,772,895	1,734,200	.....	.....	.....	.....
Northern Central:													
1880	334,494	330,860	415,325	386,130	329,788	419,193	450,298	453,923	464,093	512,918	459,054	494,310	5,050,387
1881	386,157	382,657	452,906	487,273	465,588	487,287	440,811	498,008	429,565	449,664	487,160	476,622	5,443,697
1882	407,368	413,551	430,194	435,129	482,607	482,762	509,683	.....	.....	.....	.....	.....	.....
Northern Pacific:													
1880	81,390	77,259	119,357	185,700	217,613	253,105	241,277	223,500	330,300	358,456	300,822	220,993	2,629,710
1881	116,508	78,803	162,984	216,210	312,705	412,024	393,260	434,085	490,096	565,485	428,903	434,331	4,044,576
1882	239,800	269,000	384,000	438,000	568,332	631,342	679,240	727,377	.....	.....	.....	.....	.....
Philadelphia and Erie:													
1880	224,307	245,372	327,678	334,947	311,470	331,024	308,699	347,532	322,737	367,082	324,966	281,919	3,727,733
1881	224,303	225,501	285,573	293,323	343,792	350,585	291,669	303,849	276,522	292,392	284,078	282,772	3,454,309
1882	252,727	246,246	265,311	277,851	341,415	347,614	377,206	.....	.....	.....	.....	.....	.....
St. Louis and San Francisco:													
1880	198,091	195,948	193,146	176,164	167,664	173,607	213,297	259,995	280,873	328,194	290,329	226,063	2,698,371
1881	212,435	178,234	262,050	265,298	283,399	260,254	252,333	286,373	279,064	308,569	284,320	287,914	3,160,245
1882	256,784	244,654	274,959	242,806	253,419	240,177	318,613	381,637	.....	.....	.....	.....	.....
St. Louis, Alton and Terre Haute:													
1880	153,139	163,737	168,994	155,462	147,928	150,207	191,077	216,759	204,295	221,863	188,773	184,503	2,146,741
1881	175,725	166,012	201,137	197,447	172,177	165,896	165,393	189,180	187 299	179,921	162,544	153,852	2,112,801
1882	168,987	149,619	178,145	157,450	162,842	142,742	192,017	236,137	.....	.....	.....	.....	.....
St. Louis, Iron Mountain and Southern:													
1880	555,983	490,195	451,560	408,241	349,053	363,454	432,655	565,869	671,219	688,365	632,052	656,951	6,265,597
1881	570,957	560,791	704,002	548,300	479,075	474,302	533,512	644,386	690,400	719,239	687,280	709 498	7,319,744
1882	516,370	501,127	585,008	581,977	519,120	529,700	515,519	675,981	.....	.....	.....	.....	.....
St. Paul, Minneapolis and Manitoba:													
1880	180,239	137,645	261,798	333,014	281,899	243,407	272,089	232,579	274,188	345,057	300,675	297,641	3,160,231
1881	254,187	159,482	320,962	425,685	382,642	405,322	387,488	414,954	485,736	605,708	508,530	528,262	4,878,960
1882	395,461	418 358	531,004	570,890	858,902	856,417	853,296	801,759	.....	.....	.....	.....	.....
Texas and Pacific:													
1880	245,785	219.165	215,070	174,177	141,083	153,066	195,711	226,073	266,570	303,666	312,184	301,858	2,754,408
1881	281,176	260,781	319,928	295,066	281,782	285,405	328,063	381,331	337,117	578,668	357,724	381,218	3,921,569
1882	310,785	255.644	332,911	359,543	409,228	384,713	367,215	439,918	.....	.....	.....	.....	.....
Union Pacific Railway:													
1880	1,433,636	1,393.992	1,730,509	1,937,220	2,027,269	1,028,528	1,934,215	1,913.035	2,270,179	2,707,860	2,251.148	1,869,335	23,448,445
1881	1,339.799	1,374,740	1,674,860	1,766,894	2,319,238	2,884,774	2.528,826	2,638,659	2,844,357	3,289 350	2,773,608	2,267,004	27,451,831
1882	1,961,088	1,759,863	2,226,832	2,462,004	2,491,590	2,508,453	2,301,000	2,762,107	.....	.....	.....	.....	.....
Wabash, St. Louis and Pacific:													
1880	776,790	759,451	978,629	892,024	948,773	953,468	1,966,742	1,189,478	1,178,950	1,501,203	1,131,787	1,050,816	12,428,113
1881	811,617	818,922	1,121,592	1,023,482	1,144,660	1,308,993	1,131,752	1,542,838	1,490,027	1,396,300	1,399,555	1,328,278	14,461,570
1882	1,220,965	1 134 768	1,315,776	1,378,194	1,204,864	1 149 632	1 418,837	1,772,554	.....	.....	.....	.....	.....

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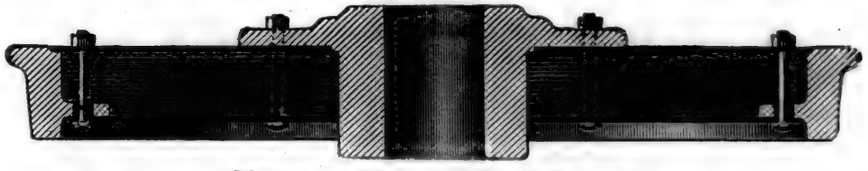
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Cotton Crop of the United States.

THE annual statement of the National Cotton Exchange of the United States for the season ending August 31, 1882, shows that the cotton crop of the United States was 5,456,048 bales, a falling off from the previous season of 1,149,702 bales. The receipts at the outports were 4,688,137 bales, against 5,878,106 bales last year. The exports were 3,551,075 bales, against 4,565,316 bales. The total quantity shipped overland by rail direct to Northern mills amounted to 1,086,217 bales. Of this 510,902 bales went direct to Eastern delivery ports, 489,170 to mills and 86,145 from Southern outports to Eastern mills. Canada took overland 31,547 bales, or 31 per cent more than last year. The exports to foreign ports aggregated 3,557,075, showing a falling off of 1,014,241 bales. Northern spinners have taken of this crop 677,581 bales, against 1,713,626 last year. The remarkable feature of the statement is the large increase in Southern consumption, these mills having taken from outports and plantations 286 945 bales, against 225,311 bales last year. The stock carried from this year's crop amounts to 155,582 bales, against 217,031 bales last year.

Anthracite Coal Tonnage.

THE following is a comparative statement of the anthracite coal tonnage for the month of August, 1882, compared with the corresponding month of the previous year—showing an increase of 161,154.11 tons:—

	1882.	1881.
Philadelphia and Reading Railroad	694,410	707,820
Lehigh Valley Railroad	576,511	530 607
Central Railroad of New Jersey	412,370	367,471
Delaware, Lackawanna and Western	482,926	417,957
Delaware and Hudson Co.	296,583	365,638
Pennsylvania Railroad	243,940	200,145
Pennsylvania Coal Co.	160,976	160,125
New York, Lake Erie and Western Railroad	26,982	42,783
Total	2,894,702	2,733,547

The stock of coal on hand at tide-water shipping points, August 31, 1882, was 603,042 tons; on July 31, 1882, it was 575,532 tons—an increase of 27,510 tons. The total production of anthracite coal for the year up to date is 18,219,803.01 tons, against 17,773,144.06 tons at the same time last year—an increase of 446,658.15 tons.

Population of the United States.

THE Census Bureau at Washington has issued a bulletin classifying the population of the United States in 1880 by nativity. The native-born were: Whites, 36,843,291; colored, 6,632,549; foreign-born, 6,679,943, total population, 50,155,783. Of the foreign-born 2,772,169 were natives of Great Britain and Ireland, 1,966,742 of the German Empire, 717,084 of British America, 194,337 of Norway, 181,729 of Sweden, 106,971 of France, 104,5 1 of China, and the remainder represent all the countries of the earth. In 1880 the total population of Virginia was 1,512,565; the total number of person in the United States who were born in Virginia was 2,118,469 Tennessee, population, 1, 542,359; Tennesseans in the country, 1,787,565. Ohio, population, 3,198,052; Ohioans in the country, 3,302,656. North Carolina, population 1,399,750; total North Carolinaians, 1,638,058. Kentucky, population, 1,648,690; total Kentuckians, 1,856,310. Georgia, population 1,542,180; Georgians in the country, 1,719,068. Alabama, population 1,262,505; Alabamians in the country, 1,319,180. South Carolina, population 995,577; South Carolinians in the country, 1,183,311. Vermont, population 332,286; Vermonters in the country, 430,041. Maryland, population 934,943; Marylanders in the country, 958,141. Maine, population 648,936; natives of Maine in the country, 745,272. Delaware, population 146, 608; Delawareans in the country, 155,517. In all the other States and Territories the population is greater than the total number of natives of the respective States in the whole country.

Western Union Telegraph Company.

THE following statement will show the condition of the Western Union Telegraph Company at the close of the quarter ended June 30, 1882.

Surplus, April 1, 1882, as per last quarterly report		$1,315,531 37
Net revenues, quarter ended June 30, 1882		1,675,691 68
		$2,991,223 05
From which deducting appropriations for—		
Dividend of 1½ per cent, paid July 15	$1,199,771 82	
Interest on Bonded Debt	107,211 10	
Sinking Funds	20,000 00	
		1,326,982 92
Leaves a surplus July 1, 1882, of		$1,664,240 13
The net revenues for the quarter ending September 30, instant, based upon nearly completed returns for July, partial returns for August, and estimating the business for September, will be about		$2,250,000 00
Add surplus, July 1, as above		1,664,240 13
		$3,914,240 13
From which appropriating for—		
Interest on Bonded Debt	$106,850 00	
Sinking Funds	20,000 00	
		126,850 00
Leaves a balance of		$3,787,390 13
It requires for the payment of a dividend of 1½ per cent on the capital stock		1,199,770 00
Deducting which leaves a surplus after paying dividend of		$2,587,620 13

In view of the preceding statements, the Committee recommend to the Board of Directors for adoption the following:

Resolved, That a dividend of one and one-half per cent on the capital stock of this Company be, and is hereby declared payable on and after the 16th day of October next, to stockholders of record at the close of business on the 20th day of September, instant.

Resolved, That, for the purpose of each dividend, and for the annual meeting of stockholders, to be held on the 11th day of October, the stock books of the Company be closed at three o'clock on the afternoon of the 20th day of September, instant, and be re-opened on the morning of the 17th of October next.

Respectfully submitted,

NORVIN GREEN, President.

"WHAT a methodical fellow you are, Brown," said Filkins, who had stepped into Brown's office during the latter's absence. "Why, what do you mean?" asked Brown, who had just entered. "Mean?" echoed Filkins: "to think that you should lock all your drawers up when you were only going out for five minutes! 'Tisn't likely that anybody would meddle with your papers." "Of course not," replied Brown; "but how did you find out that the drawers were locked?"

Illinois Central Railroad.

DURING the month of August, 1882, the traffic on the lines operated by this Company was (estimated):—

In Illinois	$669,839 00
In Iowa (leased lines)	143,761 00
Total	$813,600 00

The traffic for the same month in 1881, on the same mileage, was (actual):—

In Illinois	$672,035 56
In Iowa (leased lines)	196,371 51
Total	$86,8407 07

During August, 1882, the land sales were 6,889.53 acres for $24,547.15, and the cash collected on land contracts was $22,199.64.

L. A. CATLIN, *Secretary.*

THE Central Railroad of Georgia is to be laid with steel rails.

THE annual convention of the Brotherhood of Locomotive Firemen at Terre Haute, Ind., adjourned on the 15th inst., to meet at Denver, Col., the second week in September, 1883.

THE Supreme Court of the United States has docided—see 17 Wallace, page 357—that "a common carrier cannot lawfully stipulate for exemption from responsibility when such exemption is not just and reasonable in the eye of the law."

MR. J. ALLPORT, general manager of the Midland Railroad of England, who has been on a visit to this country, wore on his watch-chain a number of gold pieces of the size and shape of gold half eagles. They were free life-passes issued to him by railroads in England, and bore his name and the name of the company issuing them.

THE Bangor *Whig* says that second-class passengers on the all-rail line between St. John and Boston will not be obliged, those of them who do not use tobacco, to submit to the performance of those who do. Up to the present time passengers, many of them ladies, who are entitled to the privileges of a second-class ticket, have had themselves encompassed by a pillar of fire by night and a cloud by day. This nuisance is now to be abolished, regularly ordained smoking-cars having been attached to the train, in which all smokers will be incarcerated.

THE McLeod Air Railroad Signal Company have placed one of their full-sized working machines in the New England Manufacturers and Mechanics Institute Exhibition in Boston, which is exciting general attention. Although the apparatus is tested almost every minute in order to show it to some visitor, so far no weakness has been developed, and there seems to be no possible chance of its failing to act promptly. Among the visitors who have examined this signal during the exhibition are many whose interests in railroads are large, and so far no practical objection has been made by any one. We examined a signal which had been in use on one of the New England roads for over seven months and there was no sign of weakness or of a "leak" in any part, and in all its parts the signal was as perfect as when first set up.

American Railroad Journal. ESTABLISHED 1831.

SUBSCRIPTION PRICE REDUCED

—FROM—

$5 to $3.

The American Railroad Journal,

WITH ITS VARIETY OF

New Departments,

AND ITS

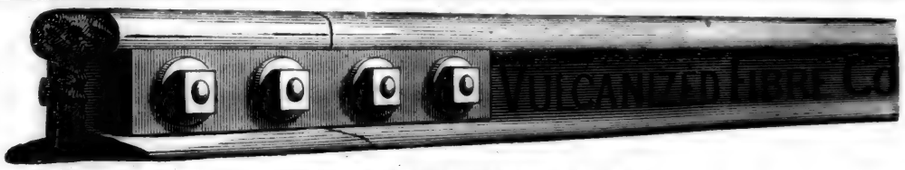
NEW DRESS,

HAS ASSUMED NEW PROPORTIONS.

We are amply justified in reducing the price from its old time rate of $5.00 per year to $3.00, on account of the numerous indications we are receiving of late of the increased interest that is being taken in the JOURNAL, which warrants us in believing that the sacrifice we make in price will be much more than compensated for by the promised liberal increase in the number of subscribers, It is gratifying to us to know that the alterations made in the Journal during the past year are meeting with such general favor as is expressed in the frequent words of commendation and congratulation sent to us from old and new readers, and we feel called upon to try in every way to merit their approval and to spare no pains to place the paper before as many as possible of those who might derive benefit and profit from it. During its fifty years' experience the JOURNAL has been highly favored by an especially choice class of readers, counting among its subscribers some of the most noted banking houses, commercial bodies, financiers, and railroad men of this country and Europe. Its aim in the future will be to prove itself of more value and interest than ever to its patrons of many years standing, while by its new features it makes itself of service and interest to a broader field and to more varied departments of life and business. We desire to make the JOURNAL as useful and welcome as possible to our readers and advertising patrons, and to this end we hope to have our columns of correspondence, communications and general information full and diversified. The columns we have devoted to general communications have proved especially interesting and popular of late, and we are pleased to have our readers favor this department with suitable contributions

We give on editorial page our new subscription rates, which are so changed in the belief that it will not only prove acceptable to many who desire to become regular readers of the paper, but that it will meet with the hearty approval of our advertising patrons, who are rapidly filling up the pages offered to them since the improvements in the JOURNAL have been started.

We will send you the "Journal" for three months for $1. Try it, and you will be glad to continue taking it.



SOLE MANUFACTURERS OF

IMPROVED VULCANIZED FIBRE TRACK-BOLT WASHERS,

which form non-metalic, permanently elastic compensating cushions, absorbing shocks and vibrations, and absolutely locking the nuts. These Washers have been adopted by a large number of railroads as the cheapest and best device in use. Flexible vulcanized-fibre dust guards and oil box packings, which are absolutely unaffected by oil and grease, are far more durable than leather and much cheaper.

Office and Factory, Wilmington, Del.



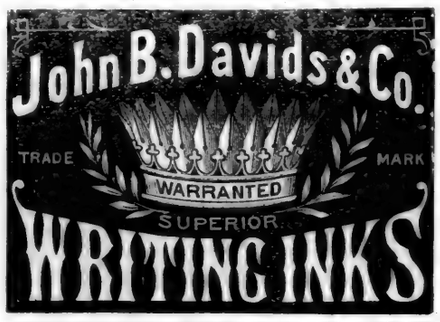
THE JENKINS STANDARD PACKING is acknowledged by users as the *Best* in the world. Unlike all other Packings, the **Jenkins Standard Packing** can be made any thickness desired in a joint by placing two or as many thicknesses together as desired, and following up joint it vulcanizes in place and becomes a metal of itself (it is frequently called Jenkins Metal) and will last for years, as it does not rot or burn out. Avoid all imitations, as a good article is always subject to cheap imitations. The **genuine** has stamped on every sheet, **"Jenkins Standard Packing,"** and is for sale by the Trade generally. Manufactured only by

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FOR SALE!

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OFFICE CLOCK

Made by Sherry & Byran, Sag Harbor, N. Y.

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IS AN EXCELLENT TIME-KEEPER.

CAN BE SEEN AT

Geo. N. Joyce's,

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NEW YORK.

Under the United States Hotel.

THE COST OF ADVERTISING

For any responsible advertiser, making application in good faith, we prepare and furnish a written estimate, showing the cost of any proposed advertising in the leading Newspapers of the United States and Dominion of Canada.

We prepare and exhibit printed proofs of any proposed advertisements.

For the preparing of estimates no charge is made, and the applicant is placed under no obligation to transact his advertising business through us unless it appears to him that by doing so he will best advance his own interests.

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Newspaper Advertising Bureau,

(Printing House Square, Opposite Tribune Building,)

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HOUSATONIC RAILROAD.

THE ONLY LINE RUNNING

THROUGH CARS

Between New York, Great Barrington, Stockbridge, Lenox, and Pittsfield—the far-famed resort of the

Berkshire Hills

of Western Massachusetts—the "*Switzerland* of America."

Two through trains daily between New York City and all points on the Housatonic Railroad, from the Grand Central Depot via the New York, New Haven, and Hartford Railroad at 8:02 A. M. and 3:45 P. M.

Descriptive Guide-Book sent free by mail upon application to the General Ticket Agent.

H. D. AVERILL, *Gen'l Ticket Agent.*

W. H. YEOMANS, *Superintendent.*

General Offices Bridgeport Ct. May 1, 188 .

Western Union Telegraph.

At the recent quarterly meeting of the Western Union Telegraph Company, Norvin Green announced his intention of retiring from the presidency at the annual meeting of the stockholders in October. In his parting address he reviewed at considerable length the growth of the company during the five years he had been its president. Among other things he said:

"Compared with the last annual report of my predecessor for the fiscal year ending June 30, 1877, my fifth report will exhibit gross receipts of over $17,100,000, and net profits of over $7,100,000, as against gross receipts of $9,800,000, and net profits of $3,100,000 for the year referred to, showing an increase in five years of 80 per cent in the gross revenues, and of 130 per cent in the net profits, while the rate of expenditures has been reduced from 69 per cent to 58 per cent of the gross revenues. And this notwithstanding the steady and very considerable reduction in rates.

"During this period of five years, the mileage of lines has been increased from 76,955 to 131,032, and of wires from 194,233 to 374,294 miles; the number of offices from 7,500 to 12,050; and the number of messages from 21,158,941 to 39,000,000, not including messages sent over wires leased to the Press and to brokers, and a very large number of messages sent for railway companies, of which no account is taken, showing an increase of over 90 per cent in the plant, 60 per cent in the number offices, and including the growing railroad service of more than 100 per cent in the amount of work done over the wires."

The New Explosive—Panclastite.

The pre-eminence long enjoyed by dynamite as an explosive power has now at last provoked a rival. The new agent of destruction has received the name of panclastite, and is highly spoken of by those who have assisted at the preliminary tests of efficacy. The two competitors for highest honors in this branch of the art of killing were pitted formally against each other at the port of Cherbourg a few days ago, when the old-established favorite seems to have been beaten by several lengths. The experiments were conducted in this way: A number of holes were bored at low water in the rocks, which are covered when the tide comes in. Some of them were filled with mining charges of dynamite and some with panclastite; but the quantity of the former was in each case double that of the latter. Nevertheless, when the charges were fired beneath the sea the effects of the explosion were invariably, it is said, much more severe in the case of the new than of the old compound. The trial was repeated several times in different places by placing the rival charges in different formations of rocks, but always with the same result. Now is it necessary for there to be more resistance to the one than to the other agent. When a charge of panclastite was laid at the side of a railway line and ignited it shattered the metal into pieces and did still more damage to the sleeper than would have been done by dynamite. The credit of the new compound seems therefore to be established beyond the risk of doubt. There is, however, this important difference between it and the old agent of destruction, which may be deemed an advantage for one or the other according to the purpose intended. The force necessary for exploding dynamite is represented by the blow of a twelve-pound iron weight dropped on it from a height of about nine inches, and common mining gunpowder is exploded by the same weight from a height of about two feet. Panclastite, however, will not explode when struck by the same weight at any height less than thirteen feet, so that it is apparently a safer as well as a more powerful material.—*London Globe.*

Chicago "Cable" Railway.

A bill in equity was recently filed in Chicago asking for an injunction to restrain the South Side Horse Railroad Company from the use of the streets by cars propelled by cable, which in turn is moved by steam; or in other words, to prohibit the company from running the cable cars or laying a cable track under its charter as a "horse" railway company. Judge Gardner, before whom the case was tried, practically decided the whole matter by holding that the proper designation of the road was a "street" railway. The power and jurisdiction of the city council over the streets, and over their use and occupancy, and over the question as to how vehicles may be propelled upon them, whether by steam or otherwise, was held to be unquestionable. The city council having granted the right to use the cable which was moved by steam, the authority of the street railway company could not be restrained in the manner sought. The injunction was therefore refused. Practically, therefore, the horse railway or street railway question is in the control and discretion of the city council, subject only to such restrictions and limitations as may be contained in the general charter of the city and in the special charters of companies. Within the limits of the company's charter and the contracts hitherto made, the city council has as complete control over those railways as it has over any other matters of city legislation.

The Tide of Immigration.

According to the report of the Chief of the Bureau of Statistics at Washington there arrived during the month of August in the customs districts of Baltimore, Boston, Detroit, Huron, Minnesota, New Orleans, New York, Passamaquoddy, Philadelphia, and San Francisco, 52,593 passengers, of whom 43,076 were immigrants, 7,047 citizens of the United States returned from abroad, and 2,470 aliens not intending to remain in the United States. Of this total number of immigrants there arrived from England and Wales, 6,077; Ireland, 3,643; Scotland, 1,212; Austria, 758; Belgium, 90; Bohemia, 236; Denmark, 840; France, 617; Germany, 16,010; Hungary, 321; Italy, 676; Netherlands, 340; Norway, 2,052; Russia, 836; Poland, 152; Sweden, 2,601; Switzerland, 837; Dominion of Canada, 4,441; and from all other countries, 437. The total number of immigrants arrived during August, 1881, was 56,744.

A Self-Acting Car Coupler.

FOUND AT LAST—THE NEEDED INVENTION TO SAVE LIFE, TIME AND MONEY.

In noticing a recent and common accident, in which a man had his hand smashed while coupling railroad cars, we took occasion to say that an invention of a self-acting car-coupler was greatly needed. This fact has been fully realized by railroad men and inventors, who for a long time have been trying to find some better way than that now used in connecting trains. Inventors have racked their brains and spent sleepless nights and large sums of money to devise a plan to couple cars without the great danger to which they are now exposed. Thousands of different arrangements for the purpose have been patented, but none of the vast number yet meet the requirements. All have come short and failed when put to the test of practical use.

George Putnam, of Glens Falls, N. Y., a mechanic of much skill, is among those who have been trying to solve the problem. Knowing the great desirability of a self-acting car coupler, ten years ago Mr. Putnam began to plan and work to get up something to answer the purpose. Since that time he has been granted no less than six patents for improved couplers, none of them, however, quite meeting the requirements. The last was brought out about a year ago, and many practical railroad men declared it to be nearer to what was wanted than any before presented. But yet objections were brought against it. Mr. Putnam heard the objections and went to work to overcome them. At last, after ten years of toiling, experimenting, and improving, it is now thought that he has been successful, and his seventh patent for self-acting car couplers has been applied for, the records examined, and a favorable report returned.

Like all *good* inventions it works like a charm. It is plain, strong, effective, easily operated, and cheaply constructed. It is simply the old head and link, with a revolving pin, or rather four pins, on a hub, either of which pins can be used. The head is always ready to receive the link when the cars come together, and the apparatus is self-locking, and as secure and strong as the common bolt.

Further information in regard to this invention may be had by addressing Norman Cole, Glens Falls, N. Y.

The bridge of the Northeastern Railroad over Lake Pontchartrain, Louisiana, now being constructed, will be six miles and a half long and will be the longest trestlework known. The spiles are being driven in clusters of four, and when the water is deep or the bottom somewhat soft, five are driven. All are creosoted, and the engineers and others contend that the bridge will be far safer than if constructed of iron, as wood, when subjected to the creosote treatment, is impervious to rot and worms, and is not so liable to break as iron. The bridge will cost $3,000,000.

The highest range of mountains is the Himalayas, the mean elevation being estimated at from 16,000 to 18,000 feet.

STEEL CAR PUSHER

MADE ENTIRELY OF STEEL.
ONE MAN with it can easily move a loaded car.
Manufactured by E. P. DWIGHT,
DEALER IN RAILROAD SUPPLIES,
407 LIBRARY ST.,
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SAFETY RAILROAD SWITCHES,
WITH MAIN TRACKS UNBROKEN.

Railroad Crossings, Frogs, and other Railroad Supplies,

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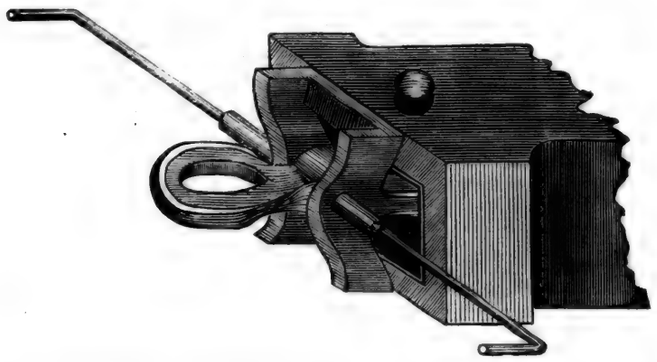
Works: 23d and Washington Avenue.
Office: 28 South 3d Street.

WATER TUBE STEAM BOILERS.



THE BABCOCK & WILCOX CO.,
30 Cortlandt St, New York.
116 James Street, Glasgow.

Car Coupler.



Our engraving represents an improved car coupler, recently invented and patented. The inventor claims that this device will commend itself to railroad men on account of its simplicity, safety, durability, and ease with which it is operated; and, from the fact that the invention pertains only to the links, no change is necessary in any part of the draw-heads now in use.

The object of the invention is to obviate all liability of getting the hands crushed in guiding the link in coupling cars, and also to prevent the link from being broken in case it should be misguided in the coupling operation. The coupling-link consists of two sections, hinged on a transversely extended rod, one section being fast and the other loose on the rod, and said rod being extended on each side of the link to form handles.

The inventor claims that one great advantage of this coupler is, that in switching it will not be necessary to remove the link from the draw-head, as the coupling cannot be injured by bumping.

Mr. J. J. Stopple, of Bellville, Austin county, Texas, is the inventor.

Straight-Tread Car Wheels.

A recent order given by the Texas and St. Louis Railway attracts attention on account of one of the acquirements among its specifications. All the wheels included in the company's order are to have "a tread of 3¾ inches, straight to within one inch of edge, then bevelled one-eighth of an inch." Car wheels with straight instead of cone tread are something of an innovation. It has always been thought that the coning was necessary to keep the wheels from plunging off from the rails at curves, and that as long as the coning of the wheel remained it reduced friction.

After carefully testing and experimenting for the past six or seven years on the subject of a straight-tread wheel in place of the cone wheel, Mr. G. W. Prescott, superintendent of motive power and machinery of the above road, says that he found the former to be a much more durable and safer wheel for several reasons. The cone wheel has a tendency to press outward upon the rails and thus to spread the track. It also bears on a very small surface, as when the cars are heavily loaded and the rails and wheels are new, the eight wheels of a car stand on less than one square inch of surface, thus breaking the fibre of the steel rail and also the chill of the wheel. Moreover, on account of the coning, even when running on straight track, the wheels take a zigzag motion, which throws them from one side of the rail to the other until the chill of one of the wheels gives way and the wheel becomes smaller than the others, which gives it a tendency to hug the rail until the flange is worn so sharp that the wheel has to be removed. In case the wheel is slid by the brake, as it only bears from one-sixteenth to one-eighth of an inch on the rail, it at once cuts the rail and the chill of the wheel, and as the brake is applied thereafter it has a tendency to stop on the same spot and cause a flat wheel.

What is claimed over the cone wheel for the straight-tread wheel is, first, that if the wheel stands upright and straight on the head of the rail, covering the surface and running straight, it will carry more dead weight with greater safety and last longer on a 35-pound rail than a cone wheel on a 42-pound rail. Also, that it gives the rail from 15 to 20 per cent more wear, as there is not as much flange work and the cars run much steadier. It is also claimed that there is at least 10 per cent less wear on the brasses and collar of the journals. Mr. Prescott says that, in his opinion, the straight-tread wheel, with swing motion or suspension truck, will save at least 50 per cent in the life of the wheel and at least 20 per cent in the wear and tear of the road-bed and track. —*Ex.*

Postal Telegraph Company.

A prospectus has just been issued of "The Postal Telegraph Company," with a capital of $21,000,000 in shares of $100 each. Alanson W. Beard, Boston, is president, and Hy. Cummins, New York, and G. L. Shorey, Boston, vice-presidents. The directors are G. D. Roberts, S. V. White and C. N. Jordan, New York; R. M. Pulsifer, and J. S. Alley, Boston; Gov. Chas. Foster, Columbus, Ohio; Professor Elisha Gray, Chicago, and Chester Snow, Harwick, Mass. The objects of the company are to provide absolute certainty and quickness of transmission at cheap and uniform rates, doing any quantity of business without delay, including press news (at cheaper rates), at any time of day, without interfering with commercial business; to provide a method by which any two parties at distant points can communicate without the knowledge or intervention of any officer of the company. The company will issue stamps, like postage stamps, by which telegrams will be received through the post-offices, sent over the wires, and then delivered by mail at the other end. Trunk lines will be constructed from New York to San Francisco, and all other large American, Canadian and Mexican cities, connecting also with the cables. Cities and towns will be served by loop lines to avoid delay to through messages. The lines are to be built in an exceptionally substantial manner. The company will use compound wire, made in its own factory at Ansonia. This compound wire consists of a steel wire core covered with copper, the conducting properties of which are well known; by its means it is claimed that the telephone can be successfully worked between New York and Chicago.

The most interesting points in this prospectus are those which announce that the company possesses and will work the patents of Leggo's automatic system and Gray's armonic system. By the former, the exact handwriting of a message written at one end appears at the other. This dispenses, it is stated, with the services of operators, the transmitting being mechanical and automatic, and without error, and preventing fraud by forgery. By the harmonic system, a single wire can be used for eight separate messages at the same time, going in the same or opposite direction.

The company is now putting up a line direct from New York to Chicago. It also has an advantageous and exclusive contract with a cable company that proposes to immediately lay two ocean cables. The directors, of course, predict a large profit for the concern, including over $300,000 per annum for making telephone and electric light compound wire in the factory.

A short history of the Western Union Telegraph Company is also given, showing its rise from the "House Printing Telegraph Company," with $360,000 capital, its absorption of the United States, American, Atlantic and Pacific, and American Union Telegraph companies, and its exclusive contracts with the Anglo-American, Direct, French and American Cable companies, its renting of the California State, Illinois State, and North Western Telegraph companies—still taking $16,000,000 of gross receipts and $6,000,000 of net earnings. The whole capital, with that of the Mutual Union, Baltimore and Ohio, and American Rapid companies, is put down at nearly $200,000,000.

A new ferry company is to be started at Toronto, Can., with a capital of $200,000.

The Railroad Commissioners of California have declared that second-class passengers shall not be compelled to ride in smoking-cars.

The Liverpool and Manchester Railway was publicly opened for the carriage of passengers on the 15th of September, 1830—fifty-two year ago.

The longest span of wire in the world is used for a telegraph in India over the river Kistnah, between Bezorah and Sectanagrum. It is more than 6,000 feet long, and is stretched between two hills, each of which is 1,200 feet high.

The dimensions of the tunnels of the Northern Pacific Railroad, as given by Chief Engineer Anderson are as follows: At the Big Horn, 1,100 feet, now completed; through Bozeman Pass, 3,600 feet; at the Mullan Pass, near Helena, 3,650 feet; at the Mullan grade, 500 feet, and at the Blackfoot, 500 feet—in all, 9,350 feet. The heaviest work is at the Bozeman and Mullan Passes.

BUSINESS CARDS.

ALLEN PAPER CAR WHEEL CO., 240 BROADWAY, New York.

BROWN BROTHERS & CO., BANKERS AND BROKERS, 59 Wall Street, N. Y.

BABCOCK & WILCOX CO., WATER TUBE STEAM Boilers, 30 Cortlandt Street, N. Y.

BROWN MANUFACTURING CO., ABSORBENT Wiper Cloths, Providence, R. I.

BEARDSLEY, D. N. & CO., MANUFACTURERS OF Superior Oak and Chestnut Lumber, and Railroad Ties, 9 Murray Street, N. Y.

CHESTER STEEL CASTING CO., MANUFACTURE Steel Castings, Cross-heads, Rocker-arms, Pistonheads, etc., for Locomotives, 407 Library St., Phila., Pa.

DAVIDS, JOHN B. & CO., WRITING INKS, 184 William Street, N. Y.

DAVIS, JOHN H. & CO., BANKERS AND BROKERS, 17 Wall Street, N, Y.

DODGE & SINCLAIR, MANUFACTURERS OF RUBber and Leather Belting, 21 Park Row, N. Y.

EVANS, GEO. A. IRON AND STEEL RAILS, 74 WALL Street, N. Y.

EAGLE TUBE CO., BOILER TUBES, 614 to 626 WEST Twenty-fourth Street, N. Y.

EAMES VACUUM BRAKE CO., RAILWAY TRAIN Brakes, 15 Gold Street, N. Y.

FAIRBANKS & CO., STANDARD SCALES, RAILROAD and Warehouse Trucks, and Copying-presses, 311 Broadway N. Y.

GORDON & DUGGAN, RAILWAY SWITCHES, 28 State Street, Boston, Mass.

GUEST, WM. A. & CO., IRON AND STEEL RAILS, 41 and 43 Pine Street, N. Y.

GEORGE, EVAN P. Jr., COUNSELLOR AT LAW AND Solicitor of Patents, 4 and 6 Warren Street, N. Y.

HARLAN & HOLLINGSWORTH CO., MANUFACTURE Passenger Cars, Wilmington, Del.

HAYWARD, S. F. GENERAL AGENT BABCOCK Fire Extinguisher, 407 Broadway, N. Y.

IVISON, BLAKEMAN, TAYLOR & CO., STEEL PENS 753 and 755 Broadway N. Y.

JOHN STEPHENSON CO., TRAM-CAR BUILDERS, New York.

KAOLATYPE ENGRAVING CO., 104 FULTON ST., New York.

KNOX & SHAIN, MANUFACTURERS OF ENGINEERing and Telegraphic Instruments, 716 Chestnut Street, Philadelphia, Pa.

MOLLER & SCHUMANN, MANUFACTURERS OF Coach and Car Varnishes, Brooklyn, N. Y.

NATIONAL TUBE WORKS CO., MANUFACTURE Wrought Iron Pipes and Tubes, 104 and 106 John Street, N. Y.

NATIONAL RAILWAY PATENT WASTE COMPANY 240 Broadway, N. Y.

PARDEE CAR WORKS, PARDEE, SNYDER & CO., (Limited) Watsontown, Pa.

PERKINS & CHOATE, AGENTS FOR STEEL OR IRON Rails, 23 Nassau Street, N. Y.

RIEHLE BROS., STANDARD SCALES AND TESTING Machines, 115 Liberty Street, N. Y.

SHUGG BROS., DESIGNERS AND ENGRAVERS ON Wood and Photo-Engravers, 18 Cortlandt St., N. Y.

SWIFTS IRON AND STEEL WORKS, MANUFACturers of all Weights of Standard and Narrow Gauge Rails, 26 West Third St., Cincinnati, Ohio.

THE CONGDON BRAKE SHOE COMPANY, IMPROVed Car Brake Shoe, 142 Dearborn Street, or opposite Tribune Building, Chicago.

THE RAMAPO IRON WORKS, MANUFACTURERS OF the Tracy Safety Switch, and General Railroad Equipment. Works and office: Ramapo, Rockland Co., New York.

UNITED STATES MINERAL WOOL COMPANY, 16 Cortlandt Street, N. Y.

VANDERBILT & HOPKINS, RAILROAD TIES, 120 Liberty Street, N. Y.

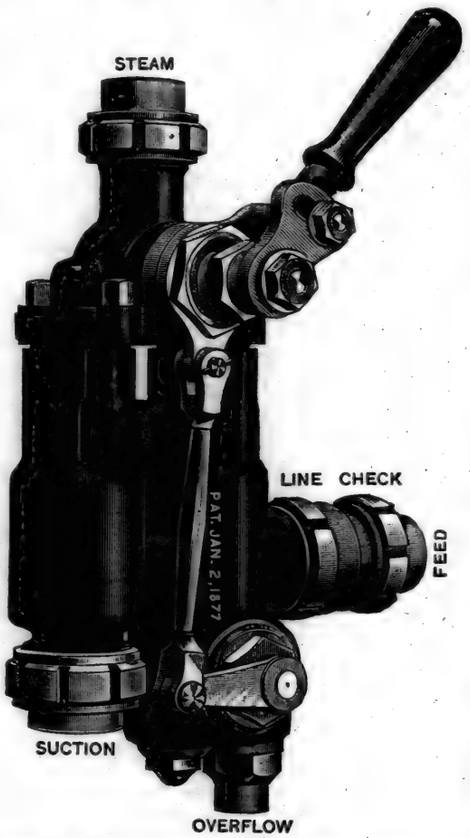
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LOCOMOTIVES.



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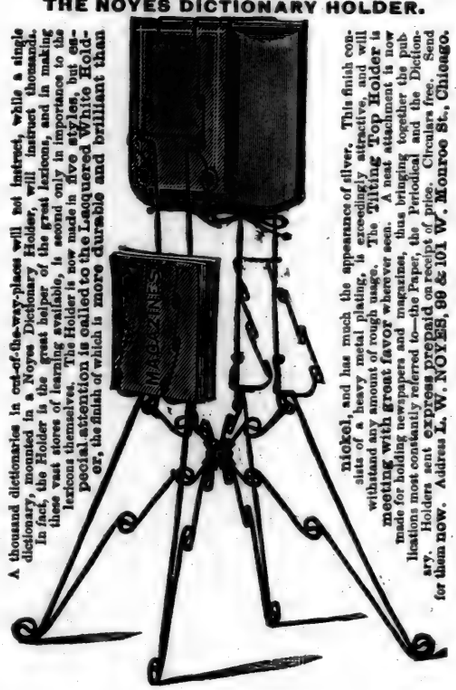
No. 34 Beach Street,

BOSTON, MASS.

A PLACE FOR YOUR DICTIONARY, A PLACE FOR YOUR NEWSPAPERS, A PLACE FOR YOUR PERIODICALS,

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Statement of the Public Debt of the United States, September 1, 1882.

DEBT BEARING INTEREST.

	Amount Outstanding.	Accrued Interest.
6 per cent loan 1863-'81 continued at 3½ per ct	$32,755,400 00	$191,073 17
5 per cent funded loan of 1881, continued at 3½ per cent	491,496,900 00	1,171,032 62
4½ per cent funded loan of 1891	250,000,000 00	2,812,500 00
4 per cent funded loan of 1907	738,909,350 00	4,926,062 33
4 per cent refunding certificates	442,100 00	2,947 33
3 per cent navy pension fund	14,000,000 00	70,000 00
Aggregate of debt bearing interest	$1,437,603,750 00	$9,173,615 45
Interest due and unpaid		1,926,080 07

DEBT ON WHICH INTEREST HAS CEASED SINCE MATURITY.

	Amount Outstanding.	Interest due and unpaid.
4 to 6 per cent. old debt, 1837.	$57,665 00	$64,174 81
5 per cent. Mexican indemnity stock, 1846-'52	1,104 91	85 74
6 per cent. bonds, 1847-'67.	1,250 00	22 00
6 per cent. bounty land scrip, 1847-'49	3,275 00	213 06
5 per cent. Texas indemnity stock, 1850-'64	20,000 00	2,945 00
5 per cent. bonds, of 1858-'74	7,000 00	875 00
5 per cent. bonds, of 1860-'71	10,000 00	600 00
6 per cent. 5-20 bonds, 1862, called	367,000 00	7,740 41
6 per cent. 5-20 bonds, June 1864, called	57,400 00	1,051 87
6 per cent, 5-20 bonds, 1865, called	70,550 00	18,521 11
5 per cent. 10-40 bonds, 1864, called	326,850 00	65,329 92
6 per cent. Consol. bonds, 1865, called	370,200 00	12,198 41
6 per cent. Consol. bonds, 1867, called	874,000 00	111,618 71
6 per cent. Consol. bonds, 1868, called	263,200 00	21,086 51
6 per cent. loan, Feb. 8, 1861, matured Dec. 31, 1880	77,000 00	4,830 00
5 per cent. funded loan 1881, called	955,650 00	12,086 64
Oregon War Debt, March 2, 1861, matured July 1, 1881.	8,100 00	1,579 50
6 per cent loan of July 17 and Aug. 5, 1861, matured June 30, 1881	573,550 00	15,184 50
6 per cent loanof July 17 and Aug. 5, 1861, continued at 3½ per cent, matured Dec. 24, 1881, called	5,456,800 00	73,462 83
6 per cent. loan of March 3, 1863, matured June 30, 1881.	164,200 00	5,724 00
6 per cent loan of March 3, 1863, continued at 3½ per cent, matured August 1, 1882, called	2,252,450 00	6,442 08
1-10 to 6 per cent. Treasury notes, prior to 1846	82,525 35	2,668 06
1-10 to 6 per cent. Treasury notes, 1846	5,900 00	200 60
6 per ct. Treasury notes, 1847	950 00	57 00
3 to 6 per cent. Treasury notes, 1857	1,700 00	99 00
6 per ct. Treasury notes, 1861.	3,000 00	364 50
7 3-10 per cent. 3 years' Treasury notes, 1861	16,300 00	1,104 43
5 per cent. 1 year notes, 1863.	41,935 00	2,098 65
5 per cent. 2 year notes, 1863.	32,700 00	1,622 30
6 per ct. compound interest notes, 1863-64	219,860 00	44,920 47
7 3-10 per cent. 3 years' Treasury notes, 1864-65	138,850 00	20,422 62
6 per cent. certificates of indebtedness, 1862-63	4,000 00	253 48
4 to 6 per cent. temporary loan, 1864	2,960 00	244 19
3 per cent. certificates, called.	5,000 00	394 31
Aggregate of debt on which Interest has ceased since maturity	$12,472,725 26	$500,251 91

DEBT BEARING NO INTEREST.

Demand notes, 1861-62	$59,595 00	
Legal tender notes, 1862-63	346,681,016 00	
Certificates of Deposit	12,000,000 00	
Coin certificates, 1863	4,992,040 00	
Silver certificates, 1878	69,440,210 00	
Unclaimed interest		5,339 96
Fractional currency, 1862, 1863 and 1864 $15,408,000 77		
Less amount estimated as lost or destroyed, act of June, 21, 1879 8,375,934 00		
	7,032,066 77	
Aggregate of debt bearing no interest	$440,204,927 77	$5,339 96

RECAPITULATION.

	Amount Outstanding.	Interest.
Debt bearing interest in coin, viz:		
Bonds at 6 per cent., continued at 3½ per cent.	$32,755,400 00	
Bonds at 5 per cent, continued at 3½ per cent.	401,496,900 00	
Bonds at 4½ per cent.	250,000,000 00	
Bonds at 4 per cent.	438,909,350 00	
Refunding certificates	442,100 00	
Navy pension fund, 3 p.c	14,000,000 00	
	$1,437,603,750 00	$11,099,695 52
Debt on which interest has ceased since maturity.	12,472,725 26	500,251 91
Debt bearing no int., viz:		
Old demand and legal-tender notes	$346,740,611 00	
Certificates of deposit	12,000,000 00	
Coin & silver certificates.	74,432,250 00	
Fractional currency	7,032,066 77	
	$440,204,927 77	
Unclaimed interest		5,339 96
	$1,890,281,403 03	$11,605,287 39
Total debt, principal and interest to date, including interest due and unpaid	$1,901,886,690 42	

AMOUNT IN TREASURY.

Interest due and unpaid		$1,926,080 07
Debt on which interest has ceased		12,472,725 26
Interest thereon		500,251 91
Gold and silver certificates		74,432,250 00
U. S. notes held for redemption of certificates of deposit		12,000,000 00
Cash balance available Sept. 1, 1882		141,629,211 22
		$242,960,518 46
Debt, less am't in Treas'y Sept. 1, 1882		$1,658,926,171 96
Debt, less am't in Treasury Aug. 1, 1882		1,675,054,433 20
Decrease of debt during the month		$16,128,261 24
Decrease of debt since June 30, 1882		$29,988,288 76

BONDS ISSUED TO THE PACIFIC RAILROAD COMPANIES, INTEREST PAYABLE IN LAWFUL MONEY.

	Amount Outstanding.	Accrued Interest not paid.
Central Pacific bonds, 1862-64	$25,885,120 00	$258,851 20
Kansas Pacific bonds, 1862-64	6,303,000 00	63,030 00
Union Pacific bonds, 1862-64	27,236,512 00	272,365 12
Cent. Branch Union Pacific bonds, 1862-64	1,600,000 00	16,000 00
West'n Pacific Bonds, 1862-64	1,970,560 00	19,705 60
Sioux City & Pacific bonds, 1862-64	1,628,320 00	16,283 20
Totals	$64,623,512 00	$646,235 12

Interest paid by the United States, $55,344,682.74; interest repaid by transportation of mails, &c., $15,221,035.61; interest repaid by cash payments: 5 per cent net earnings, $655,198.87; balance of interest paid by United States, $39,468,448.26.

The foregoing is a correct statement of the public debt, as appears from the books and Treasurer's returns in the Department at the close of business, August 31, 1882.

CHARLES J. FOLGER,
Secretary of the Treasury.

Coupling and Uncoupling Cars in England.

MR. EVANS, General Secretary of the Amalgamated Society of Railway Servants, City Road, London, delivered on the 2d inst. an address before a number of railway men and officials of the various railway companies having terminus in that city, on the subject of the "National Exhibition of Models of Improved Railway Wagon Coupling Appliances," etc., to be held in Darlington on October 3 and four following days. The exhibition was, Mr. Evans said, being promoted by the society, assisted by many patrons and friends, with the sole object of better protecting the lives of railway servants engaged in the work of coupling and uncoupling railway vehicles. It was estimated that about 14,000 men were regularly engaged in the work, and of this number the returns of the companies to the Board of Trade showed 206 to have been killed and 1,614 others personally injured in the five years ending with 1880. The risks incurred arose mainly from the universal use of link or chain couplings, and the necessity, in the absence of appliances, of men placing themselves between the vehicles, and therefore passing over the rails in attaching or detaching wagons. The promoters of the exhibition desired to demonstrate that the use of improved couplings would materially reduce, if not absolutely remove, the constant risks of accident from the cause alluded to; and that the adoption of improvements would be an economy of labor and of time, and, therefore, in the end profitable to the railway companies. In any case the promoters were anxious that the exhibition should secure for the subject the due consideration which the preservation of human life and the prevention of suffering claimed at the hands of all who directed the affairs of railways or who used them. He wished it to be known that the society sought no pecuniary aid by the exhibition, but, on the contrary, they were incurring a great expense in furthering the cause of human safety, and they trusted to the generosity of the humane wealthy to assist them in bearing the burden undertaken. After a discussion on the subject of the exhibition, a resolution pledging those present to support it was passed.

An Immense Pension List.

FROM a statement prepared by the Pension Bureau at Washington, we learn that during the fiscal year ended June 30, 40,939 original claims for pensions and 34,148 claims for increase of pension were filed. There were allowed during the year 27,664 original applications, and 10,231 for increase of pensions. The number of claims rejected was 21,295. There remain pending 269,678 original applications, and 21,288 applications for increase. The total amount paid for, pensions during the year, including the cost of disbursement, was $54,296,280.54; total number of pensioners on the roll, 285,697—a gain over the previous year of 16,867. The total amount paid by the Government for pensions from 1791 to 1861 was $81,480,455.50. The total amount paid from 1861 to June 30, 1882, was $560,641,324.75. Out of this amount, and since 1871, $25,234,232.85 has been paid to the survivors of the war of 1812, and to the widows of those who served during that war. Deducting this latter amount, and estimating that which may have been paid to pensioners on account of the wars prior to 1861 and 1865, about $530,000,000 have been disbursed on account of pensions.

THE no-masted Steamship "Metcor" was successfully launched at Nyack, N. Y., on the 13th inst. This is the first ship of the kind ever built. She is intended for the American Quick Transit Steamship Company of Boston. The inventor is A. Perry Bliven, chief constructing engineer, who has been in constant attendance during the construction. Her dimensions are as follows: Extreme length over all, 156 feet; extreme wood end, 153 feet; custom house measurement, 147 feet; depth of hold, 17 feet; beam, 21 feet, 8½ inches; beam at water line, 16 feet, 10¾ inches. The boat has no spars nor masts; the deck is domed, only the tops of the ventilators and pilot house being visible.

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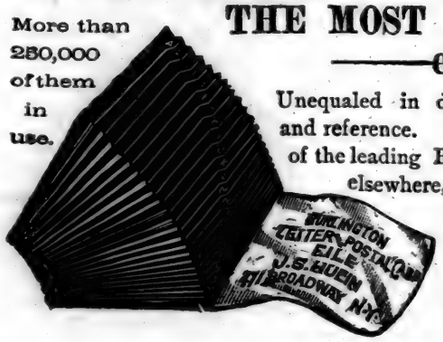
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Beauties of the Coal Region.

If one-tenth of the people of the East knew how beautiful the country and how charming the scenery is in the Anthracite coal regions of Pennsylvania, a great many more tourists would visit it. The view from Brookside, on the Reading road, is not surpassed on this continent, while the lookout from the cars of the Central Railroad of New Jersey, at Quakake, is worth a day's ride. And as for the scenery along the Lehigh Valley Railroad, there is nothing to equal its interest. The towns and cities are all thriving, while some of them are beautiful; they all have good hotels, and prices are very reasonable. Though these places are among the coal regions, and supposed for that reason to be dark, dirty and grimy, the exact contrary is the case. The towns and villages are clean, neat and comfortable. Everybody in the East burns the coal produced in these regions; not one in a thousand knows how it is produced, or how it is prepared for market. Would to heaven they did; then there would not be so much growling at the rate at which it is afforded.—*Coal Trade Journal.*

A Dividend Collector.

In the early days of railroading in Missouri a six-foot stranger, with a bad look in his eye, one day entered a station on the line of the Blank and Dash road, pulled out ten shares of stock in the company and inquired of the station-master if there were any dividends on the stock.

"Never heard of any," was the reply.

"Didn't anybody every try to collect dividends?"

"If they did they didn't get anything."

"This stock ought to pay 10 per cent," continued the stranger. "Here's a thousand dollars. Ten per cent a year would be $100. I have held these shares three months, which would be $25. Pardner, I want my divvy!"

"But I've nothing to do with it. You must go to St. Louis."

"Too far away I'm going to collect here and save time. Pilgrim, count out my divvy!"

The above peroration was followed by the sight of a six-shooter and an expression which meant business, and the agent didn't consume three minutes counting out the money, which the stranger took and walked out, with the remark that he never invested in stock paying less than 10 per cent, and didn't believe in cumulative dividends. This was the only dividend paid by the road for thirteen years, and the agent on a salary of $40 a month had to stand that.—*Oil City Derrick.*

Dr. Siemens thinks that before many years have passed ships will be made of such tough "mild-steel," that when they strike upon a rock they will not spring aleak, but only "bulge several feet." These ships will be driven by electricity or gas, for, in the opinion of the learned president of the British Association, the steam-engine is doomed. Raw coal is to disappear as a fuel, and then science will have banished "the black pall of smoke that hangs over our great cities, and restore to them pure air, bright sunshine and blue skies."

The Kinzua viaduct on the line of the New York, Lake Erie and Western Railroad, the highest in the world, has been completed. It is 2,050 feet long and 302 feet high.

"It has never been proved," says Mrs. Oliphant, "nor can it be proved, according to our belief, that to write for bread is bad for real genius, especially of the creative kind; but to write for bread when you have no message to deliver, no definite burden of prophecy, no story to tell, is a different matter."

Spikes are dropped from the Elevated Railways in this city almost daily to the injury of passers-by. Sometimes, in lieu of a spike, a paint pot, a dash of oil, a cinder, a swash of water, or some trifle of that sort is suffered to fall. A brakeman was dropped a few weeks ago, and it is now proposed to drop a director occasionally, just to see "how the old thing works."

Largest Book Published.—The latest edition of Webster's Unabridged Dictionary, in the quantity of matter it contains, is believed to be the largest volume published. It will surprise many readers to know that it contains eight times the amount of matter contained in the Bible, being sufficient to make 75 12mo. volumes that usually sell for $1.25 each! Its vocabulary comprises over 118,000 words (nearly 3,000 more than any other English Dictionary). It has a new Biographical Dictionary, giving brief important facts concerning 9,700 noted persons. There is a memoir of Noah Webster, a brief history of the English language, Principles of Pronunciation, Lists of 4,000 Scripture Proper Names, 10,000 Geographical Names, 700 common English Christian Names, several pages of Proverbs, etc., a vocabulary of Names of Noted Fictitious Persons and Places, and many other valuable features—all of which, in a volume of about 2,000 pages, embellished with 3,000 Engravings, go to make up a great storehouse of useful knowledge.

A few years ago a wealthy banker was traveling from Munich to Vienna by rail. In the same carriage with himself was a gentleman accompanied by a friend. The stranger was of pleasing manners, and the purse-proud banker at length condescended to enter into conversation with him, and gradually (as he himself expressed it) "took a liking to the man." He even went so far as to say at last, "You seem to be a good sort of a fellow and a gentleman. Look here, I am going to Vienna to see my daughter, who is married there, is awfully rich and keeps a tiptop house. I will introduce you to her. The stranger thanked him, and mentioned that, by a curious coincidence, he too was traveling to Vienna to see his daughter. "Your daughter, indeed!" said the banker, with considerable arrogance; "and pray who may she be?" "The Empress of Austria," was the calm reply. The stranger was the Duke Maximilian of Bavaria, father of the present Empress of Austria and the ex-Queen of Naples; the companion was his aide-de-camp. It is needless to add that the millionaire utterly collapsed.

Archimedes said that if he had a fulcrum upon which to place his lever he could raise the world.

One of the first requisitions received from a newly appointed railway station agent was: "Send me a gallon of red oil for the danger lanterns."

The more offensive and repulsive an individual is, the more room he takes in this world—and every one is willing he should have it. A man with a paint pot on both sides of him has the "right of way."

The best iron ore brought to Philadelphia is from the Island of Elba. It is shipped to the United States in very small quantities, as the production is monopolized by English manufacturers. The mines are said to be the oldest in the world, and were worked by the Romans in the time of the first Cæsar.

To the westward of the Surrey Hills, in Tasmania, in the county of Russell, and at a distance of a hundred miles from Launceston, lies Mount Bischaff, and here a few adventurers found tin in 1872. A company was formed and workings commenced. An eminent mineralogist reported that the mountain was almost a mass of tin, the ore yielding from seventy to eighty per cent of pure metal. Large smelting works were erected at Launceston, and in the year 1876 a thousand tons of tin were raised. Twenty-five shillings only have been paid up on each share, but the present market price is from £60 to £69, the company during the last four years having paid a dividend every two months of ten shillings per share. A fortunate gentleman in Hobart Town, who expended £875 in the purchase of 700 shares in 1873, now rejoices in the receipt of £2,100 a year as the income of his investment.

A lion that had lived for several years in a certain neighborhood and gained general respect for the manner in which he had conducted himself, was suddenly made the object of slander and abuse. When he came to trace these stories back, he found that they had been started by a mouse. "Why have you slandered me?" demanded the lion. "Because the people will only accept me as a mouse," was the reply. "But am I to blame for that?" "Perhaps not but why should you be a lion, able to strike down the ox, while I am the puny mouse, able only to frighten women and children? What grieves me is the fact that Nature made a mistake." "Very well," said the King of Beasts, "you go forth and roar and kill, and I will become a mouse." The mouse stalked into the forest and began to roar and growl, but his efforts were received with laughter. After he had tried it again and again, the owl dropped down beside him and observed: "Instead of making me afraid, you only disturb my slumbers and annoy my friends. Come inside, out of the malaria." Moral—The mouse who nibbles at crumbs is doing all that is expected of him. Secondly, he who looks for the mistakes of others simply show the world his envious feelings.

American Railroad Journal.

ESTABLISHED 1831.

Steam Navigation, Commerce, Finance, Banking, Machinery, Mining, Manufactures.

SECOND QUARTO SERIES.—VOL. XXXVIII., No. 38.] NEW YORK, SEPTEMBER 30, 1882. [WHOLE No. 2,423.—VOL. L

ORGANIZATION.

AT the thirteenth annual convention of the Master Car Painters Association, which commenced its session in Chicago on the 20th inst., the following officers were elected: President, D. D. Robertson, Michigan Central Railroad, Detroit. Vice-President, John Rottenburg, Chicago, Rock Island and Pacific Railway, Chicago. Secretary, R. McKeon, New York, Pennsylvania and Ohio R. R. Co. A large delegation was present representing, at the assembling on the first day upwards of forty of the principal railroads of the country. It was thought that much good would result from an interchange of views, the reading of papers, and the discussion of subjects.

THE reorganization of the Indianapolis and St. Louis Railroad Company under its recent purchase by E. B. Thomas was accomplished on the 26th inst. The following officers were elected: President, J. H. Devereaux; Vice-President, Stevenson Burke; Secretary and Treasurer, George H. Russell; Auditor, P. A. Hewett, all of Cleveland; Attorney, John T. Dye, Indianapolis; General Manager, E. B. Thomas; General Passenger Agent, A. J. Smith General Freight Agent, H. W. Goys; General Superintendent, C. C. C. Gale. The officers elect begin their term Oct. 1, and will hold until the regular meeting of directors on the third Wednesday in February, 1883.

INCORPORATION.

A COMPANY was organized at Chicago on the 21st inst., to be known as the Texas Continental Transportation Company, to engage in carrying dressed beef in refrigerator cars from the beef raising country in the southwest. Its operations will be confined to the Huntington system of roads, with the Chesapeake and Ohio as an eastern outlet, and the Southern Pacific as a western outlet. The company is backed by the cattle raisers and shippers of the Southwest.

CHARTERS were issued on the 21st inst. in Harrisburg, Penn., to the Phœnixville, Pottstown and Reading, and the Philadelphia, Norristown and Phœnixville railroad companies. These companies have a capital stock of one million dollars each and both will be operated by the Pennsylvania Railroad Company.

A CERTIFICATE of incorporation of the Binghamton and Williamsport Railroad Company, of Binghamton, capital, $400,000, has been filed at Albany, N. Y. The length of the railroad is to be twenty miles, and it is to run from Binghamton to a point on the division line between New York and Pennsylvania, and thence by the most feasible route to Williamsport, Pa.

CONSTRUCTION.

THE first sod of the Emerson and Northwestern Railway was turned on the 21st inst.

THE rails have been laid on the Newfoundland Railway to Holyrood, and grading is completed to Harbor Grace.

THE Chesapeake, Ohio and Southwestern Railway extension to Memphis, Tenn., is expected to be completed in October. The event will be celebrated by a grand jubilee and exhibition at Memphis.

THE engineers of maintenance of way of the Pennsylvania Railroad have finished 29 miles of third and 25 miles of fourth track on the New York line; 24 miles more have been graded, and track will be laid in 1883.

HALF the road from Doniphan to Noeleyville, known as the Doniphan Branch of the St. Louis Iron Mountain and Southern Railway, has been graded, and ties and bridge timber distributed along the line. The road will be completed and ready for operation by the 1st of December next.

THE Connotton Valley Railroad is to be made a standard gauge, and the portion of the road between Canton and Straitsville, now building, will be made standard gauge this fall, the northern half to follow in due course of time. The building of the "spur" from Mogadore to Akron is receiving serious consideration.

THE Louisville and St. Louis Air Line Company announces the completion of the Louisville, Evansville and Mount Vernon, Ill., connecting at the latter point with the Louisville and Nashville Railroad for St. Louis and the West, and forming the Louisville and St. Louis Air Line, which will be opened for through business on the 1st of October.

TRACK-LAYING on the Nevada and Oregon Railroad was completed on the 18th inst., to Roberts and Antelope stations in Long Valley, Cal., about thirty miles north of Reno, Nev., and regular freight and passenger trains commenced running from Long Valley to Reno, where connection is made with the Central Pacific and Virginia and Truckee railroads. The road will be extended this fall to Honey Lake Valley, and during 1883 to Goose Lake, at the Oregon State line. This road will run east of the Sierra Nevada Mountains through a well-settled country now without railroad facilities.

FROM Redding, Cal., we learn that the railroad company has a large number of ties piled up, and almost daily special trains are arriving with rails. Side tracks have been constructed to facilitate unloading the material to be used in the extension of the road north. The culverts are constructed for a distance of four miles. Redding is filled with laboring men, seeking employment on the road.

COLLINGWOOD SCHREIBER, C. E., Inspector of Government Railways, has returned from a trip on the Canadian Pacific Railway west. He went a distance of 444 miles, within eight miles of Old Wives Lakes, and reports work much heavier than he expected, the line substantially built and the grading well raised. Of the Thunder Bay division he states that a great portion of it is in fair condition, but 16 or 20 miles were not.

A. R. WOOLSTAW, General Freight and Passenger Agent of the Mexican National Railway Company, has issued a circular to General Passenger Agents, informing them that his line is now open for passenger business to Monterey, 329 miles from Corpus Christi and 168 miles from Laredo, Tex., forming the most direct route to the interior of Mexico. Two daily trains will be run each way between Corpus Christi and Monterey.

THE rapid progress of the Denver, Rio Grande and Western Railway bids fair to give the Central Pacific Railroad Company a new through route to the east by next February. President Palmer telegraphed from Montrose, Col., on the 18th inst., to W. W. Nevin, Esq., as follows: "Just arrived at end of track. Utah extension, 370 miles from Denver; 92 from the Utah boundary. We laid three miles to-day and 17 last week. There is nothing apparently to prevent reaching Utah boundary in December, and making connections 85 miles west thereof, at Green River, in February. We came through the famous Black Cañon of the Gunnison, altogether the grandest, as well as the most picturesque, gorge traversed by any railway in the United States. The traffic of this line cannot fail to be satisfactory. I left Leadville yesterday. It is certainly producing 1,200 tons of ore a day. The bullion yield this year is larger than last. Smelting furnaces overworked."

Northern Pacific Railroad.

THE following is a comparative statement of the earnings, operating expenses, etc. of the Northern Pacific Railroad for the years ending June 30, 1881 and 1882:—

Earnings:	1881.	1882.
From freight	$2,207,299 13	$3,909,423 20
" passengers	668,620 92	1,302,260 80
" mails	37,860 64	52,306 56
" express	76,318 69	149,293 18
" miscellaneous	4,420 11	17,021 82
Total earnings	$2,994,519 49	$5,430,305 56
Operating expenses:		
Conducting transportation	$430,072 40	$794,630 31
Motive power	490,088 35	967,694 74
General expenses	250,831 59	268,508 50
Maintenance of road and structures	499,332 31	952,919 56
Maintenance of cars	125,229 13	273,975 45
Rentals and taxes	229,836 52	315,111 95
Total expenses	$2,025,390 30	$3,572,840 51
Net earnings	$969,129 19	$1,857,465 05

Compared with the years 1881-'82 the gross earnings show an increase of $2,435,786.07, or 81.35 per cent, with an increase in expenses of $1,547,450.31, or 76.40 per cent, making the increase in net earnings $888,335.86, or 91.67 per cent. The ratio of expenses to earnings was: 1880-'81, 67.64 per cent; in 1881-'82,65.80 per cent—a decrease of 1.84 per cent, notwithstanding the rapid extension of the road from both ends into sparsely settled regions of the country, furnishing for the present but moderate traffic. The earnings derived from the transportation of construction material, carried at cost, amounted to $887,532.99.

The average number of miles of road operated in 1880-'81 was 584; do. in 1881-'82, 797—increase, 213.

The gross earnings per mile of road in 1880-'81 were $4,723.31, the expenses (including rentals and taxes) $3,119.26, and the net earnings $1,604.05; in 1881-'82, the gross earnings per mile of road were $6,318.85, the expenses (including rentals and taxes) $3,830.46, and the net earnings $2,488.89—showing an increase in gross earnings per mile of road of $1,595.54, with an increase in expenses of $711.20, making the increase in net earnings $884.34.

The number of passengers arriving on the company's lines at the eastern terminal stations, viz., St. Paul, Minneapolis, Duluth and Superior, in 1881-'82, was 42,802; and the number departing therefrom, 64,084—showing a difference of 21,282. The total number arriving and departing was 106,886, against 35,242 in 1880-'81—an increase of 71,644.

The number of through passengers (to and from other roads) carried in 1881-'82, was 19,466, of whom 8,298 were first-class, and 11,168 second-class and emigrant; the number of way passengers carried was 278,214, of whom 217,499 were first-class, 39,254 second-class, and 21,461 commutation—total through and way, 297,680, against 152,914 (6,636 through and 146,278 way) in 1880-'81, an increase of 144,766. The number moved east in 1881-'82 was 134,165; do. west, 163,515. The number moved east in 1880-'81 was 69,086; do. west, 83,838.

The number of miles traveled by through passengers in 1881-'82 was 5,699,647; do. by way passengers, 28,629,371—total, 34,329,018. In 1880-'81 the number of miles traveled by through passengers was 2,015,644; do. by way passengers, 13,230,925—total, 15,246,569; showing an increase in through passengers of 3,684,003, and in way passengers of 15,388,446—a total increase of 19,084,449.

The number of tons carried eastward in 1881-'82 was 169,866; do. westward, 485,209—total, 655,075. In 1880-'81 the number carried eastward was 128,494; do. westward, 262,402—total, 390,896, showing an increase in tons eastward of 41,372; do. westward, 222,807—total, 264,179.

The number of tons carried one mile east in 1881-'82 was 39,518,027; do. west, 142,333,510—total, 181,851,537. In 1880-'81 the number carried one mile east was 18,154,788; do. west-76,539,187—total, 94,693,975, showing an increase in the freight movement on the Eastern division of 87,157,562, of which 21,363,239 tons were east bound and 65,794,323 west bound.

The average haul for each ton of freight in 1881-'82 was: east bound, 232.6 miles; west bound, 293.3; both directions, 277.6.

Referring to the new sources of traffic, the report says:—

The movement of population into the Yellowstone Valley, under the stimulus of the advance of the Northern Pacific track into that but recently remote and little known region, has added materially to our traffic. By the opening of the road to Billings in July last, the stock-raising districts of eastern Montana were penetrated. Over 20,000 head of cattle have already been shipped from Billings this season. The country traversed by the road to Montana, east of the main range of the Rocky Mountains, and the entire region lying north of it, as far as the British Possessions, is not excelled as a grazing region by any portion of the United States. The business of stock-raising in that region is yet in its infancy, and is destined to increase steadily for many years to come, and to furnish a very important source of business for the company's main line.

The track, advancing west, up the Yellowstone Valley will soon cross the Belt Range of mountains and enter the comparatively old and well-settled districts of central Montana, lying around the important towns of Bozeman and Helena, and will there tap a large freight and passenger business, which has heretofore been compelled to take a circuitous route to the East, traversing high mountain ranges by rough roads to reach rail transportation.

The settlement of the new grain and grazing regions lying north and south of the Pend d'Oreille division, in Washington Territory and Idaho, now rapidly progressing, has materially increased the business of our completed lines on the Pacific coast, and the further development of this naturally rich and attractive section will steadily go on from year to year, and show its influence upon our traffic statements.

The portion of our line building eastward on the Pacific slope has now penetrated the great forest tract on the Clark's Fork of the Columbia River. Lumbering operations will soon spring up there for the supply of the extensive regions of eastern Washington, almost destitute of timber, and will furnish an important source of tonnage to the road. This season the finished road is expected to reach the town of Missoula, the center of trade of the fertile valleys of the Missoula and Bitter Root rivers. A short distance further east will bring it to the heart of the Montana silver and gold mining districts, and also to the agricultural valleys of the Deer Lodge River and its tributaries, thus opening other new sources of traffic.

The development of the coal fields lying at the western base of the Cascade Mountains has caused an important increase in the tonnage transported over the Pacific division. The shipments of coal from Carbonado to Tacoma during the past year were 57,200 tons. The present owners of the Carbon Hill mines say that they will increase their production of coal to 800 or 1,000 tons per day during the next four months. A new coal mine is being opened on South Prairie Creek, to which a branch track of one and three-quarter miles will be built. This mine is expected to furnish from 150 to 200 tons a day for transportation by January next. To facilitate the shipment of this large output, coal-bunkers are being built by the company at New Tacoma of a capacity of 3,000 tons.

The telegraph lines of the company, which are constructed and operated for it under the superintendence of the Western Union Telegraph Co., included, on the 30th of June, 1882, 1,512 miles of lines in operation on the main line and branches. The company's earnings from commercial business during the fiscal year ended June 30, 1882, amounted to $10,782.88, which was nearly equal to the disbursements made by the company on account of construction.

At the commencement of the year, July 1, 1881, the ends of the track were 857 miles apart. During the year they were advanced from the east 183 miles, and from the west 102 miles—total of 285 miles—leaving, June 30, 1882, 572 miles to build. This will be lessened by the close of 1882 probably 300 miles, leaving 272 miles of track to be laid after January 1, 1883. The final connection of the tracks is expected to be made during the season of 1883. In addition to the work done on the main line, 222 miles have been laid on branches in Minnesota, Dakota and Washington.

The construction of a portion of the Wisconsin division, extending 25 miles eastward from Thomson Junction, in Minnesota, was practically completed during the year. At Superior, 23.4 miles east of the Junction, the road reaches the Bay of Superior. By pushing track laying to Superior prior to Dec. 1, 1881, the company obtained valuable donations of town and county property. Other donations contingent on extending by the same date a spur track to Conner's Point, four miles from Superior, were also secured. The construction of this division was continued eastward from Superior across the Nemadji River, in order to complete 25 miles of main track, the shortest section examined by the government commissioners, and was further extended one-half mile to a proposed junction with the Lake Superior branch of the Chicago, St. Paul, Minneapolis and Manitoba Railroad. A final location for the extension of the road to a point 100 miles east of Superior, ten miles west of the Montreal River, the boundary between Wisconsin and Michigan, has been made.

Track-laying began on the Yellowstone division July 5, 1881, and on the 30th of June, 1882, had been completed 12½ miles beyond Big Horn River, or 179⅜ miles from Glendive. It is expected that the grading on this division will be finished by the beginning of October, so that the track can reach Livingston, the end of the division, 340 miles from Glendive, in November.

The Rocky Mountain division commences at a point where the road leaves the Yellowstone valley, crosses the Belt Mountains by a tunnel at the summit of Bozeman Pass, 3,600 feet long; follows the valleys of the East Gallatin, the Missouri and the Prickly Pear to Helena; crosses the main range of the Rocky Mountains

by a tunnel at Mullan Pass, 3,850 feet long, and ends at the Little Blackfoot River, on the western slope of the mountains. It is 151½ miles long. The highest elevations attained by the road are at the summit grade at Bozeman tunnel, 5,565 feet, and at the Mullan tunnel, 5,548 feet above the level of the sea. Grading was commenced at Bedford, near the crossing of the Upper Missouri River, in August, 1881, and continued 32 miles to Helena. Work was begun at the Mullan tunnel in the middle of November, 1881, and on the Bozeman tunnel in March, 1882.

The Missoula division extends from the end of the Rocky Mountain division to the head of Clark's Fork of the Columbia, 163.8 miles, following the Little Blackfoot and Hell Gate rivers to Missoula, crossing the Coriacan defile to the valley of the Jocko River, and descending that stream to the Flathead River, and the Flathead to where its junction with the Missoula forms Clark's Fork. The total descent is 2,560 feet. The highest structure in the road occurs in this defile, the Marent Gulch trestle, 750 feet long and 222 feet high.

Clark's Fork division extends from the head of Clark's Fork to the junction with the Pend d'Oreille division at Sand Point, 128 miles. During the year the track advanced eastward 102 miles to Cabinet Landing, on the Clark's Fork, 263 miles from Wallula. On the 30th of June the end of the track was 33 miles east of Sand Point, and the end of completed grade 41 miles, with nine miles in progress. It will be late in November before the track can be laid to the east end of Clark's Fork division.

The grading and bridging of the Pend d'Oreille division has been completed. Preparations are commenced for a bridge over Snake River, at Ainsworth. It will be 1,540 feet long, with a draw turning on a pivot pier.

Surveys for a connection between Portland and Kalama have been completed. The distance is 39½ miles. A bridge with two draws will be built across the Willamette from Portland to East Portland.

Surveys which were made on the Cascade division to determine the best route and the best point for crossing the Cascade Range, show that the Stampede Pass, at the head of Sunday Creek, a branch of Green River, is the best point for crossing. It is nearly due east from Tacoma, and can be crossed by a tunnel 9,100 feet long, at an elevation of 2,885 feet above the level of the sea. The line from Tacoma to Bluff Wells on the main road is 308 miles long by this route.

A company, to be known as the "Terminal Company," is to be formed for the purpose of constructing a Union Depot at Portland for the use of this company (the trains of which from the east will cross the Willamette River on a bridge), the Oregon Railway and Navigation Company, and the Oregon and California Company.

The Little Falls and Dakota Railroad, 87 miles, will be completed to Morris by the 1st of October.

The Northern Pacific, Fergus and Black Hills Railroad will be completed from Wadena Junction to Breckenridge, 75 miles, in the present month. It is designed to extend it this season westward into Dakota, about 30 miles.

The Fargo and Southwestern Railroad will be completed to the James River, 80 miles, this season, if practicable. Twenty miles are already laid.

A survey has been commenced for a branch from Billings, on the main road, to Fort Benton, a distance of 150 to 175 miles.

Two routes have been surveyed for the National Park Line, one leaving the main line at Livingston and the other at Bozeman.

The grading on the Palouse Branch is nearly completed from its junction on the Pend d'Orielle division to Colfax, 37 miles, and the track is expected to reach that place, and possibly Farmington, before the end of the year.

The railway system of the Oregon Railway and Navigation Company in Oregon and Washington Territory has made rapid progress during the past year. On the main line up the Columbia River and branches 131 miles of track were laid. The most important branches are those being constructed to Lewiston, Idaho, and Baker City, Oregon.

The Oregon and California Railroad Company is extending its main line from Roseburg to the boundary between Oregon and California, where it will join the Oregon Branch of the Central Pacific Railroad now building northward from its present terminus at Redding. About 25 miles of track have already been laid beyond Roseburg. The completion of this line and of its California connection will open direct rail communication between Portland and San Francisco, affording an all rail connection with Lake Superior and St. Paul.

From the report of the Land Commissioner it appears that there were sold during the year ending June 30, 1882, 465,208.72 acres and town lots for $1,709,338.05. The average price per acre was $3.60.

GENERAL INCOME AND REVENUE ACCOUNT.

Cash balance July 1, 1881		$11,567,954 33
Received from earnings	$5,430,305 56	
Received from Land Department	1,426,461 87	
Received from investments.	47,212 16	
		6,903,979 59
Received from proceeds of bonds	$3,524,500 00	
Received from preferred stock sold	1,157,586 65	
Received from surplus earnings, advances on general mortgage bonds and outstanding pay-roll checks	7,480,216 47	
		12,162,303 12
		$30,634,227 04
Expended for operating expenses	$3,257,728 56	
Expended for interest and rentals	1,043,869 93	
Expended for taxes	113,275 13	
Expended for Land Department expenses and balance applicable to cancellation preferred stock and bonds.	703,177 94	
Expended for preferred sto'k and bonds cancelled	898,256 75	
		6,016,308 31
Expended for construction	$14,488,657 40	
Expended for new equipment	2,138,956 26	
Expended for improvements and betterments	1,185,944 70	
Expended in material not yet in track	3,499,114 48	
Advanced for purchase of depot grounds, Minneapolis	265,322 40	
		21,577,995 24
Balance and accounts receivable		3,039,923 49
		$30,634,227 04

It will be seen by referring to the above statement that the cash on hand at the commencement of the fiscal year was $11,567,944.33, and the receipts from sales of bonds and preferred stock, $4,682,086.65; the expenditures during the same period for construction, equipment, etc. were $21,577,955.24, an amount largely in excess of the resources of the company from net earnings, and the proceeds of bonds received from the syndicate; but thanks to the syndicate and the Oregon and Transcontinental Company, the treasury was always prepared to meet the demands without ever borrowing in the open market.

There have been added to the equipment of the road during the past year 54 locomotives, 26 passenger, 17 baggage, mail, express, etc., and 2,079 freight cars. The equipment now consists of 158 locomotives, 70 passenger, 34 baggage, mail, express, etc., and 5,107 freight cars. Since the close of the fiscal year 56 locomotives have been purchased for the Eastern Division and 8 for the Western Division, making a total of 64, not included in the above statement, to be delivered before December 31, 1882.

CONDENSED BALANCE SHEET, JUNE 30, 1882.

ASSETS.

Railroad, equipment, and lands, including line under construction		$127,411,622 24
General supplies, including construction material		4,259,059 89
Northern Pacific R. R. Co.'s stock and other investments		2,236,235 10
Accounts receivable		740,922 16
Cash in hands of treasurer		2,299,001 33
Cash in hands of trustees, derived from sales of land, for retirement of bonds		42,557 88
		$136,989,398 60

LIABILITIES.

Capital stock:		
Common		$49,000,000 00
Preferred stock	$51,000,000 00	
Less cancelled by land sales	9,090,867 80	
		41,909,132 20
		$90,909,132 20
Funded debt:		
Missouri Division bonds and certificates $2,500,000		
Less cancelled by land sales 76,100		
	$2,423,900 00	
Pend d'Oreille Div. bonds and certificates $4,500,000		
Less cancelled by land sales 938,400		
	3,561,600 00	
General first mortgage gold bonds: Gold $20,000,000		
Undelivered 1,369,000		
	18,631,000 00	
		24,616,500 00
Accounts payable and advances on general first mortgage bonds		7,051,551 74
Suspense account		59,410 69
Interest on funded debt:		
Amount due $7,203 22		
Accrued, not due 654,473 52		
		661,676 74
Net proceeds of land sales, in preferred stock, bonds and cash		10,432,643 24
Profit and loss		3,258,483 99
		$136,989,398 60

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Contributed articles relating to Railroad matters generally, Mining interests, Banking and Financial items, Agricultural development, and Manufacturing news, by those who are familiar with these subjects, are especially desired.

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New York, Saturday, September 30, 1882.

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SOME people affect to believe that they derive no benefit from advertising, for the reason that they cannot trace any particular transaction to any particular advertisement. Neither can we attribute the growth of vegetation to any particular drop of rain or ray of sunshine—but it is very evident that without rain or sunshine it would fail to flourish.

THE Pennsylvania Railroad Company recently made a voluntary contribution of $30,000 in aid of the Municipal Government of Jersey City; and now the authorities of that city propose to tax the company $12,000 for an elevator, which the company insists is not liable to taxation under its charter. The city agrees, however, in case the courts decide in its favor, to deduct the amount from the sum donated, thus reducing the gift to $18,000.

THERE is a statute of the State of New York which provides that when death is the result of a railroad accident the representatives of the deceased shall recover not to exceed $5,000 damages. As the effect of this law is to limit the responsibility and thereby lessen the vigilance of railroad companies, ought it not to be repealed? The penalty for the loss of a limb may be any sum that the jury may see fit to award, but for the loss of a life it must not be more than $5,000! Is there reason or justice in this discrimination? and should our statute books be longer defiled by a law that panders so directly to railroad mismanagement and recklessness?

THE people of western Europe are at last awakening to the value and possibilities of American lands. Negotiations are on foot for large tracts with the Canadian Pacific Railway, the Northern Pacific Railroad, and the Chicago, Milwaukee and St. Paul Railway companies. The St. Louis and San Francisco Railroad Company has recently closed a sale of 175,000 acres in Missouri. A corporation in London, the American Land Company, professes to have secured options on 7,000,000 acres in northwest Texas; and another is examining title to a large tract in Arkansas. After the very low-priced lands of the Far West have been picked up by these large capitalists there will be a chance for smaller ones to obtain the valuable lands in Kentucky, North Carolina and Virginia now offering for from $5 to $15 per acre, and which are within 500 miles of the Atlantic ports.

THE city of Louisville has been indulging in a three days' civic jollification in celebration of a double railroad event in her history. It was only last year that the city was provided with another outlet to the Atlantic seaboard by the completion of the Chesapeake and Ohio Railway from Newport News to Lexington, with which latter place Louisville has long been connected. Quite recently the same proprietary have, under the name of the Chesapeake, Ohio and Southwestern Company, finished the gap in the line to Memphis via Paducah, so as to make another equally useful line to the cotton districts of West Tennessee and Arkansas. Louisville hopes by this to become a terminal of a line passing through Little Rock and Texarkana, and so on to Galveston and California. Hardly less important is the opening of a link of 150 miles between Louisville and St. Louis, known as the "Air Line"—the west end of which route is controlled by the Nashville Company. This is of local importance to Louisville, and to St. Louis also, as it affords a shorter route to the ocean by way of the Chesapeake and Ohio, as also to Washington City.

THE NEW YORK, WEST SHORE AND BUFFALO RAILROAD.

ITS POSSIBLE WESTERN CONNECTIONS.

THERE is considerable controversy in the newspaper press at the present time as to the attitude to be occupied by the newly opened New York, Chicago and St. Louis Railroad (better known, perhaps, by its "Nick-el" name), between Buffalo and Chicago. It appears that its original projectors had contemplated an alliance with what is known as the New York, West Shore and Buffalo Railroad, which, in its turn, is to have as a feeder the new Hoosac Tunnel line between Schenectady and Boston. Such a combination would have been a formidable competitor to the New York Central and Lake Shore combination. It is now asserted, however, that overtures have been made for an alliance between the New York, Lake Erie and Western, and the "Nickel Plate." While we suppose a full year, and perhaps eighteen months, must elapse before the "West Shore" road can be opened for traffic through to Buffalo, it is not inherently probable that any such an alliance can be made with the "Erie," for the reason that Mr. JEWETT is building his own line—the Chicago and Atlantic—from Marion, Ohio, into Chicago, and because the Grand Trunk and Great Western (now consolidated) must always be more or less dependent upon the "Erie" for a connection with New York.

As was foreseen some months ago, considerable coquetting must precede the pairing off of these several unmated roads east and west of Buffalo, and it is not likely that anything more than an attempt to maintain its independent position is now sought for the "Nickel Plate."

It is a little singular that the "Nickel Plate"

and the New York, Lackawanna and Western Railroad are to be opened for traffic at about the same date—October 16—and that no prospect of a union between these two roads is, so far, talked of. This may arise from a desire upon the part of each of these several pieces of road to maintain an independence and exchange of business with all the others.

This status can be, however, only temporary. Mr. VANDERBILT's lines must, of necessity, take all the business they can, and anything given to the parallel or rival lines would be merely crumbs which could not be otherwise disposed of. It may be that the fact of the "Lackawanna" being dominated by Mr. GOULD, who also controls the Wabash system, prevents the "SENEY" management from entering into any close partnerships.

MR. GOULD stands at the head of the largest system of roads in the same ownership in this country, extending from Toledo westward to Ogden, southwestward to the frontier of Mexico, and south to Galveston and New Orleans. Such a system needs an outlet to the Atlantic coast. Just how the link between Buffalo and Toledo will be supplied remains to be seen. His interests, however, in the "Lackawanna" road are not so great nor so prominent as to prevent his parting with them at any time when there is an advantage in doing so; and it may be that before the "West Shore" road is completed the majority of interest may pass into his hands, in which event he will have not only the easiest approach into New York City, but by far the most valuable piece of road crossing New York State, with the exception of Mr. VANDERBILT's lines.

It is not paying Mr. GOULD too high a compliment to say that he will see his opportunity to part with his holdings in "Lackawanna" at high prices, and put the proceeds into "West Shore" at low prices, when he will be in position to consolidate the greatest combination of railroads in the country having New York for its terminus, by a line superior to and alongside the Vanderbilt stem line.

This road is built with lighter grades than the New York Central, is more direct, and as it is closely parallel for nearly its entire length, it reaches the most productive parts of the State.

It is a noticeable feature of the enterprise that the New York, Ontario and Western is to be worked in harmony with the "West Shore;" and these two interests together represent a mileage in this State nearly as great as either the New York Central or the "Erie." In spite of the predictions that the new road will want business when completed, the fact that it is capitalized at about one-half the cost of the older lines will enable it to pay fixed charges and dividends, and the others will be deprived of them.

Mexican Securities Abroad.

LOUIS J. JENNINGS, the London correspondent of the *New York World*, in a letter published in that paper of the 24th inst., says:—

"Under the belief that American enterprise is sure to develop Mexico rapidly, the buying of Mexican bonds has been greatly stimulated of late. These bonds have been down to 10 per cent, but now are up to 27.

"People who look to the future have great faith that the United States will control the sister republic of Mexico, either directly or indirectly, and notice the immense progress made in the Mexican railway system owing to American enterprise.

"General attention is being directed to the subject, and the *Saturday Review* has an article expressing the opinion that the great American capitalists, with General Grant at their head, are likely to bring order out of the Mexican chaos.

"The dealings here in Mexican railroad stocks are now very extensive, and altogether there is a revival of Mexican speculation based upon the 'manifest destiny' theory of some years ago.

"The British public want a new field for investment, and this is likely to suit them as well as any other."

Florida Land Sales.

THE announcement made to-day by the Florida Land and Improvement Company, of its lands being thrown open for sale at Government prices, $1.25 per acre, will have an important bearing on the settlement of this State, and will be heartily welcomed by the thousands of immigrants who will settle in Florida during the coming winter. It is now more than a year since the announcement was made that the trustees of the Internal Improvement Fund, through Governor Blaxham, had sold Hamilton Disston, of Philadelphia, 4,000,000 acres of land, and that by such sale the fund was disencumbered from the incubus of debt which had hung over it for so many years, which had given rise to protracted litigation and which had paralyzed all efforts toward the building of railways and all other public improvements. The first result of this sale was soon apparent in rapid building of railways in all directions. The last year has been spent by the company in selecting lands and obtaining titles from the State. The company now announces that lands will be sold on the same terms as lands of the United States, except that each purchaser is limited to 640 acres, as the company does not desire to have its lands go in large tracts into the hands of speculators. So far Disston & Co. have commanded the confidence and best wishes of the people of this State, and no act of theirs will more strongly cement this feeling than that announced to-day. By this act the people are assured that there is to be no gigantic land monopoly to speculate upon, and thus retard development of the State, but that immigration is to be assisted and stimulated by the offer of choice lands at cheap prices.—*Jacksonville (Fla.) Times, Sept.* 22.

A LEATHER belt has just been made in Hartford, Conn., which is an inch thick, 38 inches wide and 125 feet long, and weighs 184 pounds.

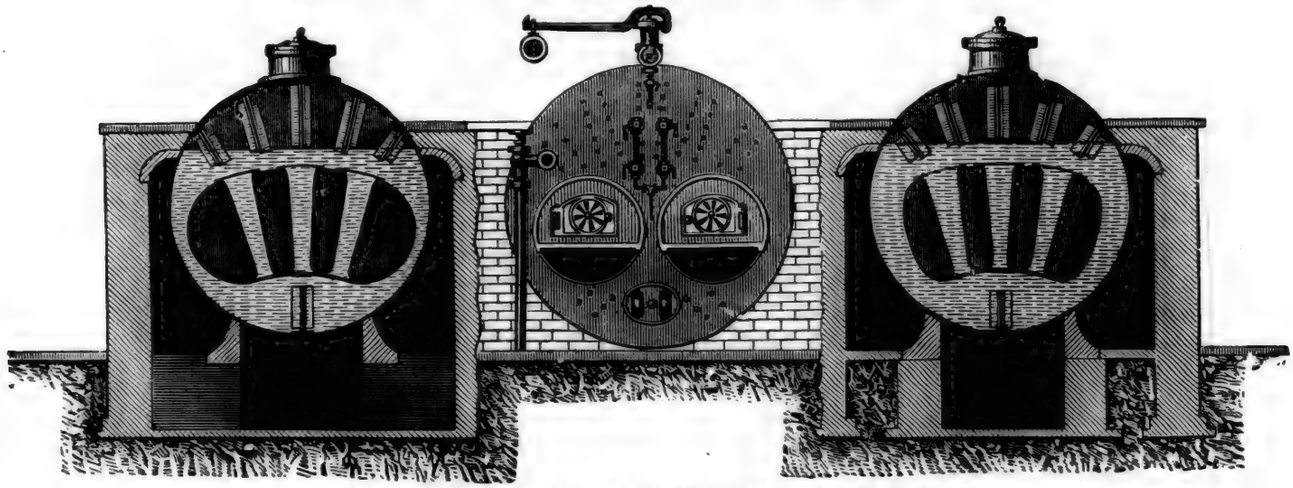
IT is said that an area of 93,000 acres has been planted with trees in Kansas under the new law relating to arboriculture. The cotton tree was largely planted on account of its rapid growth, and 60,000 acres were set with walnut trees. The expectation is that it will operate, in course of time, to relieve the climate of its extreme dryness.

AT a meeting of the Society of Engineers of Western Pennsylvania, held in Pittsburgh on the 19th inst., a paper was read on "The Commercial Value of Furnaces of Different Kinds," by Mr. Ignatius Hahn. He said about eighty per cent of the furnaces used in the manufacture of iron, and about forty per cent of those used in the manufacture of steel, are common reverbatory furnaces. Steel manufacturers are generally more quick to abandon old methods than iron manufacturers. The burden of Mr. Hahn's address was to show the superiority of the Siemens furnace over those of the ordinary kind. The speaker thought that whenever there was sufficient demand the Siemens furnace with the reversible plane and four generating furnaces was the cheapest in the end. Mr. Kent, in response to a question addressed to him, said that he had never yet learned of a satisfactory experiment with the Siemens furnace to generate gas for use under boilers. Mr. Kent was of opinion that the only reason why the Siemens furnaces were not more extensively used was owing to the excessive cost of plant and the length of time necessary to put it up.

ACCORDING to the London *Globe*, a curious instance of electrical development by friction has been observed in a Berlin brewery, though not without causing a great deal of alarm among the workmen. The building is constructed of stone and iron, the floor being laid in asphalt. In the upper story of the malt-house was a malt-cleaning machine, from which the malt was taken through an iron shoot to wagons below for distribution through the works. It was found that if this machine remained in operation for a length of time electricity was developed by the friction of the malt with the shoot, and in the isolated portions of it the tension of the electricity was such as to cause a continuous stream of sparks. The malt itself is crackled, while the sparks flew from it to the hands of those standing by, who looked upon the manifestation as one of demoniacal origin. An expert was called in to examine the phenomenon, and the subject was brought before the Electrical Technical Union. Dr. Werner Seimens showed how, through the influence of the asphalt floor, the malt room was so insulated from the other portions of the building as to become a large "Leyden jar."

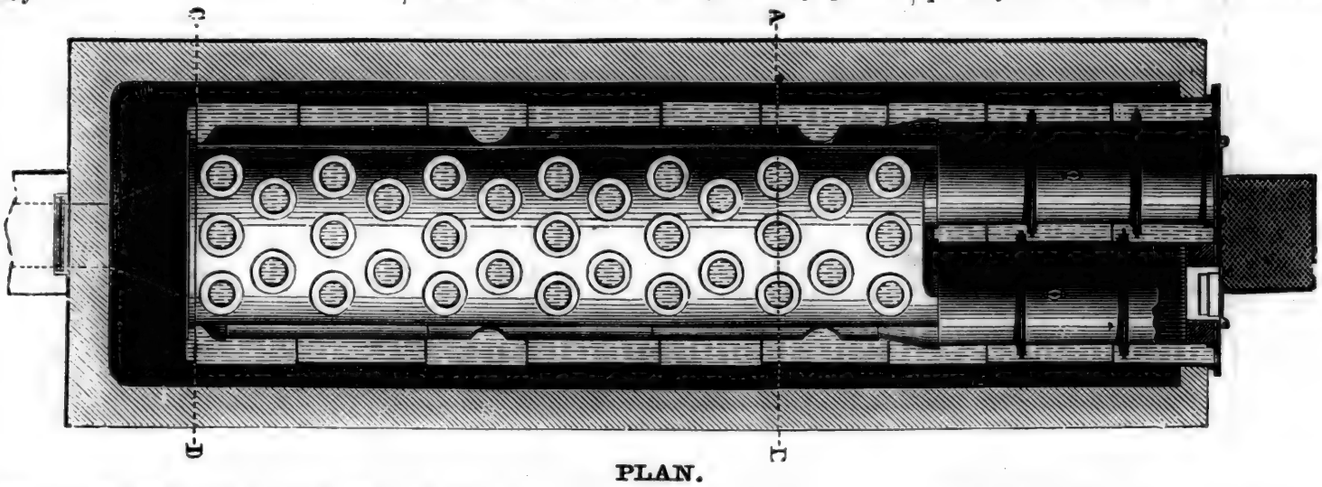
ADVERTISE in the RAILROAD JOURNAL.

THE GALLOWAY BOILER.



FRONT ELEVATION AND CROSS SECTIONS.

IMPORTANT improvements have been recently effected in the construction of the original "Galloway" boiler, which the makers have patented in the United States, and the Edge Moor Iron Company, of Wilmington, Del., has become the sole manufacturer and lincensee for this country.

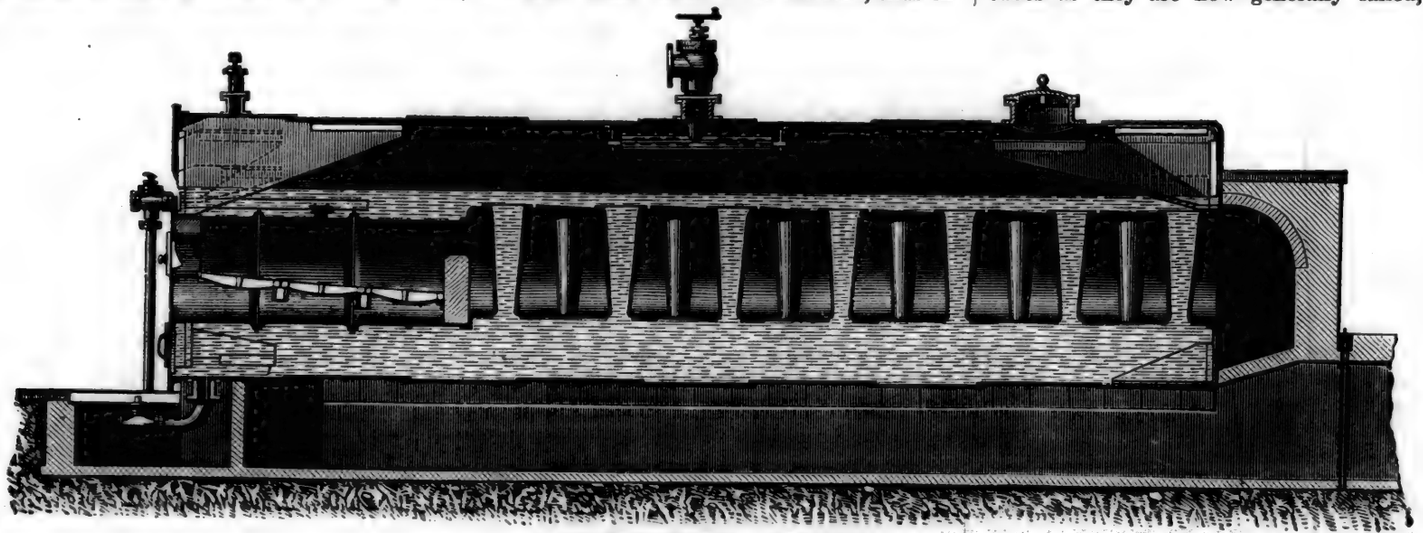


PLAN.

The Galloway boiler has been in use in England for upward of 25 years, being owned and manufactured in that country by Messrs. W. & J. Galloway & Sons, of Manchester. It is regarded in that country as the most economical and efficient steam generator now made, and has rapidly superseded other forms of boilers in use in that country.

The improvements consist in forming the top and bottom of the back flue in parallel curved lines, struck from a central line, below this flue, and in arranging the conical tubes radial to this central line, whereby greater facilities are furnished for cleaning and examining the lower part of the boiler and also in making the conical tubes of uniform length and with parallel flanges, which makes them interchangeable and allows a larger number of the same sized tubes to be inserted, thus increasing the heating surface so that a smaller boiler is now equivalent in power to one of a larger size constructed on the old plan.

The construction of the boiler will be readily understood from an examination of the illustrations herein given. The exterior presents a plain cylindrical shell, within which are placed two cylindrical furnaces which unite into one back flue, having cylindrically formed sides, with parallel curved top and bottom, struck from a center below the boiler. In this flue are placed the conical water pipes, or Galloway tubes as they are now generally called, and



LONGITUDINAL SECTION.

which present a direct heating surface to the action of the flame and promote a rapid circulation of water, thus maintaining a more uniform temperature, whereby the durability and safety of the boiler are increased, and unequal expansion and contraction, with their attendant evils of undue strains and eventual rupture, are avoided.

These conical water tubes are 10½ inches in diameter at the top and 5½ inches at the bottom, fixed in a radial position and perpendicular to the top and bottom of the flue, so as to support and brace the flue in the best manner and to intercept and break up the flames and heated gases from the furnaces. Along the sides of the flue there are also placed several wrought-iron pockets, or bafflers, which deflect the heated currents and cause then to impinge against the tubes; the end pocket, in addition, providing for the necessary expansion and contraction of this flue. After leaving the flue the gases pass along the sides of the shell to the front end of the boiler, thence back again under the center of the boiler to the chimney, by which means the maximum absorption of their heat is acquired.

In the report of the tests at the Centennial Exhibition, where three of these boilers were exhibited, in addition to achieving the most economical result in evaporation, viz., 12,125 lbs. of water per pound of combusibtle, they also gave the driest steam. These boilers also had a greater amount of steam and water space in proportion to their power than any other boiler exhibited.

The mountings and fittings have been especially designed for them, and include all the modern and most approved appliances for safe and economical working. These embrace wrought-iron furnace frames, and doors with slides to regulate the admission of air to the combustion chamber to prevent smoke; fusible plugs in the crown of each furnace, as safeguards in case the water should be reduced below the safe working line; wrought-iron solid welded manholes, water gauges in duplicate, steam pressure gauge, check feed valve, brass blow-off cock, steam junction valve, duplex safety valve, and anti-priming pipe.

Among the parties now using these boilers may be mentioned: The Crystal Plate Glass Company, of St. Louis, Mo.; the St. Joseph Lead Company, of Desloge Mines, Bone Terre P. O. Mo.; the Albany and Rensselaer Iron and Steel Company, of Troy, N. Y.; the Norfolk and Western Railroad Company, of Norfolk, Va.; the Eddystone Manufacturing Company, of Chester, Pa.; the Philadelphia Grain Elevator Company, Philadelphia; the Midvale Steel Company, Messrs. Wm. Sellers & Co., Messrs. Finley & Schlichter, and Edge Moor Iron Co., of Wilmington, Del. All of these boilers are giving great satisfaction, and it is confidently expected that in a short time they will be regarded in this country, as they are now in England, the most efficient, safe and economical steam generator now offered to the consideration of steam users.

THERE are many people who not only believe that the earth revolves on its axis, but they believe they are the axis.

Wall Safe for Cars.

J. H. LASKEY's "Wall Safe for Cars," patented September 12, 1882, is designed as a perfect security for valuables for Passengers or Express Companies in Railroad Cars.

The Safe is manufactured of indestructible material, and is absolutely fire and burglar proof. It is permanently fixed in the car, and cannot be removed without destroying a part of the car; that size for the use of Express Companies forms a part of one end of an Express Car, and it is impossible for any one to get it from its place without demolishing the whole end of the car, and then it cannot be opened except after hours of hard work. If the car is derailed or burned, the contents of the safe cannot be burned or molested, and the safe must be sent to its destination or returned to the starting point before it can be opened. The size required for Passenger use is inclosed in the side of the car for each berth; there are two locks for the use of the Passenger, one to be kept by the Passenger and one by the Conductor of the car.

The most satisfactory experiments have been made with these safes under intense heat, and the contents have been unharmed.

MR. LASKEY has also invented a new "Sleeping-Car," patented September 16, 1882.

One of the most important features in which this car differs from all others is the arrangement of the upper berth, which could be used by all other Sleeping-Car Companies to the convenience of the public and their own advantage. It is so arranged that it is thrown back to the side of the car when not in use, and by simple mechanism is carried to the top of the side, and makes part of a finished cornice.

Some of the advantages claimed for this car over others are: it is simple, less expensive, lighter, equally strong, more reliable under all contingencies, and makes a first-class Drawing-Room Car for day use, with the berths entirely removed from sight. These improvements are well worth the attention of Railroad Managers and Car Builders, and are now controlled by the LASKEY MANUFACTURING COMPANY, Boston, Mass., of whom parties interested can obtain such information as is desired.

Duplex Automatic Vacuum Railway Brake.

THIS brake is the invention of Mr. F. W. Eames, President of the Eames Vacuum Brake Company. The advantages claimed for it are, that it is simpler in its mechanism and quicker n its action than the Westinghouse brake, while at the same time it has all the advantages pertaining to the latter. Mr. Eames' invention has made it possible for any one, by simply raising a small lever, which is placed at each end of every car, to bring the entire train to a dead stop in ten seconds, while it has the further advantage of causing the cars to stop suddenly in the event of a disconnection with the engine by accident or otherwise. A trip was recently made over the Second Avenue Elevated Railroad for the purpose of testing the efficiency of this brake. The train, consisting of an engine and four cars, left the Grand street station and proceeded up the line as far as One Hundred and Twenty-seventh street. On the trip several trials were made of the new brake, and always with success, eliciting the approval of such practical engineers as Col. F. K. E. Hain, General Manager of the Manhattan Railway; C. L. Green, General Superintendent; T. W. Peeples, master mechanic; John D. Campbell, foreman of machinists; H. A. Webster, master car-builder; C. A. Thompson, master mechanic of the Long Island Railroad, and H. B. Roark, assistant train-master. By a singular coincidence, on the return trip an accidental disconnection of the cars occurred, which served to illustrate in a very practical manner the usefulness of Mr. Eames' invention, the disconnected cars coming to a dead halt without any perceptible jerk. The duplex automatic vacuum brake has been tested on all the British railways, and has been in constant use on the Lancashire and Yorkshire Railway for three years.

Car Coupling.

Editor AMERICAN RAILROAD JOURNAL:

THE following is a description of my car coupling, a patent for which was issued on the 8th inst. I claim that it is an improvement over the old link and pin coupling as used here on the Mississippi, Ouachita and Texas Railroad. Seeing the danger of standing between the cars by the brakemen in coupling on this road, I set my wits to work to contrive a coupling that would possess the two requisite features in operation for an automatic coupling of the link and pin style, as this road is so rough that no coupling of a rigid form can be used. My coupling is, however, not at all perfect, nor suited for cars of different heights, nor for loaded and unloaded cars, nor do I believe there is one out the merits of which will overcome these objections in a simple and uncomplicated form, and easy of manipulation enough to be successful on all roads, rough and smooth. My coupling is an automatic coupling and link adjustment. In uncoupling the cars (which may be done by suitably arranged cords from top or sides of boxes), by the same motion the pin is left set ready for recoupling without the aid of anybody; the lug on the pin serves to press the back end of the link down, thereby holding the link in proper shape to enter the set one, and strike the trigger, when the pin will fall and complete the coupling; in the event the heads are jammed, in raising the pin in uncoupling, the trigger will force the slack of link into the opposite head, and be uncoupled and set, when you can draw out or recouple at pleasure. Yours Respectfully,

W. E. GRISHAM.

Selma, Drew Co., Ark., Sept. 18, 1882.

THE attention of Contractors is invited to the Advertisement, in another column, of P. R. LACHICOTTE, Esq., President of the the Georgetown and Lanes Railroad Company, asking for proposals, until the 31st of October, for the construction of the road-bed of said road as covered by the survey and estimate of Major G. W. EARLE, Engineer. The office of the company is at Georgetown, S. C., where specifications, etc. may be obtained.

The Stock Exchanges and Money Market.

New York Stock Exchange.

Closing Prices for the week ending Sept. 27.

	Th.21.	F.22.	Sat.23.	M.25.	Tu.26.	W.27.
Adams Express	.....	.....	140	.....	.....	141¾
Albany and Susq.	.....	....	.....	.....	.....	.....
1st mortgage	.....	.....	....	.....	....	.....
2d mortgage	.....	.....	.....	.....	.....	.....
American Express	93¾	95	94	95	95¼	95¼
Burl., C. R. & Nor.	.....	.....	82	82	.....	.....
1st mortgage 5s	.....	.....	100½	.....	....	100½
Canada Southern	65½	65¼	66⅜	66½	67	66¾
1st mortgage guar	.....	93⅜	.....	.....	93½	94
Central of N. Jersey	79½	79¼	80⅞	79¾	79¾	78⅜
1st mort. 1890	.....	.....	.....	.....	.....	....
7s, consol. ass	.....	.....	.....	.....	.....	.....
7s, convertible ass	.....	.....	.....	.....	.....	.....
7s, Income	.....	.....	.....	.....	.....	.....
Adjustment	.....	.....	.....	.....	.....	.....
Central Pacific	92¼	92½	93	92¼	92⅜	92¼
6s, gold	.....	115	.....	115	114	.....
1st M. (San Joaq)	.....	.....	.....	.....	.....	.....
1st M. (Cal. & Or.)	.....	.....	.....	.....	.....	.....
Land grant 6s	.....	.....	.....	.....	.....	.....
Chesapeake & Ohio	25	.....	25	25	24¼	24½
1st pref	38¾	38½	39	39⅛	38⅜	39
2d pref	27	.....	.....	.....	.....	.....
1st mort., series B	86⅛	86	.....	86¼	86¼	86½
Chicago and Alton	141¼	.....	140	.....	140	.....
Preferred	.....	.....	.....	.....	.....	.....
1st mortgage	.....	.....	.....	.....	.....	122
Sinking Fund	.....	.....	.....	.....	.....	.....
Chi., Bur. & Quincy	133⅝	133¼	134⅜	134⅛	132⅞	132½
7s, Consol. 1903	.....	.....	.....	.....	.....	.....
Chi., Mil. & St. Paul	108¾	109⅛	110⅝	109¾	110	109⅛
Preferred	124	.....	125⅛	125⅜	124½	124½
1st mortgage, 8s	.....	.....	130	.....	.....	133
2d mort., 7 3-10s	.....	.....	.....	.....	.....	.....
7s, gold	.....	.....	.....	124⅛	.....	.....
1st M. (La. C. div)	.....	.....	.....	.....	.....	.....
1st M. I. & M. div.)	.....	.....	.....	.....	.....	.....
1st M. (I. & D. ext.)	.....	.....	.....	.....	.....	.....
1st M. (H.&D. div.)	117	.....	117	.....	.....	117
1st M. (C. & M. div.)	.....	.....	.....	.....	.....	.....
Consolidated S. F.	125	.....	.....	.....	125¾	.....
Chi. & Northwestern	145⅛	145¾	148	146¾	146⅛	145¼
Preferred	165¾	.....	168	167	.....	166¾
1st mortgage	.....	.....	.....	.....	.....	107
Sinking Fund 6s	.....	.....	.....	.....	.....	.....
Consolidated 7s	.....	.....	.....	.....	.....	.....
Consol. Gold bo'ds	....	125	125⅛	.....	125¾	....
Do. reg	.....	.....	.....	.....	.....	.....
Chi., R. Isl. & Pac.	135¾	135¾	137¼	136	136	136½
6s, 1917, c	..	.....	.....	.....	.....	.....
Clev., Col., Cin. & Ind.	82½	82½	83½	84	82½	83
1st mortgage	.....	.....	....	.....	.....	....
Clev. & Pittsburg gr.	.....	.....	.....	.....	.....	.....
7s, Consolidated	....	....	....	.....	.....	.....
4th mortgage	.....	.....	.....	.....	.....	.....
Col., Chi., & Ind. Cent	11⅞	11¾	10½	9¾	9¾	9¼
1st mortgage	.....	.....	.....	.....	.....	.....
2d mortgage	.....	.....	.....	.....	.....	.....
Del. & Hud Canal.	115½	.....	115⅞	115¾	115	113⅜
Reg. 7s, 1891	.....	114⅜	.....	....	.....	.....
Reg. 7s, 1884	106¾	.....	.....	.....	.....	.....
7s, 1894	.....	....	.....	.....	.....	.....
Del., Lack. & Western	145¼	144¾	147	145⅞	145⅛	143¼
2d mortgage 7s	.....	.....	.....	.....	.....	.....
Consol. 1907	.....	.....	.....	.....	.....	.....
Erie Railway	....	.....	.....	.....	.....	.....
1st mortgage	.....	.....	.....	.....	.....	126½
2d mort. 5s, ext.	.....	.....	.....	.....	.....	.....
3d mortgage	.....	.....	.....	.....	.....	.....
4th mort. 5s, ext.	.....	....	.....	.....	.....	.....
5th mortgage	.....	.....	.....	.....	.....	.....
7s, Consol. gold	.....	.....	.....	.....	.....	.....
Great West. 1st mort	.....	107	107	.....	.....	.....
2d mortgage	.....	.....	.....	.....	.....	.....
Hannibal & St. Jo.	.....	.....	.....	.....	.....	.....
Preferred	.....	87½	.....	87½	89	90
8s, Convertible	.....	.....	.....	105	.....	.....
Houston & Tex. Cen	82⅛	.....	84	.....	.....	84
1st mortgage	110	....	.....	.....	.....	.....
2d mortgage	.....	.....	.....	.....	.....	.....
Illinois Central	140¾	140½	141⅝	140¼	139⅜	139¾
LakeShore & MichSo	115⅞	115⅜	116⅜	116	115⅞	115⅝
Consol. 7s	.....	.....	.....	.....	124¼	.....
Consol. 7s, reg	.....	.....	.....	.....	.....	.....
2d Consolidated	125⅛	.....	.....	.....	.....	.....
Leh. & W. B. con. ass	.....	103¾	103½	.....	.....	.....
Long Dock bonds	.....	.....	.....	.....	.....	.....
Louisville & Nash.	71½	71⅛	73¼	71⅝	71⅞	71¾
7s, Consolidated	.....	.....	.....	.....	.....	.....
Manhattan	50⅜	.....	.....	50	.....	50
1st pref	.....	.....	.....	.....	.....	.....
Met. Elevated	.....	.....	.....	.....	.....	87⅛
1st mortgage	.....	100	100	.....	100	100
Michigan Central	103⅜	103⅛	104⅛	103¾	102⅞	100¼
7s, 1902	.....	.....	.....	.....	.....	.....
Morris & Essex	126	.....	.....	.....	.....	.....
1st mortgage	.....	.....	....	.....	.....	.....
2d mortgage	.....	.....	.....	.....	.....	.....
7s of 1871	.....	.....	.....	.....	.....	.....
7s, Convertible	...	.....	.....	.....	.....	.....
7s, Consolidated	.....	.....	.....	.....	125	125
N. Y. Cen. & Hud. R.	134	133½	134⅝	133⅜	133⅝	133⅝
6s, S. F. 1883	...	.	.....	.....	.....	.....
6s, S. F., 1887	.....	.....	.....	.....	.....	.....
1st mortgage	.....	132	.....	.....	.....	.....
1st mortgage, reg.	....	.....	.....	.....	.....	.....
N. Y. Elevated	.....	....	.....	.....	.....	104
1st mortgage	.....	.....	.....	.....	.....	117
N. Y. & Harlem	.....	....	.....	.....	.....	.....
Preferred	.....	.....	.....	.....	.....	...
1st mortgage	.....	.....	.....	.....	.....	.....
1st mortgage, reg	...	.....	.....	.....	.....	.....
N. Y. Lake Erie & W	41⅛	42	42⅞	42⅜	42⅜	42⅜
Preferred	86⅜	.....	87	87	.....	86
2d Consolidated	100½	100	100⅜	100⅜	90⅝	99⅞
New 2d 5s fund	.....	.....	.....	.....	.....	.....
N. Y., N. Hav'n & Hart	.....	.....	182	.....	.....	.....
North Mo. 1st mort	.....	.....	.....	.....	.....	.....
Northern Pacific	50¼	50⅛	51⅜	51⅛	51⅝	49⅛
Preferred	96⅜	97	98⅛	97⅛	96⅝	94⅜
Ohio & Mississippi	39	38⅞	40	39⅛	38⅛	38⅜
Preferred	.....	.....	.....	.....	.....	.....
2d mortgage	.....	.....	.....	.....	.....	.....
Consolidated 7s	.....	.....	.....	.....	.....	.....
Consol. S. Fund	.....	.....	.....	.....	.....	.....
Pacific Mail S. S. Co	44⅞	45	45¾	45	44⅛	45
Pacific R. R. of Mo.	.....	.....	.....	.....	.....	.....
1st mortgage	.....	.....	.....	.....	105	105
2d mortgage	.....	.....	.....	.....	.....	.....
Panama	167	.....	.....	.....	.....	.....
Phila. & Reading	63½	63⅛	64¾	63⅜	63⅝	62⅜
Pitts, Ft. W. & Chi. gtd	.....	.....	.....	.....	.....	.....
1st mortgage	.....	.....	.....	.....	.....	.....
2d mortgage	.....	.....	.....	134	.....	.....
3d mortgage	.....	.....	.....	.....	.....	.....
Pullman Palace Car	...	130½	.....	130⅛	130	129¾
Quicksil'r Min'g Co	.....	.....	.....	.....	.....	.....
Preferred	.....	.....	.....	.....	.....	...
St. Louis & San Fran	.....	....	.....	.. ..	.....	.....
Preferred	61	61	63¼	62⅜	.....	61⅜
1st Preferred	99⅛	.....	100¼	.....	99⅛	.....
St. L., Alt'n & T. H.	.....	.....	48⅞	.....	.....	45
Preferred	89	....	.....	.....	.....	89
1st mortgage	.....	.....	.....	.....	...	.....
2d mort. pref.	.....	.....	.....	.....	.....	.....
Income bonds	.....	.....	.....	.....	....	.....
St. L., Iron Mt. & S	.....	.....	.....	.....	.....	.....
1st mortgage	.....	.....	.....	.....	.....	113
2d mortgage	.....	.....	....	108	.....	.....
Toledo and Wabash	....	.....	.....	.....	.....	.....
1st mortgage	.....	107⅞	....	.....	.....	.....
2d mortgage	...	105	.....	.....	.....	.....
7s, Consolidated	.....	.....	....	....	.....	.....
St. Louis Division	.....	.....	.....	102	.....	.....
Union Pacific	111⅛	110¾	112¾	111⅛	111⅛	110⅞
1st mortgage	115⅞	116	.....	.....	.....	.....
Land Grant 7s	.....	114	.....	114	.....	.....
Sinking Fund 8s	118⅛	.....	.....	.....	.....	118
United States Ex	70	72	. ...	.....	.....	.....
Wabash, St. L. & Pac	36⅜	36⅛	37⅞	37⅛	36¾	36½
Preferred	67⅛	67⅛	68¾	68¼	68⅛	67¾
New mort. 7s	.....	.....	.....	.....	.....	.....
Wells-Fargo Ex	130	.....	.....	.....	.....	.....
Western Pacific b'ds	.....	.....	.....	.....	.....	.....
Western Union Tel.	89⅛	88¾	90	89⅜	89	88⅜
7s, S.F conv., 1900	.....	.....	.....	.....	.....	.....
FEDERAL STOCKS :—						
U. S. 4s, 1907, reg	.....	.. ..	119	.....	118¾	....
U. S. 4s, 1907, coup	.....	120½	.....	.....	119¾	.....
U. S. 4½s, 1891, reg	.....	113½	...	.....	.....	.....
U. S. 4½s, 1891, coup	.....	113	113	.....	.....	.....
U. S. 5s, cont'd at 3½	.....	.....	.....	.....	100⅜	.....
U. S. 6s cont'd at 3½	.....	...	.....	.....	.....	.....
Dt. of Col. 3-65s, reg	.....	.....	.....	.....	.....	.....
Dt. of Col. 3-65s, coup	.....	.....	.....	.....	.....	...

Boston Stock Exchange.

Closing Prices for the Week Ending Sept. 27.

	Th.21.	F.22.	Sat.23.	M.25.	Tu.26.	W.27.
Atch., Top. & San. Fe.	94	93⅜	93⅝	94⅜	93⅞	93⅜
1st mortgage	.....	.....	.....	.....	.....	.....
Land Grant 7s	114½	.....	.....	113¾	.....	.....
Boston & Albany	172	.....	173	173	173	.....
Boston and Lowell	.....	.....	.....	.....	...	.....
Boston & Maine	.....	.....	156	.....	.....	.....
Boston & Providence	.....	.....	.....	160	.....	.....
Bos'n, Hart. & Erie 7s	.....	.....	....	57⅜	57	.....
Burl. & Mo. R. L. G. 7s	.....	.....	.....	.....	.....	.....
Burl. & Mo. R. in Neb	.....	.....	.....	.....	.....	.....
6s, exempt	.....	.....	.....	.....	.....	111
4s	.....	.....	.....	.....	.. ..	.....
Chi., Burl. & Quincy	133⅜	133¼	133¾	134⅜	132¼	132½
Cin., Sand. & Clev ($50)	.....	28	.....	.....	.....	....
Concord ($50)	....	.....	.....	.....	.....	.....
Connecticut River	.....	.....	.....	.....	.....	.....
Eastern	.....	44½	.....	.....	....	43¾
New 6s, Bonds	.....	.....	.....	.....	.....	.....
Fitchburg	.....	.....	.....	.....	.....	130
N. Y. & New England	57	.....	56¾	57¾	57¾	57
7s	.....	116¾	116	.....	.....	.....
Northern N. H	.....	.....	111	.....	.....	111¾
Norwich & Worcester	.....	.....	.....	.....	.....	....
Ogden & Lake Cham	.....	.....	.....	.....	.....	.....
Old Colony	.....	.....	134	.....	135	135⅛
Ph., Wil. & Balt. ($50)	.....	.....	.....	.....	.....	.....
Portl'd, Saco & Ports	111	.....	.....	.....	.....	.....
Pueblo & Ark Val 7s	....	.....	.....	114⅜	.....	.....
Pullman Palace Car	132	131½	.....	.....	130	130½
Union Pacific	112⅜	110½	.....	112⅜	110⅜	110⅛
6s	114	.....	.....	.....	.....	.....
Land Grant 7s	.....	.....	.....	.....	.....	.....
Sinking Fund 8s	.....	.....	.....	.....	.....	.....
Vermont & Mass	.....	.....	.....	.....	.....	.....
Worcester & Nashua	.....	.....	.....	.....	.....	.....
Cambridge (Horse)	.....	.....	.....	.....	.....	.....
Metropolitan (Horse)	.....	.....	.....	.....	.....	.....
Middlesex (Horse)	.....	.....	.....	.....	.....	.....
Cal. & Hecla Min'g Co	248¾	249	.....	249	248	.....
Quincy	68⅛	68½	.....	68⅛	.....	88

Philadelphia Stock Exchange.

Closing Prices for the Week Ending Sept. 26.

	W.20.	Th.21.	F.22.	Sat.23.	M.25.	Tu.26.
Allegh'y Val. 7 3-10s	.....	.....	.....	.....	122½	.....
7s, Income	.....	.....	.....	.....	.....	.....
Buff., Pitts & West.	21¾	21¾	21⅝	22¼	21⅞	21⅛
Camd'n & Am. 6s, '83	.....	.....	.....	.....	.....	.....
6s, 1889	.....	.....	.....	.....	.....	.....
Mort. 6s, 1889	.....	.....	.....	.....	.....	.....
Camden & Atlantic	.....	.....	.....	.....	.....	.....
Preferred	.....	.....	58½	.....	56½x	56½
1st mortgage	.....	.....	.....	.....	.....	.....
2d mortgage	.....	.....	.....	.....	.....	.....
Catawissa	.....	.....	22	.....	.....	.....
Preferred	....	.....	.....	.....	.....	.....
2d pref	.....	.....	.....	.....	.....	.....
7s, new	.....	.....	.....	.....	.....	.....
Del. & Bound Brook	.....	.....	.....	.....	.....	.....
7s	.....	126	126½	.....	.....	.....
Elmira & Williamsp't	41	.....	.....	.....	.....	.....
Preferred	....	.....	.....	.....	.....	.....
Hunt. & B. Top Mt.	16	16⅞	17	17½	17½	17½
Preferred	.....	32	32	32⅝	33	32⅝
2d mortgage	.....	.....	.....	.....	.....	.....
Lehigh Navigation	44⅞	45	44⅝	44⅞	44⅞	44⅞
6s, 1884	.....	.....	.....	.....	.....	.....
Gold Loan	113	.....	113	113¾	113¾	113½
Railroad Loan	.....	.....	.....	.....	.....	114
Conv. Gold Loan	...	.....	.....	.....	.....	.....
Consol. Mort, 7s	....	.....	.....	.....	.....	.....
Lehigh Valley	66⅝	67⅜	66¾	67½	66¾	66⅝
1st mort. 6s, coup	.....	.....	.....	122½	.....	.....
1st mort. 6s, reg	122½	.....	.....	.....	.....	.....
2d mort. 7s	.....	.....	.....	134½	.....	.....
Consol mort. 6s	.....	.....	.....	.....	.....	122
Consol. mtg. 6s, reg	.....	.....	.....	.....	.....	...
Little Schuylkill	58	.....	58½	.....	.....	.....
Minehill & Sch. Hav'n	....	.....	.....	.....	.....	.....
North Pennsylvania	65	.....	.....	.....	.....	.....
1st mortgage 6s	.....	.....	.....	.....	.....	.....
2d mortgage 7s	.....	122½	.....	.....	.....	.....
Genl. mtg. 7s, coup	.....	.....	.....	.....	.....	.....
Genl. mtg. 7s, reg	.....	.....	.....	.....	.....	.....
Northern Central	55⅞	.....	56½	57½	57½	56¾
5s	.....	97¼	.....	97½	.....	.....
Northern Pacific	50¾	50½	50¼	51¾	51	51
Preferred	96⅜	96⅛	97	98	97⅛	96⅜
Pennsylvania R. R.	64½	64⅜	64¼	64½	.....	64⅛
1st mortgage	.....	.....	.....	.....	.....	.....
Gen'l mort	.....	.....	.....	.....	125	125
Gen'l mort reg	.....	.....	.....	.....	.....	...
Consol. mort. 6s	.....	.....	.....	.....	.....	.....
Consol. mort. reg	..	.....	.....	.....	.....	.....
Pa. State 5s, new	.....	.....	.....	117⅞	.....	.....
do 4s, new	.....	.....	.....	116¾	.....	.....
do 3⅜s, 1912	.....	.....	.....	.....	.....	.....
Phila. & Reading	32⅛	32	31⅝	32¼	32	31⅞
1st mortgage 6s	.....	.....	.....	.....	.....	.....
7s of 1893	.....	.....	.....	.....	.....	.....
7s, new convert	76⅜	...	.....	76¾	76½	76⅝
Consol. mort. 7s	127¾	127⅛	.....	.....	.....	.....
Consol. mort. reg	.....	127¾	.....	.....	.....	.....
Gen'l mort. 6s	96	95⅜	95¼	96	96¼	.....
Def. Income bonds	.....	.....	.....	.....	.....	.....
Philadelphia & Erie	22	23	23	23	23⅜	23⅜
1st mortgage 5s	.....	.....	.....	.....	.....	105½
2d mortgage 7s	.....	.....	.....	.....	.....	.....
Pittsb., Cin. & St. L. 7s	.....	121	.....	.....	120¾	121
Pitts., Tit. & Buff. 7s	....	.....	.....	.....	.....	.....
Schuylkill Navi't'n	..	.. ..	.. ..	.....	.....	.....
Preferred	.....	.....	.....	.....	14	14
6s, 1895	.....	.....	.....	.....	.....	.....
6s, 1907	.....	.....	.....	.....	.....	.....
United Co. of N. J.	.....	.....	.....	.....	.....	.....
Hestonville, (Horse)	16	....	.....	.....	.....	.....
Chestnut & Walnut)	.....	.....	.....	.....	.....	.....

Baltimore Stock Exchange.

Closing Prices for the Week Ending Sept. 26.

	W.20.	Th.21.	F.22.	Sat.23.	M.25.	Tu.26.
Baltimore & Ohio....						
6s, 1885.....						
Central Ohio ($50)...						
1st mortgage.....						
Marietta & Cincin'ti.						
1st mortgage, 7s..						
2d mortgage, 7s....						
3d mortgage, 8s..						
Northern Cen. ($50).		55⅞	56⅛	57⅛	57⅛	57
2d mort. 6s, 1885..		106				
3d mort. 6s, 1900..						
6s, 1900, gold.....				116		
6s, 1904, gold.....						
Pitts. & Connelsv. 7s.						
Virginia 6s Consol..	60	59¾	59	59	59⅛	
Consol. coupons...	60					
10-40 bonds.....	43	42⅝		43¼		43
Def'd Certificates.						
Western Maryland..			16			
1st M.,end,by Balt						
2d M., do.						
3d M., do.						
1st M., unendorsed						
2d M.,end.Wash Co						
2d M., preferred...						
City Passenger R. R.	42					

London Stock Exchange.

	Closing Prices—Sept. 8.		Sept. 15.	
Baltimore and Ohio 5s, 1927.....	107	109	107	109
Central of N. J., $100 shares.....	85	90	85	90
Do. consol. mort.....	112	114	109	111
Do. Income Bonds.....	92	96	92	96
Central Pacific of Cal., $100 shs..	95½	96⅛	96	97
Do. 1st mort. 6s, 1895-'98.....	117	119	117	119
Det., G'd Haven & Mil. Equip bds.	116	118	113	115
Do. Con. M. sp. c., till '83 after 6p. c.	114	116	113	115
Illinois Central $100 shares.....	141	143	145	147
Do. S. F. 5s, 1903.....	106	108	106	108
Lehigh Valley Cons. mort. 1923...	115	119	115	119
Louisville and Nashville mort. 6s	97	99	97	99
Do. capital stock $100 shares...	74	76	75	77
N. Y. Cen. & Hud. R. mort. bonds.	132	136	132	136
Do. $100 shares.....	137	138	139½	140½
Do. mort. bonds (stg.).....	121	123	121	123
N. Y. Lake Erie & West. $100 shs.	40¾	41¼	44¼	44¾
Do. 6 p. c, pref. $100 shares....	81	83	88	90
Do. 1st Con. Mort. bonds (Erie).	126	129	124	127
Do. do. Funded Coupon bonds.	124	127	124	127
Do. 2d Consol. Mort. bonds....	100	102	103	105
Do. do. Funded Coupon bonds.	95	97	96	98
N. Y., Pa. & Ohio 1st mort. bonds.	53½	54½	55	56
Do. Prior Lien bonds (sterling).	100	105	100	105
Pennsylvania $50 shares.....	64¼	65	65⅛	66
General Mortgage.....	123	125	122	124
Phil. & Erie Gen. mort. 6s, 1920...	117	119	117	119
Philadelphia & Reading $50 shs..	31¾	32¼	33	33⅛
General Consol Mortgage.	115	117	115	117
Do. Improvement Mortgage....	104	106	105	107
Do. Gen. Mtg. '74, ex-def'd coup.	97½	98⅛	97⅛	98⅛
St. L. Bridge 1st mort. gold bond.	125	127	122	124
Do. 1st. pref. stock.....	97	100	97	100
S. P'fic of Cal., 1st mort 6s, 1905-6.	108	110	106	108
Union Pacific 1st mtg. 6s, 1896-9..	120	124	118	120
Wabash, St. L. & P. $100 shares..	38⅛	39¾	39	40
Do. $100 pref. shares.....	69⅛	70⅝	71½	72½
Do. gen. mort. bonds....	88	90	90	92

AMERICAN RAILROAD JOURNAL.

Financial and Commercial Review.

THURSDAY EVENING, September 28, 1882.

THE quotation for call loans on stocks this morning was 7@8 per cent, and on United States bonds about 6 per cent. In the afternoon the rate was 7 per cent, dropping, however, at one time to 4@5 per cent, but finally closed at 6 per cent. The fair average rate for the day was 7 per cent.

The posted rates for prime bankers' sterling were 4·83@4.88; the actual rates were 4.82@4.82½ and 4.87@4.87½, with cables 4.88@4.88½, and prime commercial bills 4.80¾@4.80¾. The rates for Continental bills were: Francs, 5.23⅛@5.22½ for 60 day, and 5.19⅜@5.18¾ for demand. The actual rates for richsmarks were 94⅛@94⅝ and 99⅜@95⅛; and for guilders 39⅞@40⅛.

The first meeting of the Governing Committee of the New York Stock Exchange since the summer vacation was held on the 27th inst., when stocks, bonds, etc., were listed to the amount of $37,280,000, as follows: 10,000 shares of the common stock of the Milwaukee, Lake Shore and Western Railway, $100 each, $1,000,000; 1,275 5 per cent bonds of the Burlington, Cedar Rapids and Northern Railway, $1,000 each, $1,275,000, issued to pay for additional road built; 1,500 bonds of the Minneapolis Union Railway, $1,000 each, $1,500,000; 100,000 shares Illinois Central Railroad Company, leased line, 4 per cent stock, $100 each, $10,000,000; 504 first mortgage bonds of 1911 of the Texas Central Railway, $1,000 each, $504,000, issued to pay for new road; 140,000 shares of the American Telegraph and Cable Company, $100 each, $14,000,000; 5,000 6 per cent sinking fund bonds of the Atchison, Topeka and Santa Fe Railway, $1,000 each, $5,000,000. In addition to the above, the committee, on application of the committee representing the holders of the first mortgage consolidated 6 per cent bonds of the New York City and Northern Railroad, ordered the receipts of the Farmers' Loan and Trust Company, with which the bonds are deposited, placed on the list when the certificates are ready for use. The amount is $4,000,000.

The Secretary of the Treasury at Washington issued, on the 23d inst., the 117th call for the redemption of bonds of the 5 per cent funded loans of 1881. The call is for $25,000,000, and the principal and interest will be paid at the Treasury of the United States, in the City of Washington, D. C., on the 23d of December, 1882, and the interest on said bonds will cease on that day, viz:

Registered bonds of the acts of July 14, 1870, and January 20, 1871, continued during the pleasure of the Government under the terms of circular No. 52, dated May 12, 1881, to bear interest at the rate of three and one-half per cent per annum, from August 12, 1881, as follows: $50—No. 851 to No. 1,592, both inclusive; $100—No. 7,101 to No. 13,222, both inclusive; $500—No. 3,501 to No. 5,923, both inclusive; $1,000—No. 14,501 to No. 20,700, both inclusive; $5,000—No. 4,125 to No. 5,776, both inclusive; $10,000—No. 13,801 to No. 18,402, both inclusive; $20,000—No. 1,820 to No. 2,241, both inclusive; $50,000—No. 5,251 to No. 6,033, both inclusive. Total, $25,000,000.

The bonds described above are those last dated and numbered as required by Section 3 of the act of July 14, 1870.

Many of the bonds originally included in the above numbers have been transferred or exchanged and cancelled, leaving outstanding the amount above stated.

Bonds forwarded for redemption should be addressed to the "Secretary of the Treasury, division of loans, etc., Washington, D. C.," and all bonds called by this circular should be assigned to the "Secretary of the Treasury for redemption." Where checks in payment are desired in favor of any one but the payee, the bond should be assigned to the "Secretary of the Treasury for redemption for account of —— ——."

The Chicago and Northwestern Railway Company notified the New York Stock Exchange on the 20th inst. that it had perfected consolidation with the Menominee River Railroad Company and the Escanaba and Lake Superior Railroad Company—two of its proprietary roads in Michigan—at the adjourned meeting of the stockholders held at Escanaba, Mich., on the 14th inst., and that it would after thirty days, issue at its convenience the amount of 16,200 shares of its common stock in payment and exchange for the capital stock of said Menominee Railroad Company, and of the Escanaba Railroad Company, in accordance with the terms of such consolidation.

The Board of Directors of the Lake Shore and Michigan Southern Railway Company have declared a quarterly dividend of two per cent upon its capital stock, payable November 1 at the Treasurer's office, Grand Central Depot, this city, to stockholders of record at the closing of the transfer books the 2d of October. The books will be reopened on the 6th of November.

The gross earnings of the Philadelphia and Erie Railroad for the month of August, 1882, were $420,329.26, against $303,848.93 for the month of August, 1881; the operating expenses were $233,910.71, against $243,256.9- in 1881, and the net earnings $186,418.55, against $60,591.-97 in 1881, showing an increase of $125,826.58. The gross earnings for the first eight months of the year we e $2,522,700, against $2,318,585 for the corresponding period of 1881. The net earnings were $920,909, against $738,842.29 last year, an increase of $182,066.71.

The gross earnings of the West Jersey Railroad for the month of August were $199,246.07, which includes $140,991.15 for the main line and $49,747 from the West Jersey and Atlantic Railroad, and shows an increase of $24,698.02 as compared with the same month last year. The operating expenses were $89,848.59, leaving net earnings of $109,396.48, an increase of $6,771.99 as compared with the corresponding month of last year.

The gross receipts of the Buffalo, Pittsburgh and Western Railroad for August were $79,169, and those of the Oil City and Chicago Railroad, $12,253: total, $91,422. The expenses during the same month were $47,661 and the net profits, $43,761—being an increase as compared with the same month last year, of $11,768. The net earnings of both companies for the eight months ending August 31 were $289,856, being an increase of $153,957 compared with the corresponding period last year.

The following quotation of sales of railway and other securities, for the week, are in addition to those given elsewhere in our columns.

New York.—Am. Dock and Imp. 5s, 94½; Allegheny Central, 30¾; Atchison, Topeka and Santa Fe, 93½; Boston and New York Air Line, pref., 78½; Cairo and Fulton 1st, 107; Chicago and Northwestern Interest bonds, 104; Chicago, St. Paul, Minneapolis and Omaha, 51⅝; do. pref., 110⅞; do. consol., 106; Central Iowa, 33¾; do. 1st, 111; Chicago, St. Louis and New Orleans, 80; Chicago, St. Paul, and Minn. 1st, 114; Chesapeake and Ohio cur. 6s, 53; Chicago, Milwaukee and St. Paul, Chicago and Pacific West div. 1st, 92⅞; do. Southern Minn. div. 1st, 107; do. southwest div. 1st, 108½; do. Chicago and Pacific, div. 1st, 108; Col. Chicago and Indiana Central inc., 50; do. trust Co. certif. ass., sup., 118; Chicago, Burlington and Quincy, 5s, S. F., 104; Dubuque and Sioux City, 93½; do, 1st, 97½; do. 2d div., 114; Denver and Rio Grande, 59¾; do. 1st, 113½; do. consol., 99; Delaware and Hudson 1st, Penn. div., 128; Denver, South Park and and Pacific 1st, 102; East Tennessee, Virginia and Georgia 1o; do. pref., 17; do. inc., 44; do. 5s, 73; Evansville and Terre Haute, 80; do. 1st, 96⅞; Green Bay, Winona and St. Paul, 10⅜; do. 1st, 83½; Gulf, Colorado and Santa Fe 1st, 107; Houston and Texas Central, 1st. Western div., 106; do. Waco and N. W. div. 1st, 110; Indiana, Bloomington and Western, 46¼; do. 1st, 91; do, Eastern div. 6s, 95; International and Gt. Northern 1st, 106; do. coup. 6s, 83; Kansas Pacific 1st, consol 104; do. 6s, Denver div. ass., 109; do. 6s, 1895, 110¾; Keeokuk and Des Moines 1st, 103½; Louisiana and Missouri River, 19; Long Island, 62¾; Lake Erie and Western, 39⅛; Louisville, New Albany and Chicago, 70; Lafayette, Bloomington and Muncie 1st, 102; Louisville and Nashville, genl. mort. 6s, 95; do. St. Louis div. 1st, 100½ Midland New Jersey 4-5-6s, 86½; Metropolitan Elevated Railway 2d, 90; Manhattan Beach, 21; Minneapolis and St. Louis, 33; do. pref., 73¼; do. 1st, 116½; do Iowa ext. 1st, 112; Miss uri, Kansas and Texas, 38¾; do. genl. mort. 6s, 87¾; do. 2d, 67½; Missouri Pacific, 107⅛; do. 1st, consol., 101¾; do. 3d, 112; Memphis and Charleston, 58; Michigan Southern, S. F. 107½; Milwaukee, Lake Shore and Western, 54½; do. 1st, 101½; Marietta and Cincinnati 2d pref., 6½; Mobile and Ohio 1st deben., 79; do. 2d deben., 47; Milwaukee and Northern, 1st, 98; New York, Chicago and St. Louis, 15¼; do. pref., 32¾; do. 1st, 92; Nashville, Chattanooga and St. Louis, 59½; do. 1st, 113¼; New York, Ontario and Western, 27⅞; Norfolk and Western, 21⅛; do. pref., 58; do. gen'l mort., 102⅞; New York City and Northern gen'l mort., 56; Northern Pacific 1st, 103¾; Ohio Central, 17⅞; do. 1st, 92; Oregon Railway and Nav., 160⅛; do. 1st, 108⅛; Oregon Trans., 92½; New Orleans Pacific 1st, 91; Ohio Southern, 18; do, inc., 34; Oregon Short Line 6s, 102; Peoria, Decatur and Evansville, 34½; do. 1st, 104½; Rochester and Pittsburgh, 24¾; do. 1st, 104½; do. inc., 46; Richmond and Alleghany, 20½; do. 1st, 85½; Richmond and Danville, 112½; do. deben., 77; do. 1st, 100; Richmond, Danville and West Point, 61¾; Rome, Watertown and Ogdensburg inc., 40; St. Paul and Duluth, 35; do. pref., 94; St. Paul, Minn. and Man., 160; do. Dakota ext. 1st, 108; South Carolina, 30; do. 1st, 102½; Southern Pacific of Cal. 1st, 106⅜; St. Paul and Sioux 1st, 112; St. Louis, Iron Mt. and Southern 5s, 80½; St. Louis, Kansas City and Northern, R. E. 7s, 105; St. Louis, Vandalia and Terre Haute 2d guar., 110½; St. Louis and San Francisco 2d, Class C, 90; Scioto Valley 1st, 94; Texas and Pacific, 49½; do. inc. L. G., 63¾; do. consol. 6s, 92; do. Rio Grande div. 1st, 83; Texas Central 1st, 108; Utah Southern ext. 1st, 100; Wabash, St. Louis and Pacific gen'l mort. 6s, 87; do. Iowa div 1st, 90; do. Chicago div. 1st, 85; Winona and St. Peter 2d, 128¼; Arkansas 6s, Fund, 31; do. 7s, L. R. P. B. & N. O., 31; Alabama, class A, 81; Tennessee 6s, 53; do. Compromise bonds, 60; Virginia 6s, def., 13; Mutual Union

Telegraph, 25¼; do. 6s, 77; Colorado Coal and Iron, 44; Cameron Coal, 21; New Central Coal, 20; Homestake, 18½; Ontario, 39⅜; Standard, 7½.

Boston.—Atlantic and Pacific, inc, 26; do. 6s, 96⅜; Atchison, Topeka and Santa Fe guar., 114; Boston Land, 7¼; Boston Water Power, 3⅛; Boston and Albany 7s, 124½; Connecticut and Passumpsic Rivers, 95; Chicago, Milwaukee and St. Paul, Dayton div. 1st, 103¾; Connotton Valley, 7⅛; do. 6s, 64; Central of Iowa, 134¼; Chicago and West Michigan, 67; Chicago, Burlington and Quincy 4s, old, 86; do. Denver exten. 4s, 84; Flint and Pere Marquette pref., 96; Iowa Falls and Sioux City, 91; Kansas City, St. Joseph and Council Bluffs 7s, 115; Little Rock and Ft. Smith, 56; do. 7s, 107¼; Maine Central, 85; Massachusetts Central, 4⅛; Mexican Central, 24; do. 7s, 81; do. block No. 3, 105; Marquette, Houghton and Ontonagon, 69⅛; Michigan Central, 102; New York and New England 6s, 105½; New Mexico and Southern Pacific 7s, 114⅜; Noadway Valley 7s, 107; Ogdensburg and Lake Champlain inc., 35; Oregon Short Line 6s, 102; Old Colony 6s, 116; Sonora 7s, 106; Summit Branch, 12; Toledo, Delphos and Burlington Branch inc., 17; do. Dayton div. inc., 18¾; Wisconsin Central, 19¾; Atlantic Mining, 17; Allouez, 3; Brunswick Antimony, 10; Franklin, 16⅝; Hnron, 3⅛; Harshaw, 1⅝; Osceola, 35; Pewabic, 14⅝; Silver Islet, 14; Sullivan, 2⅛.

Philadelphia.—Camden and Atlantic pref. scrip, 101; Central Transp., 35; Harrisburg and Lancaster R. R., 75; Nesquehoning Valley, 54⅜; Philadelphia and Reading R. R. deben. 6s, 65; do. scrip, 100; Philadelphia City 6s, 1894, 126; do. 1895, 127⅛; do. 1899, 131; Philadelphia, Wilmington and Baltimore 4s, 95¼; Philadelphia, Germantown and Norristown, 111; Peoples' Pass. R. W., 16; Pennsylvania Canal 6s, 90; Pennsylvania Co. 4½s, 95⅞; St. Paul and Duluth, 34; Schuylkill Nav. 6s, 1897, 106⅛; do. 6s, Boat Loan, 65; Texas and Pacific consol. mort. 6s, 94; West Philadelphia Pass. R. W., 115. The latest quotations are: City 6s, 108@120; do. free of tax, 127@132; do. 4s, new, 108@114; Pennsylvania State 5s, new loan, 116⅛@118; do. 4s, old, 108@113; do. 4s, new, 116@117; Philadelphia and Reading Railroad, 31⅛@31¾; do. consol. mort. 7s, reg., 126@127; do. gen'l mort. 6s, coupon 95¼@96; do. 7s, 1893, 121@—; do. new conv., 76@76¼; United New Jersey R. R. and Canal, 189½@—; Buffalo, Pittsburg and Western, 21⅛@21¾; Pittsburgh, Titusville and Buffalo 7s, 93¼@94½; Camden and Amboy mort. 6s, 1889, 114@115; Pennsylvania R. R., 64⅜@64½; do. general mort. 6s, coupon, 125@125½; do. reg., 127@129; do. consol. mort. 6s, reg., 120½@121½; Little Schuylkill R. R., 57⅛@58½; Schuylkill Navigation pref., 13@15; do. 6s, 1882, 90@91; Elmira and Williamsport pref., 58@59; do. 5s, 100@101; Lehigh Coal and Navigation, 44⅝@44⅞; do. 6s, 1884, 103½@104½; do. R. R. loan, 114@114¼; do. Gold Loan, 113@114; do. consol. 7s, 117@118; Northern Pacific, 50⅝@50⅞; do. pref., 96⅝@96¾; North Pennsylvania, 64⅛@65; do. 6s, 106@107; do. 7s, 122@123; do. 7s, General mort. reg. 123@125; Philadelphia and Erie, 23@24; do. 7s, 114@115; do. 5s, 105⅛@106; Minehill, 61⅛@62; Catawissa 22@24; do. pref., 56@—; do. new pref., 45@55; do. 7s, 1900, 117@—; Lehigh Valley, 66⅞@67¼; do. 6s, coupon, 122@123; do. reg., 122@123; do. 7s, 133@135; do. consol. mort., 121@122; Fifth and Sixth streets (horse), 170@—; Second and Third, 112@115; Thirteenth and Fifteenth, 70@75; Spruce and Pine, 42@44; Green and Coates, 80@90; Chestnut and Walnut, 90@93; Germantown, 70@75; Union, 110@111; West Philadelphia, 112@120; People's, 14@—; Continental, 103@105.

Baltimore.—Atlanta and Charlotte 1st, 108; Atlantic Coal, 1.10; Baltimore and Ohio 1st pref., 127; do. 2d pref., 122½; Baltimore City 5s, 1900, 118; do. 5s, 1916, 125; do. 1894, 114; Chesapeake and Ohio Canal 6s, 37; Charlotte, Columbia and Augusta, 53; Columbia and Greenville 1st, 100⅝; Marietta and Cincinnati 1st Trust certificates, 127¼; do. 2d do., 101½; do. 3d do., 57¼; Maryland Defense 6s, 106; Northern Central 5s, series A, 97¼; Ohio and Mississippi, Springfield div. 1st, 120½; Virginia and Tennessee 2d, 101½; Virginia Midland 2d mort., 108; do. 5th mort., 93¾; Virginia Peelers, 35½; do. coupons, 38; do. 10-40 coupons, 66; Wilmington, Columbia and Augusta, 108. The latest quotations are: Atlanta and Charlotte 1st, 107½@108¼; Baltimore and Ohio, 194@198; do. 6s, 1885, 106½@107; Baltimore City 6s, 1890, 114½@115½; do. 4s, 1920, 111¾@—; Central Ohio 1st, 108⅝@109; Canton Co. 6s, 104@105; Columbia and Greenville 1st, —@101; Marietta and Cincinnati 1st, 127¼@128; do. 2d, 100¾@101½; do. 3d, 57@57¼; Northern Central, 56⅞@57; do. 6s, 1900, gold, 115½@116¼; Virginia Midland inc., —@71; Virginia consols, 59@59¾; do. 10-40s, 42¾@43¼.

De Lesseps' Canals.

It is often taken for granted that because M. de Lesseps severed the Isthmus of Suez he must also succeed in severing that of Panama. But the ditch which he dug in the sand from Port Said to Suez cannot for a moment be compared to the channel which he has undertaken to hew through the rocks and swamps of Panama. The new canal will only be half as long as the old one, but, as it passes through a mountain range necessitating a clean cut 350 feet deep through solid rock, the difficulty of its construction cannot be estimated by its length. In Africa the River Nile was of invaluable service to M. de Lesseps. In America, after the earthquakes, his greatest enemy is the River Chagres, whose turbulent torrent, unless curbed by a dam the like of which has never been constructed by engineer, is certain to destroy the canal the first rainy season. In Suez he was close to the over-stocked labor market of three continents, and in the immediate neighborhood of the workshops of the world. In Panama he has to import negroes from Jamaica and coolies from China. All his machinery has to be transported thousands of miles from Europe or America. But even in Suez he would probably have failed had it not been for the lavish support of the late Khédive and the powerful patronage of Napoleon III. The Colombian Government has no resources to place at his disposal, and the undisguised jealousy of the United States will probably lead to the construction of a competing canal with an American guarantee. Yet, even if we accept the Suez precedent, it is far from reassuring for the holders of Panama stock. When M. de Lesseps began to make the Suez Canal he estimated its cost at a little more than £8,000,000. Before it was opened it cost little less than £20,000,000. M. de Lesseps estimates the cost of cutting the Panama Canal at £26,000,000. At the Suez rate it will not be completed at much below £60,000,000. At present he has raised £6,000,000, not including the money required to purchase the railroad. There is only one point more to which we need now advert. At Suez M. de Lesseps has a monopoly of the traffic, whereas the Foreign Affairs Committee of the American House of Representatives has already reported in favor of a bill incorporating a company with a Government guarantee to cut a maritime canal through Nicaragua. There may be traffic enough to pay for making one canal from the Atlantic to the Pacific, but what prospect is there of a dividend if there are two?—*Pall Mall Gazette.*

The Bank of England, in settlements involving fractions of a penny, always reckons such fractions in its own favor. It has thus accumulated the astonishing sum of $716,360. The London *Economist* cites this as an example of the power of accumulation of small amounts, and praises the wisdom of the English Government in establishing the postal savings bank, in which deposits of one penny are received. During the year 1881 the deposits in this institution were $12,500,000.

Two first-class passenger cars of the Eastlake design, finished in ash and mahogany and richly ornamented, were shipped to the Cincinnati, Wabash and Michigan Railroad on the 25th inst. by the Jackson & Sharp Company, of Wilmington, Del.

The *Two Republics*, an English paper published in the City of Mexico, says of wheat in that country: "The fact that American exporters are looking toward Mexico for wheat for exportation from the southern ports of the United States should be of interest to our readers who reside in the northern part of Mexico. If there is any one product for which the soil of the States of Nuevo Leon, Coahuila, Durango, Chihuahua and Sinaloa is peculiarly adapted, that product is most assuredly wheat, the State of Coahuila in particular having long been renowned for the superiority of its flour. Whether the wheat grown in Mexico will pass out of the country across the Rio Grande or through the port of Tampico remains to be seen, but it is probable that the Huntington-Frisbie road, which is to pass through the State of Coahuila, and which will connect at Eagle Pass, Texas, with the Southern Pacific Railway system of the United States, will carry out of the country large quantities of this grain, in which case it will be shipped from New Orleans to Europe. In any event, however, it should be encouraging to Mexican farmers to know that, as regards time and distance, the wheat raised in the northern sections of the Republic will have a considerable advantage over that grown in California, one of the first wheat growing countries in the world, and which has for many years past shipped immense quantities of this grain to Europe."

COUPONS OF THE CENTRAL PACIFIC RAILROAD Company (San Joaquin Valley Branch) and of the LAND BONDS, due October 2, 1882, will be paid at the Banking House of FISK & HATCH, No. 5 Nassau street, New York.

E. H. MILLER, Jr., Secretary.

COUPONS OF THE FIRST MORTGAGE BONDS OF the SOUTHERN PACIFIC RAILROAD COMPANY (of California), due October 2, 1882, will be paid at the office of the Company, Nos. 35 Wall and 23 Broad streets, New York.

J. L. WILLCUTT, Secretary.

THE LAKE SHORE AND MICHIGAN SOUTHERN RAILWAY COMPANY.

TREASURER'S OFFICE, GRAND CENTRAL DEPOT, NEW YORK, Sept. 27, 1882.

The Board of Directors of this company have this day declared a QUARTERLY DIVIDEND of TWO PER CENT upon its Capital Stock, payable on WEDNESDAY, the first day of NOVEMBER next, at this office. The TRANSFER books will be closed at 3 o'clock P. M., on MONDAY, the 2d day of October next, and will be reopened on the morning of Monday, the sixth day of November next.

E. D. WORCESTER, Treasurer.

To Contractors.

OFFICE OF THE GEORGETOWN AND LANES RAILROAD COMPANY. GEORGETOWN, S. C., Sept. 22, 1882.

PROPOSALS ARE INVITED UNTIL October 31, prox., for the construction of the road-bed of the GEORGETOWN AND LANES RAILROAD, as covered by survey and estimate of Major G. W. EARLE, Engineer. For specifications and all other information address the undersigned. The Company reserves the right to reject any or all bids.

P. R. LACHICOTTE, President G. & L. R. R. Co.

GORDON & DUGGAN
RAILWAY SWITCH.

The **Standard** on several and in use on twenty-five Railroads.

Combines Safety, Durability, Simplicity, and Low Cost, with **Fixed Rails.**

The only movable piece weighs 375 lbs., and is without a bolt or rivet.

E. GORDON, Treasurer,
No. 28 STATE STREET, BOSTON, MASS.

FOR SALE.

Locomotives—Five Second-hand Narrow Gauge Engines in good order.
One Second-hand "Tank" Narrow Gauge Engine, 10 tons.
Several Second-hand Standard Gauge Locomotives in good order, immediate delivery.
One new 3ft. Gauge Passenger Engine, 22 tons, prompt delivery.
Six new 4ft. 8½ Gauge Locomotives, cylinders 17x24, weight 35 tons. August and September delivery.
One new 3ft. Gauge Saddle Tank Engine, delivery this month.
Cars—Passenger and Freight Cars of all descriptions for early delivery.
Three Second-hand Passenger Coaches in good order.
Rails—16lb., 30lb. and 56lb. Rails in store.
Car Wheels and Axles.
Narrow-Gauge Rolling-stock a specialty.

BARROWS & CO.,
64 Broadway,
NEW YORK.

McCANN'S
EXCELSIOR SELF CAR COUPLING.

Patented August 3, 1880.

For Durability, Simplicity, and Practicability
IT HAS NO EQUAL

MARION W. McCANN,
Patentee and Proprietor,
DUBLIN, IND.

Continuous Automatic
FREIGHT BRAKES.

Requiring no other Connection between Cars than the ordinary Coupling-Link and Pin.

SIMPLE, DURABLE, AND EFFICIENT.

Brakes can be applied to every Car in the longest train, from the engine or cabose, or from any car in the train. It can be readily attached to any car, and adapted to ordinary brake beams, shoes, etc. There is no possibility of damaging wheels by "sliding."

PATENTED MAY 23, 1882.

☞Railroad and manufacturing companies, or parties able to co-operate with patentee in their manufactur and introduction, are invited to correspond with

WM. C. SCHULTZE,
Surgeon C., R. I. and P. Ry.
MARENGO, Iowa Co., Iowa.

NO OTHER LINE IS SUPERIOR TO THE
FITCHBURG RAILROAD
HOOSAC TUNNEL ROUTE
WEST.

6.30 A.M. ACCOMMODATION.

Connecting at Syracuse, N. Y., at 7.15 P.M., with through sleeping cars for Cincinnati, Cleveland, Toledo, *DETROIT AND CHICAGO.*

3.00 P.M. CINCINNATI EXPRESS.

Pullman Sleeping Car attached, running through to Cincinnati without change. (Only Line running Pullman Cars from Boston.) This car runs *via* Erie Railway and N.Y., P. & O. R.R., making direct connection for Louisville, St. Louis, Kansas City, New Orleans, and all points in Texas and New Mexico.

3.00 P.M. ST. LOUIS EXPRESS.

THE ONLY LINE which runs a THROUGH SLEEPING-CAR from

BOSTON TO ST. LOUIS WITHOUT CHANGE!

ARRIVING AT 8.00 A.M. SECOND MORNING.

Through sleeping car for Buffalo, Toledo, Fort Wayne, Logansport, Lafayette, Danville Tolono, Decatur and St. Louis, making direct connection with through Express Trains for Kansas, Colorado, Texas, and all points in the

SOUTHWEST.

6.00 P.M. PACIFIC EXPRESS.

The only line running a through sleeping car *via* Buffalo and Detroit without change, arriving at Chicago at 8.00 A.M. second morning, making sure connections with through Express Trains for Iowa, Nebraska, Kansas, Colorado, the Pacific Coast, Wisconsin, Minnesota and all points in the

WEST AND NORTHWEST.

THE ABOVE TRAINS RUN DAILY, SUNDAYS EXCEPTED.

This Great Short Line passes through the most celebrated scenery in the country, including the famous HOOSAC TUNNEL, four and three-quarters miles long, being the longest Tunnel in America, and the third longest in the world.

Tickets, Drawing-Room and Sleeping-Car Accommodations may be secured in Advance by Applying to or Addressing

250 WASHINGTON STREET, BOSTON. 250

JOHN ADAMS, General Superintendent. F. O. HEALD, Acting Gen'l Passenger and Ticket Agent.

In effect January 9th, 1882, and subject to changes.

RAILROAD AND CANAL DIVIDEND STATEMENT.

Showing the amount of Stock Outstanding, the Dividend Periods and the date of last Dividend.

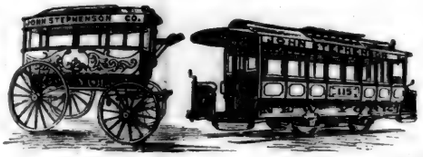
Marked thus(*)are leased roads.	Stock out-standing.	Divide'd Periods.	Last Dividend Payable.
Albany and Susq*...100	2,500,000	semi-an	July '82 2
Ashuelot.....100	210,000	q'arterly	Oct. '81 3½
Atch., Top. and S. Fe100	54,000,000	q'arterly	Aug. '82 1½
Atlanta and W. Point100	1,232 200	semi-an	Jan. '82 6
Atlantic and St. Law*100	5,840,000	semi-an	Mar. '82 3
Augusta and Savan'h100	1,022,900	semi-an	June '81 3½
Avon, Geneseo&MtM*100	225,000	semi-an	July '81 3
Baltimore and Ohio.100	14,792,566	semi-an	May '82 5
" " pref.100	5,000,000	semi-an	July '82 3
Washington Br....100	1,650,000	semi-an	Apl. '82 5
Berkshire*.....100	600,000	q'arterly	Apl. '82 1¾
Boston and Albany..100	20,000,000	q'arterly	Sept. '82 2
Bos. &N.Y.AirLine pf.100	2,795,227	q'arterly	June '82 1
Bos., Cl., F.&N.B.pref.100	1,750,100	semi-an	Oct. '82 3½
Bos., Conc.&Mont.pf*100	800,000	semi-an	May '82 3
Boston and Lowell..500	3,940,000	semi-an	July '82 2
Boston and Maine...100	6,921,274	semi-an	May '82 4
Boston & Providence100	4,000,000	semi-an	May '82 4
Attleborough Br...100	131,700	semi-an	July '82 3½
Bos., Revere B &Lynn100	419,400	semi-an	July '82 3½
Buffalo, N. Y. & Erie*.100	950,000	semi-an	June '82 3
Camden & Atlantic.. 50	377,400	q'arterly	Nov. '82 3
" " pref. 50	880,650	q'arterly	Nov. '82 4
Camden & Burl. Co..100	381,925	semi-an	July '82 3
Canada Southern....100	15,000,000	.....	Feb. '81 2½
Cape May & Millville* 50	447,000	semi-an	June '81 3
Catawissa*..... 50	1,159,500	annual	Oct. '81 $1½
" pref..... 20	2,200,000	semi-an	May '82 3½
" new pref.. 50	1,000,000	semi-an	May '82 3½
Cayuga and Susq.*.. 50	589,110	semi-an	July '81 4½
Cedar Rapids&Mo.R*100	6,850,400	q'arterly	Aug. '82 1½
" " pref.100	769,600	semi-an	Aug .'82 3½
Central of Georgia...100	7,500,000	semi-an	June '82 4
Central of New Jersey100	18,563,200	q'arterly	July '76 2½
Central Ohio*..... 50	2,437,950	semi-an	July '82 3
" pref.... 50	411,550	semi-an	July '82 3
Central Pacific 100	59,275,500	semi-an	Aug. '82 3
Chemung*..... 100	380,000	q'arterly	July '81 1½
Cheshire preferred ..100	2,155,300	semi-an	July '82 1½
Chicago and Alton...100	11,181,741	semi-an	Sept. '82 4
" " pref 100	2,245,400	semi-an	Sept. '82 4
Chi., Burl. & Quincy.100	55,337,455	q'arterly	Sept. '82 2
Chi., Iowa & Nebras*.100	3,916,200	semi-an	July '82 4
Chi., Mil. & St. Paul.100	20,404,261	semi-an	Oct. '82 3½
" " pref 100	14,401,483	semi-an	Oct. '82 3½
Chi. & N. Western...100	14,988,257	semi-an	June '82 3½
" pref.100	21,525,353	q'arterly	Sept. '82 2
Chi., R. I. & Pacific..100	41,960,000	q'arterly	Nov. '82 1½
Chi. and West Mich .100	6,151,000	semi-an	Feb. '82 2½
Chi., St.P., M.&O.pref.100	10,390,000	q'arterly	Oct. '82 1¾
C., Ind., St. L. & Chi..100	6,000,000	q'arterly	July '82 1½
Cin., Sand. & Clev.pf. 50	429,037	semi-an	May '82 3
Clev. and Mahoning* 50	3,759,200	semi-an	Nov. '81 3½
Clev. and Pittsburg* 50	11,244,336	q'arterly	Sept. '82 1¾
Columbus & Xenia*. 50	1,786,200	q'arterly	Sept. '82 2
Colum. &HockingVal.100	2,500,200	semi-an	Aug. '81 208
Concord 50	1,500,000	semi-an	May '82 5
Concord and Ports.*.100	350,000	semi-an	July '82 3½
Conn. & Passump. Riv100	2,244,400	semi-an	Aug '82 3
Connecticut River ..100	2,100,000	semi-an	July '82 4
Cumberland Valley.. 50	1,292,950	q'arterly	July '82 2½
" 1st pref 50	241,900	semi-an	Apl. '82 4
" 2d pref. 50	243,000	semi-an	Apl. '82 4
Danbury & Norwalk. 50	600,000	.....	Apl. '82 1½
Dayton and Mich.*.. 50	2,402,573	semi-an	Apl. '82 1¾
" " pref. 50	1,211,250	q'arterly	July '82 2
Delaware*..... 25	1,468,940	semi-an	July '82 3
Del. & Bound Brook*100	1,652,000	q'arterly	Aug. '82 1¾
Del., Lack.& Western 50	26,200,000	q'arterly	July 82 2
Denver & Rio Grande.100	29,160,000	q'arterly	Jan. '82 1½
Den., South P. & Pac.100	3,500,000	.....	Aug. '80 4
Detroit, Lans. & Nor.100	1,825,600	semi-an	Aug. '80 2½
" " pref.100	2,503,380	semi-an	Aug. '82 3½
Dubuque&Sioux C'y*100	5,000,000	semi-an	Oct. '82 3
East Pennsylvania*., 50	1,709.550	semi-an	July '82 3
East Mahanoy*..... 50	392,950	semi-an	July '82 3
Eastern (N. H.).....100	492,500	semi-an	June '82 2½
Eel River.....100	3,000,000	q'arterly	Sept. '82 $1
Elmira.Jef.&Canand*100	500,000	annual	Sep. '80 5
Elmira&Williamsp't* 50	500,000	semi-an	May '82 1½
" " pref. 50	500,000	semi-an	July '82 3½
Erie and Pitsburg*.. 50	1,998,400	q'arterly	June '82 1¾
Evansville & Terre H.100	100,000	semi-an	Nov. '81 2
Fitchburg.....100	4,500,000	semi-an	July '82 3
F. & P. Marquette pf.100	6,500,000	semi-an	July '82 3
Ft. W. & Jackson pref.100	2,000,000	.....	May '82 2
Georgia. 100	4,200,000	q'arterly	July '82 2½
Granite 100	1,250,000	semi-an	July '82 3
Han. & St. Jo. pref .100	5,083,024	semi-an	Aug. '82 3½
Harrisbg&Lancaster 50	1,182,500	semi-an	July '82 3½
Housatonic pref. ...100	1,180,000	q'arterly	July '82 2
Illinois Central.....100	39,000,000	semi-an	Sept. '82 3½
Ia. Falls & Sioux City*100	4,623,500	q'arterly	Sept. '82 1¾
Iowa R. Land Co....100	7,620,000	q'arterly	Aug. '82 1
Jeffersonv. Mad. &Ind100	2,000,000	q'arterly	May '82 1¾
Joliet and Chicago*..100	1,500,000	q'arterly	June '82 1¾
Kan. C., Ft. S. &Gulf....100	4,000,000	.....	Feb. '82 2
" " pref..100	2,750,000	semi-an	Aug. '82 4
Kentucky Central...100	500,000	semi-an	June '81 1
" " pref..100	5,583,500	semi-an	June '83 1
Lake Shore&Mich. So.100	49,466,500	q'arterly	Nov. '82 2
" (guar.)100	533,500	semi-an	Aug. '82 5
Lawrence*..... 50	450,000	q'arterly	July '82 2
Lehigh Valley..... 50	27,496,895	q'arterly	Oct. '82 2
" pref. 50	106,300	q'arterly	Oct. '82 2

Marked thus(*)are leased roads.	Stock out-standing.	Divide'd Periods.	Last Dividend Payable.
Little Miami..... 50	4,637)300	q'arterly	Sept. '82 2
Little Rock & Ft. S..100	4,096,135	.....	July' 81 108
Little Schuylkill*.. . 50	2,646,100	semi-an.	July '82 3½
Louisville & Nashv..100	19,130,913	semi-an.	Feb. '82 3
Lowell & Andover...100	500,000	semi-an.	Jan. '82 3½
Lykens Valley.....100	600,000	q'rterly.	Oct.' 81 2½
Manchester & Law..100	1,000,000	semi-an.	May '82 5
Manhattan 100	13,000,000	.....	.....
" " 1st pref.100	6,500,000	q'rterly.	Oct. '82 1½
" " 2d pref.100	6,500,000	q'rterly.	Oct. '82 1½
Marietta& Cincinnati 50	1,386,350	.....	.....
" " 1st pref 50	8,105,600	semi-an.	Sep. '66 38
" " 2d pref 50	4,440,000	semi-an.	Sep. '66 38
Marq. Hout. & Ont. pf...100	2,259.026	.....	Aug. '82 4
Massawippi*..... 100	400,000	semi-an.	Aug. '82 3
Metropolitan 100	6,500,000	q'rterly.	Oct. '82 1½
Michigan Central....100	18,738,204	q'rterly.	Aug. '81 1
Middlesex Central...100	280,000	semi-an.	Aug. '82 3
Mill Creek& Minehill* 50	323,000	semi-an.	July '82 5
M. Hill& Schuyl. Hav* 50	4,022,500	semi-an.	July '82 3½
Missouri Pacific.....100	28,169,800	q'rterly.	Oct. '82 1¾
Mobile&Montgomery100	3,022,517	semi-an.	Feb. '80 2½
Morris and Essex.... 50	15,000,000	semi-an.	July '82 3½
Mt Carbon&PtCarbon 50	282,350	semi-an.	July '82 6
Nashua and Lowell..100	800,000	semi-an.	July '82 4
Nashua & Rochester.100	1,305,800	semi-an.	Apl. '82 1½
Nashv. & Decatur...100	1,827,000	semi-an.	June '81 3
Nash., Chat. &St Louis 25	6,670,325	semi-an.	Apl. '82 1½
Naugatuck.....100	2,000,000	semi-an.	July '82 5
Nesquehoning Val'y* 50	1,300,000	semi-an.	Sept. '82 3
N. Castle&Beaver Val* 50	600,000	q'rterly.	Oct. '81 —
New London North'n*100	1,500,000	q'rterly.	July '82 1½
N. Y. Cen. & Hud. R.100	89,428,330	q'rterly.	Oct. '82 2
N. Y. and Harlem....100	7,950,000	q'rterly.	July '82 4
" " pref.100	1,500,000	q'rterly.	July '82 4
" City Line.. —	.....	annual	Apl. '82 3
N.Y., Lake Erie&West.100	77,083,900	.....	.....
" " pref.100	8,156,825	.....	Jan. '82 6
N. Y., N. H. & Hart..100	15,500,000	semi-an.	Jan. '82 5
N. Y., Prov. & Boston100	3,000,000	q'rterly.	Aug. '82 2
Niag. Bridg&Canand*100	1,000,000	semi-an.	July '81 3
North Carolina*.....100	3,000,000	semi-an.	Sep. '81 3
" " pref.100	1,000,000	semi-an.	Sep. '81 3
N. Eastern (S.C.) pref100	86,000	semi-an.	May '81 4
Norfolk & Western pref. 50	15,000,000	q'rterly.	Sept. '82 $1
North Pennsylvania. 50	4,527,150	q'rterly.	Aug. '82 1¾
Northern Central.... 50	6,142,000	semi-an.	July '82 3
Northern N. Hampsh100	3,068,400	semi-an.	June '82 3
Northern N. Jersey*.100	1,000,000	semi-an.	July '80 2½
Norwich&Worcester*100	2,604,400	semi-an.	July '82 5
Ohio 100	18,500,000	.....	.....
Ohio and Miss. pref..100	4,030,000	semi-an.	Mar. '75 3½
Old Colony.....100	7,333,800	semi-an.	July '82 3½
Oregon R'way&Nav.100	6,000,000	q'rterly.	Aug. '82 2
Oswego & Syracuse..100	1,320,400	semi-an.	Aug. '81 4½
Panama..... 100	7,000,000	.....	July '82 6½
Paterson & Hudson*.100	630,000	semi-an.	July '82 4
Paterson & Ramapo.100	248,000	semi-an,	July '82 4
Pember.&Hightst'n*. 50	342,150	semi-an.	Jan. '82 3
Pennsylvania..... 50	77,672,750	semi-an.	May '82 4
Pennsylvania Co..... 50	20,000,000	semi-an.	June '81 2½
Peoria & Bureau Val*100	1,200,000	semi-an.	Feb. '82 4
Philadelphia & Erie*. 50	7,013,700	semi-an.	.....
" " pfd 50	2,400,000	semi-an.	Jan. '75 4
Phil, Ger. &Norrist'n* 50	2,231,900	q'rterly.	Sept. '82 3
Phil. and Reading... 50	32,726,375	q'rterly.	Jan. '76 2½
" " pref. 50	1,551,800	q'rterly.	July '76 3½
Phila. and Trenton..100	1,250,100	q'rterly.	July '82 2½
Phila., Wil. and Balt. 50	11,585,750	semi-an.	July '82 4
Pittsb., Ft. W. & Chi.*100	19,714,285	q'rterly.	July '82 1¾
" Special Imp..100	6,770,900	q'rterly.	July '82 1¾
Pittsfield&N. Adams..100	450,000	semi-an.	July '82 2½
Portl., Saco & Portsm100	1,500,000	semi-an.	July '82 3
Providence & Worces.100	2,000,000	semi-an.	July '82 3
Rensselaer&Saratog.*100	7,000,000	semi-an.	July '82 4
Rhode Island& Mass..100	100,000	.....	Jan. '81 3
Richmond& Danv....100	3,866,000	q'rterly.	Aug. '82 2
Richmond & Petersb100	1,009,300	semi-an.	Jan. '81 3
Roch. &Genesee Val.*100	555,200	semi-an.	July '82 3
Rutland preferred.. 100	4,000,000	semi-an.	Sept. '82 1
St. L., Alt. & T. Haute. 100	2,300,000	.....	.....
" " pref.100	2,468,406	.....	May '82 3
St. L. & S. Fran. 1st pref100	4,500,000	.....	Aug. '82 3½
St. L., I. Mt. & South'n. 100	21,459,921	semi-an.	Feb. '74 3
St. L., Jac'ville & Chic.100	1,293,000	.....	Aug. '82 4½
" " pref.100	1,034,000	.....	Aug. '82 4½
St. P. & Duluth pref.100	4,705,000	q'rterly.	June '82 1¾
St. P., Minn. & Man...100	20,000,000	semi-an.	Aug. '82 3½
Schuylkill Valley*... 50	576,050	semi-an.	July '82 3½
Seaboard & Roanoke.100	1,229,600	semi-an.	May '82 5
Shamokin V. &Pottsv 50	669,450	semi-an.	Feb. '82 3
Shore Line*.....100	1,000,000	semi-an.	July '82 4
Sioux C. & Pacific pref100	160,000	semi-an.	Apl. '82 3½
South Br. (N. J.)*....100	438,300	semi-an.	Jan. '82 3
South Western (Ga.)*100	3,892,300	semi-an.	Dec. '81 3½
Stockbridge&Pitts.*. 100	448,700	semi-an.	Oct. '81 1½
Syr., Bingham&N.Y.*100	2,500,000	semi-an.	Feb. '81 2
Terre Haute & Ind....100	1,988,150	semi-an.	Aug. '82 4
Troy and Boston....100	1,609,000	semi-an,	Feb. '80 2
Union Pacific.....100	61,000,000	q'rterly.	Oct. '82 1¾
United Cos of N. J.*.100	20,490,000	q'rterly.	July '82 2½
Utica, Shenango&S V100	4,000,000	semi-an.	Nov. '81 3
Utica and Black Riv.100	1,772,000	semi-an.	Mar. '82 2
Vermont and Mass.. 100	3,050,000	semi-an.	Apl. '82 3
Wab. St. L. & Pac. pref.100	22,615,100	q'rterly.	Nov. '81 1½

Marked thus(*)are leased roads.	Stock out-standing.	Divide'd Periods.	Last Dividend Payable.
Ware River*.....100	750,000	semi-an.	July '82 3½
Warren (N. J.).....100	1,200,000	semi-an.	Apl. '82 3½
Warwick Valley.....100	340,000	semi-an.	July '82 2½
Westchest& Phil. pref100	821,300	semi-an.	July '80 2
West Jersey.....100	1,359,750	semi-an.	Sept. '82 3
Wilmingt'n& Weld'n.100	1,456,200	semi-an.	July '82 3
Wil., Col., & Aug 100	960,000	semi-an.	July '82 3
Winchester&Poto'c.*100	180,000	semi-an.	July '82 3
Winchester&Strasb.*100	74,700	semi-an.	July '82 8
Worcester & Nashua. 75	1,789,800	semi-an.	July '82 1½
HORSE-POWER R. R.			
Albany City.....100	200,000	annual	.....'80 5½
Baltimore City..... 25	1,000,000	semi-an.	Oct. '82 3
Balt., Cat. &El. Mills..100	....	semi-an.	July '82 2
BleeckerSt. &Ful. F'y.100	900,000	semi-an.	July '81 ¾
Boston&Chelsea pref. 50	110,000	semi-an.	Apl. '82 3
Broadway (Brooklyn)100	250,000	q'arterly	Oct. '81 3
B'way&7th Av. (N.Y.)100	2,100,000	q'arterly	Oct, '81 2
B'klyn&Hunter's Pt.100	400,000	semi-an.	Apl. '79 3
Brooklyn City.....100	2,000,000	q'arterly	Dec. '81 3½
Bushwick (Brooklyn)100	309,000	semi-an.	July '81 2½
Cambridge.....100	908,000	q'arterly	Apl. '82 4½
Cen. Park, N. & E. Riv.100	1,800,000	q'rterly.	Oct. '82 2
Christoph'r&TenthSt100	650,000	semi-an.	Aug. '81 2½
Citizens' (Phil.)..... 50	192,500	q'rterly.	Jan. '82 2½
Citizens' (Pbg.)..... 50	200,000	annual..	....'80 14½
Coney Island&Bklyn100	500,000	semi-an.	Oct. '80 5
Continental (Phil.).. 50	580,000	semi-an.	July '82 6
D. Dock, E. B'way&Bat100	1,200,000	q'arterly	Nov. '81 4
Eighth Av. (N. Y.)...100	1,000,000	q'rterly.	Oct. '81 3
42d St. & G. St. Ferry100	747,000	semi-an.	Nov. '81 6
Frankf. &Southw (Ph) 50	600,000	q'rterly.	Jan. '82 6
Germantown, (Ph.).. 50	572,800	q'rterly.	Oct. '82 2½
Girard College (Ph.) . 50	500,000	semi-an.	July '71 3
Grand St. & Newton.100	170,091	semi-an.	July '81 2½
Green&Coates St. (Ph) 50	150,000	q'rterly.	July '82 3
Heston, Mantau&F'm 50	299,381	semi-an.	Jan. '75 4
Highland.....100	600,000	semi-an.	July '82 4
Lomb. &SouthSts(Ph) 25	195,000	semi-an.	Oct. '75 4
Lynn and Boston....100	200,000	semi-an.	May '82 4
Malden and Melrose.100	165,000	....	.....
Metropolitan (Bost.). 50	1,500,000	semi-an.	July '82 4
Middlesex (Boston)...100	650,000	semi-an.	May '82 3½
N.Y., Bay Ridge&Jam100	150,000	..... .	Oct. '78 7
Ninth Av. (N. Y.)....100	707,320	....	.....
Orange & Newark....100	282,555	.....	.....
People's (Phila.) pref. 25	124,744	.....	July '82 2
Philadelphia City... 50	475,000	semi-an.	July '82 4
Phila. and Darby.... 20	200,000	semi-an.	July '81 3½
Phila. & Grey's Ferry. 50	308,000	semi-an.	Jan. '82 6
Pbg, Alleg. &Manches. 50	300,000	q'rterly.	Oct. '81 3
Ridge Avenue (Ph.).. 50	420,000	semi-an.	Oct. '81 11
Second Avenue (N.Y.)100	1,100,500	semi-an.	July '81 2½
Second&ThirdSt. (Ph) 50	771,076	q'rterly.	Jan. '82 4½
17th &19th sts (Ph.).. 50	250,000	semi-an.	July '81 3
Sixth Avenue (N. Y.)100	750,000	semi-an.	Oct. '81 5
Somerville (Boston).100	113,000	semi-an.	May '82 3
South Boston..... 50	600,000	semi-an.	July '82 4
Third Avenue, N. Y...100	2,000,000	q'rterly.	Nov. '81 5
13th and 15th sts., Ph 50	334,520	q'rterly.	Jan. '82 4
23d street, N. Y.....100	600,000	semi-an.	Aug. '81 4
Union, Boston.....100	374,300	semi-an.	Jan. '82 4
Union, Phila..... 50	1,005,000	semi-an.	Jan. '82 7
West Philadelphia... 50	750,000	semi-an.	July '77 10
CANALS.			
Chesapeake and Dela 50	2,078,038	semi-an.	June '75 2
Delaware Division... 50	1,633,350	semi-an.	Aug. '82 $1
Delawa. and Hudson100	20,000,000	q'rterly.	Sept. '82 1¾
Delaware & Raritan*.100	5,847,400	q'rterly.	July '82 2½
Lehigh Coal and Nav 50	11,204,250	semi-an.	June '82 2
Monongahela Nav... 50	1,004,500	semi-an.	July '82 3
Morris, consolidated.100	1,025,000	semi-an.	Aug. '82 2
" preferred....100	1,175,000	semi-an.	Aug. '82 5
Pennsylvania..... 50	4,501,200	....	.....
Schuyl. Nav., com.*. 50	859,100	annual..	Oct. '82 50c.
" " pref... 50	3,200,000	annual..	Oct. '82 $1
MISCELLANEOUS.			
Adams Express.....100	12,000,000	q'rterly.	Sept. '82 2
American Express... 50	18,000,000	semi-an.	July '82 3
Amoskeag Manuf. Co.100	3,000,000	semi-an.	June '81 5
Calumet&HeclaMin'g 25	100,000 S.	q'rterly.	Aug. '82 $5
Central Mining Co....100	.....	semi-an.	Feb. '82 2½
Consolidation Coal..100	10,250,000	semi-an.	Jan. '82 2
George's Creek C. &I.100	.....	semi-an.	Jan. '82 3
Maryland Coal.....100	4,400,000	semi-an.	Feb. '76 1½
Mariposa L. &Mining100	10,000,000	..... .	.....
" pref100	5,000,000	..... .	.....
Missouri Val. LandCo100	200,000	semi-an.	July '82 12
National Tube Works100	1,000,000	q'rterly.	July '82 3
Pac. Mail Steamship.100	20,000,000	q'rterly.	Sept. '69 3
Pennsylvania Coal... 50	5,000,000	q'rterly.	Aug. '82 3
Pullman Palace Car...100	10,032,800	extra.	Sept. '82 1½
Quicksilver, com....100	5,708,700	..... .	May '82 0.4
" pref.....100	4,291,300	..... .	May '82 6
Quincy Mining Co... 25	40,000 shs	semi-an.	Aug. '82 $5
Quincy R. R. Bridge.100	1,750,000	semi-an.	July '82 5
SiouxC. &I.F.L. &L.Co100	500,000	semi-an.	June '82 5
Spring Mt. Coal.....100	1,500,000	semi-an.	June '82 3½
Topeka Equip'nt Co.100	255,500	semi-an.	Apl. '82 5
United States Ex....100	7,000,000	q'rterly.	Aug. '82 1
Wells-Fargo & Co. Ex100	6,250,000	semi-an.	July '82 4
Western Union Tel..100	80,000,000	q'rterly.	Oct. '82 1½

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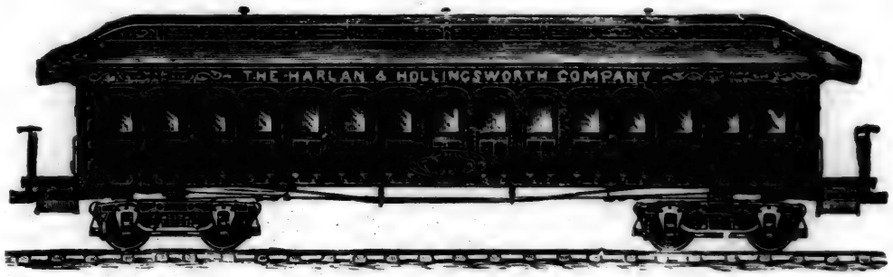
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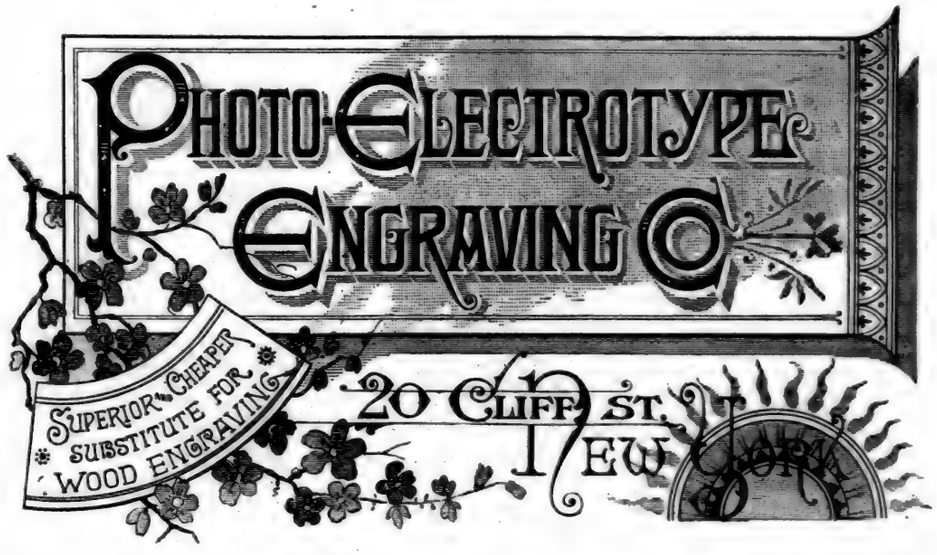
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RAILROAD EARNINGS.—MONTHLY.

	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total.
BURL., CEDAR RAP. & NORTHERN:													
1880	184,316	165,170	188,325	141,652	149,504	153,378	143,432	160,160	179,804	204,991	189,330	193,419	2,053,484
1881	167,750	124,510	148,551	184,680	165,630	205,912	174,351	209,112	221,801	221,748	203,880	232,812	2,259,037
1882	252,823	225,631	224,107	178,304	199,278	211,257	198,276	224,921	.....	.....	.....	.....	.....
CENTRAL PACIFIC:													
1880	1,200,614	1,070,487	1,373,438	1,356,716	1,778,488	1,724,930	1,840,067	1,973,438	1,964,997	1,120,229	2,199,466	1,905,221	20,508,112
1881	1,602,907	1,454,218	1,709,637	1,872,370	2,091,410	2,159,381	1,899,340	2,088,518	2,293,000	2,514,000	2,267,000	2,110,000	23,947,951
1882	1,876,000	1,702,000	1,987,000	2,052,000	2,353,000	2,239,000	2,020,000	2,277,000	.....	.....	.....	.....	.....
CHESAPEAKE AND OHIO:													
1880	202,335	198,681	222,762	221,559	199,443	214,352	238,236	259,110	247,303	211,820	240,795	218,009	2,674,308
1881	162,540	184,389	228,479	227,343	252,235	241,135	225,096	262,858	247,144	237,303	235,585	203,562	2,702,762
1882	210,455	209,708	208,981	267,454	255,939	260,753	306,831	371,175	.....	.....	.....	.....	.....
CHICAGO AND ALTON:													
1880	534,054	497 013	626,473	542,961	616,128	617,524	708,906	761,120	767,349	785,199	696,776	574,695	7,718,198
1881	487,890	461,641	529,915	558,190	548,556	635,860	676,205	769,751	768,897	750,359	680,133	635,307	7,553,988
1882	579,447	530,480	584,483	561,787	553,412	613,886	671,537	800,624	.....	.....	.....	.....	.....
CHICAGO AND NORTHWESTERN:													
1880	1,154,632	1,131,683	1,361,725	1,294,573	1,875,608	1,671,177	1,699,686	1,767,938	2,020,245	2,105,217	1,855,671	1,477,902	19,416,007
1881	1,240,667	963,208	1,178,795	1,474,612	1,879,006	2,306,640	1,983,031	2,315,164	2,292,676	2,341,097	2,019,037	1,855,476	21,849,209
1882	1,620,336	1,471,945	1,696,568	1,634,819	2,058,133	2,022,700	2,025,736	2,099,755	.....	.....	.....	.....	.....
CHICAGO, BURLINGTON AND QUINCY:													
1880	1,432,740	1,411,870	1,732,518	1,489,894	1,909,627	1,682,956	1,773,643	1,834,321	1,862,285	1,934,762	1,837,860	1,552,018	20,454,494
1881	1,307,948	1,034,821	1,418,149	1,574,371	1,679,455	2,083,803	1,888,358	2,173,945	2,262,981	2,031,001	1,816,133	1,905,490	21,324,150
1882	1,658,834	1,457,300	1,566,217	1,530,838	1,505,261	1,437,164	1,625,006	.....	.....	.....	.....	.....	.....
CHICAGO, MILWAUKEE AND ST. PAUL:													
1880	764,298	738,749	900,675	871,041	1,134,745	1,037,958	1,026,708	991,297	1,257,677	1,493,620	1,472,037	1,397,308	13,086,119
1881	990,847	682,717	916,989	1,259,946	1,538,491	1,729,811	1,568,706	1,678,361	1,645,000	1,590,000	1,569,000	1,855,000	17,025,462
1882	1,435,000	1,377,000	1,561,000	1,518,000	1,629,000	1,620,000	1,465,000	1,545,000	.....	.....	.....	.....	.....
CHICAGO, ST. PAUL, MINNEAPOLIS AND OMAHA:													
1880	193,827	173,078	259,783	259,208	232,146	218,093	236,995	251,013	300,833	342,052	342,894	312,173	3,122,097
1881	257,786	158,594	251,648	261,211	350,124	404,562	383,202	385,586	363,685	382,714	380,733	391,950	3,981,296
1882	307,498	315,100	405,779	356,558	406,420	363,109	331,480	394,555	.....	.....	.....	.....	.....
CINCINNATI, INDIANAPOLIS, ST. LOUIS AND CHICAGO:													
1880	155,697	172,541	198,220	168,199	186,995	200,332	204,138	233,478	343,627	239,881	209,014	198,254	2,412,185
1881	182,523	171,511	191,005	183,710	191,056	192,299	177,161	229,858	219,977	212,606	194,805	192,623	2,296,916
1882	200,042	186,879	208,066	204,269	199,110	195,948	209,564	.....	.....	.....	.....	.....	.....
DENVER AND RIO GRANDE:													
1880	124,759	126,922	160,883	164,882	193,925	295,455	373,132	400,133	406,583	473,318	408,562	349,196	3,478,007
1881	307,476	317,681	398,493	433,111	514,767	584,230	548,284	606,193	620,643	665,686	566,819	643,417	6,206,812
1882	491,914	412,987	535,055	559,917	614,298	537,462	495,797	574,040	.....	.....	.....	.....	.....
HANNIBAL AND ST. JOSEPH:													
1880	176,079	166,965	216,061	206,735	191,317	179,396	224,312	238,081	233,448	242,214	207,147	279,635	2,561,366
1881	154,401	122,874	176,356	190,812	172,950	190,740	201,899	210,240	202,567	313,433	201,782	180,376	2,230,961
1882	138,284	154,717	168,798	148,913	154,917	155,030	184,347	258,628	.....	.....	.....	.....	.....
ILLINOIS CENTRAL:													
1880	595,212	613,806	613,008	535,732	665,120	681,736	724,095	732,755	806,836	880,211	783,120	673,182	8,304,812
1881	631,281	524,499	557,789	662,493	673,259	803,887	720,004	868,407	828,847	815,238	737 218	763,475	8,586,397
1882	728,173	689,387	695,371	674,603	674,749	663,746	752,251	813,600	.....	.....	.....	.....	.....
INDIANA, BLOOMINGTON AND WESTERN:													
1880	80,498	89,690	116,185	90,374	85,733	106,954	103,438	116,732	110,622	121,343	96,621	104,619	1,233,079
1881	90,283	83,261	192,085	203,677	200,064	199,846	199,125	272,114	195,307	181,674	160,826	156,697	.....
1882	195,824	175,755	206,235	205,934	182,554	186,133	206,072	278,814	.....	.....	.....	.....	.....
LOUISVILLE AND NASHVILLE:													
1880	674,455	575,035	612,593	563,883	655,014	976,229	772,537	827,088	931,910	1,000,326	953,086	949,184	9,491,346
1881	816,960	805,124	947,959	850,862	828,726	1,227,885	817,135	876,192	951,566	1,002,950	1,065,223	1,122,285	11,326,859
1882	950,065	960,036	1,073,745	950,007	946,435	1,187,385	1,038,385	1,030,385	.....	.....	.....	.....	.....
MOBILE AND OHIO:													
1880	250,116	204,094	168,301	140,091	129,249	121,855	131,621	140,593	184,246	264,714	251,368	287,373	2,373,621
1881	224,347	216,768	230,916	163,551	145,803	136,517	135,548	160,789	209,044	252,921	252,434	262,025	2,406,437
1882	161,433	158,154	152,651	145,272	137,645	132,572	136,398	140,443	.....	.....	.....	.....	.....
NASHVILLE, CHATTANOOGA AND ST. LOUIS:													
1880	205,633	191,154	169,457	155,466	158,839	144,155	151,594	169,326	167,473	178,266	182,087	175966	2,049,484
1881	178,143	190,866	207,710	183,525	104,430	154,549	150,430	168,317	179,979	172,121	152,059	173,127	2,075,256
1882	156,994	159,961	161,005	154,155	137,645	119,074	160,991	1,03c,385	.....	.....	.....	.....	.....
NEW YORK AND NEW ENGLAND:													
1880	164,232	149,907	183,845	179,689	183,701	219,891	205,056	249,885	235,642	215,491	210,856	198 108	2,396,302
1881	189,749	173,614	212,019	216,913	217,185	231,518	246,821	280,524	299,573	261,199	242,412	237,729	2,809,255
1882	213,840	217,261	265,222	263,544	283,244	290,060	308,920	353,726	.....	.....	.....	.....	.....
NEW YORK, LAKE ERIE AND WESTERN:													
1879	1,147,173	1,207,391	1,356,780	1,372,755	1,350,574	1,230,419	1,273,533	1,450,223	1,492,497	1,713,697	1,515,835	1,398,224	16,509,127
1880	1,296,381	1,252,218	1,644,958	1,643,151	1,592,544	1,661,812	1,580,976	1,606,874	1,786,417	1,899,910	1,799,338	1,726,788	19,149,361
1881	1,443,437	1,425,765	1,847,261	1,709,057	1,776,891	1,794,982	1,787,081	1,772,895	1,734,200	.....	.....	.....	.....
NORTHERN CENTRAL:													
1880	334,494	330,860	415,325	386,130	329,788	419,193	450,298	453,923	464,093	512,918	459,054	494,310	5,050,387
1881	386,157	382,657	452,906	487,273	465,588	487,287	440,811	498,008	429,565	449,664	487,160	476,622	5,443,697
1882	407,368	413,551	430,194	435,129	482,607	482,762	509,683	667,488	.....	.....	.....	.....	.....
NORTHERN PACIFIC:													
1880	81,390	77,259	119,357	185,700	217,613	253,105	241,277	223,500	330,300	358,456	300,822	220,993	2,629,710
1881	116,508	78,803	162,984	216,210	312,705	412,024	393,260	434,085	490,096	565,485	428,903	434,331	4,044,576
1882	239,800	269,000	384,000	438,000	568,332	631,342	679,240	727,377	.....	.....	.....	.....	.....
PHILADELPHIA AND ERIE:													
1880	224,307	245,372	327,678	334,947	311,470	331,024	308,699	347,532	322,737	367,082	324,966	281,919	3,727,733
1881	224,303	225,501	285,573	293,323	343,792	350,585	291,669	303,849	276,522	292,392	284,078	282,772	3,454,309
1882	252,727	246,246	265,311	277,851	341,415	347,614	377,206	420,329	.....	.....	.....	.....	.....
ST. LOUIS AND SAN FRANCISCO:													
1880	198,091	195,948	193,146	176,164	167,664	173,607	213,297	259,995	280,873	328,194	290,329	226,063	2,698,371
1881	212,435	178,234	262,050	265,298	283,399	260,254	252,333	286,373	279,064	308,569	284,320	287,914	3,160,245
1882	256,784	244,654	274,959	242,806	253,419	240,177	318,613	381,637	.....	.....	.....	.....	.....
ST. LOUIS, ALTON AND TERRE HAUTE:													
1880	153,139	163,737	168,994	155,462	147,928	150,207	191,077	216,759	204,295	221,863	188,773	184,503	2,146,741
1881	175,725	166,012	201,137	197,447	172,177	165,896	165,393	189,180	187 299	179,921	162,544	153,852	2,112,801
1882	168,987	149,619	178,145	157,450	162,842	142,742	192,017	236,137	.....	.....	.....	.....	.....
ST. LOUIS, IRON MOUNTAIN AND SOUTHERN:													
1880	555,983	490,195	451,560	408,241	349,053	363,454	432,655	565,869	671,219	688,365	632,052	656,951	6,265,597
1881	570,957	560,791	704,002	548,300	479,075	474,302	533,512	644,386	690,400	719,239	687,280	709,498	7,319,744
1882	516,370	501,127	585,008	581,977	519,120	529,700	515,519	675,981	.....	.....	.....	.....	.....
ST. PAUL, MINNEAPOLIS AND MANITOBA:													
1880	180,239	137,645	261,798	333,014	281,899	243,407	272,089	232,579	274,188	345,057	300,675	297,641	3,160,231
1881	254,187	159,482	320,962	425,685	382,642	405,322	387,488	414,954	485,736	605,708	508,530	528,262	4,878,960
1882	395,461	418 358	531,004	570,890	858,902	856,417	853,296	801,759	.....	.....	.....	.....	.....
TEXAS AND PACIFIC:													
1880	245,785	219,165	215,070	174,177	141,083	153,066	195,711	226,073	266,570	303,666	312,184	301,858	2,754,408
1881	281,176	260,781	319,928	295,066	281,782	285,405	328,063	381,331	337,117	578,668	357,724	381,218	3,921,569
1882	310,785	255,644	332,911	359,543	409,228	384,713	367,215	439,918	.....	.....	.....	.....	.....
UNION PACIFIC RAILWAY:													
1880	1,433,636	1,393,992	1,730,509	1,937,220	2,027,269	1,928,528	1,934,215	1,913.035	2,270,179	2,707,860	2,251.148	1,869,335	23,448,445
1881	1,339,799	1,374,740	1,674,860	1,766,894	2,319,238	2,884,774	2,528,826	2,638,659	2,844,357	3,289 350	2,773,608	2,267,004	27,451,831
1882	1,961,088	1,759,863	2,226,832	2,462,004	2,491,590	2,508,453	2,301,000	2,762,107	.....	.....	.....	.....	.....
WABASH, ST. LOUIS AND PACIFIC:													
1880	776,790	759,451	978,629	892,024	948,773	953,468	1,966,742	1,189,478	1,178,950	1,501,203	1,131,787	1,050,816	12,428,112
1881	811,617	818,922	1,121,592	1,023,482	1,144,660	1,308,993	1,131,752	1,542,838	1,490,027	1,396,300	1,399,555	1,328,278	14,461,570
1882	1,220,965	1 134 768	1,315,776	1,378,194	1,204,864	1 149 682	1 418,837	1,772,544	.....	.....	.....	.....	.....

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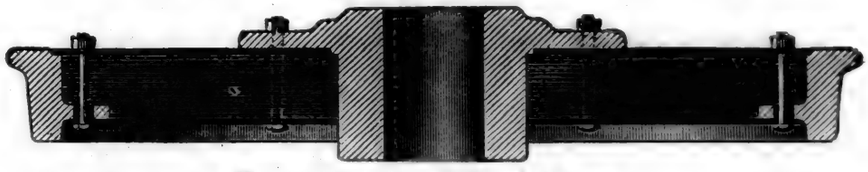
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OUR CANADIAN LETTER.

[From Our Special Correspondent.]

RAILWAY construction is being vigorously pushed forward in the Dominion, and the present may well be described as a railway period. There are already nearly 12,000 miles of railways in operation in Canada. The railway connection between the Maritime Provinces and Quebec and Ontario being complete, the country is now looking anxiously forward to the time when there shall be an all rail route between British Columbia and Halifax, N. S., through Canadian territory.

The Ottawa and Gatineau Valley Railway Company, with James M. Currier, Esq., ex-M. P., president; C. H. Mackintosh, Esq., M. P., vice-president; J. Murray Mitchell, Esq., C. E., F. G. S., managing director and chief engineer, and H. B. Mackintosh, Esq., secretary, in addition to the early construction of their main line, between Hull opposite Ottawa to Desert River, have in contemplation an extensive exploratory survey from the Desert River to James' Bay (in Hudson Bay); the distance from Ottawa to the Bay by the Hurricanaw River route being only 450 miles. This route will traverse a line of country full of valuable minerals of a highly merchantable character, offering a field for capitalists and farmers second to none on the Continent. Professor Bell and other eminent authority say that the 60,000 square miles situated between James' Bay and the Height of Land, north of Lake Superior and Lake Huron, are exceedingly valuable in lumbering and mining resources, and owing to its comparatively warm climate adapted to sustain a very considerable agricultural population. Professor Bell reports that around James' Bay and up the eastern side of Hudson's Bay lie great deposits of iron and coal; so close together that with the cheap water freights which the region may afford the district about James' Bay may yet become another Pennsylvania. It is expected that work will be commenced on the railway this fall. The Ottawa and Gatineau alley Railway, between here and Desert, taps the richest phosphate, iron and other minerals of Canada, and the energetic gentlemen at its head are guarantors of success.

The International Railway, which is now nearly completed between Sherbrooke and a point 16 miles over the National border—near Lake Megantic—will, it is intended, join the road at Mattawanka, Maine, which extends from New Brunswick west, and is called the "European and North American." When the Sherbrooke extension of about 130 miles is completed (this fall), it is proposed to consolidate the line from St. Johns to Sherbrooke. The consolidated bonds will be issued upon the credit of the whole road. This road—which does not compete with water—will be some 350 miles shorter from Montreal to St. John than the Intercolonial, and 150 miles shorter than any other possible route. The International when extended to Montreal will tap the Canadian Pacific and Grand Trunk, and will no doubt become one of the most important of Canadian railways. The Hon. John Henry Pope, Minister of Agriculture, is the principal owner of the road. He is a man of the highest standing for integrity and energy, and no doubt when the bonds of the "International and North American Railway are placed on the market, they will be eagerly taken up.

THE CANADA AND ATLANTIC RAILWAY.

This railway is now completed between Coteau Landing on the Grand Trunk and Ottawa. Trains have just begun running between Ottawa and Montreal, and the trip can be made in three hours, being three-quarters of an hour shorter than any other route. When the bridge is built across the St. Lawrence at Coteau, and the road completed to Rouses Point, immense quantities of lumber and other freight will be carried over it. Mr. Linsley, the contractor, deserves great credit for the speedy completion of the road, which is with outdoubt one of the finest in America.

In the Spring of 1880 the Thompson Steamship Company established a line of monthly steamers between Montreal and Newcastle. The success of the Company, which has been beyond their most sanguine expectations, has induced a number of North of England capitalists to organize a company to run another line of steamers between Newcastle and Montreal. The steamers will be very fast and specially fitted up for cattle and perishable export trade, besides having comfortable accommodation for a limited number of passengers. The first steamer, the "Standard," 1,666 tons will arrive about September 26th, and leave on the 6th of October. Mr. J. G. Sidey, who is so well known and popular among our shipping men, has been appointed agent of the new line, with headquarters at Montreal.

The Ottawa, Waddington and New York Railway directors held a meeting on Sept. 26th, when important matters were discussed, and a programme of operations laid out.

E. A. C. Pew, President of the Souris River and Rocky Mountain Railway has arrived here. Mr. Pew informs me that operations have begun on the first 10 miles of the road, that the spring will see him prepared to push vigorously forward construction.

A new time table embracing the Grand Trunk System will be issued in a few days.

The Canadian Pacific Railway, will owing to press of business, place a third train between Ottawa and Montreal.

Owing to the Provincial Fairs, the Canadian railways and steamboat companies are offering very cheap excursion tickets.

The General Passenger Agents of the United States and Canada held their annual convention at Montreal last week.

Mr. Collingwood Schrieber, Engineer in Chief of the Canadian Government Railways, left Ottawa last week for a trip of inspection of that portion of the Canadian Pacific Railway between Thunder Bay, Lake Superior and Winnipeg. Mr. Schrieber will most probably continue the inspection west of Winnipeg across the prairie. The road is now open from Thunder Bay to 360 miles west of Winnipeg.

An Engineer of the Ottawa, Waddington and New York Railway and Bridge Company, is now busily engaged making a profile of the whole line (including the two large bridges) from Ottawa to Canton, New York—the terminus proper of the projected railway. The Ottawa and Waddington Route, via Canton, North Creek and Albany to New York, will be when completed the shortest possible route by 85 miles, and the trip can be made between Ottawa and New York in 12 hours. The final survey and location of the line and the bridges will be commenced on the first of October. The Hon. Thomas C. Durant, of New York, who is connected with the Adirondack Railroad, is one of the provisional directors of this railway.

General Manager Van Horn of the Canadian Pacific was in the city recently to meet the President and Directors of the Canadian Pacific Railway.

The French (France) Phosphate Company, operating about 20 miles from Ottawa, and who having invested and expended large sums of money were from the beginning unsuccessful, have within a few days struck several rich veins, and their stock, which was very low, has suddenly taken a rise.

Mr. Andrew Leamy, representative of the Messrs. Onderdonk, San Francisco and D. O. Mills, New York, who have a large contract on Central Pacific in British Columbia, left here last week with about 80 men under Forman Tim Brown. The men are wood-choppers and carpenters; the former are paid $2.50 and latter $3.50 per day. Contract for 2 years.

By an order in Council, just passed, the duty on steel boiler plate is made 12½ per cent *ad valorem*, being the same as that paid on boiler plate iron.

An order in Council provides that sewing-machines imported into Canada shall be appraised and entered at the price at which they are sold at the place of manufacture by the agents of the manufacturers, *and not at price at which the manufacturers* supply such agents, and the duty shall be levied and collected upon the value so entertained, and not upon a lower value.

It is thought that the Government, owing to the strong representation from Manitoba, relax the policy of disallowance of local railroad charters in that Province.

THE PONTIAC AND PACIFIC RAILWAY.

Work on the Pontiac and Pacific Junction Railway is being pushed forward with all possible dispatch, seven miles being graded. Notwithstanding that $1.40 per day is paid to laborers and fare paid to works, very few can be hired, although many are required.

NEW BIOGRAPHICAL DICTIONARY.—An excellent feature of the latest edition of Webster's Unabridged Dictionary, is the New Biographical Dictionary, in which are given the names of nearly ten thousand noted persons of ancient and modern times, with a brief statement of the dates of their birth and death, their nationality, profession, etc. This is designed for purposes of ready reference, to answer the questions which often arise as to when and where certain persons lived, and the character of their achievements. It contains many names of persons who are still living, and the pronunciation of each name is given.

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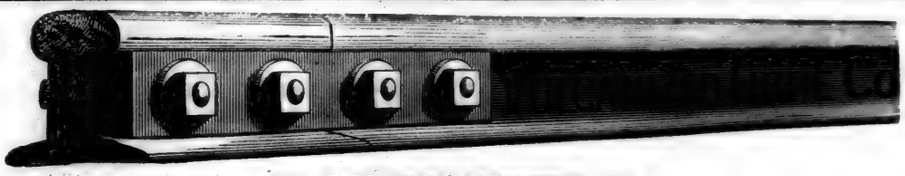
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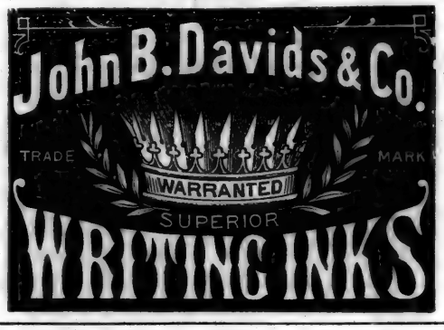
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A copy of the advertisement, a list of the papers, the space the advertisement is to occupy and the time it is to appear, should all be given with the application for an estimate of the cost.

When an advertiser does not know what he wants or what he ought to do, he can designate some sum of money within which he wishes to limit his expenditure; this will enable us to prepare for him such a list of papers as will be the best for his purpose, within the limits which he prescribes.

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RAILROAD, MINING, AND MILL SUPPLIES.

No. 21 Park Place,

NEW YORK.

OUR BOSTON LETTER.

[From our Special Correspondent.]

THE JOURNAL MAN GOES TO THE FAIR.

THE New England Manufacturers' and Mechanics' Institute is now holding its second annual exhibition in this city, and the JOURNAL man sallied forth the other evening to see what there was to be seen up there which would be of interest to railroad men. Upon entering the building the proper thing to do first is to call upon Mr. A. L. Delesderrier, the popular press agent, at his headquarters, which the writer duly did, and found therein an energetic individual, who is bound that the newspapers shall be successful in getting all the good points of the show, and who is the right man in the right place. After passing a few moments in the press room, and getting the location of the exhibitors of railroad goods, your correspondent started out to make a circuit of them, and to take in all of the "greatest inventions on earth" which were to be seen in this vast array of the results of the activity of the American mind. The fair is one of the best ever held in this city, and is full of instructive sights of interest to people of all tastes and professions. However, as the JOURNAL is a railroad journal, the writer will confine himself to exhibits of that nature. The first (and also the last) to attract one's attention is the display made by the McLeod Air Signal Company. It is intended to attract people's attention, and to warn them that a train is coming; and in the first it is a decided success, as one can hear the sharp clang of its warning bell no matter what part of the hall he may be in. It really is a good thing, and it works entirely by air, and cannot get out of order. A couple of flat pieces of iron are attached to the outside of the rail so that the ends come together at an angle, the point being a little higher than the rail. As a train passes along, the outside rim of the wheel presses these pieces of iron down, which compress the air in a bellows that is in the foot of a signal post at the side of the track. These automatically expel the air, which passes through a tube and sets a loud bell ringing at a crossing that may be from one to two thousand feet away, as desired. It also lowers a sign on which is painted in large letters, "Train coming, look out," or if it be night it can be set to lower instead a red lantern. It can also be used in a way similar to the block system.

The next railroad exhibit seen was an automatic switch, invented by Geo. H. Knapp, of Brockton, which can be opened or closed by the engineer from his cab, and which, by a similar arrangement, can be left open or shut by him as he departs. Seeing a large freight car in the near distance, the JOURNAL man headed for it, and found it to be a Burton stock car, the first one built by the Burton Company, and which has for its object the humane transportation of cattle from the West to the seacoast. It is built on a new principle, and has a partition in its center. Two rows of cattle are placed in each of these rooms, in rows of three each, back to each other, with their heads in stanchions similar to the cow stalls of a barn. Plenty of room is given them to stand up or lie down, and in front of each row are feed and water troughs, which can be filled from the top of the car by opening a hatch above each one. The feed (grain) is stored in boxes under the roofs and above the heads of the cattle, and by moving a handle any desired quantity can be let down. The car takes water the same as the tender of a locomotive, receiving it in a long pipe at one end, from which it is distributed through smaller ones to the troughs. This car will carry twelve cattle, or two less than are now put into a car in the "boxed herring" style. It certainly is a humane idea, and the company intend pushing it. Near this is the exhibit of the Continental Construction Company, who have, among other railway supplies, the model of a wrecking car, which is much admired by all who see it. It is strongly constructed, and is provided with a tipping counter-balanced mast 32 feet high, with a 28 foot boom, which is placed on a turn-table on the deck of the car, and is so made that when a bridge or tunnel is to be passed through it can be laid in a nearly horizontal position. The model is one-eighth size, and has a tender attached in which can be carried tools, etc. When working, the car can be fastened to the rail by patent grips, and has jack-screws placed under its sides so as to prevent tipping. It works well as a model, and is approved by numerous railway men, and should be visited by all such who go to the Institute.

In another part of the hall the Hancock Inspirator Co. display the practical workings of their locomotive and other injectors, which are really fine ones, and Mr. Russell the gentleman in charge, can explain them so that even a scribe can understand them. In the center of the main hall, the Chesapeake and Ohio Railway has a liberal stock of coal and wood exhibited, all of which come from the line of their road. In the gallery near the band-stand is the famous Southern railroad display, which attracted so much attention at the Atlanta cotton exposition. The part brought up North consists of the exhibit of the Richmond and Danville Railroad system, comprising some 2,000 miles of road, and of the Virginia, Tennessee and Georgia Air Line. The former of these is much the most extensive. To go into a detailed description of either of them would be out of place in a paper of this character, but it is sufficent to say that no richer display of minerals and woods has been seen in New England for a long time; and to look at them gives one new ideas of the natural wealth of the Southern States, chiefly the Virginias, the Carolinas, Georgia and Alabama. There are many fine specimens, and the object for which they came would seem likely to be accomplished, viz., that of attracting to the South some of the large surplus of New England capital which the West is constantly absorbing. These specimens of coals, ores, deposits, ledges and forest woods are all near the line of some of these roads, and not a great mileage from the coast, and can easily be brought North to a good market by sea. The Richmond and Danville display is in charge of Capt. McPhail, a man of inexhaustible knowledge on the subject of geology, and the one to whom the JOURNAL man would refer those who may desire to know the names and origin of the thousand or more specimens here exhibited. In another letter, other scenes and objects at the fair will be described as there are yet some things left there of interest to railroad men which this letter does not touch upon.

CINDERS.

Massachusetts is getting itself into notoriety rapidly as a place for railroad accidents, and if it keeps on, the Railroad Commissioners will have to work nights and Sundays investigating them. The laws of the State say, sec. 8, chap. 112, general railroad law: "The Board of Commissioners shall investigate the cause of any accident resulting in loss of life, or any accident not so resulting which it may deem to require investigation." The New York and New England has been supplying them with accidents until lately, and now the Fitchburg and the State Road are falling in, no less than three occurring on these roads in about a week.

An old locomotive called the Pilgrim, which has seen some thirty years active service on the Old Colony Railroad, has just been taken to pieces. It would seem to be proper to here say with the past, "The Pilgrim fathers, where are they?"

The railroad man is, from the nature of his profession, quick to take advantage of opportunities, and also equally quick to apply them to himself, when it can be done so to his advantage. The other day a group of yard men of the Fitchburg Railroad were discussing the political situation, when one of them was heard to exclaim: "Och, and if Gineral Butler is elected, such of us as gets a dollar and a half a day, will thin get two dollars and a half. Hooray for the Gineral."

The managers of the Boston roads are hard at work on their fall time tables, and indications are that the rush of travel is about over. Most of the roads report it as the heaviest for several years. "CURTIS."

BOSTON, September 28, 1882.

THE German Government intends to devote its attention to the execution of a project for the construction of a canal connecting the North Sea with the Baltic.

ALL limited first or second class, or theatrical tickets sold hereafter from New York to Cincinnati, Louisville, Chicago and St. Louis must be for a continuous journey from starting point to destination. To carry this out the Trunk Lines will be provided with a rubber stamp reading as follows: "Valid only for continuous passage on train leaving New York at —, m—, arriving at the destination of this ticket at — m —, 188—, as per schedule." This they must stamp on the back of the contract of each ticket and fill up the blank spaces, which are to show the hour and day at which the train leaves New York, and the hour and day on which it arrives at the destination named on the ticket. This filling up must be done plainly and distinctly with ink. Before selling tickets it will be necessary to ascertain from the purchaser train and date on which he will start. The ticket agents will also be provided with a rubber stamp reading. "As per limitation on back of this contract." This must be stamped on the face of each contract.

STEEL CAR PUSHER

MADE ENTIRELY OF STEEL.
ONE MAN with it can easily move a loaded car.
Manufactured by E. P. DWIGHT,
DEALER IN RAILROAD SUPPLIES,
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First-Class English
IRON AND STEEL RAILS
AT LONDON PRICES, F. O. B.

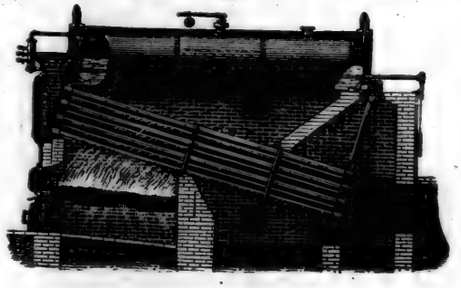
We also purchase all classes of Railroad Securities and negotiate loans for Railroad Companies.

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MECHANICS' BANK BUILDING,
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Manufacturers of Fine
COACH AND CAR VARNISHES.
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SAFETY RAILROAD SWITCHES,
WITH MAIN TRACKS UNBROKEN.
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WHARTON RAILROAD SWITCH CO.,
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WATER TUBE STEAM BOILERS.



THE BABCOCK & WILCOX CO.,
30 Cortlandt St, New York.
116 James Street, Glasgow.

The Kelley Traction Motor.

THE Kelly Traction Motor Company, which proposes to develop a new motor, involving the novel application of the principles of the ordinary locomotive and stationary engine combined, with some new and ingenious devices, has filed papers of incorporation in the County Clerk's office. The limit of the capital stock is placed at $1,000,000. The main end sought by Mr. Kelley in his invention was to secure greater tractive force with less expenditure of steam power and less weight to an engine. This, he says, he has accomplished in the new motor by the additional use of the power of friction secured by transmitting the weight of a portion of the engine to the tops of the driving-wheels through a fulcrum wheel rotating horizontally. This wheel receives its motion directly from the steam cylinder or other source of power, and on account of its horizontal rotation it produces a forward or backward motion in both drivers.

One large driver is used on one side, and two drivers, one resting on the other, each with one-half the diameter of the large driver, on the other side. These drivers are not directly connected by rigid axles, each driver having an independent short hollow axle, and they are held to gauge by pedestals with adjustable hollow boxes firmly secured, braced and counter-braced to the frame. The weight transmitted to the tops of the driving-wheels is adjustable by means of a screw attached to the frame and passing through the center of the fulcrum, which receives pressure or weight therefrom through three friction rollers attached to the stem of the screw, thus adapting the engine to variable loads. In comparing the construction of the engine with the regular direct-connected engines, it is found that with the same number of strokes of the piston per minute and with equal length of crank-shafts the fulcrum wheel of this new motor engine will revolve as fast as the drivers of a locomotive or stationary engine, and that the power is independent of the diameter of the fulcrum wheel and the velocity dependent on its diameter or crank-shaft; consequently the power and the leverage exerted on the top of the driver-wheels by the fulcrum wheel is equal to the power exerted by the driver-wheel on the rail or on a belt in direct-connected engines. The driver-wheels being provided with hollow boxes, the weight of the fulcrum wheel upon the drivers is transmitted directly to the rail or shaft, independent of the box or axle. This gives an additional leverage of the whole diameter of the drivers to produce additional power.

The additional tractive or propelling power is found to be from 25 to 50 per cent of the power of comparative direct-connecting engines, and consequently the actual power of the engine is increased from one-quarter to one-half, dependent solely upon the plan and arrangement of the parts in construction. The boiler is situated under the fulcrum wheel, thus bringing the center of gravity of the engine as near as possible to the surface of the ground. The cylinders are placed above the fulcrum wheel, protecting them from all damage from dust and dirt. This engine is adapted to any and every kind of service, either on land or sea, when propelling power is required. The patentee says that engines of this design of twice the power of a direct-connecting engine will cost one-quarter less to build and will last at least one-quarter longer. The short hollow axles facilitate the rounding of curves by motors, and are equally efficient when used on horse or steam car tracks, eliminating largely the friction of the wheel flanges on the rail.

The directors of the Kelley Traction Motor Company are Chauncey Vibbard, Benjamin M. Plumb and James P. Bradt, of New York; John D. Gould and G. W. Daniels, of Boston; Richard Schermerhorn, William Hadden, John Daily and C. P. Porter, of Brooklyn; H. W. Blair, of New Hampshire, and Joseph F. Kelley, of Washington.

Philadelphia and Reading Companies.

The following is the comparative statement of the Philadelphia and Reading Railroad Company and the Philadelphia and Reading Coal and Iron Company for the month of August, 1882, and 1881 :—

	1882.	
GROSS RECEIPTS.	*Profit for mo.*	*Year to date.*
Railroad traffic	$854,553 80	$6,324,401 03
Canal traffic	84,089 15	125,792 36
Steam colliers	12,670 05	195,683 28
Richmond coal barges	11,227 55	115,610 14
Total Railroad Co	$950,085 45	$6,630,266 53
Reading Coal & Iron Co.	221,214 10	660,954 78
Total of all	$1,171,299 55	$7,291,221 31
TONNAGE & PASSENGERS.	*Month.*	*Year to date.*
Tons of coal on railroad	819,511.08	5,914,172.17
Tons of merchandise	665,177.01	5.587,477.09
Passengers carried	1,077,039	8,664,491
Coal transp. by steam colliers	50,189.00	419,608.02
TONS OF COAL MINED.		
By Coal and Iron Company	416,405.18	2,833,045.09
By tenants	150.026.15	1.075,328.10
Total mined from lands owned and controlled by Co. and from leasehold estates	566.432.13	3,908,373.19

	1881.	
GROSS RECEIPTS.	*Profit for mo.*	*Year to date*
Railroad traffic	$900,431 74	$5,836,065 82
Canal traffic	64,368 09	239,068 86
Steam colliers	38,404 11	176,327 47
Richmond coal barges	1,558 05	297 50
Total Railroad Co	$1,003,762 59	$6,251,759 64
Reading Coal & Iron Co.	151,503 06	683,098 56
Total of all	$1,155,265 65	$6,934,858 14
TONNAGE & PASSENGERS.	*Month.*	*Year to date.*
Tons of coal on railroad	818,890.06	5,647,080.10
Tons of merchandise	665,203.06	4,789,830.05
Passengers carried	1,043,413	7,625,501
Coal transp. by steam colliers	56,039.12	410,104.17
TONS OF COAL MINED.		
By Coal and Iron Company	434,643.02	2,679,640.08
By tenants	142,229.00	1,051.224.06
Total mined from lands owned and controlled by Co. and from leasehold estates	576,872.02	3,730,864.15

Total of both companies for the month of August, 1882: Gross receipts, $3,591,200.78; gross expenses, $2,419,901.23—profit, $1,171,299.55.

THE fence along the Canadian bank at Niagara Falls, for which an appropriation was made by the Canadian Government, is to be of at least four lines of iron wire extended on iron posts cemented in the limestone rock at small distances from one another. The fence will extend along the bluff from the railway extension bridge to the brink of the Horseshoe Fall, and, of course, will offer no obstruction to the view, while it will be of inestimable value as a protection against accidents.

Northern Central Railway.

THE following is a comparative statement of the earnings, expenses, etc. of the Northern Central Railway for the months of August, 1881 and 1882:—

	1882.	1881.
Gross earnings	$667,488	$498,098
Operating expenses	276,299	310,671
Extraordinary expenses	19,968	93,002
Total expenses	$296,267	$403,673
Net earnings	$371,221	$94,335

For the eight months ending August 31, 1881 and 1882, the earnings, expenses, etc. were:—

	1882.	1881.
Gross earnings	$2,828,842	$3,600,688
Operating expenses	2,159,787	2,188,621
Extraordinary expenses	197,818	214,007
Total expenses	$2,357,605	$2,402,628
Net earnings	$1,471,237	$1,198,060

—showing an increase for the month of August in gross earnings of $169,488, and in net earnings of $276,886; and for the eight months ending August 31, an increase in gross earnings of $228,154, and in net earnings of $273,177.

Medical Boxes.

THE box that the Pennsylvania Railroad Company has decided on as the best for use in case of an accident is of tin, about eight inches in length, four in width, and two in height, and is to be fitted into a chest on the tender. They were suggested by surgeons of the company. On the cover is the following:

PENNSYLVANIA RAILROAD.

MEDICAL BOX.

To be kept on each locomotive, and used in case of accident only.

Outfit.

1 rubber compress, 1 package of absorbent cotton, 6 rolls of bandages, 1 pyramid of pins.

This outfit must always be kept up, and when anything is needed requisition should be made at once.

Directions.

When an arm or leg is crushed, causing hemorrhage, pass compress around limb immediately below the injured part. In case of rupture, if a vein, tie it lightly until arrival of surgeon.

The rupture of an artery can be distinguished by the color of the blood, which is red, and spurts out, while a vein has black blood and flows continuously.

For wounds on the head or face apply absorbent cotton, and bind with a bandage.

The boxes are to be put on trains this week. In the office of Road Foreman of Engines R. E. Pettit about 2,000 are piled for distribution.

"There is not a doubt of the usefulness of the box," an engineer said. "Almost any engineer can tell of instances where just such articles would have been of very great use. I stood in the Newark depot one day whittling a stick when my knife slipped and went into my arm. The blood spurted like a waterway; I tore off my sleeve, and the fireman tied up my arm with a rope. The company's surgeon had an office across the way. Generally many wounded men are not so fortunate as I was. They frequently bleed to death."

A SUMMARY method of unloading coal boats by the Aire & Calder Navigation Company, at Goole, Scotland, is to hoist the coal boat weighing thirty tons bodily out of the water with a hydraulic crane, and literally turn it over into a larger vessel, just as a coal hod is emptied on a fire.

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BEARDSLEY, D. N. & CO., MANUFACTURERS OF Superior Oak and Chestnut Lumber, and Railroad Ties, 9 Murray Street, N. Y.

CHESTER STEEL CASTING CO., MANUFACTURE Steel Castings, Cross-heads, Rocker-arms, Pistonheads, etc., for Locomotives, 407 Library St., Phila., Pa.

DAVIDS, JOHN B. & CO., WRITING INKS, 184 William Street, N. Y.

DAVIS, JOHN H. & CO., BANKERS AND BROKERS, 17 Wall Street, N, Y.

DODGE & SINCLAIR, MANUFACTURERS OF RUBber and Leather Belting, 21 Park Row, N. Y.

EVANS, GEO. A. IRON AND STEEL RAILS, 74 WALL Street, N. Y.

EAGLE TUBE CO., BOILER TUBES, 614 to 626 WEST Twenty-fourth Street, N. Y.

EAMES VACUUM BRAKE CO., RAILWAY TRAIN Brakes, 15 Gold Street, N. Y.

FAIRBANKS & CO., STANDARD SCALES, RAILROAD and Warehouse Trucks, and Copying-presses, 311 Broadway N. Y.

GORDON & DUGGAN, RAILWAY SWITCHES, 28 State Street, Boston, Mass.

GUEST, WM. A. & CO., IRON AND STEEL RAILS, 41 and 43 Pine Street, N. Y.

GEORGE, EVAN P. Jr., COUNSELLOR AT LAW AND Solicitor of Patents, 4 and 6 Warren Street, N. Y.

HARLAN & HOLLINGSWORTH CO., MANUFACTURE Passenger Cars, Wilmington, Del.

HAYWARD, S. F. GENERAL AGENT BABCOCK Fire Extinguisher, 407 Broadway, N. Y.

IVISON, BLAKEMAN, TAYLOR & CO., STEEL PENS 753 and 755 Broadway N. Y.

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PARDEE CAR WORKS, PARDEE, SNYDER & CO., (Limited) Watsontown, Pa.

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RIEHLE BROS., STANDARD SCALES AND TESTING Machines, 115 Liberty Street, N. Y.

SHUGG BROS., DESIGNERS AND ENGRAVERS ON Wood and Photo-Engravers, 18 Cortlandt St., N. Y.

SWIFTS IRON AND STEEL WORKS, MANUFACturers of all Weights of Standard and Narrow Gauge Rails, 26 West Third St., Cincinnati, Ohio.

THE CONGDON BRAKE SHOE COMPANY, IMPROVed Car Brake Shoe, 142 Dearborn Street, or opposite Tribune Building, Chicago.

THE RAMAPO IRON WORKS, MANUFACTURERS OF the Tracy Safety Switch, and General Railroad Equipment. Works and office: Ramapo, Rockland Co., New York.

UNITED STATES MINERAL WOOL COMPANY, 16 Cortlandt Street, N. Y.

VANDERBILT & HOPKINS, RAILROAD TIES, 120 Liberty Street, N. Y.

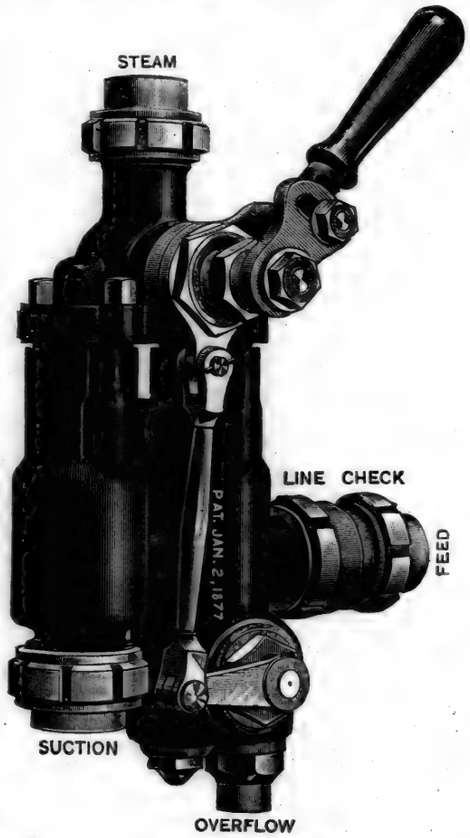
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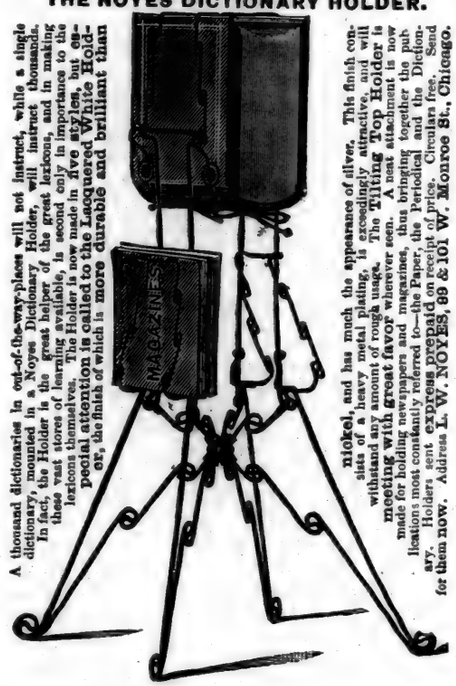
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Superior Oak and Chestnut Lumber,

AND RAILROAD TIES.

Oak Car Timber a Specialty.

OFFICE: 9 MURRAY ST., NEW YORK.

List of Recent Patents for Inventions Relating to Railway Interests.

264,437. Boiler Furnace: ELIJAH H. BROWNELL, Dayton, Ohio. Filed April 1, 1882.

264,440. Fare Register: EDWIN CHESTERMAN, Philadelphia, Pa. Filed June 16, 1882.

264,441. Car Coupling: JOHN COUP, Cleveland, Ohio. Filed August 4, 1882.

264,464. Elevated Cable Railway: CHARLES LEAVITT, Cleveland, Ohio. Filed January 23, 1882.

264,465. Ticket Punch: JOHN LIPPINCOTT, Baltimore, Md. Filed March 4, 1882.

264,475. Electrical Car Brake: GEORGE D. PAUL, Orange, N. J., and FREDERICK A. KAMPFE, Brooklyn, N. Y., assignors to said Paul, Kampfe Bros., New York, William Lisle, Jr., Brooklyn, and George S. Ferry, New York, N. Y. Filed November 26, 1881.

264,489. Injector: MORGAN D. STRICKLAND, St. Louis, Mo. Filed March 16, 1882.

264,494. Feeding Water to Boilers of Locomotives: WILLIAM H. TURRENTINE, Company Shops, N. C. Filed July 24, 1882.

264,500. Device for Leveling Boilers of Road Engines: T. FRANK WILSON and ALBERT L. WILSON, Gorham, N. Y. Filed June 28, 1882.

264,501. Spark Arrester: DAVID WISER, Plymouth, Ind., assignor of two-thirds to Thomas J. Hupp and Lorie G. Capron, same place. Filed May 15, 1882.

264,507. Rotary Engine: ISAAC W. BAILEY, Fairport, Va. Filed May 26, 1882.

264,582. Car Brake: FREDERICK W. STREHLAN, Baltimore, Md. Filed July 5, 1882.

264,606. Steam Whistle: WILLIAM BARNETT, Mansfield, Ohio. Filed July 1, 1882.

264,617. Air Brake for Railway Cars: MARCUS BROCKWAY, CHARLES N. WATTS, and PORTER SHELDON, Jamestown, N. Y. Filed June 24, 1882.

264,626. Nut Lock; JAMES T. CLARK, Milwaukee, Wis., assignor to Tuttle & Whittemore, Naugatuck, Conn. Filed July 29, 1882.

264,634. Car Coupling: WILLIAM JENKINS DAWSON, Lawrence, Kan. Filed February 7, 1882.

264,719. Railroad Alarm Signal: CLINTON LLOYD, Williamsport, Pa. Filed April 14, 1882.

264,733. Car Coupling: HARRISON MENZEMER, Shawneetown, Ill. Filed April 10, 1882.

264,734. Mechanical Movement: LEWIS N. MERRIMAN, Dixon, Ill. Filed March 17, 1882.

264,736. Suspension Joint for Railway Rails: HENRY T. MORSE, Boston, Mass., assignor of three-fourths to Wm. Wallace Page, Geo. Marshall Lee, and Everett D. Lee, all of same place. Filed July 12, 1882.

264,755. Railroad Frog: JAS. REED, Cochran, Ind. Filed July 1, 1882.

264,762. Weighing and Transfer Car: LLOYD D. RICHARDSON, JOHN R. TRIMMER, and EUGENE E. LOOMIS, Chicago, Ill. Filed May 11, 1882.

264,782. Railroad Signal: JAMES B. SMITH, Hackettstown, N. J. Filed April 19, 1882.

264,784. Car Coupling: FRANK P. STEBBINS, Collins, Mich. Filed May 13, 1882.

264,807. Sleeping-Car: WILLIAM H. WIGMORE, Philadelphia, Pa., assignor of one-half to John H. Doerr, same place. Filed July 15, 1882.

264,829. Railway Signal: HENRY HANSON, Boston, Mass. Filed April 17, 1882.

264,832. Railway Wrecking Car: ROBERT HITCHCOCK, Springfield, Mass. Filed August 2, 1882.

North Carolina Midland Railroad.

C. G. HOLLAND, one of the directors of the Virginia Midland Railroad Company, has just returned from New York, where he went to attend a meeting of the directors of the company held for the purpose of considering the matter of building the North Carolina Midland Railroad. We learn that the North Carolina extension received highly favorable consideration, and that the enterprise has been put on such a footing as will insure the speedy construction of the road. It will be remembered that the North Carolina Midland Railroad Company is a body corporate, independent in its existence of the Virginia Midland Railroad Company, and chartered as an independent company under the laws of North Carolina. This company has made arrangements to construct its road through western North Carolina, and the Virginia Midland has entered into contract to lease the road as soon as completed, the contract for the lease stipulating for the completion of the new road within three years after the signing of the deed of lease. From all we can learn it appears that the prospect for the construction of the North Carolina Midland Railroad is very favorable.—*Danville (Va.) Register.*

The Pennsylvania Railroad Company Increasing its Facilities.

THE Pennsylvania Railroad Company is steadily pursuing the policy of extending its facilities for moving traffic by laying down third, fourth, and, in some cases, fifth tracks. On the New York Division, between Frankford and Holmesburg Junction, the land has been procured for three additional tracks (to make five tracks in all). The fifth track, which will be the southernmost, is intended for the movement of freight for the manufactories now built and to be located between the railroad and the Delaware River, as all of the lands between these points will in a short time be occupied for manufacturing purposes. Facilities will be given to construct sidings from the establishments. The main object in building the fifth track at this point is to avoid interference with the main tracks, used for passenger and freight trains. Between Holmesburg Junction and Schenck Station, and from thence to Bristol, two additional tracks have been completed and are now in use. Through a portion of the borough of Bristol an entirely new line for the railway is contemplated, and work will be commenced upon it immediately. Between Bristol and Morrisville, opposite Trenton, the company is in possession of the necessary land upon which to construct two additional tracks, and upon a large portion of the line grading has been finished and is now ready for the rails. Upon the main line, between Philadelphia and Columbia, the construction of four-tracks has been completed westward to Bryn Mawr, and surveys and grading are progressing beyond. In conducting the traffic of the four track line the passenger trains take the outer tracks and the freight trains the center two.

Pennsylvania Railroad.

THE statement of the business of all the lines of the Pennsylvania Railroad Company east of Pittsburgh and Erie, for August, 1882, as compared with the same month in 1881, shows:

An increase in gross earnings of	$861,201
An increase in expenses of	272,845
An increase in net earnings of	$588,356

The eight months of 1882, as compared with the same period in 1881, show:

An increase in gross earnings of	$2,326,943
An increase in expenses of	2,389,496
A decrease in net earnings of	$62,553

All lines west of Pittsburgh and Erie for the eight months of 1882 show a deficiency in meeting all liabilities of $506,252, being a decrease as compared with the same period of 1881 of $1,548,418.

THE life saving crew in the neighborhood of Ocean Park, N. J., gave an exhibition on the 22d inst., with a life saving car of the same pattern as that used by the life saving patrol of Great Britain. The sea ran high and the wind blew almost a gale. Manned by fourteen men, the crew of two stations, the life car or raft was quickly launched in the surf and successfully pulled through the breakers to a surf boat which was stationed about a thousand yards from the shore. The surf boat contained six surfmen from one of the stations. The crew of the life car went through the form of rescuing the six men, and the life car was brought safely to the shore. In any ordinary storm it is said that a crew or seven men can handle the life car, and it can carry thirty persons.

The Coal Trade.

THE leading coal-carrying companies make the following reports of their tonnage for the week ending Sept. 16, and for the year to that date, compared with their respective amounts carried to the same time last year:—

	Week.	1882.	1881.
Reading Railroad	211,228	6,253,995	6,101,858
Schuylkill Canal	16,238	318,201	414,223
Lehigh Valley	175,407	4,783,523	4,425,586
Delaware, Lackawanna and Western	96,463	3,087,717	2,948,153
Shamokin	25,564	791,532	757,900
Central R. R. of New Jersey	95,156	3,000,743	3,031,252
United R. R. of New Jersey	36,115	1,173,768	1,089,864
Pennsylvania Coal	36,994	946,954	943,871
Delaware and Hudson Canal	95,331	2,367,433	2,487,659
Huntingdon and Broad Top Mountain	15,858	310,045	370,173
Penn. and New York	27,198	1,119,061	1,154,252
Clearfield, Pa.	56,911	2,028,957	1,698,460

The total tonnage of anthracite coal from all the regions for the week ending Sept. 16, as reported by the several carrying companies, amounted to 726,186 tons, against 662,563 tons in the corresponding week last year, an increase of 63,623 tons. The total amount of anthracite mined for the year is 19,425,336 tons, against 19,057,251 tons for the same period last year, an increase of 368,085 tons. The quantity of bituminous coal sent to market for the week amounted to 102,165 tons, against 86,975 tons in the corresponding week last year, an increase of 15,190 tons. The total amount of bituminous mined for the year is 2,969,952 tons, against 3,438,413 tons for the corresponding period last year, a decrease of 468,461 tons. The total tonnage of all kinds of coal for the week is 828,351 tons, against 749,539 tons in corresponding week last year, an increase of 78,813 tons, and the total tonnage for the coal year is 22,395,288 tons, against 22,495,664 tons to same date last year, a decrease of 100,376 tons. The quantity of coal and coke carried over the Pennsylvania Railroad for the week ending Sept. 16, was 223,182 tons, of which 173,988 tons were coal and 49,194 tons coke. The total tonnage for the year thus far has been 7,750,182 tons, of which 5,723,544 tons were coal and 2,026,638 tons coke. These figures embrace all the coal and coke carried over the road, east and west. The shipments of bituminous coal from the mines of the Cumberland coal region for the week ended Sept. 16 were 44,725 tons, and for the year to that date 767,296 tons, a decrease of 684,286 tons as compared with the corresponding period of last year. The shipments were: To the Baltimore and Ohio Railroad—For the week, 19,395 tons; year, 585,296 tons; decrease as compared with 1881, 358,582 tons. Chesapeake and Ohio Canal—Week, 15 778 tons; year, 76,388 tons; decrease as compared with 1881, 235,878 tons. Pennsylvania Railroad — Week, 9,232 tons, year, 100,563 tons; decrease from last year, 93,272 tons. The Reading Railroad shipment for last week, ending September 23, was about 200,000 tons, of which 54,000 tons were sent to and 47,500 tons shipped from Port Richmond, and 16,500 tons sent to and 16,000 tons shipped from Elizabethport.—*Philadelphia Ledger, Sept. 25.*

THE Pennsylvania Railroad system aggregate 10,015 miles of track.

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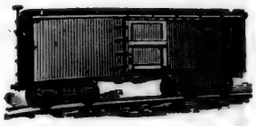
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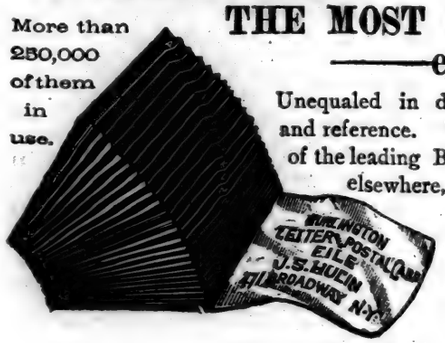
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GENERAL RAILROAD SUPPLIES.

Railroad Incident.

THE particulars of an accident—or rather an incident—which occurred on the Northern Wisconsin division of the Chicago and Northwestern Railway, in the vicinity of Oconto, on the morning of the 19th inst., is thus recounted by one of the passengers, and which, if true, is certainly one of the most extraordinary in railroad history:

"The north-bound passenger train, with a very large number of passengers was running along at not less than 25 miles an hour, when her locomotive exploded with gigantic force. I was seated in the smoking-car, the third from the engine, and knew by the loud report and the heavy shock to the train what had happened. Springing up, I said, 'The boiler has exploded!' and I expected in the next instant that the train would be smashed into kindling-wood. At almost the same moment a mass of rubbish from the explosion fell upon the top of the car, which rattled loudly, but did no other damage. Of course, in a moment the sensation of danger was over, as the train ran smoothly along, except a peculiar and unnatural sound from the front of the train, which seemed to move along without any perceptible diminution of speed. I concluded that my impression that the boiler had exploded was erroneous, as everything seemed then to be all right; and a gentleman remarked that a torpedo had probably been exploded under the train with a view to mischief. By this time the train had run down and crossed the bridge across the Oconto River, when the brakemen suddenly set the brakes with great exertion, and brought the train to a halt. Up to this moment no one on the train knew what the actual situation was except the mail agent and baggage men, and they were unable for some reason to put on the brakes to stop the train. The train was finally brought to a standstill. It was then found that the four forward trucks of the engine were loaded handsomely upon the tender, which was intact. It was evident that not an individual on the train, as it stood there, was injured, and a fact that the majority of the passengers did not know that anything had occurred until they were told, as the report was not heard very far back, and many were asleep. But the engineer and fireman—there was but one voice, 'they are dead.' Some of the passengers and the train men ran back, and they were utterly amazed to find them standing by the wrecked engine, but little the worse for the dreadful shaking up. After a careful examination of the whole ground, the following conclusions were reached by me and many others: First, that the explosion had been most terrific; that at the time of its occurrence the engine was lifted from its connection with the tender and violently wrenched clear of it; that at the same moment the cow-catcher was thrown downward as a matter of course, and as was shown by three ties being rooted up and broken in two nearly in the center; and at the same point by the side of the track lay the nose of the badly demoralized cow-catcher. This must have occurred as the engine was thrown forward into the air with the most terrific force, as was fully established by its being hurled 180 feet forward and along a little to the right of the track before it struck the ground, where it buried itself half out of sight in the mud. Of course, this 30-ton mass of iron must have turned a complete somersault in the air, at which time the forward trucks were dropped upon the tender, where they are now lying. The grass and bushes are blackened and dead by the escaping steam underneath the track where the engine flew through the air. The huge machine took itself and all its immense rubbish, the result of the explosion, absolutely out of the way and left a clean track for the train to pass along, and, strange to say, the rails at the point of the broken ties were scarcely disturbed. But the fireman and engineer were carried along in the cab and landed with it, or very near. One pair of trucks on the mail car jumped the track at the point where the explosion occurred, and ran in that situation one mile, passing over the bridge at the Oconto River in that way. and another odd freak, passing a switch a moment before the train was stopped, they ran on again, and no great damage was done except to tear off the heads of all the spikes from one side of the rail for the whole distance, breaking nearly all the bolts which connect the ends of the rails together—all this without one life being lost or any one seriously injured. Who can cite anything like it in railroads to-day?"

Completion of the Gunnison Extension of the Denver and South Park R. R.

J. W. MORSE, general passenger agent of the Union Pacific Railway, has just issued the following circular regarding the completion of the Gunnison extension of the Denver and South Park Railway:—

"On Friday, Sept. 1, the Gunnison extension of the Denver and South Park division, Union Pacific Railway, was completed to Gunnison City, the commercial center of the Gunnison mining region. The territory thus made tributary to our railway system is equal to the best in Colorado. It already contains a large population, and a considerable portion of the mining immigration of Colorado is at present going thither. Pitkin, Tin Cup, Hillerton, Tomichi, Ohio Creek, Virginia City, Woodstock, Crested Butte, Gothic, Irwin and Cochetopa—all flourishing mining camps—are embraced within the bounds of this section. Lake City, Ouray, and other rich camps in the San Juan country, are also best reached via Gunnison City. The importance of this extension to the Union Pacific will be readily appreciated.

"The Denver and South Park division extends from Denver to Gunnison, 208 miles, with branches to Morrison, Breckenridge, Fairplay and Leadville. It is the only line from Denver to Morrison, Fairplay and Breckenridge. It is the shortest line to Leadville by 107 miles, and to Gunnison by 82 miles.

"The line passes up Platte Cañon, conceded to be the most picturesque of the famous gorges of Colorado. It climbs Kenosha Hill to an elevation of 10,200 feet, and there presents a glorious view of the beautiful South Park, 2,000 feet below. Crossing the park it enters the Arkansas Valley, and leaving it pushes up Chalk Creek Cañon to within 600 feet of the summit of the great Saguache range of mountains, and there, far above timber line, at the altitude of eternal snow and ice, it enters a tunnel 1,800 feet in length, and piercing the most rugged of the Rockies. Emerging from the tunnel on the Pacific slope, 11,524 feet above sea level, the enchanting valleys of Quartz Creek and its numerous tributaries and 150 miles of monster mountains stretch before the eye—a view of stupendous peaks and rugged cañons unexcelled for grandeur on this or any other continent.

"Alpine Tunnel, the first to pierce the main range of the Rocky Mountains, is the highest railway tunnel in North America or Europe. The approaches of the Denver and South Park division of the Union Pacific on either side are marvels of engineering skill, laid through scenes unrivalled for grandeur and magnificence. Although the tunnel commences with a sharp curve at its eastern end, so nicely was the engineering done that when the workmen from either side met in the heart of the great Snowy Range they found only about one inch of variation of the respective bores. As one of the foremost exhibitions of science in railway building in the world, as a scenic attraction beside which all others of the kind, in our land at least, are tame, and as a grand factor in the commerce of the West, the Alpine Tunnel route will henceforth be the first of all in Colorado to be utilized by the intelligent tourist."

THE annual meeting of the United States Charcoal Iron-workers, with a membership of 300 in twenty-six States and representing $50,000,000 of invested capital, is called to be held in Chattanooga, Tenn., on the 18th of October. A free excursion has been tendered the Association through Alabama, Tennessee and Georgia, and an attractive programme has been arranged for their entertainment.

THE Governor of New York has issued a proclamation ordering the Boston, Hoosac Tunnel and Western Railway Company to remove within three months so much of the embankment near the village of Schaghticake as prevents the water of the Hoosick River from flowing through the old and natural channels of the river, where it was accustomed to flow immediately before the construction of the embankment.

THE King of Spain sent an Ambassador to the Pope, a young man of high extraction, with a special mission. The Pope, informed that a special envoy of the King of Spain demanded an audience, imagined that he would receive an aged Minister covered with stars, and venerable white hair, etc. Instead of which, in walked with light elastic steps quite a young man. Haughty and irritable, the Pope looked at him, and at last said: "Are all the old diplomatists in Spain dead, that the King sends us a young boy, without even a beard!" ("*Un jeune homme imberbe.*") "Holy Father," said the indignant Spaniard, "if the King, my master, had thought that honor consists in a beard, he would have sent you a goat, and not a noble man, like myself."

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SECOND QUARTO SERIES.—VOL. XXXVIII., No. 39.] NEW YORK, OCTOBER 7, 1882. [WHOLE No. 2,424.—VOL. L

CONSOLIDATION.

ARTICLES of consolidation and amalgamation of the San Luis Obispo and Santa Maria Valley Railroad Company with the Pacific Coast Railroad Company were filed with the Secretary of State of California, on the 21st ult.

ARTICLES of consolidation were entered into on the 27th of September between the Joplin and Arkansas Northern Railroad, of Missouri, and the Arkansas Northern Narrow-Gauge Railroad. The line of the latter will begin at Van Buren and run northwardly through Crawford, Washington and Benton counties to McDonald County, Mo. The consolidated road will be hereafter known as the "St. Joseph, Kansas City and Arkansas Railroad Company." It is understood that work will soon begin on the line.

THE Atlantic and French Broad Valley Railroad of South Carolina, the Cumberland Railway of Kentucky, the Morristown, Cumberland Gap and Ohio Railroad of Tennessee, and the Morristown and Carolina Railway were consolidated at Columbia, S. C., on the 2d inst., under the name of the "Carolina, Cumberland Gap and Chicago Railway Company." The consolidated road runs from Aiken, S. C., to Livingston, Ky., a total distance of 368 miles. The whole road is to be completed by 1888, and the line from Aiken to Abbeville, S. C., will be finished and in working order by July, 1883. Under the organization South Carolina has five directors, North Carolina one, and Tennessee five. Gov. Hagood, of South Carolina, was elected President, O. C. King, of Tennessee, Vice-President, and S. S. Campbell, of New York, Secretary and Treasurer of the consolidated lines. Capt. W. J. Kirk was elected Chief Engineer of the Southern Division of the road, comprising the two Carolinas, and the headquarters of the company have been established at Aiken, S. C. The contract for building the road has been awarded to a company of capitalists called the Atlantic and Northwestern Construction Company, of New York, of which W. H. Schofield is President. The contractors agree to build and equip 100 miles of the road per year until the whole line is completed, work to be commenced at Aiken within 90 days. Bonds will be issued at once at the rate of $20,000 per mile of first mortgage, and at the rate of $15,000 per mile of second mortgage classes, amounting altogether to about $17,000,000. These bonds will be floated as soon as issued, arrangements for their hypothecation having been already effected. As soon as Gen. Hagood's term of office as Governor of South Carolina expires he will give the construction of the road his immediate supervision. The new road will traverse the finest portions of South Carolina, North Carolina, Tennessee, and Kentucky, and will open up direct communication by way of the South Carolina Railroad between Charleston and the Northwest. The road will connect with the South Carolina Railroad at Aiken, with the Charlotte, Columbia and Augusta Railroad at Trenton, with the Augusta and Knoxville at Troy, with the Atlanta and Charlotte Air-line Railroad at Easleys—all points in South Carolina; with the Western North Carolina Railroad at Waynesville, N. C.; with the East Tennessee, Virginia and Georgia Railroad at Morristown, Tenn., and with the great Kentucky system of railroads to all points North and West at Livingston, Ky. The road will cross the Blue Ridge Mountains through Eastatoc Gap without tunneling, and at a comparatively easy grade. Altogether, the consolidation of the various railroads which make up this great trunk line is one of the most important railway enterprises ever undertaken in the South.

ORGANIZATION.

AT a meeting of the Gold and Stock Telegraph Company, held in this city on the 26th ult., the following Board of Directors was elected: Norvin Green, William K. Bliss, William A. Wheelock, Jay Gould, George J. Gould, Thomas T. Eckert, E. D. Morgan, Augustus Schell, John Van Horne and J. O. Green. The old officers were re-elected at a board meeting held after the annual meeting.

AT a recent meeting of the stockholders of the Ohio River and Indiana Railroad the following Board of Directors was elected: Isaac B. Hyner, John C. Hassenier, C. A. Layton, James Wilson, M. D. Shaw, John M. Leiter and C. W. Timmermeister. The officers chosen are as follows: President, Isaac B. Hyner; vice-president, James Wilson, secretary, C. A. Layton; treasurer, John C. Hassenier.

AT the annual meeting of the stockholders of the Metropolitan Trust Company, held in this city on the 3d inst., the following gentlemen were elected trustees for the ensuing year: C. P. Huntington, M. K. Jesup, A. Gracie King, Thomas Hillhouse, Frederick D. Tappen, Parker Handy, James J. Higginson, Dudley Olcott, George A. Hardin, Phineas Prouty, J. Howard King, Bradley Martin, Isaac N. Phelps, J. J. Terry, D. O. Mills, J. W. Drexel, H. W. Jewett, E. D. Morgan, Jr.; O. P. Buel, Freeman Clarke, E. B. Hudson, John F. Slater, W. J. Hatch, H. R. Bishop, H. E. Pellew.

AT the annual meeting of the Danville, Olney and Ohio River Railroad Company, held at Kansas, Ill., on the 20th ult. the old Board of Directors was re-elected. At a subsequent meeting of the directors the following officers were chosen: President, Parker C. Chandler; vice-president and general manager, James R. Maxwell; treasurer, Charles A. Hovey, and secretary, Wm. H. Brown. There are no changes in the officers of the company, except by the election of James R. Maxwell, hitherto chief engineer of the road, in place of Charles Howard, who remains upon the Executive Committee.

AT the annual meeting of the New York Clearing House Association, held on the 3d inst., the following officers were elected for the ensuing year: President, F. D. Tappen; secretary, H. H. Nazro; manager, W. A. Camp, Clearing House Committee—Benj. B. Sherman, Geo. G. Baker, Wm. L. Jenkins, O. D. Baldwin, Richard King. Conference Committee—Geo. S. Coe, Percy R. Pyne, Henry W. Ford, Chas. F. Hunter, Jas. D. Fish. Nominating Committee—Alex. Gilbert, G. G. Brinckerhoff, Zenas E. Newell, Wm. J. Quinlan, Jr., E. K. Wright. Committee on Admissions—W. A. Hall, Geo. J. McGourkey, Geo. H. Wyckoff, J. L. Jewett, A. S. Frissell. Arbitration Committee—J. L. Everitt, E. D. Randolph, James T. Woodward, John Parker, D. C. Hays.

INCORPORATION.

THE Stevens Locomotive Company, of New York, capital $1,000,000, was incorporated on the 28th ult., at Albany.

ARTICLES of incorporation have been filed with the Secretary of State of Ohio, of the Youngstown and Austintown Railway Company, branch line.

THE Illinois, Iowa and Minnesota Railway Company has been incorporated with a capital of $2,000,000. The route of the road is to be from Streator, Ill., to the Mississippi River at or near Clinton, Iowa.

ARTICLES of incorporation were filed in the office of the Secretary of State of California, on the 21st ult., of the Pacific Coast Railway Company. The directors are: Chas. Goodall, Will

iam Norris, John Rosenfeld, John L. Howard, W. H. Knight and S. O. Putnam. Capital stock, $2,628,500, divided into 26,285 shares. Principal place of business, San Francisco.

The following companies were incorporated at Albany, N. Y., on the 2d inst: The Commercial Telegram Company; capital, $50,000. [The lines of the company are to run from New York to different cities in this and other States.] The Mexican Northern Telegraph and Telephone Company, of New York; capital, $200,000. [Its line is to run from New York through the State of New Jersey, and thence in a southwesterly direction to the city of Laredo and other cities in Mexico.]

Articles of incorporation have been filed with the Secretary of State of Illinois, by the Kaskaskia River, St. Elmo and Southern Railway Company, which proposes to construct a railroad from a point in Shelby county, on the line of the Toledo, Cincinnati and St. Louis Railroad, through the counties of Effingham, Fayette, Marion, Jefferson, Franklin, Williamson, Jackson and Union, to a point on the line of the Cairo and St. Louis Railroad. The principal office of the company is to be located at St. Elmo, and the capital stock is to be $500,000. The corporators are Benjamin F. Johnston, Presby M. Johnston, John B. Leach, William H. Smith, Bowles C. Smith, J. Harvey Johnston, Arthur G. Brown, Alexander M. Johnston, Leander R. Stocker and Joseph Micks, all of St. Elmo, and Malcolm E. Williams, of Effingham.

CONSTRUCTION.

Trains on the Santa Maria Railroad commenced running to Los Alamos on the 1st inst.

The Jacksonville (Fla.) and Atlantic Beach Railroad is to be completed by the 1st of May next.

The North Shore Railway is to be extended to Tadousac, where a winter Canadian port will be established.

Through passenger trains from Fortress Monroe were put on the Chesapeake and Ohio railway on the 2d inst. Two trains are run daily.

The Canadian Pacific Railway for 447 miles west of Winnipeg, and nearly 50 west of Moose Jaw Creek, is now complete, and sleeping-cars are running.

Advices from Magdalena state that the gap between the Sonora Limited and Benson railroads is thirty miles. Connection will be made about October 20th.

The formal opening of the Canada Atlantic Railroad took place on the 30th ult., an excursion party of about 200 persons going from Ottawa to Cateau at the invitation of the company.

The last spike in the completion of the Live Oak (Fla.) and Rowland's Bluff Railroad was driven on the 29th ult. The road is five feet gauge and standard, and first-class in its construction and equipment.

The construction of the Western North Carolina Railroad is progressing rapidly. On the line between Asheville and Ducktown 700 hands are employed. Twenty-four miles of the road, running as far as Wayneville, are completed and in running order. The line from Asheville to Ducktown is about 80 miles in length.

The New Orleans Pacific Railroad, from New Orleans to Shreveport, has been turned over to and consolidated with the Texas and Pacific Railway, and there is now no line of the former name in existence. It is all the Texas and Pacific, from El Paso to New Orleans.

The Erlanger syndicate have completed their route via Akron, on the Alabama and Great Southern division of the Cincinnati, New Orleans and Texas Pacific, to Selma, making a line to Selma independent of the Louisville and Nashville, and East Tennessee, Virginia and Georgia railways.

Engineers have begun running a line for a railroad from Delmar, Del., to Cherrystone, Va. It will cross the Eastern Shore Railroad one mile below Salisbury, and will touch New Church, Drummondtown, Temperanceville and other Virginia towns. It is proposed to build a branch from New Church to Chincoteague Bay, and another branch to Onancock, which is two miles from the main line.

The track of the Wisconsin Central Railroad is now nearly completed from Neenah south to Oshkosh, 20 miles, running parallel and close to the track of the Chicago and Northwestern Railway as far as that important point. From Schleisingerville north about 10 miles have been laid. The entire track will be completed about October 16, and through trains will be put on soon after that.

Arrangements have been completed by which Edward Bates Denny, president of the United States Mining and Investment Company, with its headquarters in this city, in connection with English capitalists, will undertake the construction of the Ottawa and Gatineau Valley Railroad. It is said that there is a scheme on foot to amalgamate this company with the Ottawa, Waddington and New York Railway and Bridge Company.

The Chenango and Allegheny Valley Railroad Company are building an extension of their main line from Coalville, a point near their present terminus, to Butler, Butler county, a distance 25 miles, where it will connect with the lines of the Western Pennsylvania Railroad Company. The latter have made an arrangement with the Chenango and Allegheny Valley Railroad Company for the transfer of traffic over the new branch, giving the Pennsylvania Railroad a new outlet for coal and other freight to the Lake regions and the northwest.

The Milwaukee and Northern Railroad Company is receiving 1,000 tons of steel rails per month for the Wisconsin and Michigan. Track-laying on this route is being pushed at the rate of one-half mile per day, and the road is down for eight miles north of Stiles. Winter will not interfere with track-laying, as the grading is far enough ahead to keep the track-layers busy should a heavy freeze set in at once. The road will reach Ontonagon early next season. This road has just received three new locomotives, Nos. 12, 14 and 15. Two are Baldwins and one is a Brooks machine, and they cost about $37,000. This makes fifteen engines in all on the road.

Nashville, Chattanooga and St. Louis Railway.

The lines now operated by this company are as follows: Nashville, Chattanooga and St. Louis, Main Stem, 321 miles; Shelbyville Branch, 8 miles; Jasper Branch, 19 miles; Fayetteville Branch, 40 miles; McMinnville Branch, 48 miles; Lebanon Branch, 30 miles; Centerville Branch, 25 miles; Duck River Valley Railroad, leased, 48 miles—total, 539 miles.

The gross earnings of the main stem and branches for the year ending June 30, 1882, were:

Main Stem	$1,882,780 52
Lebanon Branch	62,166 96
McMinnville Branch	44,141 41
Fayetteville Branch	37,481 08
Centerville Branch	17,350 66
Duck River Valley Railroad	30,662 07
	$2,074,582 70

Operating expenses, viz:

Main Stem	$1,114,561 79	
Lebanon Branch	24,130 89	
McMinnville Branch	30,514 64	
Fayetteville Branch	24,978 25	
Centerville Branch	14,691 96	
Duck River Valley Railroad	32,112 90	
		1,240,990 43

Net earnings:

Main Stem	$768,218 73	
Lebanon Branch	38,036 07	
McMinnville Branch	13,626 77	
Fayetteville Branch	12,502 83	
Centerville Branch	2,658 70	
Duck River Valley R. R., loss	1,450 83	
		$833,592 27

The sources whence the earnings of the main stem and branches were derived are as follows:

From freight	$1,364,066 85
" passengers	579,847 40
" mail service	51,552 80
" rents and privileges	79,115 65
Total, as above	$2,074,582 72
Less operating expenses	1,240,990 43
Leaving net earnings	$833,592 27
The interest and taxes were	583,577 37
Leaving a surplus of	$250,014 90
There were also received dividends on stock investments	39,006 20
Increasing the surplus to	$289,021 10
The surplus of 1880-'81, after paying interest and taxes, was	336,496 60
Balance of the proceeds of sale of $1,000,000 second mortgage bonds after expenditures shown in last report	566,569 73
Total surplus for the year	$1,192,087 43

There has been paid:

Two dividends, one of 3 per cent and one of 1½ per cent.	$300,164 94	
For improvement of track	352,316 16	
For new iron bridges	61,302 45	
For new engines	104,128 35	
For new cars	255,423 62	
For buildings, fences, elevators, real estate, side tracks, etc.	226,827 10	
For McMinnville extension	46,231 49	
For Centerville extension	80,426 08	
For Duck River extension	85,774 80	
		1,512,594 96
Showing an excess of payments over receipts of		$320,507 53

—which, with the cash on hand June 30, accounts for the increase of the floating debt, all of which, the report says, can be liquidated by the sale of the bonds authorized to be issued upon the completion of the McMinnville and Centerville extensions, and the disposition of the $144,000 Duck River bonds held by the Company.

A further analysis of the report shows that the earnings of the main stem were, from freight $1,243,859.87; passage, $516,317.12; mails, $43,487.88; rents and privileges, $79,115.65. Of the Lebanon Branch: from freight, $34,187.15; passage, $26,463.13; mails, $1,516.68. Of the McMinnville Branch: from freight, $29,592.13;

passage, $13,034.28; mails, $1,515. Of the Fayetteville Branch: freight, $24,767.21; passage, $10,988.15; mails $1,725.72. Of the Centerville Branch: from freight, $10,112.54; passage, $5,442.62; mail, $1,795.50. Of the Duck River Valley Railroad: from freight, $21,547.95; passage, $7,602.10; mails, $1,512.02. Total earnings of main stem as branches, as above stated, $2,074,583.70.

Compared with the preceding year, the gross earnings show a decrease of $181,603, with a decrease in operating expenses of $137,186, making a decrease in the net earnings of $44,417. The report says:

The extension of the Duck River Valley Railroad, from Petersburg to Fayetteville, 13 miles, was completed in April last, and trains have been running since June 1. This extension was made in accordance with the lease of the Duck River Railroad, at a cost to your Company of $115,815.70. In addition to this sum, there is due the N., C. & St. L. Railway, $15,766.96, for moneys advanced to pay the floating debt of this road, making a total of $131,582.66. To offset this expenditure your Company holds $69,500 first mortgage, and $75,000 second mortgage bonds of the Duck River road, which, when sold, will be sufficient to repay the sums advanced.

An agreement was entered into with White County for the extension of the McMinnville road from Rock Island to Sparta; White County agreeing to turn over to your Company $30,000 of its bonds when the road is finished four miles beyond Caney Fork river, also to provide the right of way. In pursuance of this agreement, work was commenced on the extension in September, 1881, and it is expected to be completed by January next.

The Centerville Branch has been extended from Graham to Mill Creek, about four miles, and trains have been running since December, 1881. The grading of five miles more has also been completed, and iron is now being laid, and a contract for the remaining three miles, to Duck River, has been entered into, and the road will be ready for operation, within two miles of Centerville, by October 15th, and to the north bank of the river by December 1st. There are large deposits of iron ore two miles west of Graham station, which, together with the lumber, agricultural products and pig iron from Warner furnace, will afford all the business that can be done upon the Centerville Branch with its present equipment.

An agreement has been made with the Tennessee Coal, Iron and Railroad Company to extend the Jasper Branch from Victoria to Inman, about 5½ miles, for the purpose of rendering accessible the immense deposits of iron ore at that point. The Coal Company believe they will ship fifty to sixty cars per day, and guarantee the shipment of thirty cars of ore daily, over this extension. The Coal Company also agree to construct the road at their own expense and turn it over to your Company, when finished, in consideration of the issuance and delivery, to them, of Nashville, Chattanooga and St. Louis Railway forty year six per cent bonds, secured by a first mortgage on the extension, to an amount, at their par value, equal to the cost of the road, not exceeding, however, $16,000 per mile. It is expected that this extension will be completed and in operation by December next.

During the year 18 miles of 58-lb. steel rail were laid upon the Chattanooga division, and 11.76 miles upon the Northwestern division, a total of 29.76 miles. There were also 11.32 miles of re-rolled iron rails laid upon the Northwestern Division, 6.59 miles upon the branches, and 9.83 miles of new side track were constructed; and 35 miles of the Chattanooga division, and 13½ miles of the Northwestern division were ballasted. On the main line 221,050 cross ties and 108 sets of switch ties were put in the track, and 57,134 cross ties and 13 sets of switch ties were used upon the branches. There were also constructed 11,617 feet, or over two miles, of bridging and trestling. Extensive improvements have been made upon the depots along the line, and new ones erected. An elevator has been built at Hickman, 50 by 100 feet, four stories high, with a hoisting capacity of 6,000 pounds, the expenditure upon which and the wharf amounted to $17,223.57.

The equipment of the road has been increased during the year by the purchase of 8 new ten-wheel engines, and the construction of 3 passenger engines, making the number now on hand, 87, most of which are in good running order. There have also been added by purchase 4 new coaches, 2 postal cars, 300 box and 100 flat cars. The car equipment now consists of 40 passenger coaches, 14 baggage, 4 mail, 1 pay, 52 stock, 538 flat, 1,272 box, and 2 wrecking cars and 1 pile driver—all of which have been fitted with the Miller platform and coupler and the Westinghouse brake. The mileage of engines during the year was 1,979,923, against 2,151,673 for the year preceding. The cost per mile of motive power, including repairs, fuel, wages, etc., was 15.19 cents.

The car mileage for the year was: passenger, 1,603,878; sleeping, 257,862; baggage, 682,701; mail, 122,754; freight, 15,384,624—total, 18,051,819. The passenger train mileage of the entire main line was 546,798, and the earnings per mile $1.08; freight train mileage 884,681, earnings $1.46—total train mileage 1,431,579, total earnings per mile 1.315, expenses .778, net .537.

The total number of tons carried on the Chattanooga division was 997,140, and on the Northwestern division 147,990—total, 1,145,130. The total number of passengers carried was 341,323, of whom 172,089 went west and 169,234 east.

In 1880 the local passenger rate was reduced from five to four cents per mile, which showed such satisfactory results that in November, 1881, a further reduction was made to three cents per mile; the former reduction resulted in an increase in revenue of $23,250 over the five cent rate, and the latter in a further increase of $13,165.57 over the four cent rate—the increase in favor of the three cent rate over the five cent rate was $36,415.65. A three cent rate, the report says, is considered the minimum by practical railroad managers as profitable to the lines, and it is now being generally adopted by southern roads, while it is deemed sufficiently low to meet the views of the public and promote travel.

The mortgage debt, as per last report, was $8,147,000, since which time there has been issued $992,000 main stem first mortgage 7 per cent bonds, and $6,000 Duck River Valley second mortgage endorsed 6 per bonds; and there has been redeemed $494,000 endorsed and $2,000 unendorsed 6 per cent bonds of the Nashville and Chattanooga Railroad—leaving the mortgage indebtedness at the close of the fiscal year $8,649,000. The $992,000 first mortgage bonds were issued in lieu of $500,000 bonds due the United States, which were redeemed June 1, 1881, and the $494,000 endorsed bonds redeemed July 1, 1881. The proceeds of the $6,000 Duck River Valley bonds were used in reimbursing the company on account of the sum paid on the floating debt of that road, as provided in the lease made October 2, 1879.

COST, RESOURCES AND LIABILITIES.

Total cost of road to June 30th, 1882			$15,711,488 93
RESOURCES.			
Due from transportation department	$ 17,242 62		
Bills receivable	7,186 62		
Sundry railroads and persons	104,703 25		
Sundry railroad and other stocks and bonds	386,040 00		
Real estate (not used for railroad purposes)	84,245 85		
Centerville Branch, construction account	112,526 90		
Centerville Branch, extension	98,027 97		
McMinnville Branch, extension	26,264 88		
Jasper Branch, extension	689 00		
Duck River Railroad, extension	115,815 70		
Duck River Railroad, floating debt	17,848 81		
Shop and road supplies	68,179 28		
Cash in Nashville...$119,445 52			
Cash in New York... 297,090 82			
	416,536 34		
		1,455,307 22	
			$17,166,796 15
LIABILITIES.			
Capital stock			$6,670,331 20
Bonds endorsed by State of Tennessee	$402,000 00		
First Mortgage bonds, main stem	5,894,000 00		
Second Mortgage bonds, main stem	1,500,000 00		
First Mortgage bonds, Jasper Branch	90,000 00		
First Mortgage bonds, Lebanon Branch	300,000 00		
First Mortgage bonds, Fayetteville and McMinnville Branches	398,000 00		
Second Mortgage bonds, D. R. V. R. R. endorsed by N., C. & St. L. R'y	65,000 00		
		8,649,000 00	
Bills payable	659,687 46		
Due sundry railroads and persons	102,493 40		
Bills and pay rolls unpaid	75,664 99		
Interest due July 1st, 1882	279,610 00		
Interest accruing during the war on bonds held by the U. S. Government	153,600 00		
Back dividends	14,569 14		
Dividend No. 24, due April 1st, 1882	48,444 85		
		1,334,069 84	
Profit and loss account		513,395 11	
			$17,166,796 15

President.—JAMES D. PORTER.

Directors.—James D. Porter, J. H. Inman, V. K. Stevenson, J. W. Thomas, G. A. Washington, Thos. C. Whiteside, G. M. Fogg, J. W. Childers, Thos. Lipscomb, T. W. Evans, M. H. Smith, E. L. Jordan, Henry Earle, Thomas O'Conner, A. S. Colyar.

Gen'l Superintendent.—J. W. THOMAS.

Resident Engineer.—R. C. MORRIS.

Sec. and Treas.—R. C. BRANSFORD.

A CONTRIVANCE for the use of street cars is said to have been invented in France, and to have been in use on a line in that country since 1878, during which time 14 cases have occurred of persons falling in front of the wheels of the cars who have been caught up by it and thrown aside with comparatively slight injury. The apparatus is known as a "man-catcher," and consists of an iron frame immediately in front of the wheels, reaching to within a short distance of the car track, attached to the journals of the wheels. In front of this frame projects a short distance a shoe-shaped piece of iron reaching to within one and a half inches of the ground. This simple and inexpensive contrivance is intended to catch up unfortunate persons who may fall in front of the car and throw them aside out of the way of the wheels.

AMERICAN Railroad Journal. ESTABLISHED 1832.

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WE invite railroad officers to send us notice of elections, transfers, appointments, resignations, etc.; and all our readers would oblige us by furnishing for our columns any items of personal information, that may come to their knowledge, adapted to this department. We aim to record all new railway enterprises in the United States and Canada, and to note the progress of construction on all new roads and extensions; and we request all concerned in railway building to give us early information regarding the above, that our report may be as complete as possible.

Subscribers are requested to report to our office any irregularity in receiving the JOURNAL.

Contributed articles relating to Railroad matters generally, Mining interests, Banking and Financial items, Agricultural development, and Manufacturing news, by those who are familiar with these subjects, are especially desired.

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New York, Saturday, October 7, 1882.

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IT is pretty well understood that the Bessemer rail manufacturers have concluded to assent to a reduction of the duty on rails to $14 a ton, or just one-half of the present tax. As a result, orders are being taken for delivery during the coming year at about $40 per ton. The combination is not quite as wise as it should be. Ten dollars a ton is margin of protection enough. The free traders of the South and West are liable to concentrate and abolish the duty altogether.

A SON once attempted to reason with his father upon the subject of gambling, claiming that his money was his own and he had a right to do with it as he pleased. His father replied that he would not argue with a person that would endeavor to convince him that gambling was right; he would put him far from him. Gambling, he said, was against the law of the land, it was against the law of God and the law of man, against the Divine law and the moral law. Gambling, he continued, leads to drunkenness, it leads to stealing, it leads to suicide, it leads to murder—to the State prison, the gallows and the grave. What more argument did the young man want?

THE disposition of the great army of invalids and pleasure seekers to visit a warmer climate for the winter season is on the increase. The Mediterranean and the Bermudas cannot be reached without a stormy sea voyage. Florida is low, flat and damp, and more fatal to weak lungs than the North. Southwest Texas, though dry, is subject to cold "Northers." Southern California promises to be quite a rival for the class of travelers who have hitherto gone to Florida. The trip to Los Angeles can now be made in about six days from New York, and the climate there is perfect. San Diego, Santa Barbara and Ventura, in the same vicinity, have a reputation for pulmonary help. At Monterey, within 3½ hours of San Francisco, is a hotel and grounds which have cost nearly a million of money, which is crowded with Eastern visitors summer and winter. A party of 150 persons is making up in Boston to start in December and spend the winter there. The sea bathing and flowers and fruits are available all the year round.

THE "National Mineral and Industrial Exposition Association of Nashville, Tenn," was recently organized in that city, and the charter duly signed and registered. The Incorporators and Directors are: Col. J. B. Killebrew, Gen. Ira P. Jones, Dr. Thos. A. Atchison, Capt. Wm. Stockell, Wm. Porter, Robert Thompson, Wm. M. Duncan, Judge Pitkin C. Wright, A. H. Robinson, Gov. James D. Porter, Col. E. W. Cole, John M. Bass, M. M. Kline, Major A. W. Willis, and Gen. W. H. Jackson. The Association is to have a capital of $300,000, divided into 6,000 shares of $50 each. It is the intention of the Directors to meet at once, elect officers, open books of subscription, and go actively to work; the object of the Association being to make preparations for the holding of a National Mineral and Industrial Exposition in Nashville in the fall of 1883 or 1884, and to make it the finest and best this country has ever witnessed. Nashville has always done well and thoroughly all that she has ever attempted, and it is believed that she will in this instance surpass all that she has ever done before.

LOUISVILLE AND NASHVILLE'S DIFFICULTIES.

THE center of attraction in Wall street during the past few days, and in a less degree during the last few weeks, has been the stock of the Louisville and Nashville Railroad Company. The managers of this road have, during the past few years, adopted the policy of annexation and enlargement of their system, so that it has added to the original Louisville and Nashville Railroad at both ends, and now it reaches Cincinnati and Lexington at the North, and New Orleans, Mobile and Pensacola on the Gulf, and Georgia coast ports on the southeast. More recently, it is said, an effort has been made to capture the Eastern Illinois Railroad with an extension which will give it a very direct connection from Chicago to Louisville. All this has been done in order to head off, or keep pace with, its rivals in the same vast territory. The Louisville and Nashville was threatened on the one hand by the East Tennessee, Virginia and Georgia system, of which Col. COLE was president, and which threatened to capture the line from Nashville to St. Louis. To prevent this, the Nashville, Chattanooga and St. Louis, with its numerous dependencies, was purchased. Further South, it was threatened by what is now known as the Richmond and Danville system, and so was obliged to purchase or lease the line from Montgomery to Mobile and thence into New Orleans at heavy cost. For some reason, not very obvious, the managers elected to build the unfinished line from near Mobile to Pensacola, which cannot be anything but a "sucker" enterprise for many years to come. A majority interest in the Georgia Railroad has also been purchased, and the road leased, though it is not quite clear what advantage is to spring from it. On the West, the road was threatened by the Chesapeake, Ohio and Southwestern, which is now completed from Louis-

ville to Memphis; and on the East, it was threatened by the Cincinnati Southern (ERLANGER's roads), which are being extended into New Orleans, and also into Knoxville and Nashville. Nearer home, a former president of the road, Dr. E. D. STANDIFORD, is threatening to build a line from Louisville to Harrodsburgh, where it will intersect the Cincinnati Southern, and will, together with his line from Louisville to Chicago, form a line competitive from Chicago to New Orleans via Louisville.

These assaults upon its territory from without, and lamentable dissensions in its councils within, and a heavy floating debt, which the management has vainly striven to conceal, have resulted in what may be called a crisis in its affairs; and the meeting of the stockholders to be held at Louisville during the current week has been looked forward to with great interest. Visible results so far are: an important decline in the stock, with heavy dealings at the Exchange, and every evidence of a collapse which nothing but a reorganization, and perhaps a transfer of its control into other and stronger hands, can check. Rumor connects the name of JAY GOULD with the reorganization; but it is hardly probable that he will take hold of an enterprise until the lowest point of demoralization has been reached. The Baltimore and Ohio or Pennsylvania systems will be much more likely to take hold of it. But even these strong concerns will find it a heavy load to carry. The Chesapeake and Ohio is understood to have refused to entertain a proposition of that kind. The ERLANGER syndicate are more directly interested, and the general opinion seems to be that the present management is wholly inadequate. Mr. GREEN, of Rhode Island, for a long time a heavy holder of the stock, is named in connection with the Presidency, but it is not even certain that he retains his large interest, or that he would be of any more use at the head of the board than he has been heretofore. There has been too much gambling in the securities of this company, too much bold financiering, and not enough caution.

THE Cincinnati and Georgia extension of the East Tennessee, Virginia and Georgia Railroad was opened for business from Rome to Mscon, on the 30th ult.

A CONVENTION of Tennessee land-owners and of persons desiring to make investments in mining, manufacturing and agricultural property in that State is to be held at Mont Eagle Springs, Marion county, on the 17th of October, and continue for three, and perhaps four days. A number of gentlemen from the Northern States, it is stated, are to be present for the purpose of conferring with citizens of the State with the view of making investments or seeking homes there.

The Locomotive Superseding the Stage-Coach.

CORRESPONDENT "S.," of the *Pittsburgh Chronicle*, writing from Uniontown, Penn., under date of September 29th, refers to the recent opening of the Redstone Branch of the Pittsburgh, Virginia and Charleston Railroad, over which trains are now running from Pittsburgh to Uniontown via Brownsville, and which he says marks another epoch in the decline of that once famous National highway, the old pike leading from Cumberland, Md., to Wheeling, West Va., than which few roads possess more historic interest. He then adds:—

The proposition to construct a road leading across the Alleghenies, from Washington to the Ohio River, first came up in Congress in 1797, but no definite action was then taken. When Ohio was admitted in 1802 a provision was made that one-twentieth of the proceeds of public lands in that State should be applied to the construction of roads across the Alleghenies. "An act to regulate the laying out and making a road from Cumberland, Md., to the State of Ohio," became a law in 1806. Eli Williams and Thomas Moore, of Maryland, and Joseph Kerr, of Ohio, were appointed Commissioners to locate the road. The route, as at first laid out, followed the path that Washington had trod across the mountains in the French and Indian war, but after emerging from the mountains west it went too far north to take in Uniontown. The citizens of this then small burg believed it would be ruinous to its future if it were left out of the calculations, and hence Ephraim Douglass and others carried the matter to President Jefferson, who, in a special message of February 19, 1808, said: "I have approved the route therein proposed for the said road as far as Brownsville, with a single deviation, since located, which carries it through Uniontown."

The contracts were at once let and the one from Braddock Grove to Uniontown, eleven miles, was reached in 1817. Concerning the rapid building of the road, A. L. Littell, Esq., formerly of Fayette county, Penn., now of Cleveland, Ohio, wrote: "I was there to see it located, and the stakes stuck down the mountain across the old commons south of Woodstock (afterwards Monroe) * * * before a shovelful of earth was displaced, and also to see that great contractor, Mordecai Cochran, with his immortal Irish brigade, a thousand strong, with their carts, wheel-barrows, picks, shovels, and blasting tools, grading those commons and climbing the mountain-side * * * * and leaving behind them a roadway good enough for an emperor to travel over."

The first stage-coach bearing the United States mails passed over the road from Cumberland to Wheeling, August 1, 1818. The distance was 130 miles, and the total cost of construction was $1,700,000. An idea of the care with which the road was to be built may be had from the language of the contractors, which stipulated that the road should be 60 feet in width, the road-bed to be even 32 feet wide, 20 feet of the graduated part to be covered with stone 18 inches deep at the center and tapering to 12 inches deep at the edges, the upper 6 inches of the stone to be broken so as to pass through a ring 3 inches in diameter, and the lower stratum to be broken so as to pass through a 7-inch ring. The stone part was to be covered with gravel and rolled with an iron-faced roller 4 feet in length and made to bear 3 tons.

The amount of travel over this highway was enormous. The stage-coach entered upon a career of prosperity unparalleled and uninterrupted until the locomotive banished it forever. By this road went to Washington all the public men of the West and many of the South. We have a number of old residenters here who still delight to recount the days when they shook hands with Henry Clay, Andrew Jackson and other celebrities who stopped in Uniontown for refreshments.

The driving and wagoning over the road was enormous. So great was the traffic that public houses to accommodate it sprang up all along the route and averaged about one for every two miles of road.

Although so substantially constructed, the heavy travel soon wore out the road-bed, and when it became burdensome to the general government to keep it in repair it was turned over to Pennsylvania, Maryland and Ohio, and these each established gates to collect toll.

In 1830 the stage lines carried 18,000 passengers to and from the Monongahela River steamboats. Some idea of the travel over the road may be imagined from the fact that in 1848 133 six-horse teams were counted passing along in a single day, besides teams of one, two, three, etc. horses.

But the old pike was now in its palmiest days. It was soon to decline. In 1852, the Pennsylvania Railroad was opened to Pittsburgh, and in the same year the Baltimore and Ohio Railroad was completed to Wheeling. Henceforth the rumble of the broad-wheeled freight wagon was gradually silenced, and the once famous highway of illustrious men was rapidly reduced to its present modest character, that of an ordinary avenue of local travel.

THE general passenger agents of Eastern Trunk lines, at a meeting in Chicago, on the 28th ult., elected to issue continuous trip tickets from differential points West to differential points East, similar to those now in use from East to West. These tickets allow no stop over, and are intended to put a check on scalping.

THE Pennsylvania Railroad Company announces that within a month the hackmen will be excluded from the Broad street station in Philadelphia, and twenty hansom cabs and ten "four-wheelers," owned by the company, will take their places. The vehicles will be let to responsible drivers at a fixed price per day, the rate of fare being prescribed by the company. The price for a hansom cab holding two persons will be twenty-five cents for a mile and a half or less, and fifteen cents for any additional mile or fraction thereof. The charge per hour will be sixty-five cents. The price for the "four-wheelers" will be thirty-five cents for a mile and a half or less, and twenty cents for each additional mile or fraction thereof. The charge for a trunk will be ten cents, and for each valise five cents.

SUBSCRIBE for the RAILROAD JOURNAL.

Wm. Sellers & Co.

Among the manufacturers of iron and steel working machinery, the house of Wm. Sellers & Co., 1,600 Hamilton street, Philadelphia, and 79 Liberty street, New York, has always occupied a leading position, by the excellent character of their designs and the conscientious accuracy of their work.

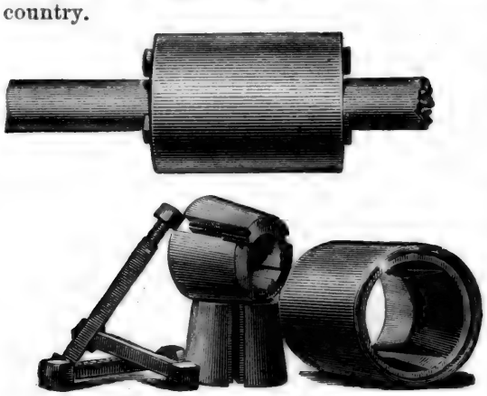
This firm was started in 1848 as Bancroft & Sellers and so continued until 1855, when, upon the death of the senior partner, the business passed into the hands of two brothers, William and John Sellers, Jr., who alone constituted the firm until 1873, since which time the firm has consisted of William Sellers, John Sellers, Jr., Coleman Sellers, J. Sellers Bancroft and James C. Brooks.

It was the pioneer in the introduction of the present sytem of shafting and mill gearing with interchangeable parts; and the present recognized system of transmission of power owes its excellence in a large measure to the efforts of this house.

The present system of shafting and mill gearing as manufactured by this firm is the result of their large and extended experience since 1848; and the advantages of this system may be set forth as follows:—

1. All sizes are made to standard gauges.
2. The double-cone vise coupling admits of quick and easy attachment and detachment.
3. The double-braced ball and socket hangers are light but very strong, and readily adjustable in every direction.
4. Long journal bearings, held so as to always insure a uniform distribution of pressure over the entire length of the bearing.
5. The appropriate distribution of metal in pulley castings, giving the greatest strength with the least quantity of material.

In any large factory the shafting, considered as a machine to transmit motion, is most frequently the largest in the establishment, and the more perfectly the power is transmitted to the work, the more profitable will be its use. The value of high speed in belts has been long known in England and some parts of Europe, and many wonderful examples of its application exist there, but the practice of high-speed shafts and the entire substitution of belting for gear wheels, belong essentially to this country.



DOUBLE-CONE VISE COUPLING.

To obtain this high speed, found advantageous in modern mill practice, the shafts must be straight and truly cylindrical, and must be united by couplings that hold them firmly, and be provided with bearings that will maintain the shaft in true line, so as with proper lubrication to reduce the friction to a minimum.

The shafting made by Wm. Sellers & Co. is turned accurately, so that a standard gauge will slip the entire length. The coupling consists, as shown in the illustration, of two split cones, drawn by three square bolts into an outside shell, whereby equal pressure is brought to bear upon each shaft, so that the shafts need not be exactly the same size, the cones insuring the shafts being so held that the axis of rotation will be in one and the same line.

This coupling, since its introduction in 1856, has been put to the severest tests, even by blocking the shafts $1\frac{3}{4}$ inches out of line and running for many weeks at 250 revolutions per minute, without loosening under the severe strain. Before the introduction of the swivel hanger, by this firm, rigid bearings, *i. e.*, bearings that would not adjust themselves to the position of the shafts, only were used. The swivel hanger has been superseded by what is called the ball and socket hangers, now in universal use, but although the form was changed the principle remained the same.



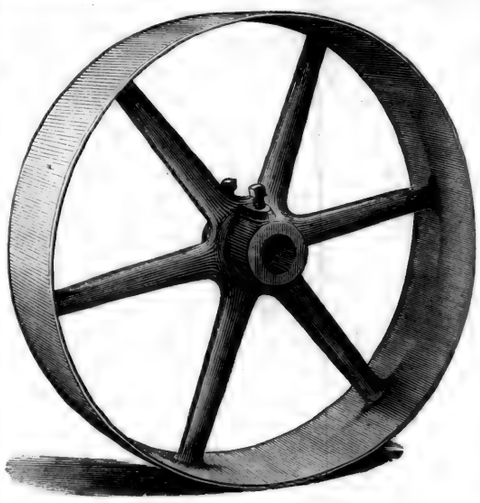
BALL AND SOCKET HANGER.

The hanger now in use has the box provided with spherical surfaces on top and bottom, held by adjustable plungers, allowing the box to adjust itself to any position the shaft may assume, and providing for an adjustment in case of settlement of building, shrinkage of supporting timber, etc.

The joint, in truth, copies nature as shown by the ball and socket joint of various bones.

The pulleys are now made with straight arms, and are well proportioned, care being taken in selecting the iron to be used and regulating the conditions of cooling. The straight-armed pulley can be made with the least possible metal and the greatest possible strength, and its form is the best able to transmit the peculiar strain brought to bear upon it, and at the same time it is the most pleasing form to the eye, in contra-distinction to the old heavy curved-arm pulley.

A fixed scale of prices for the various articles comprised under the head of shafting has been introduced by this firm, offering the advantage of giving the net price for any schedule, easily



STRAIGHT-ARM PULLEY.

ascertained by the purchaser, after having the existing rate of discount. As much as this firm has done toward perfecting a system for the transmission of power, it is in the design and manufacture of labor-saving steel and iron working machines that we must look a moment to note the advance they have made in that direction. The rapid advancement of engineering, rendered possible by the invention of machines to do the work required, demands constant addition to the list of such machines; and in this article we can but briefly glance at a few of the principal machines manufactured by this firm. Let us note, in passing, the records of the world's great exhibitions upon the machines exhibited by Wm. Sellers & Co.

The Paris Exposition Universelle, of 1867, awarded them the highest medal of gold, accompanied by a framed diploma.

At the World's Fair in Vienna, 1873, the Grand Diploma of Honor was awarded, and the recommendation read:—

"Sellers. For pre-eminent achievements in the invention and construction of machine tools, many of which have been adopted as patterns by the constructors of tools in all countries."

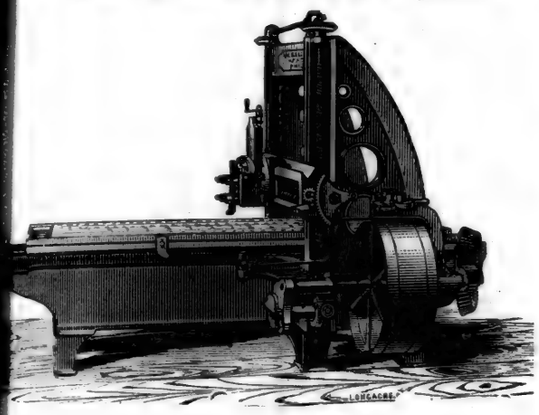
At the International Exhibition in Philadelphia, 1876, the following heading to the report of the Judges was written by Mr. John Anderson, LL.D. C. E., of Woolwich Arsenal, Great Britain, as Examining Judge:—

"For a remarkable collection of machine tools for working metals, when considered in regard to its extent and value, its extraordinary variety and general excellence, as also for the large amount of originality that is shown in the numerous new devices that are introduced, this exhibit is probably without a parallel in the past history of international exhibitions; and, taken as a whole, is worthy of the highest honor that can be conferred. Besides, it is thoroughly national in its characteristics, and pre-eminently worthy of the United States and of the grand occasion of the Centennial Exhibition."

In glancing over the large list of tools manufactured by this firm, comprising a full equipment for a railway or other large shop—such as Lathes, Planers, Drills, Shapers, Slotters, Punches, Shears, Bending Rolls, etc., we are particularly struck with the novel design of their planer, a brief description of which may prove interesting:

Most conspicuous and important among the various novel features of this machine is the

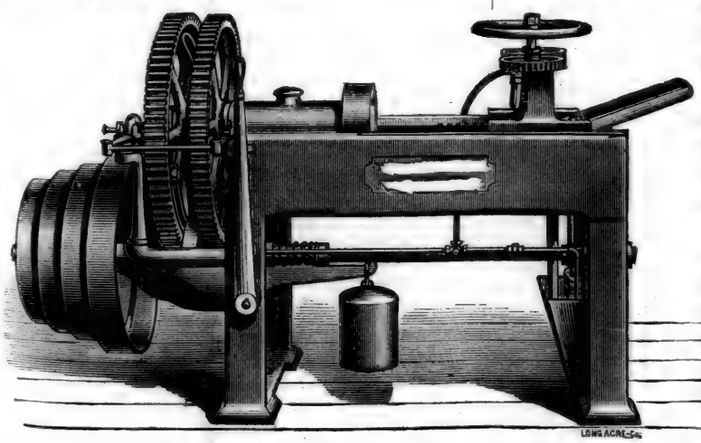
manner of giving motion to the table; this is furnished with a rack, but instead of being operated by the ordinary spur gearing, it receives motion through a peculiar form of spiral pinion upon a driving-shaft, which crosses the bed diagonally and passes out in the rear of the upright on the side where the workman stands. The position of the pulley shaft places the driving-belts within convenient reach of the operator, and its axis being parallel with the line of motion of the table, these machines may be placed parallel with lathes, and thus economize space and permit a better arrangement of workshops. By this simple driving arrangement, a very smooth and uniform motion is imparted to the table. The pinion has four teeth, and is, in fact, a short piece of a coarse screw, the position of the teeth upon the same being as the threads of a screw of deep pitch, and of a like number of threads to that of the teeth in the pinion.



PLANER.

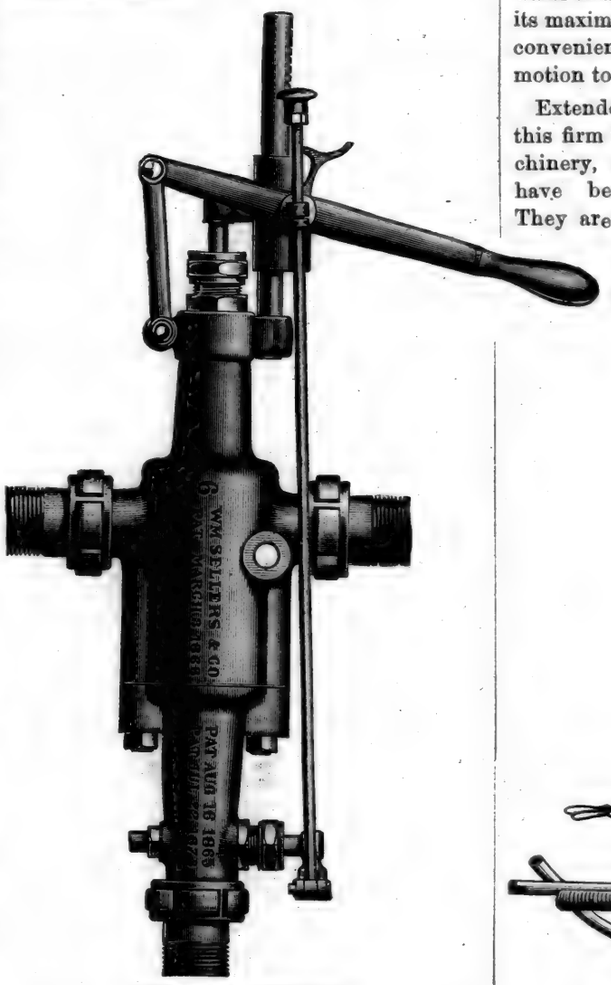
This pinion being placed on the diagonal shafts its action differs from the ordinary spur gear, as also from that of a worm, the motion being that of rolling, rather than a rubbing or sliding one. The feed is also novel in its design and the reversing of the belts an ingenious arrangement of cams locking the belt in any position.

The general design presents a distribution of metal where it will give the greatest strength; and recent experiments have fully proved by practice the great durability of the spiral pinion and rack as used in this planer.



BOLT AND NUT SCREWING MACHINE.

The bolt and nut screwing machines designed and manufactured by this firm present also many novel and valuable features; and in this connection we may mention that the standard American Screw Thread grew out of the investigation of this subject by Mr. William Sellers, who, in an able paper, read before the Franklin Institute of Philadelphia in 1864, presented his reasons for differing with the Whitworth thread, which led the Institute to memorialize Congress, who adopted the Sellers thread as the American standard.



THE "1876" INJECTOR.

The Whitworth or English thread has flat sides at an angle of 55 deg. with the top and bottom of thread rounds determined by dividing the depth of thread into 6 equal parts, inscribing a circle top and bottom within the lines formed by the sides of thread and the top and bottom dividing lines. The American Thread has flat sides at an angle of 60 deg., being easier obtained than 55 deg. and is flat top and bottom by dividing the side of the thread into eight equal parts.

As the wearing surface on all screws will be confined practically to the flat sides, the American thread gives 36 per cent more wearing surface than the English.

The Railway Turn-tables with the Sellers' Patent Conical Steel rollers for center bearing, are so universally used on the railways of this country that we need scarcely mention them.

In 1860, this firm introduced into America the celebrated Giffard Injector for boiler feeding, and were sole makers of this valuable instrument during the term of the original patent.

They have made many valuable improvements since, and in 1876 introduced their present form of one-motion injector.

This instrument has self adjustment for the water and has a range of 60 per cent between its maximum and minimum supply, and is as convenient in its manipulation as a single motion to stop, start and adjust can make it.

Extended experience has been acquired by this firm in the manufacture of Hydraulic machinery, and many valuable improvements have been perfected within late years. They are the sole licensees for the Hydraulic system of Riveting of Mr. Ralph Tweddell of England, so popular in that country.



PORTABLE RIVETER.—TWEDDELL SYSTEM.

The works of Wm. Sellers & Co. occupy two full blocks in the heart of the metal manufacturing district of Philadelphia, and employ many hundred hands, and will amply repay a visit to those interested in the advancement of American machinery for working iron and steel.

THE entire route of the South Pennsylvania Railroad, extending from the Susquehanna at Harrisburg to the Youghiogheny, has been surveyed. At the latter point it connects with the Pittsburgh, McKeesport and Youghiogheny Railroad, going into Pittsburg. The route of the road will be through the following counties in this State: Perry, Bedford, Somerset and Fayette. At Harrisburg it will connect with the Philadelphia and Reading.

A NEW driver, fresh from the country lyceum was recently initiated into the horse-car business on one of the Norwich routes. The peculiarities of his style in collecting fares excited the mirth of his first car full of passengers. After he had finally collected all the money that he reckoned was due him and escaped to the platform, a couple of girls tittered. He wheeled round solemnly and remarked in the parliamentary language of "Cushing's Manual:" "If any of you people hain't paid their fares, they will please manifest it by rising."

The Stock Exchanges and Money Market.

New York Stock Exchange.

Closing Prices for the week ending Oct. 4.

	Th. 28.	F. 29.	Sat. 30.	M. 2.	Tu. 3.	W. 4.
Adams Express	141	.....	.....	.....	140	....
Albany and Susq.	.....	....	.....	.....	.....	.....
1st mortgage	.....	.....	...	.....	....	.....
2d mortgage	.....	.....	.....	.....	.....	.....
American Express	96	96	96	95	95½	.....
Burl., C. R. & Nor.	.....	80	.....	.....	.....	.....
1st mortgage 5s	100¾	.....	.....	100½	100½	100¾
Canada Southern	66¼	66¼	62½	62½	64¼	64½
1st mortgage guar	93¼	93⅜	92¾	93	93	.....
Central of N. Jersey	77⅝	76⅞	76⅜	74⅛	75¾	74¾
1st mort. 1890	.....	.....	.....	116	114¾	....
7s, consol. ass	110	.....	110½	.....	.....	.....
7s, convertible ass	109¼	.....	.....	.....	.....	109
7s, Income	.....	.....	.....	.....	.....	.....
Adjustment	.....	.....	....	.....	.....	.....
Central Pacific	91⅛	92	91¾	90¼	91¾	91⅞
6s, gold	114½	115	.....	114¾	114	115
1st M. (San Joaq)	.....	.....	.....	.....	.....	.....
1st M. (Cal. & Or.)	.....	.....	.....	.....	.....	.....
Land grant 6s	.....	.....	...	.....	....	.....
Chesapeake & Ohio	25	24¾	26	25	25¾	26¼
1st pref	39¼	38½	38¼	37	38	40¾
2d pref	27	26¾	27¾	27	.....	29
1st mort., series B	86¾	87	87	86½	87¼	88
Chicago and Alton	140	140	139¾	138½	139½	.....
Preferred	....	.....	.....	.....	.....	.....
1st mortgage	.....	.....	.....	.....	.....	.....
Sinking Fund	.....	114½	.....	.....	.....	115
Chi., Bur. & Quincy	132¼	132¼	....	131⅛	131⅛	131⅜
7s, Consol. 1903	.....	.....	.....	....	.....	.....
Chi., Mil. & St. Paul	109⅜	108¾	107¾	107½	108¾	109⅜
Preferred	124½	124	123	123	.....	124
1st mortgage, 8s	.....	.....	131	.....	133	131
2d mort., 7 3-10s	.....	.....	.....	.....	.....	.....
7s, gold	.....	....	...	.....	.....	.....
1st M. (La. C. div)	.....	.....	.....	.....	.....	.....
1st M. I. & M. div.)	.....	.....	.....	.....	.....	.....
1st M. (I. & D. ext.)	.....	.....	.....	.....	.....	.....
1st M. (H. & D. div.)	.....	.....	..	.....	.....	.....
1st M. (C. & M. div.)	.....	.....	.....	.....	.....	.....
Consolidated S. F.	.....	...	.....	.....	.....	.....
Chi. & Northwestern	145¾	145¾	144¼	143¼	144¾	144½
Preferred	165	164½	164½	162½	163	164¾
1st mortgage	.....	.....	.....	.....	107½	.....
Sinking Fund 6s	.....	.....	.....	.....	.....	.....
Consolidated 7s	....	.....	.....	.....	.....	.....
Consol. Gold bo'ds	....	126	.....	.....	.....	.....
Do. reg	.....	.....	.....	.....	.....	.....
Chi., R. Isl. & Pac.	135⅝	135	133⅜	132	133½	133½
6s, 1917, c	..	.....	.....	.....	.....	127½
Clev., Col., Cin. & Ind.	82	... .	81½	80⅛	80½	81
1st mortgage	.....	.....	....	.....	.....	....
Clev. & Pittsburg gr.	.....	.....	.....	.....	.....	.....
7s, Consolidated	.....	... ..	.....	.....	.....	.....
4th mortgage	.....	.....	.....	108	.....	.....
Col., Chi., & Ind. Cent	9	8⅞	8¼	9¼	9	9
1st mortgage	.....	.....	.....	.....	120	.....
2d mortgage	.....	.....	.....	.....	.....	.....
Del. & Hud Canal.	113¼	114	113⅜	112⅜	113	113⅛
Reg. 7s, 1891	.....	.....	.....	115X	.....	.....
Reg. 7s, 1884	.....	.....	.....	.....	.....	.....
7s, 1894	.....	.....	.....	.....	.....	.....
Del., Lack. & Western	142⅜	141¼	138⅞	137¼	138¾	136¼x
2d mortgage 7s	.....	.....	.....	.....	.....	.....
Consol. 1907	.....	.....	.....	.....	.....	.....
Erie Railway	....	.....	.....	.....	.....	.....
1st mortgage	126¼	.....	.....	.....	.....	.....
2d mort. 5s, ext.	....	.....	.....	.....	.....	.....
3d mortgage	100⅛	.....	100⅞	100⅜	.....	100⅜
4th mort. 5s, ext.	108⅛	....	108⅛	.....	.....	...
5th mortgage	.....	.....	.....	.....	.....	.....
7s, Consol. gold	.....	.....	.....	.....	126½	126½
Great West. 1st mort	.....	.....	.....	...	.....	.....
2d mortgage	.....	103⅜	.....	.....	.....	.....
Hannibal & St. Jo.	48	.....	....	.....	.....	.....
Preferred	87½	.....	87	86¼	85⅛	86⅜
8s, Convertible	105	.....	104¾	.....	.....	.....
Houston & Tex. Cen	.....	83½	.....	80	80¾	.....
1st mortgage	.....	.....	....	.....	109	109
2d mortgage	.....	.....	.....	.....	.....	121X
Illinois Central	138¼	139⅞	139	138½	138¾	139¼
LakeShore & MichSo	115¾	115¾	115	111½x	112⅝	112½
Consol. 7s	.....	.....	.....	.....	128	.....
Consol. 7s, reg	.....	.....	.....	.....	.....	.....
2d Consolidated	.....	.....	.....	.....	.....	.....
Leh. & W. B. con. ass	.....	.....	.....	.....	.....	.....
Long Dock bonds	.....	.....	.....	.....	.....	.....
Louisville & Nash.	68¾	67	63½	57⅞	58⅛	56¾
7s, Consolidated	.....	.....	.....	.....	115½	115½
Manhattan	49	50½	49	50½	50¼	51
1st pref	.....	.....	.....	88½	.....	.....
Met. Elevated	.....	.....	.....	.....	88¼	93
1st mortgage	100	100	.....	99½	100	.....
Michigan Central	100	99	96¼	95⅝	98	97⅛
7s, 1902	.....	.....	.....	.....	.....	.....
Morris & Essex	126	126	126	124	.....	.....
1st mortgage	.....	.....	140	.....	.....	138
2d mortgage	.....	.....	.....	.....	.....	.....
7s of 1871	124	....	.....	.....	.....	.....
7s, Convertible	.	.....	.....	.....	.....	.....
7s, Consolidated	.....	.....	125½	.....	...	.....
N. Y. Cen. & Hud. R.	133¼	133¼	133	132¼	133⅜	132⅞
6s, S. F. 1883	...	.....	102¾	102¾	102½	.....
6s, S. F., 1887	.....	.....	.....	108	.....	.....
1st mortgage	132½	.....	132½	.....	.....	132¾
1st mortgage, reg.	..	.....	.....	.....	.....	.....
N. Y. Elevated	.....	.....	.....	.....	.....	.....
1st mortgage	.....	.....	.....	116½	.....	.....
N. Y. & Harlem	.....	.....	.....	.....	.....	.....
Preferred	.....	.....	.....	.....	.....	.....
1st mortgage	.....	.....	.....	.....	.....	132½
1st mortgage, reg	..	.....	.....	.....	.....	.....
N. Y. Lake Erie & W	42⅛	42¾	41⅞	41¼	42¾	42⅜
Preferred	...	.....	86¾	86	86¼	84⅜
2d Consolidated	100	99¾	....	99¾	100	100½
New 2d 5s fund	.....	.....	.....	.....	.....	.....
N. Y., N. Hav'n & Hart	.....	.....	.....	.....	184	.....
North Mo. 1st mort	.....	.....	.....	.....	.....	.....
Northern Pacific	49¼	49¾	49¾	48¾	49⅝	49¾
Preferred	95	95½	94⅞	94¼	95¼	95¼
Ohio & Mississippi	38¾	38⅝	38¼	38⅛	38¾	39
Preferred	....	.....	.....	.....	.....	.....
2d mortgage	125	.....	125	120½x	120	.....
Consolidated 7s	.....	.....	.....	.....	.....	.....
Consol. S. Fund	.....	.....	.....	.....	.....	.....
Pacific Mail S. S. Co	44⅛	44¼	.....	43¼	44	44⅞
Pacific R. R. of Mo.	.....	.....	.....	....	.....	.....
1st mortgage	.....	.....	105¾	.....	.....	.....
2d mortgage	.....	.....	.....	.....	.....	.....
Panama	.....	.....	.....	.....	...	.....
Phila. & Reading	62⅜	63¼	64	63¼	63¾	63¾
Pitts, Ft. W. & Chi. gtd	135	.....	.....	136¼	.....	.....
1st mortgage	.....	.....	.....	137½	....	.....
2d mortgage	... .	.....	135	.....	.....	.....
3d mortgage	.....	.....	.....	.....	.....	.....
Pullman Palace Car	128¾	.....	129	128	129	128¼
Quicksil'r Min'g Co	....	.....	.....	.....	8	.....
Preferred	.....	.....	.....	.....	45	... .
St. Louis & San Fran	.....	....	.....	39	38	40
Preferred	60½	60	.....	58	59	.....
1st Preferred	... .	100	.....	97	.....	.....
St. L., Alt'n & T. H.	.....	.....	43	41¼	43	44
Preferred	86	....	87⅞	84	.....	.....
1st mortgage	.....	.....	.....	.....	...	114¾
2d mort. pref	.....	.....	.....	.....	.....	110¾
Income bonds	... .	.....	.....	.....	....	....
St. L., Iron Mt. & S	.....	.....	.....	.....	.....	.....
1st mortgage	.....	.....	.....	.....	.....	.....
2d mortgage	113	.....	....	.....	.....	.....
Toledo and Wabash.	....	.....	.....	.....	.....	.....
1st mortgage	.....	.....	.....	.....	.....	.....
2d mortgage	... .	.....	.....	.....	.....	.....
7s, Consolidated	.....	.....	.....	.....	.....	.....
St. Louis Division	.....	.....	.....	.....	.....	.....
Union Pacific	111⅛	.....	108¼	107½	108¼	106⅞
1st mortgage	... .	.....	.....	116	115	115⅛
Land Grant 7s	.....	.....	.....	.....	.....	.....
Sinking Fund 8s	118	118	.....	119	.....	118
United States Ex	.....	.....	. ...	.....	.....	70
Wabash, St. L. & Pac	36	35¾	35¾	35¼	36½	36¼
Preferred	67⅞	67½	66½	64	65⅞	65⅝
New mort. 7s	.....	.....	.....	.....	.....	.....
Wells-Fargo Ex	. ...	.....	130	.....	.....	....
Western Pacific b'ds	.....	.....	.....	.....	.....	.....
Western Union Tel.	88½	88⅝	88¾	87	87¾	87⅝
7s., S. F conv., 1900	....	.....	.....	.....	.....	....
FEDERAL STOCKS :—						
U. S. 4s, 1907, reg	.....	.. ..	.....	.....	108⅝	108¾
U. S. 4s, 1907, coup.	119⅞	119½	119⅞	.....	.....	.....
U. S. 4½s, 1891, reg.	112⅞	.....	.....	.....	.....	112⅞
U. S. 4½s, 1891, coup	... .	....	112⅞	.....	112⅝	.....
U. S. 5s, cont'd at 3½	.....	.....	.....	.....	.....	100¼
U. S. 6s cont'd at 3½	....	... .	.....	.....	.....	.....
Dt. of Col. 3-65s, reg	.....	.....	.....	.....	.....	.....
Dt. of Col. 3-65s, coup	.....	.....	.....	.....	.....	... .

Boston Stock Exchange.

Closing Prices for the Week Ending Oct. 4.

	Th. 28.	F. 29.	Sat. 30.	M. 2.	Tu. 3.	W. 4.
Atch., Top. & San. Fe.	93¾	92¾	92¼	90¼	91½	92¾
1st mortgage	.....	120	.....	.....	.....	.....
Land Grant 7s	.....	.....	.....	.....	.....	.....
Boston & Albany	175	175	175	.....	175	175
Boston and Lowell	.....	102	.....	102	...	.....
Boston & Maine	.....	.....	.....	.....	154	.....
Boston & Providence	.....	.....	.....	.....	.....	160
Bos'n, Hart. & Erie 7s	.....	.....	....	.....	56	.....
Burl. & Mo. R. L. G. 7s	.....	.....	.....	.....	.....	.....
Burl. & Mo. R. in Neb	.....	.....	.....	.....	.....	.....
6s, exempt	.....	.....	.....	.....	112	112⅜
4s	.....	.....	.....	.....	.. ..	.....
Chi., Burl. & Quincy	132¼	132¼	132½	131	130¾	132½
Cin., Sand. & Clev ($50)	27¼	.....	.....	26½	.....	27
Concord ($50)	....	.....	.....	.....	.....	.....
Connecticut River	.....	.....	.....	.....	.....	.....
Eastern	.....	.....	.....	40	42	43½
New 6s, Bonds	.....	.....	.....	.....	110	.....
Fitchburg	.....	....	.....	130	.....	130¼
N. Y. & New England	56	55⅞	55½	56	55	.....
7s	116	.....	.....	....	115¾	.....
Northern N. H.	.....	.....	111¾	.....	.....	.....
Norwich & Worcester	.....	.....	.....	.....	.....	.....
Ogden & Lake Cham	.....	.....	.....	.....	.....	.....
Old Colony	139	139	....	137½	137	.....
Ph., Wil. & Balt. ($50)	.....	.....	.....	.....	.....	.....
Portl'd, Saco & Ports	.....	.....	110	111	.....	.....
Pueblo & Ark Val 7s	....	.....	.....	.....	.....	.....
Pullman Palace Car	.....	.....	129½	.....	127	.....
Union Pacific	. ..	111¼	110¾	107⅝	108½	107⅞
6s	.....	.....	116	.....	.....	.....
Land Grant 7s	.....	.....	.....	.....	.....	.....
Sinking Fund 8s	....	.....	.....	.....	.....	.....
Vermont & Mass	.....	.....	.....	.....	.....	.....
Worcester & Nashua	.....	.....	.....	.....	.....	.....
Cambridge (Horse)	.....	....	.....	.....	.....	.....
Metropolitan (Horse)	.....	.....	.....	.....	.....	.....
Middlesex (Horse)	.....	.....	.....	.....	.....	.....
Cal. & Hecla Min'g Co	.....	.....	249	.....	.....	.....
Quincy	.....	67¾	.....	67¼	.....	67

Philadelphia Stock Exchange.

Closing Prices for the Week Ending Oct. 3.

	W. 27.	Th. 28.	F. 29.	Sat. 30.	M. 2.	Tu. 3.
Allegh'y Val. 7 3-10s	.....	.....	.....	.....	.....	.....
7s, Income	.....	.....	.....	50½	.....	.....
Buff., Pitts & West.	21⅜	21¼	21½	21¾	20⅞	21
Camd'n & Am. 6s, '83	.....	.....	.....	.....	.....	101¼
6s, 1889	.....	.....	.....	.....	.....	.....
Mort. 6s, 1889	.....	114½	114½	....	.....	.....
Camden & Atlantic	.....	.....	.....	.....	.....	.....
Preferred	.....	56½	56½	.....	.....	.....
1st mortgage	.....	.....	.....	.....	.....	.....
2d mortgage	.....	.....	.....	.....	.....	.....
Catawissa	.....	.....	.....	.....	.....	.....
Preferred	.....	56	56	.....	.....	.....
2d pref.	.....	54½	.....	.....	54	.....
7s, new	.....	.....	120	.....	.....	.....
Del. & Bound Brook	.....	.....	.....	.....	.....	.....
7s	.....	.....	.....	.....	.....	.....
Elmira & Williamsp't	.....	.....	.....	.....	.....	41½
Preferred	.....	.....	.....	.....	.....	.....
Hunt. & B. Top Mt.	17⅜	. ...	16¼	16	16	.....
Preferred	33½	33	31⅞	32	.....	32
2d mortgage	.....	.....	.....	.....	.....	.....
Lehigh Navigation	44⅛	44⅜	44⅛	44	43⅜	43¾
6s, 1884	.....	.....	.....	.....	103	.....
Gold Loan	.....	114	.....	113	.....	.....
Railroad Loan	.....	.....	.....	112¼	.....	.....
Conv. Gold Loan	... .	.....	.....	.....	.....	.....
Consol. Mort, 7s	....	.....	.....	.....	117¼	.....
Lehigh Valley	66⅝	66⅛	.....	66¼	66⅜	66¼
1st mort. 6s, coup	.....	.....	.....	.....	.....	.....
1st mort. 6s, reg	.....	.....	.....	.....	.....	.....
2d mort. 7s	.....	.....	.....	134	.....	.....
Consol mort. 6s	.....	.....	.....	.....	.....	.....
Consol. mtg. 6s, reg	.....	.....	.....	.....	.....	.....
Little Schuylkill	.....	.....	.....	.....	.....	.....
Minehill & Sch. Hav'n	....	62¼	.....	.....	62¼	...
North Pennsylvania	.....	64¾	64¾	.....	.....	.....
1st mortgage 6s	.....	.....	.....	.....	. ..	.....
2d mortgage 7s	.....	.....	.....	.....	.....	.....
Genl. mtg. 7s, coup	.....	125	.....	.....	.....	125
Genl. mtg. 7s, reg	....	.....	.....	.....	.....	.....
Northern Central	56½	56¾	56⅝	.....	56¼	56
5s	.....	.....	97½	.....	.....	97
Northern Pacific	49⅛	49⅞	49½	49¼	48⅝	49⅛
Preferred	94⅜	95⅞	95½	95	94¾	95⅜
Pennsylvania R. R.	64	.....	63⅞	64	63⅜	63¾
1st mortgage	.....	.....	.....	.....	.....	.....
Gen'l mort	.....	.....	.....	.....	.....	.....
Gen'l mort reg	.....	.....	.....	.....	.....	...
Consol. mort. 6s	.....	.....	.....	.....	.....	.....
Consol. mort. reg	.. .	.....	.....	.....	.....	.....
Pa. State 5s, new	.....	117⅛	.....	117¾	.....	.....
do 4s, new	.....	.....	.....	116½	.....	.....
do 3½s, 1912	.....	.....	.....	.....	.....	.....
Phila. & Reading	31⅜	31¼	31⅜	32½	31⅝	31⅞
1st mortgage 6s	.....	.....	.....	.....	.....	.....
7s of 1893	.....	.....	.....	.....	.....	.....
7s, new convert	.....	... .	.....	.....	.....	75
Consol. mort. 7s	.....	.....	.....	.....	126¾	.....
Consol. mort. reg	126½	.....	.....	.....	.....	.....
Gen'l mort. 6s	.....	95½	95½	95¼	95	95
Def. Income bonds	.....	.....	.....	.....	.....	.....
Philadelphia & Erie	23¼	.....	22⅝	22½	.....	22¼
1st mortgage 5s	.....	.....	105⅜	.....	.....	102½x
2d mortgage 7s	.....	.....	.....	114	....	.....
Pittsb., Cin. & St. L. 7s	.....	.....	121	121	.....	.....
Pitts., Tit. & Buff. 7s	....	.....	.....	.....	.....	.....
Schuylkill Navi't'n	. ..	.. ..	.. ..	.....	.....	.....
Preferred	.....	.....	.....	.....	12¾x	....
6s, 1895	.....	.....	.....	.....	.....	.....
6s, 1907	.....	.....	.....	.....	.....	.....
United Co. of N. J.	190	190	190	190	.....	.....
Hestonville, (Horse)	.....	....	.....	.....	.....	.....
Cehstnut & Walnut)	.....	.....	.....	.....	.....	....

Baltimore Stock Exchange.

Closing Prices for the Week Ending Oct. 3.

	W. 27.	Th. 28.	F. 29.	Sat. 30.	M. 2.	Tu. 3.
Baltimore & Ohio....	.....	.....	.....	.....	.....	.....
6s, 1885.....	.....	.....	.....	.....	.....	103¾
Central Ohio ($50)...	.....	.....	.....	.....	.....	.....
1st mortgage.....	.....	108¾	108¼	108	.....	.....
Marietta & Cincin'ti.	.....	.....	.....	.....	.....	.....
1st mortgage, 7s..	.....	.....	.....	.....	.....	.....
2d mortgage, 7s....	.....	101¼	.....	.....	.....	.....
3d mortgage, 8s...	.....	.....	.....	.....	.....	.....
Northern Cen. ($50).	57	56⅛	56¾	56⅛	56⅛	56
2d mort. 6s, 1885..	.....	.....	.....	105¼	.....	.....
3d mort. 6s, 1900..	.....	.....	.....	.....	.....	.....
6s, 1900, gold.....	116	.....	.....	.....	.....	.....
6s, 1904, gold.....	.....	.....	.....	.....	.....	.....
Pitts. & Connelsv. 7s.	.....	.....	.....	.....	.....	.....
Virginia 6s Consol..	.....	59¾	59¼	58¾	58⅛	.....
Consol. coupons...	.....	.....	.....	.....	59¼	.....
10-40 bonds.....	.....	.....	42¾	42⅝	42½	42⅛
Def'd Certificates	.....	.....	.....	.....	.....	.....
Western Maryland..	.....	.....	16	.....	.....	.....
1st M., end. by Balt	.....	.....	.....	.....	.....	.....
2d M., do.	.....	.....	.....	.....	.....	.....
3d M., do.	.....	.....	.....	.....	.....	.....
1st M., unendorsed	....	.....	.....	...	.....	.....
2d M., end. Wash Co	.....	.....	.....	.....	.....	.....
2d M., preferred...	.....	108¾	.....	.....	.....	.....
City Passenger R. R.	.....	.....	.....	.....	43	.....

London Stock Exchange.

	Closing Prices			
	Sept. 22.		Sept. 15.	
Baltimore and Ohio 5s, 1927.....	107	109	107	109
Central of N. J., $100 shares.....	85	90	85	90
Do. consol. mort.....	109	111	109	111
Do. Income Bonds.....	88	92	92	96
Central Pacific of Cal., $100 shs..	94	95	96	97
Do. 1st mort. 6s, 1895–'98.....	117	119	117	119
Det., G'd Haven & Mil. Equip bds.	115	117	113	115
Do. Con. M. 5p.c., till '83 after 6p.c.	113	115	113	115
Illinois Central $100 shares.....	144	146	145	147
Do. S. F. 5s, 1003.....	106	108	106	108
Lehigh Valley Cons. mort. 1923...	115	119	115	119
Louisville and Nashville mort. 6s	97	99	97	99
Do. capital stock $100 shares...	73	75	75	77
N. Y. Cen. & Hud. R. mort. bonds.	132	136	132	136
Do. $100 shares.....	138½	139½	139½	140⅛
Do. mort. bonds (stg.).....	121	123	121	123
N. Y. Lake Erie & West. $100 shs.	42⅛	43	44¼	44¾
Do. 6 p. c. pref. $100 shares....	87	89	88	90
Do. 1st Con. Mort. bonds (Erie).	127	130	124	127
Do. do. Funded Coupon bonds.	124	127	124	127
Do. 2d Consol. Mort. bonds....	103	104	103	105
Do. do. Funded Coupon bonds.	98	100	96	98
N. Y., Pa. & Ohio 1st mort. bonds.	54	55	55	56
Do. Prior Lien bonds (sterling).	100	105	100	105
Pennsylvania $50 shares.....	65⅛	66	65⅛	66
General Mortgage.....	121	123	122	124
Phil. & Erie Gen. mort. 6s, 1920...	117	119	117	119
Philadelphia & Reading $50 shs..	32⅛	32¾	33	33⅛
General Consol Mortgage.	115	117	115	117
Do. Improvement Mortgage....	105	107	105	107
Do. Gen. Mtg. '74, ex-def'd coup.	97⅛	98	97½	98⅛
St. L. Bridge 1st mort. gold bond.	122	124	122	124
Do. 1st. pref. stock.....	97	100	97	100
S. P'fic of Cal., 1st mort 6s, 1905–6.	105	107	106	108
Union Pacific 1st mtg. 6s, 1896–9..	117	119	118	120
Wabash, St. L. & P. $100 shares..	37	38	39	40
Do. $100 pref. shares.....	69	70	71½	72½
Do. gen. mort. bonds.....	88	90	90	92

AMERICAN RAILROAD JOURNAL

Financial and Commercial Review.

THURSDAY EVENING, October 5, 1882.

DURING the morning hours call loans ranged from 6 to 8 per cent. In the afternoon the quotation was 7 per cent, but in the last hour fell to 4 per cent. The highest rate during the day was 8 per cent, the ruling quotation being 6@7 per cent.

The posted rates for prime bankers' sterling were 4 81@4.85½. The actual rates were 4.80¼@4.80¾ and 4.85 @4.85¼, with cables 4.85¾@4.86¼, and prime commercial bills 4.78¾@4.79¼. The rates for Continental bills are as follows: Francs, 5.25@5.20⅝, marks 94⅛@⅜ and 95⅛@⅜, and guilders 39¾@40.

The annual report of the Louisville and Nashville Railroad Company, which was presented at the annual meeting of the stockholders, held in Louisville, Ky., on the 4th inst., shows that the bonded debt of the company at the close of the fiscal year, June 30, 1882, amounted to $58,117,778, and the capital stock to $18,133,513. The gross earnings during the year were: from passengers, $3,0c7,464.74; from freight, $8,050,330.c4; from mails and express, $527,c23.68; and from miscellaneous sources, $402,917.09—total, $11,987,744.55; from which deduct operating expenses, $7,429,370.35, leaving as net earnings $4,558,374.20; to which add $266,442.35, realized from investments, making the total income $4,824,816.55, from which deduct for interest, rental, taxes, etc., $4,036,908.78; for deficit on Georgia Railroad lease, $110,000; for dividend paid February 10, 1882, at 3 per cent, $543,900—leaving the net surplus for the year, $135,007.77. The number of miles operated by the company is 3,233. A resolution was adopted increasing the capital stock to $30,000,000, such increase amouncing to $11,866,487. An election for directors was held, which resulted in the choice of the following gentlemen: C. C. Baldwin, G. C. Clark. C. H. Clark, F. D. Carley, T. W. Evans, E. H. Green, John E. Green, J. S. Rogers, G. A. Washington, J. T. Woodward, John M. Brookman, W. C. Hall and W. S. Williams. C. C. Baldwin was re-elected president, and M. H. Smith first vice president. Second Vice President Hington and Secretary Ranney were also re-elected.

The report of the Charlotte, Columbia and Augusta Railroad, which is now operated by the Richmond and Danville combination, shows a total income for the year ending June 30, 1882, of $590,935.17; the total expenses, including taxes for the same period, were $464,166.72, leaving as net income $126,768.45. During the year $55,767.63 was spent in the equipment and construction of the road, making the total cost of equipment and construction $5,188,583.98, equal to $27,217.71 per mile. The total debt of the road is $2,795,155.04, of which $2,506,c00 is funded, and $289,155.04 unfunded. During the year the total earnings of the passenger department amounted to $206,757.55, and the total earnings of the freight department to $376,894.19. The taxes paid by the company were $20,25c.87. The road has 191½ miles of track, 55 miles of which have been laid with steel rails. Twelve miles of steel rails were laid during the past year, and the road is in a steadily improving condition. This road runs from Charlotte, N. C., by way of Columbia, S. C., to Augusta, Ga., and is a most important link in the Richmond and Danville system.

The directors of the recently reorganized Indianapolis and St. Louis Railroad Company have decided to issue $2,000,000 of new mortgage bonds with which to realize funds to put the raod and equipments into first-class condition: and the stockholders have confirmed the action of the directors in this particular.

The annual report of the Columbia and Greenville Railroad Company, made to the State Railroad Commissioner, shows that the total income for the year ended June 30, 1882, was $608,594.02, and the total expenses (including taxes) $434,6c3.54, leaving as net income $173,990.48. During the year $45,687.81 was expended on the construction and equipment of the road, making the total cost of equipment and construction at the close of the year $5,c45,687.81, or $25,717.06 per mile. The total debt of the company is $3,323,279.65, of which $2,000,-00c is funded in 6 per cent interest bearing first mortgage bonds, and $1,c00,0c0 in 6 per cent interest-bearing second mortgage bonds. The unfunded debt amounts to $323,279.65. The capital stock paid in pe mile is $10,193.68, and the total debt per mile is $16,038.22. The earnings of the passenger department amounted to $139,997.c6, and the earnings of the freight department to $459,874.13. The income per mile of road amounted to $3,1c1.91, and the expense per mile of road to $2,219.11. The main line of this road and its branches are 196 miles in length. The Spartanburg, Union and Columbia Railroad and the Laurens Railway are operated by the Colnmbia and Greenville Railroad Company. The Spartanburg Railroad is 68 miles in length. During the year its income from all sources amounted to $1c0,-105.72, and its expenses to $81,8c1.36. The Laurens Railway is 29 miles in length. Its total income for the year amounted to $33,1c8.25, and its expenses to $33,-049.45. The Columbia and Greenville Railroad belongs to the Richmond and Danville combination, and is operated in its interests.

The earnings of the Chesapeake and Ohio Railway for the month of August, 1882, were $381,454.42; the expenses $208,609.76, and the net earnings, $172,944.66. The officers of the company call attention to the fact that if the earnings were to continue at this rate they would be sufficient to pay full cash interest upon the entire bonded debt, including the currency bonds, on which it is permitted to pay interest in second preferred stock. They assert that it is the policy of the company to pay the interest on these bonds in cash as soon as the earnings will admit of it.

The following quotations of sales of railway and other securities, for the week, are in addition to those given elsewhere in our columns.

New York.—Allegheny Central, 27⅝; Atchison, Colorado and Pacific 1st, 94; Boston and New York Air Line pref., 79; Chicago, St. Paul, Minneapolis and Omaha, 51⅝; do. pref., 108½; do. consol., 107½; Central Iowa, 33¾; Cedar Falls and Minn., 19; Columbia and Greenville pref., 65; Chicago, Milwaukee and St. Paul, Southern Minn. div. 1st, 107¼; do. Chicago and Pacific West div 1st, 93; Chicago, Burlington and Quincy 5s, S. F., 102½ do. Iowa div. 4s, 84½; Cairo and Fulton 1st, 106½; Chesapeake and Ohio cur. 6s, 52; Dubuque and Sioux City, 88; Denver and Rio Grande, 56⅝; do. 1st, 115¾; Denver South Park and Pacific 1st, 102½; East Tennessee, Va. and Ga., 1st; do. inc., 40⅞; do. 5s, 71½; Evansville and Terre Haute, 8s; do. 1st, 96¾; Fort Worth and Denver 1st, 97⅝; Green Bay, Winona and St. Paul, 1st Georgia R. R., 151; Gulf, Colorado and Santa Fe 1st, 107⅜ International and Gt. Northern coup. 6s, 81½; do. 1st 105¾; Indiana, Bloomington and Western, 4s; Eastern div. 6s, 94½; Kansas Pacific 1st consol., 103½; do. 6s Denver div. ass., 100; Keokuk and Des Moines 1st, 100½; Louisville and Nashville, genl. mort. 6s, 86; Little Miami 1st, 101; Louisville, New Albany and Chicago, 7s; do. 1st, 103; Long Island, 6s; do. consol. 5s, 97½; do. 1st, 121; Lake Erie and Western, 37⅛; do. inc., 5s; Milwaukee, Lake Shore and Western pref., 55; do. 1st, 101; Minneapolis and St. Louis, 3s; do. pref., 73¼; Mobile and Ohio, 21¾; do. 1st deben., 109½; Missouri, Kansas and Texas, 37; do. genl. mort. 6s, 86½; do. consol., 106¾; Missouri Pacific, 107⅛; do. 1st consol., 101⅜; Manhattan Beach, 17; Memphis and Charleston, 52½; Michigan Central, 5s, 08; Metropolitan Elevated Railway 2d, 00; New York, Chicago and St. Louis, 15; do. pref., 31½; do. 1st, 90½; Nashville, Chattanooga and St. Louis, 5s; New York, Ontario and Western, 27; Norfolk and Western pref., 57¾; do. gen'l mort., 102⅞; New Orleans Pacific 1st, 91⅜; Northern Pacific 1st, 103¾; Ohio and Mississippi, Springfield div. 1st, 121; Ohio Central, 17½; do. 1st, 90; Oregon Railway and Nav., 152; do. 1st, 108½; Oregon Trans-Continental, 91½; Ohio Southern, 17; do. inc., 30; Oregon Short Line 6s, 100½; Peoria, Decatur and Evansville, 33½; Richmond and Alleghany, 19½; Rochester and Pittsburgh, 23½; do. 1st, 105; Richmond and Danville, 107½; do. deben., 70½; do. 1st, 90; Richmond, Danville and West Point, 55¾; Rome, Watertown and Ogdensburg extended 5s, 73; St. Paul and Duluth, 35; do. pref., 93; St. Paul, Minn. and Man., 158 do. 1st, 110½; do. Dakota ext. 1st, 108; St. Louis, Iron Mt. and Southern, Arkansas Branch 1st, 106¾; do. 5s 77½; St. Paul and Sioux City 1st, 100; Southern Pacific of Cal. 1st, ex-int., 103; St. Louis and San Francisco 2d Class B, 90½; do. C. 90½; St. Louis, Kansas City and Northern, Omaha div. 1st, 108¾; Texas and Pacific, 45⅜; do. inc. L. G., 62½; do. Rio Grande div. 1st, 82½; Utah Southern Gen'l mort. 7s, 104½; Union Pacific col. trust, 106½; Wabash, St. Louis and Pacific gen'l mort. 6s, 85½; do. Iowa div. 1st, 90; do. Dubuque div. 1st, 83; Winona and St. Peter 1st, 106½; Arkansas 7s, M., O. & R R., 30; Louisiana consols, 7o; North Carolina S. T. 3d class, 6½; do. consol. 4s, 78; South Carolina 6s, non fund., 6½; Tennessee 6s, 50; do. Compromise bonds, 6o; American Cable, 72; Mutual Union Telegraph, 25½; do. 6s, 76; Colorado Coal and Iron, 42; Cameron Coal, 18; Maryland Coal, 18; New Central Coal, 18; Homestake Mining, 18; Ontario, 38½; Standard, 5.

Boston.—Atlantic and Pacific blocks, 105; do. 6s, 96; do. inc, 24½; Boston Land, 7½; Boston Water Power, 3¼; Boston, Clinton, Fitchburgh and New Bedford, 57 Central of Iowa, 33⅞; Cincinnati, Sandusky and Cleveland 7s, 104½; Chicago, Milwaukee and St. Paul, Dayton div. 6s, 103½; Chicago, Burlington and Quincy 5s, 1919, 103; do. Denver exten. 4s, 83⅜; Connotton Valley, 7½; do. pref., 11½; do. 6s, 64; do. 5s, 50; Flint and Pere Marquette, 20½; do. pref., 9s; Iowa Falls and Sioux City, 88; Kansas City, St. Joseph and Council Bluffs 7s, 114; Kansas City, Fort Scott and Gulf, 7s, 112; Little Rock and Ft. Smith, 53; do. 7s, 107½; Marquette, Houghton and Ontonagon, 6o; do. 6s, 101; Mexican Central, 23¼; do. 7s, 78½; Massachusetts Central, 5½; do. 6s, 06; Maine Central, 8s; Republican Valley 6s, 102½ New York and New England 6s, 105½; New Mexico and Southern Pacific 7s, 114; Oregon Short Line 6s, 90⅞; Rutland pref., 22; do. 5s, 7o; do. 6s, 00; Sonora 7s, 104¾; Summit Branch, 11; Southern Kansas and Western 7s, 110; Toledo, Delphos and Burlington

Branch inc., 18; Toledo, Cincinnati and St. Louis, 7⅝, do. 6s, 63; do. Southeast div. 6s, 63; Wisconsin Central, 18¾; Allouez Mining Co., 1¾; Atlantic, 16¼; Brunswick Antimony, 10; Franklin, 16¼; Harshaw, 1¾; Huron; 3½; Osceola, 35; Pewabic, 14; Sullivan, 2; Silver Islet, 14.

Philadelphia.—Am. S. S. Co. 6s, 105½; Cincinnati 7.30s, 131½; Central Transp., 34¾; Huntingdon and Broad Top Mt. consol. mort. 5s, 93; Northern Pacific pref. scrip, 94½@95; Norfolk and Western pref., 57⅛; Philadelphia, Wilmington and Baltimore 4s, 95; Philadelphia and Reading deben. 6s, 61; do. pref., 31¾; Pittsburgh Av. 7s, 1885, 105, Philadelphia City 4s, 1903, 113¾; do. 6s, 1890, 120; Pennsylvania and New York Canal 7s, 1896, 122¾; Pennsylvania Co. 4½s, 96; Steubenville and Indiana 6s, A. & O., 105¼; Texas and Pacific consol. mort. 6s, 92½; Warren and Franklin 7s, 112; West Jersey and Atlantic, 31. The latest quotations are: City 6s, 108@120; do. free of tax, 127@132; do. 4s, new, 108@114; Pennsylvania State 5s, new loan, 117⅛@118; do. 4s, old, 108@114; do. 4s, new, 116@117; Philadelphia and Reading Railroad, 31¾@31⅞; do. consol. mort. 7s, reg., 126@127; do. gen'l mort. 6s, coupon 94¾@95¾; do. 7s, 1893, 121@—; do. new conv., 75@76; United New Jersey R. R. and Canal, 190@190½; Buffalo, Pittsburg and Western 21⅛@21⅝; Pittsburgh, Titusville and Buffalo 7s, 94@95; Camden and Amboy mort. 6s, 1889, 114@115; Pennsylvania R. R., 63¾@63⅞; do. general mort. 6s, coupon, 125@125¼; do. reg., 121@—; do. consol. mort. 6s, reg., 120½@121½; Little Schuylkill R. R., 58@—; Schuylkill Navigation pref., 13@15; do. 6s, 1882, 90@91; Elmira and Williamsport pref., 58@59; do. 5s, 100@101; Lehigh Coal and Navigation, 43¾@43⅞; do. 6s, 1884, 102½@103¼; do. R. R. loan, 114@115; do. Gold Loan, 112@113½; do. consol. 7s, 117@118; Northern Pacific, 49⅜@49⅝; do. pref., 95¼@95¾; North Pennsylvania, 64@65; do. 6s, 106@107; do. 7s, 122@123; do. 7s, General mort. reg. 124@125; Philadelphia and Erie, 22@22½; do. 7s, 114@114½; do. 5s, 102@103; Minehill, 62@62½; Catawissa 22@23; do. pref., 55½@—; do. new pref., 54@54¼; do. 7s, 1900, 117@120; Lehigh Valley, 66¼@66¾; do. 6s, coupon, 122@123; do. reg., 122@123; do. 7s, 133@135; do. consol. mort., 121@122; Fifth and Sixth streets (horse), 170@—; Second and Third, 114@115; Thirteenth and Fifteenth, 70@75; Spruce and Pine, 42@44; Green and Coates, 85@90; Chestnut and Walnut, 90@93; Germantown, 70@75; Union, 110@111; West Philadelphia, 112@120; People's, 16@17; Continental, 103@105.

Baltimore.—Atlantic Coal, 1.10; Atlanta and Charlotte 1st, 107¾; Baltimore City 6s, 1900, 127: do. 6s, 1890, 115; do. 6s, 1886, 108; do. 6s, 1893, exempt, 116; do. 6s, 1902, 124; do. 6s, 1886, new, 105½; do. 5s, 1916, 125; Columbia and Greenville 1st, 100¾; Canton Co., 60; do. 6s, 104; Cincinnati 7.30s, J. & J., 131; Charlotte, Columbia and Augusta, 53; George's Creek Coal, 95½; Maryland Defense 6s, 106; Marietta and Cincinnati 1st Trust certificates, 127; do. 2d do., 98¾; do. 3d do., 56; Northern Central 5s, series A, 97½; North Carolina consol. 4s, 78¼; Ohio and Mississippi, Springfield div. 1st, 120½; Virginia and Tennessee 8s, 123; do. 6s, 101¾; Virginia Midland pref., 100; do. 2d mort., 107; do. 5th mort., 93⅞; Virginia 10-40 coupons, 66; do. Peeler coupons, 39. The latest quotations are: Baltimore and Ohio, 194½@—; do. 6s, 1885, 103¾@104; Baltimore City 6s, 1890, 114¾@115; do. 5s, 1900, 117½; do. 5s, 1916, —@125½; do. 5s 1894, 114@114½; Canton Co. 6s, 103½@—; Columbia and Greenville 1st, 100½@103¾; Marietta and Cincinnati 1st, 127@127½; do. 2d, 98¾@99; do. 3d, 56@56¼; Northern Central, 55¾@56⅛; do. 6s, 1900, 115¼@116⅛; do. 1900; gold, —@116; do. 5s, Series A, 97¼@97¾; Ohio and Mississippi, Springfield div. 1st, 120¼@120½; Virginia consols, 57½@58¾; do. 10-40s, 42½@42⅝; Virginia Midland 2d mort., 106⅞@107½; do. 5th mort., 93½@—; do. inc., 64@71.

How very fortunate it is that every one is able to believe that he has more than his share of brains.

A YOUNG man in a train making fun of a young lady's hat to an elderly gentleman in the seat with him. "Yes," said his seat mate, "that's my wife, and I told her if she wore that bonnet some fool would make fun of it."—*Hawkeye.*

The Coal Trade.

THE leading coal-carrying companies make the following reports of their tonnage for the week ending Sept. 23, and for the year to that date, compared with their respective amounts carried to the same time last year:—

	Week.	1882.	1881.
Reading Railroad	203,667	6,457,662	6,292,886
Schuylkill Canal	20,197	338,399	430,138
Lehigh Valley	137,624	4,921,147	4,538,700
Delaware, Lackawanna and Western	116,034	3,203,752	3,036,913
Shamokin	25,626	816,558	780,994
Central R. R. of New Jersey	.....	3,000,743	3,031,252
United R. R. of New Jersey	40,851	1,214,618	1,119,385
Pennsylvania Coal	38,243	985,197	979,067
Delaware and Hudson Canal	91,896	2,459,359	2,569,525
Huntingdon and Broad Top Mountain	15,583	325,828	383,243
Penn. and New York	.....	1,119,061	1,154,252
Clearfield, Pa.	54,468	2,083,425	1,743,651

The total tonnage of anthracite coal from all the regions for the week ending Sept. 23, as reported by the several carrying companies, amounted to 704,705 tons, against 611,487 tons in the corresponding week last year, an increase of 93,218 tons. The total amount of anthracite mined for the year is 20,108,879 tons, against 19,684,826 tons for the same period last year, an increase of 514,043 tons. The quantity of bituminous coal sent to market for the week amounted to 103,026 tons, against 94,105 tons in the corresponding week last year, an increase of 8,921 tons. The total amount of bituminous mined for the year is 3,080,983 tons, against 3,532,518 tons for the corresponding period last year, a decre f 451,535 tons. The total tonnage of all kinds of coal for the week is 807,731 tons, against 705,592 tons in corresponding week last year, an increase of 102,139 tons, and the total tonnage for the coal year is 23,279,862 tons, against 23,217,344 tons to same date last year, a decrease of 62,518 tons. The quantity of coal and coke carried over the Pennsylvania Railroad for the week ending Sept. 23, was 224,779 tons, of which 178,980 tons were coal and 44,794 tons coke. The total tonnage for the year thus far has been 7,974,956 tons, of which 5,903,524 tons were coal and 2,071,432 tons coke. These figures embrace all the coal and coke carried over the road, east and west. The shipments of bituminous coal from the mines of the Cumberland coal region for the week ended Sept. 23 were 53,298 tons, and for the year to that date 820,595 tons, a decrease of 663,333 tons as compared with the corresponding period of last year. The shipments were: To the Baltimore and Ohio Railroad—For the week, 27,198 tons; year, 612,243 tons; decrease as compared with 1881, 358,141 tons. Chesapeake and Ohio Canal—Week, 16,463 tons; year, 93,352 tons; decrease as compared with 1881, 226,617 tons. Pennsylvania Railroad — Week, 9,637 tons, year, 110,200 tons; decrease from last year, 92,572 tons. The Reading Railroad shipment for last week, ending September 30, was about 212,000 tons, of which 62,100 tons were sent to and 53,000 tons shipped from Port Richmond, and 13,500 tons sent to and 13,000 tons shipped from Elizabethport.—*Philadelphia Ledger, Oct. 2.*

Progress of Railroad Tickets.

PREVIOUS to 1855 a simple, plain cardboard ticket was all that was in use on American railroads, and these were used over and over again, the conductors passing them back to the ticket seller after a trip, and only lost their usefulness with their shape and consistency. Those were palmy days for conductors, especially if they happened to be unscrupulous and inclined to regulate their own salaries, as too often they did, being human and infernally tempted. Compared with them, the present conductor is bound with chains. But already at the period alluded to above a better system had obtained upon English railroads, and in 1855 the Boston and Worcester Railroad introduced numbered local tickets to American use. Previous to that time railroad tickets were not an American production, either in their stock or their printing; but now it became necessary to make them articles of home manufacture. We may be very sure that the presence of demand proved marvellously stimulating to the Yankee desire to supply, and it was not long before Yankee printers were prepared to turn out everything required of them, and were in turn found leading the railroads in the way they should go with respect to their ticket forms and devices, as they have done in some respects ever since. In 1864 the system of coupon numbered tickets was first proposed by the Baltimore and Ohio management, and great was the ridicule and contempt poured upon the suggestion by the remaining lines in the country. Not even the introduction of the umbrella was received with greater popular disfavor than was this innovation by the American railroads. It is hardly necessary to state, however, that the proposition, carried into immediate effect, became at once successful, and that they who laughed the loudest and scorned the fiercest were the first to adopt in imitation. It is now eighteen years since that episode took place; and, should consecutively numbered coupon railroad tickets now be suddenly withdrawn from business, or in some way their manufacture become impossible, either event alone would be sufficient to almost paralyze travel upon railroads.—*Boston Herald.*

THE terminal facilities of the New York, Chicago and St. Louis Railway at Chicago have been finally arranged for on the land recently voted by the city to the Baltimore and Ohio for depot purposes. The two roads, it is understood, will occupy this site, which is a very central one, jointly.

THE Squire had a yoke of fine oxen, and one day told Mike, who was working them, to "bait" them and then come to dinner. Dinner was about half finished when Mike entered, his face betraying unusual exertion. The Squire didn't notice this, but happened to think of the oxen. "Mike," said he, "did you bait the oxen?" "Dade," replied he, "an' I bate one of them till he lay down, he did; an' I just thought I'd be after gettin' me dinner, an' I would go out an' bate the ither one!"

THE LAKE SHORE AND MICHIGAN SOUTHERN RAILWAY COMPANY.

TREASURER'S OFFICE, GRAND CENTRAL DEPOT, NEW YORK, Sept. 27, 1882.

The Board of Directors of this company have this day declared a QUARTERLY DIVIDEND of TWO PER CENT upon its Capital Stock, payable on WEDNESDAY, the first day of NOVEMBER next, at this office. The TRANSFER-books will be closed at 3 o'clock P. M., on MONDAY, the 2d day of October next, and will be reopened on the mording of Monday, the sixth day of November next.

E. D. WORCESTER, Treasurer.

To Contractors.

OFFICE OF THE GEORGETOWN AND LANES RAILROAD COMPANY, GEORGETOWN, S. C., Sept. 22, 1882.

PROPOSALS ARE INVITED UNTIL October 31, prox., for the construction of the road-bed of the GEORGETOWN AND LANES RAILROAD, as covered by survey and estimate of Major G. W. EARLE, Engineer. For specifications and all other information address the undersigned. The Company reserves the right to reject any or all bids.

P. R. LACHICOTTE, President G. & L. R. R. Co.

GORDON & DUGGAN
RAILWAY SWITCH.

The **Standard** on several and in use on twenty-five Railroads.

Combines **Safety, Durability, Simplicity,** and **Low Cost, with Fixed Rails.**

The only movable piece weighs 375 lbs., and is without a bolt or rivet.

E. GORDON, Treasurer,
No. 28 STATE STREET, BOSTON, MASS.

FOR SALE.

Locomotives—Four Second-hand Narrow-Gauge Engines in good order.
One Second-hand "Tank" Narrow-Gauge Engine, 10 tons.
Several Second-hand Standard-Gauge Locomotives in good order, immediate delivery.
One new 3ft. Gauge Passenger Engine, 22 tons, prompt delivery.
Six new 4ft. 8½ Gauge Locomotives, cylinders 17x24, weight 35 tons. October and November delivery.
Two new 3ft. Gauge Locomotives, Cylinders 12x18, weight 20 tons. October and November delivery.
Cars—Passenger and Freight Cars of all descriptions for early delivery.
Rails—16lb., 20lb. 30lb. 35lb. and 56lb. Rails.
Car Wheels and Axles.
Narrow-Gauge Rolling-stock a specialty.

BARROWS & CO.,
64 Broadway,
NEW YORK.

McCANN'S
EXCELSIOR SELF CAR COUPLING.

Patented August 3, 1880.

For Durability, Simplicity, and Practicability
IT HAS NO EQUAL

MARION W. McCANN,
Patentee and Proprietor,
DUBLIN, IND.

Continuous Automatic
FREIGHT BRAKES.

Requiring no other Connection between Cars than the ordinary Coupling-Link and Pin.

SIMPLE, DURABLE, AND EFFICIENT.

Brakes can be applied to every Car in the longest train, from the engine or cabose, or from any car in the train. It can be readily attached to any car, and adapted to ordinary brake beams, shoes, etc. There is no possibility of damaging wheels by "sliding."

PATENTED MAY 23, 1882.

☞Railroad and manufacturing companies, or parties able to co-operate with patentee in their manufactur and introduction, are invited to correspond with

WM. C. SCHULTZE,
Surgeon C., R. I. and P. Ry.
MARENGO, Iowa Co., Iowa.

NO OTHER LINE IS SUPERIOR TO THE
FITCHBURG RAILROAD
HOOSAC TUNNEL ROUTE
WEST.

6.30 A.M. ACCOMMODATION.

Connecting at Syracuse, N. Y., at 7.15 P.M., with through sleeping cars for Cincinnati, Cleveland, Toledo, *DETROIT AND CHICAGO.*

3.00 P.M. CINCINNATI EXPRESS.

Pullman Sleeping Car attached, running through to Cincinnati without change. (Only Line running Pullman Cars from Boston.) This car runs *via* Erie Railway and N.Y., P. & O. R.R., making direct connection for Louisville, St. Louis, Kansas City, New Orleans, and all points in Texas and New Mexico.

3.00 P.M. ST. LOUIS EXPRESS.

THE ONLY LINE which runs a THROUGH SLEEPING-CAR from

BOSTON TO ST. LOUIS WITHOUT CHANGE!

ARRIVING AT 8.00 A.M. SECOND MORNING.

Through sleeping car for Buffalo, Toledo, Fort Wayne, Logansport, Lafayette, Danville Tolono, Decatur and St. Louis, making direct connection with through Express Trains for Kansas, Colorado, Texas, and all points in the

SOUTHWEST.

6.00 P.M. PACIFIC EXPRESS.

The only line running a through sleeping car *via* Buffalo and Detroit without change, arriving at Chicago at 8.00 A.M. second morning, making sure connections with through Express Trains for Iowa, Nebraska, Kansas, Colorado, the Pacific Coast, Wisconsin, Minnesota and all points in the

WEST AND NORTHWEST.

THE ABOVE TRAINS RUN DAILY, SUNDAYS EXCEPTED.

This Great Short Line passes through the most celebrated scenery in the country, including the famous HOOSAC TUNNEL, four and three-quarters miles long, being the longest Tunnel in America, and the third longest in the world.

Tickets, Drawing-Room and Sleeping-Car Accommodations may be secured in Advance by Applying to or Addressing

250 WASHINGTON STREET, BOSTON. 250

JOHN ADAMS, General Superintendent. F. O. HEALD, Acting Gen'l Passenger and Ticket Agent.

In effect January 9th, 1882, and subject to changes.

RAILROAD AND CANAL DIVIDEND STATEMENT.

Showing the amount of Stock Outstanding, the Dividend Periods and the date of last Dividend.

Marked thus(*)are leased roads.	Stock out-standing.	Divide'd Periods.	Last Dividend Payable.
Albany and Susq*...100	2,500,000	semi-an	July '82 2
Ashuelot.....100	210,000	q'arterly	Oct. '81 3½
Atch., Top. and S. Fe100	54,000,000	q'arterly	Nov. '82 1¼
Atlanta and W. Point100	1,232 200	semi-an	Jan. '82 6
Atlantic and St. Law*100	5,840,000	semi-an	Mar. '82 3
Augusta and Savan'h100	1,082,900	semi-an	June'81 3½
Avon, Genesee&MtM*100	225,000	semi-an	July '81 3
Baltimore and Ohio.100	14,792,566	semi-an	May '82 5
" " pref.100	5,000,000	semi-an	July '82 3
Washington Br....100	1,650,000	semi-an	Apl. '82 5
Berkshire*..... 100	600,000	q'arterly	Apl. '82 1¾
Boston and Albany..100	20,000,000	q'arterly	Sept.'82 2
Bos.&N.Y.AirLine pf.100	2,795,227	q'arterly	June'82 1
Bos.,Cl.,F.&N.B.pref.100	1,750,100	semi-an	Oct. '82 3½
Bos.,Conc.&Mont.pf*100	800,000	semi-an	May '82 3
Boston and Lowell..500	3,940,000	semi-an	July '82 2
Boston and Maine...100	6,921,274	semi-an	May '82 4
Boston & Providence100	4,000,000	semi-an	May '82 4
Attleborough Br...100	131,700	semi-an	July '82 3½
Bos.,Revere B&Lynn100	419,400	semi-an	July '82 3½
Buffalo,N. Y. & Erie*.100	950,000	semi-an	June'82 3
Camden & Atlantic.. 50	377,400	q'arterly	Nov. '82 3
" " pref. 50	880,650	q'arterly	Nov. '82 4
Camden & Burl. Co..100	381,925	semi-an	July '82 3
Canada Southern....100	15,000,000	.....	Feb. '81 2½
Cape May &Millville* 50	447,000	semi-an	June'81 3
Catawissa*..... 50	1,159,500	annual	Oct.'81 $1 ½
" pref..... 20	2,200,000	semi-an	May '82 3½
" new pref.. 50	1,000,000	semi-an	May '82 3½
Cayuga and Susq.*.. 50	589,110	semi-an	July '81 4½
Cedar Rapids&Mo.R*100	6,850,400	q'arterly	Aug. '82 1½
" " pref.100	769,600	semi-an	Aug .'82 3½
Central of Georgia...100	7,500,000	semi-an	June '82 4
Central of New Jersey100	18,563,200	q'arterly	July '76 2½
Central Ohio*..... 50	2,437,950	semi-an	July '82 3
" pref.. 50	411,550	semi-an	July '82 3
Central Pacific 100	59,275,500	semi-an	Aug. '82 3
Chemung*..... 100	380,000	q'arterly	July '81 1½
Cheshire preferred ..100	2,155,300	semi-an	July '82 1½
Chicago and Alton...100	11,181,741	semi-an	Sept. '82 4
" " pref 100	2,245,400	semi-an	Sept. '82 4
Chi., Burl. & Quincy.100	55,337,455	q'arterly	Sept. '82 2
Chi., Iowa & Nebras*.100	3,916,200	semi-an	July '82 4
Chi., Mil. & St. Paul.100	20,404,261	semi-an	Oct. '82 3½
" " pref 100	14,401,483	semi-an	Oct. '82 3½
Chi. & N. Western...100	14,088,257	semi-an	June'82 3½
" pref.100	21,525,353	q'arterly	Sept. '82 2
Chi., R. I. & Pacific..100	41,960,000	q'arterly	Nov. '82 1¾
Chi. and West Mich .100	6,151,000	semi-an	Feb. '82 2½
Chi.,St.P.,M.&O.pref.100	10,300,000	q'arterly	Oct. '82 1¾
C., Ind., St. L. & Chi..100	6,000,000	q'arterly	July '82 1½
Cin., Sand. & Clev.pf. 50	429,037	semi-an	May '82 3
Clev. and Mahoning* 50	3,759,200	semi-an	Nov. '81 3½
Clev. and Pittsburg* 50	11,244,336	q'arterly	Sept. '82 1¾
Columbus & Xenia*. 50	1,786,200	q'arterly	Sept.'82 2
Colum.&HockingVal.100	2,500,200	semi-an	Aug.'81 208
Concord 50	1,500,000	semi-an	May '82 5
Concord and Ports.*.100	350,000	semi-an	July '82 3½
Conn.& Passump.Riv100	2,244,400	semi-an	Aug '82 3
Connecticut River ..100	2,100,000	semi-an	July '82 4
Cumberland Valley.. 50	1,292,950	q'arterly	Oct.' 82 2½
" 1st pref 50	241,900	semi-an	Apl. '82 4
" 2d pref. 50	243,000	semi-an	Apl. '82 4
Danbury & Norwalk. 50	600,000	.....	Oct. '82 2½
Dayton and Mich.*.. 50	2,402,573	semi-an	Apl. '82 1¾
" " pref. 50	1,211,250	q'arterly	July '82 2
Delaware*..... 25	1,468,940	semi-an	July '82 3
Del. & Bound Brook*100	1,652,000	q'arterly	Aug. '82 1¾
Del., Lack.& Western 50	26,200,000	q'arterly	Oct., 82 ¤
Denver & Rio Grande.100	29,160,000	q'arterly	Jan '82 1½
Den.,South P. & Pac.100	3,500,000	.....	Aug.'80 4
Detroit, Lans. & Nor.100	1,825,600	semi-an	Aug.'80 2½
" " pref.100	2,503,380	semi-an	Aug.'82 3½
Dubuque&Sioux C'y*100	5,000,000	semi-an	Oct. '82 3
East Pennsylvania*., 50	1,709 550	semi-an	July '82 3
East Mahanoy*..... 50	392,950	semi-an	July '82 3
Eastern (N. H.)..... 100	492,500	semi-an	June'82 2½
Eel River..... 100	3,000,000	q'arterly	Sept. '82 $1
Elmira,Jef.&Canand*100	500,000	annual	Sep. '80 5
Elmira&Williamsp't* 50	500,000	semi-an	May '82 1½
" " pref. 50	500,000	semi-an	July '82 3½
Erie and Pitsburg*.. 50	1,998,400	q'arterly	June'82 1¾
Evansville & Terre H.100	100,000	semi-an	Nov.'81 2
Fitchburg..... 100	4,500,000	semi-an	July '82 3
F. & P. Marquette pf.100	6,500,000	semi-an	July '82 3
Ft.W. & Jackson pref.100	2,000,000	.....	May '82 2
Georgia. ..... .100	4,200,000	q'arterly	July '82 2½
Granite 100	1,250,000	semi-an	July '82 3
Han. & St. Jo. pref .100	5,083,024	semi-an	Aug. '82 3½
Harrisbg&Lancaster 50	1,182,500	semi-an	July '82 3½
Housatonic pref. ...100	1,180,000	q'arterly	Oct. '82 2
Illinois Central.....100	39,000,000	semi-an	Sept. '82 3½
Ia.Falls & Sioux City*100	4,623,500	q'arterly	Sept. '82 1¾
Iowa R. Land Co....100	7,620,000	q'arterly	Aug. '82 1
Jefferson v. Mad.&Ind100	2,000,000	q'arterly	May '82 1¾
Joliet and Chicago*..100	1,500,000	q'arterly	June'82 1¾
Kan.C.,Ft.S.&Gulf...100	4,000,000	.....	Feb. '82 2
" " pref..100	2,750,000	semi-an	Aug. '82 4
Kentucky Central...100	500,000	semi-an	June'81 1
" " pref..100	5,583,500	semi-an	June'83 1
Lake Shore&Mich.So.100	49,466,500	q'arterly	Nov. '82 2
" (guar.)100	533,500	semi-an	Aug. '82 5
Lawrence*..... 50	450,000	q'arterly	July '82 2
Lehigh Valley..... 50	27,496,895	q'arterly	Oct. '82 2
pref. 50	106,300	q'arterly	Oct. '82 2

Marked thus(*)are leased roads.	Stock out-standing.	Divide'd Periods.	Last Dividend Payable.
Little Miami..... 50	4,637)300	q'arterly	Sept. '82 2
Little Rock & Ft. S..100	4,096,135	.....	July' 81 10s
Little Schuylkill*.. . 50	2,646,100	semi-an.	July '82 3½
Louisville & Nashv...100	19,130,913	semi-an.	Feb. '82 3
Lowell & Andover...100	500,000	semi-an.	Jan. '82 3½
Lykens Valley.....100	600,000	q'rterly.	Oct.' 81 2½
Manchester & Law..100	1,000,000	semi-an.	May '82 5
Manhattan 100	13,000,000	.....	.....
" " 1st pref.100	6,500,000	q'rterly.	Oct. '82 1½
" " 2d pref.100	6,500,000	q'rterly.	Oct. '82 1½
Marietta& Cincinnati 50	1,386,350	.....	.....
" " 1st pref 50	8,105,600	semi-an.	Sep. '66 38
" " 2d pref 50	4,440,000	semi-an.	Sep. '66 38
Marq.Hout.&Ont.pf..100	2,259.026	.....	Aug. '82 4
Massawippi*..... 100	400,000	semi-an.	Aug. '82 3
Metropolitan 100	6,500,000	q'rterly.	Oct. '82 1½
Michigan Central....100	18,738,204	q'rterly.	Aug.'81 1
Middlesex Central...100	280,000	semi-an.	Aug.'82 3
Mill Creek&Minehill* 50	323,000	semi-an.	July '82 5
M.Hill& Schuyl.Hav* 50	4,022,500	semi-an.	July '82 3½
Missouri Pacific.....100	28,169,800	q'rterly.	Oct. '82 1½
Mobile&Montgomery100	3,022,517	semi-an.	Feb. '80 2½
Morris and Essex.... 50	15,000,000	semi-an.	July '82 3½
Mt Carbon&PtCarbon 50	282,350	semi-an.	July '82 6
Nashua and Lowell..100	800,000	semi-an.	July '82 4
Nashua & Rochester.100	1,305,800	semi-an.	Oct. '82 1½
Nashv. & Decatur...100	1,827,000	semi-an.	June'81 3
Nash.,Chat.&StLouis 25	6,670,325	semi-an.	Apl. '82 1½
Naugatuck.....100	2,000,000	semi-an.	July '82 5
Nesquehoning Val'y* 50	1,300,000	semi-an.	Sept.'82 3
N.Castle&Beaver Val* 50	600,000	q'rterly.	Oct. '81 —
NewLondonNorth'n*100	1,500,000	q'rterly.	July '82 1½
N. Y. Cen. & Hud. R.100	89,428,330	q'rterly.	Oct. '82 2
N. Y. and Harlem....100	7,950,000	q'rterly.	July '82 4
" " pref.100	1,500,000	q'rterly.	July '82 4
" City Line.. —	....	annual	Apl. '82 3
N.Y.,LakeErie&West.100	77,083,000	.....	.....
" " pref.100	8,156,825	.....	Jan. '82 6
N. Y., N. H. & Hart...100	15,500,000	semi-an.	Jan. '82 5
N.Y., Prov. & Boston100	3,000,000	q'rterly.	Aug. '82 2
Niag.Bridg&Canand*100	1,000,000	semi-an.	July '81 3
North Carolina*.....100	3,000,000	semi-an.	Sep. '81 3
" " pref.100	1,000,000	semi-an.	Sep. '81 3
N. Eastern (S.C.) pref100	86,000	semi-an.	May '81 4
Norfolk & Western pref.	15,000,000	q'rterly.	Sept. '82 $1
North Pennsylvania. 50	4,527,150	q'rterly.	Aug. '82 1¾
Northern Central.... 50	6,142,600	semi-an.	July '82 3
Northern N. Hampsh100	3,068,400	semi-an.	June'82 3
Northern N. Jersey*.100	1,000,000	semi-an.	July '80 2½
Norwich&Worcester*100	2,604,400	semi-an.	July '82 5
Ohio 100	18,500,000	.....	.....
Ohio and Miss. pref..100	4,030,000	semi-an.	Mar.'75 3½
Old Colony.....100	7,333,800	semi-an.	July '82 3½
Oregon R'way&Nav.100	6,000,000	q'rterly.	Aug. '82 2
Oswego & Syracuse..100	1,320,400	semi-an.	Aug. '81 4½
Panama..... 100	7,000,000	.....	July '82 6½
Paterson & Hudson*.100	630,000	semi-an.	July '82 4
Paterson & Ramapo.100	248,000	semi-an.	July '82 4
Pember.&Hightst'n*. 50	342,150	semi-an.	Jan. '82 3
Pennsylvania..... 50	77,672,750	semi-an.	May '82 4
Pennsylvania Co..... 50	20,000,000	semi-an.	June'81 2½
Peoria & Bureau Val*100	1,200,000	semi-an.	Feb. '82 4
Philadelphia & Erie*. 50	7,013,700	semi-an.	.....
" " pfd 50	2,400,000	semi-an.	Jan. '75 4
Phil,Ger.&Norrist'n* 50	2,231,900	q'rterly.	Sept.'82 3
Phil. and Reading... 50	32,726,375	q'rterly.	Jan. '76 2½
" " pref. 50	1,551,800	q'rterly.	July '76 3½
Phila. and Trenton...100	1,250,100	q'rterly.	Oct. '82 2½
Phila., Wil. and Balt. 50	11,585,750	semi-an.	July '82 4
Pittsb., Ft. W. & Chi.*100	19,714,285	q'rterly.	Oct. '82 1¾
" Special Imp..100	6,770,900	q'rterly.	Oct. '82 1¾
Pittsfield&N.Adams...100	450,000	semi-an.	July '82 2½
Portl., Saco & Portsm100	1,500,000	semi-an.	July '82 3
Providence & Worces.100	2,000,000	semi-an.	July '82 3
Rensselaer&Saratog.*100	7,000,000	semi-an.	July '82 4
Rhode Island& Mass.100	100,000	.....	Jan. '81 3
Richmond& Danv...100	3,866,000	q'rterly.	Aug. '82 2
Richmond & Petersb100	1,009,300	semi-an.	Jan. '81 3
Roch.&Genesee Val.*100	555,200	semi-an.	July '82 3
Rutland preferred.. 100	4,000,000	semi-an.	Sept. '82 1
St.L.,Alt. & T.Haute.100	2,300,000	.....	.....
" " pref.100	2,468,406	.....	May '82 3
St.L.&S.Fran.1st pref100	4,500,000	.....	Aug. '82 3½
St.L.,I.Mt.&South'n.100	21,459,927	semi-an.	Feb. '74 3
St.L.,Jac'ville & Chic.100	1,293,000	.....	Aug. '82 4½
" " pref.100	1,034,000	.....	Aug. '82 4½
St. P. & Duluth pref.100	4,705,000	q'rterly.	June'82 1¾
St. P., Minn. & Man...100	20,000,000	semi-an.	Aug.'82 3½
Schuylkill Valley*... 50	576,050	semi-an.	July '82 2½
Seaboard & Roanoke.100	1,229,600	semi-an.	May '82 5
Shamokin V.&Pottsv 50	669,450	semi-an.	Feb.'82 3
Shore Line*.....100	1,000,000	semi-an.	July '82 4
Sioux C.&Pacific pref100	160,000	semi-an.	Apl. '82 3½
South Br. (N. J.)*....100	438,300	semi-an.	Jan. '82 3
South Western (Ga.)*100	3,892,300	semi-an.	Dec. '81 3½
Stockbridge&Pitts.*..100	448,700	semi-an.	Oct. '81 1½
Syr.,Bingham&N.Y.*100	2,500,000	semi-an.	Feb. '81 2
Terre Haute & Ind...100	1,988,150	semi-an.	Aug. '82 4
Troy and Boston....100	1,600,000	semi-an.	Feb. '80 2
Union Pacific..... 100	61,000,000	q'rterly.	Oct. '82 1¾
United Cos of N. J.*.100	20,400,000	q'rterly.	Oct. '82 2½
Utica, Shenango&S V100	4,000,000	semi-an.	Nov.'81 3
Utica and Black Riv.100	1,772,000	semi-an.	Mar.'82 2
Vermont and Mass. 100	3,050,000	semi-an.	Oct .'82 3
Wab, St.L.& Pac.pref.100	22,615,100	q'rterly.	Nov.'81 1½

Marked thus(*)are leased roads.	Stock out-standing.	Divide'd Periods.	Last Dividend Payable.
Ware River*.....100	750,000	semi-an.	July '82 3½
Warren (N. J.)..... .100	1,800,000	semi-an.	Apl. '82 3½
Warwick Valley.....100	240,000	semi-an.	July '82 2½
Westchest&Phil.pref100	821,300	semi-an.	July '80 2
West Jersey..... ...100	1,359,750	semi-an.	Sept. '82 3
Wilmingt'n&Weld'n.100	1,456,200	semi-an.	July '82 3
Wil., Col., & Aug 100	960,000	semi-an.	July '82 3
Winchester&Foto'c.*100	180,000	semi-an.	July '82 3
Winchester&Strasb.*100	74,700	semi-an.	July '82 8
Worcester & Nashua. 75	1,789,800	semi-an.	July '82 1½
HORSE-POWER R. R.			
Albany City.....100	200,000	annual	.....'80 5½
Baltimore City..... 25	1,000,000	semi-an.	Oct. '82 3
Balt.,Cat.&El.Mills...100	....	semi-an.	July '82 2
BleeckerSt.&Ful.F'y.100	900,000	semi-an.	July '82 ¾
Boston&Chelsea pref. 50	110,000	semi-an.	Oct. '82 3
Broadway (Brooklyn)100	250,000	q'arterly	Oct. '82 6
B'way&7th Av.(N.Y.)100	2,100,000	q'arterly	Oct, '82 2
B'klyn&Hunter's Pt.100	400,000	semi-an.	Oct. '82 6
Brooklyn City..... .100	2,000,000	q'arterly	Aug. '82 3½
Bushwick (Brooklyn)100	300,000	semi-an.	Oct. '82 6
Cambridge..... ...100	608,000	q'arterly	Oct. '82 6
Cen.Park,N.& E.Riv.100	1,800,000	q'rterly.	Oct. '82 6
Christoph'r&TenthSt100	650,000	semi-an.	Aug.'82 2½
Citizens' (Phil.)..... 50	192,500	q'rterly.	Jan. '82 2½
Citizens' (Pbg.)..... 50	200,000	annual..	.....'80 14½
Coney Island&Pblyn100	500,000	semi-an.	Oct. '80 5
Continental (Phil.).. 50	580,000	semi-an.	July '82 6
D.Dock,E.B'way&Bat100	1,200,000	q'arterly	Oct. '81 4
Eighth Av. (N. Y.)...100	1,000,000	q'rterly.	Oct. '81 3
42d St. & G. St. Ferry100	747,000	semi-an.	Nov.'81 6
Frankf.&Southw (Ph) 50	600,000	q'rterly.	Oct. '82 6
Germantown, (Ph.).. 50	572,800	q'rterly.	Oct. '82 2¾
Girard College (Ph.) . 50	500,000	semi-an.	July '71 3
Grand St. & Newton..100	170,091	semi-an.	July '81 2½
Green&Coates St.(Ph) 50	150,000	q'rterly.	Oct. '82 3
Heston,Mantua&F'm 50	299,387	semi-an.	Jan. '75 4
Highland..... 100	600,000	semi-an.	July '82 4
Lomb.&SouthSts(Ph) 25	195,000	semi-an.	Oct. '75 4
Lynn and Boston....100	200,000	semi-an.	May '82 4
Malden and Melrose.100	166,000	... ...	... .
Metropolitan (Post.). 50	1,500,000	semi-an.	July '82 4
Middlesex (Boston)..100	650,000	semi-an.	May '82 3½
N.Y.,Bay Ridge&Jam100	150,000	..... .	Oct. '78 7
Ninth Av. (N. Y.)....100	707,320	.....	.....
Orange & Newark....100	282,555	.....	.....
People's (Phila.) pref. 25	124,744	..... .	July '82 2
Philadelphia City... 50	475,000	semi-an.	July '82 4
Phila. and Darby.... 20	200,000	semi-an.	July '81 3½
Phila.&Grey's Ferry. 50	308,000	semi-an.	Jan. '82 6
Phg.Alleg.&Manches. 50	300,000	q'rterly.	Oct. '81 3
Ridge Avenue (Ph.).. 50	420,000	semi-an.	Oct. '81 11
Second Avenue (N.Y.)100	1,100,500	semi-an.	July '82 2
Second&ThirdSt.(Ph) 50	771,076	q'rterly.	Jan. '82 4½
17th & 19th sts (Ph.).. 50	250,000	semi-an.	July '81 3
Sixth Avenue (N. Y.)100	750,000	semi-an.	May '82 5
Somerville (Boston).100	113,000	semi-an.	May '82 3
South Boston..... 50	600,000	semi-an.	July '82 4
Third Avenue, N. Y...100	2,000,000	q'rterly.	Aug '82 5
13th and 15th sts.,Ph 50	334,520	q'rterly.	Jan. '82 4
23d street, N. Y.....100	600,000	semi-an.	Aug.'82 4
Union, Boston.....100	374,300	semi-an.	Jan '82 4
Union, Phila..... 50	1,005,000	semi-an.	Jan. '82 7
West Philadelphia... 50	750,000	semi-an.	July '77 10
CANALS.			
Chesapeake and Dela 50	2,078,088	semi-an.	June'75 2
Delaware Division... 50	1,623,350	semi-an.	Aug. '82 $1
Delawa. and Hudson100	20,000,000	q'rterly.	Sept. '82 1¾
Delaware & Raritan*.100	5,847,400	q'rterly.	Oct. '82 2½
Lehigh Coal and Nav 50	11,204,288	semi-an.	June'82 2
Monongahela Nav... 50	1,004,500	semi-an.	July '82 $3
Morris, consolidated.100	1,025,000	semi-an.	Aug. '82 2
" preferred....100	1,175,000	semi-an.	Aug.'82 5
Pennsylvania..... 50	4,501,200	.....	.....
Schuyl. Nav., com.*. 50	859,100	annual..	Oct.'82 50c.
" " pref... 50	3,200,000	annual..	Oct. '82 $1
MISCELLANEOUS.			
Adams Express..... 100	12,000,000	q'rterly.	Sept.'82 2
American Express... 50	18,000,000	semi-an.	July '82 3
Amoskeag Manuf.Co.100	3,000,000	semi-an.	June'81 5
Calumet&HeclaMin'g 25	100,000	S. q'rterly.	Aug. '82 $5
Central Mining Co...100	.....	semi-an.	Feb.'82 2½
Consolidation Coal..100	10,250,000	semi-an.	Jan. '82 2
George's Creek C.&I.100	.....	semi-an.	Jan. '82 3
Maryland Coal.....100	4,400,000	semi-an.	Feb. '76 1½
Mariposa L. &Mining100	10,000,000	..... .	.....
" pref100	5,000,000	..... .	.....
Missouri Val.LandCo100	200,000	semi-an.	July '82 12
National Tube Works100	1,000,000	q'rterly.	Oct. '82 3
Pac. Mail Steamship.100	20,000,000	q'rterly.	Sept.'69 3
Pennsylvania Coal.. 50	5,000,000	q'rterly.	Aug. '82 3
Pullman Palace Car..100	10,032,800	extra.	Sept.'82 1½
Quicksilver, com....100	5,708,700	..... .	May '82 0.4
" pref....100	4,291,300	..... .	May '82 6
Quincy Mining Co... 25	40,000	shs	semi-an.	Aug. '82 $5
Quincy R. R. Bridge.100	1,750,000	semi-an.	July '82 5
SiouxC.&I.F.L.&L.Co100	500,000	semi-an.	June '82 5
Spring Mt. Coal.....100	1,500,000	semi-an.	June '82 3½
Topeka Equip'nt Co.100	255,500	semi-an.	Oct. '82 5
United States Ex....100	7,000,000	q'rterly.	Aug. '82 1
Wells-Fargo & Co. Ex100	6,250,000	semi-an.	July '82 4
Western Union Tel..100	80,000,000	q'rterly.	Oct. '82 1½

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RAILROAD EARNINGS.—MONTHLY.

	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total.
BURL., CEDAR RAP. & NORTHERN:													
1880	184,316	165,170	188,325	141,652	149,504	153,378	143,432	160,160	179,804	204,991	189,330	193,419	2,053,484
1881	167,750	124,510	148,551	184,680	165,630	205,912	174,351	209,112	221,801	221,748	203,880	232,812	2,259,937
1882	252,823	225,631	224,107	178,304	199,278	211,257	198,276	224,921	.....	.....	.....	.....	.....
CENTRAL PACIFIC:													
1880	1,200,614	1,070,487	1,373,438	1,356,716	1,778,488	1,724,950	1,840,067	1,973,438	1,964,997	1,120,229	2,199,466	1,905,221	20,508,112
1881	1,602,907	1,454,218	1,709,637	1,872,370	2,091,410	2,159,381	1,899,346	2,088,518	2,293,000	2,514,000	2,267,000	2,110,000	23,947,951
1882	1,876,000	1,702,000	1,987.000	2,052,000	2,353,000	2,239,000	2,020,000	2,277,000	.....	.....	.....	.....	.....
CHESAPEAKE AND OHIO:													
1880	202,335	198,681	222,762	221,559	199,443	214,352	238,236	259,110	247,303	211,820	240,795	218,009	2,674,308
1881	162,540	184,389	228,479	227,343	252,235	241,135	225,096	262,858	247,144	237,303	235,585	203,562	2,702,762
1882	210,455	209,708	208,981	267,454	255,939	260,753	306,831	371,175	.....	.....	.....	.....	.....
CHICAGO AND ALTON:													
1880	534,054	497 013	626,473	542,961	616,128	617,524	708,906	761,120	767,349	785,199	696,776	574,695	7,718,198
1881	487,890	461,641	529,915	558,190	548,556	635,860	676,205	769,751	768,897	750,359	680,133	635,307	7,553,988
1882	579,447	530,480	584,483	561,787	553,412	613,886	671,537	800,624	.....	.....	.....	.....	.....
CHICAGO AND NORTHWESTERN:													
1880	1,154,632	1,131,683	1,361,725	1,294,573	1,875,608	1,671,177	1,699,686	1,767,938	2,020,245	2,105,217	1,855,671	1,477,902	19,416,007
1881	1,240,667	963,208	1,178,795	1,474,612	1,879,006	2,306,640	1,983,031	2,315,164	2,292,676	2,341,097	2,019,037	1,855,476	21,849,209
1882	1,620,336	1,471,945	1,696,568	1,634,819	2,058,133	2,022,700	2,025,736	2,099,755	.....	.....	.....	.....	.....
CHICAGO, BURLINGTON AND QUINCY:													
1880	1,432,740	1,411,870	1,732,518	1,489,894	1,909,627	1,682,956	1,773,643	1,834,321	1,862,285	1,934,762	1,837,860	1,552,018	20,454,494
1881	1,307,948	1,034,821	1,418,149	1,574,371	1,679,455	2,083,803	1,888,358	2,173,945	2,262,981	2,031,001	1,816,133	1,905,490	21,324,150
1882	1,658,834	1,457,300	1,566,217	1,530,838	1,505,261	1,437,164	1,625,006	.....	.....	.....	.....	.....	.....
CHICAGO, MILWAUKEE AND ST. PAUL:													
1880	764,298	738,749	900,675	871,041	1,134,745	1,037,958	1,026,708	991,297	1,257,677	1,493,620	1,472,037	1 397,308	13,086,119
1881	990,847	682,717	916.989	1,259,946	1,538,491	1,729,811	1,568,706	1,678,361	1,644,67c	1,590,000	1,569,000	1,855,000	17,025,462
1882	1,435,000	1,377,000	1,561,000	1,518,000	1,629,000	1,620,000	1,465,000	1,545,000	1,950,000	.....	.....	.....	.....
CHICAGO, ST. PAUL, MINNEAPOLIS AND OMAHA:													
1880	193,827	173,078	259,783	259,208	232,146	218,093	236,995	251,013	300,833	342,052	342,894	312,173	3,122,097
1881	257,786	158,594	251,648	261,211	350,124	404,562	383,202	385,586	373,370	382,714	380,733	391,950	3,981,296
1882	307,498	315,100	405,779	356,558	406,420	363,109	331,480	394,555	483,462	.....	.....	.....	.....
CINCINNATI, INDIANAPOLIS, ST. LOUIS AND CHICAGO:													
1880	155,697	172,541	198,220	168,199	186,995	200,332	204,138	233,478	343,627	239,881	209,014	198,254	2,412,185
1881	182,523	171,511	191,005	183,710	191,096	192,299	177,161	229,858	219,977	212,606	194,805	192,623	2,296,916
1882	200,042	186,879	208,066	204,269	199,110	195,948	209,564	.....	.....	.....	.....	.....	.....
DENVER AND RIO GRANDE:													
1880	124,759	126,922	160,883	164,882	193,925	295,455	373,132	400,133	406,583	473,318	408,562	349,196	3,478,007
1881	307,476	317,681	398,493	433.111	514,767	584,230	548,284	606,193	589,287	665,686	566,819	643,417	6,206,812
1882	491,914	412,987	535,055	559,917	614,298	537,462	495,797	574,040	595,306	.....	.....	.....	.....
HANNIBAL AND ST. JOSEPH:													
1880	176,079	166,965	216,061	206,735	191,317	179,396	224,312	238,081	233,448	242,214	207,147	279,635	2,561,366
1881	154,401	122,874	176,356	190,812	172,950	190,740	201,899	210,240	202,567	313,433	201,782	180,376	2,230,961
1882	138,284	154,717	168,798	148,913	154,917	155,030	184,347	258,628	.....	.....	.....	.....	.....
ILLINOIS CENTRAL:													
1880	595,212	613,806	613,008	535,732	665,120	681,736	724,095	732,755	806,836	880,211	783,120	673,182	8,304,812
1881	631,281	524,499	557,789	662,493	673,259	803,887	720,004	868,407	828,847	815,238	737 218	763,475	8,586,397
1882	728,173	689,387	695,371	674,603	674,749	663,746	752,251	813,600	.....	.....	.....	.....	.....
INDIANA, BLOOMINGTON AND WESTERN:													
1880	80,498	89,690	116,185	90,374	85,733	106,954	103,438	116,732	110,622	121,343	96,621	104,619	1,233,079
1881	90,283	83,261	192,085	203,677	200,064	199,846	199,125	272,114	195,307	181,674	160,826	156,697	.....
1882	195,824	175,755	206,235	205,934	182,554	186,133	206,072	278,814	.....	.....	.....	.....	.....
LOUISVILLE AND NASHVILLE:													
1880	674,455	575,035	612,593	563,883	655,014	976,229	772,537	827,088	931,910	1,000,326	953,086	949,184	9,491,346
1881	816,960	805,124	947,959	850,862	828,726	1,227,885	817,135	876,192	951,566	1,002,950	1,065,223	1,122,285	11,326,859
1882	950,065	960,036	1,073,745	950,007	946,435	1,187,385	1,038,385	1,030,385	.....	.....	.....	.....	.....
MOBILE AND OHIO:													
1880	250,116	204,094	168,301	140,091	129,249	121,855	131,621	140,593	184,246	264,714	251,368	287,373	2,373,621
1881	224,347	216,768	230,916	163,551	145,803	136,517	135,548	160,789	209,044	252,921	252,434	262,025	2,406,437
1882	161,433	158,154	152,651	145,272	137,645	132,572	136,398	140,443	.....	.....	.....	.....	.....
NASHVILLE, CHATTANOOGA AND ST. LOUIS:													
1880	205,633	191,154	169,457	155,466	158,839	144,155	151,594	169,326	167,473	178,266	182,087	175966'	2,049,484
1881	178,143	190,866	207,710	183,525	104,430	154,549	150,430	168,317	179,979	172,121	152,059	173,127	2,075,256
1882	156,994	159,961	161,005	154,155	137,645	119,074	160,991	1,03c,385	.....	.....t	.....	.....	.....
NEW YORK AND NEW ENGLAND:													
1880	164,232	149,907	183,845	179,689	183,701	219,891	205,056	249,885	235,642	215,491	210,856	198 108	2,396,302
1881	189,749	173,614	212,019	216,913	217,185	231,518	246,821	280,524	299,573	261,199	242,412	237,729	2,809,255
1882	213,840	217,261	265,222	263,544	283,244	290,060	308,920	353,726	.....	.....	.....	.....	.....
NEW YORK, LAKE ERIE AND WESTERN:													
1879	1,147,173	1,207,391	1,356,780	1,372,755	1,350,574	1,230,419	1,273,533	1,450,223	1,492,497	1,713,697	1,515,835	1,398,224	16,509,127
1880	1,296,381	1,252,218	1,644,958	1,643,151	1,592,544	1,661,812	1,580,976	1,606,874	1,786,417	1,899,910	1,799,338	1,726,788	19,149,361
1881	1,443,437	1,425,765	1,847,261	1,709,057	1,776,891	1,794,982	1,787,081	1,772,895	1,734,200	.....	.....	.....	.....
NORTHERN CENTRAL:													
1880	334,494	330,860	415,325	386,130	329,788	419,193	450,298	453,923	464,093	512,918	459,054	494,310	5,050,387
1881	386,157	382,657	452,906	487,273	465,588	487,287	440,811	498,008	429,565	449,664	487,160	476,622	5,443,697
1882	407,368	413,551	430,194	435,129	482,607	482,762	509,683	667,488	.....	.....	.....	.....	.....
NORTHERN PACIFIC:													
1880	81,390	77,259	119,357	185,700	217,613	253,105	241,277	223,500	330,300	358,456	300,822	220,993	2,629,710
1881	116,508	78,803	162,984	216,210	312,705	412,024	393,260	434,085	490,096	565,485	428,903	434,331	4,044,576
1882	239,800	269,000	384,000	438,000	568,332	631,342	679,240	727,377	.....	.....	.....	.....	.....
PHILADELPHIA AND ERIE:													
1880	224,307	245,372	327,678	334,947	311,470	331,024	308,699	347,532	322,737	367,082	324,966	281,919	3,727,733
1881	224,303	225,501	285,573	293,323	343,792	350,585	291,669	303,849	276,522	292,392	284,078	282,772	3,454,309
1882	252,727	246,246	265,311	277,851	341,415	347,614	377,206	420,329	.....	.....	.....	.....	.....
ST. LOUIS AND SAN FRANCISCO:													
1880	198,091	195,948	193,146	176,164	167,664	173,607	213,297	259,995	280,873	328,194	290,329	226,063	2,698,371
1881	212,435	178,234	262,050	265,298	283,399	260,254	252,333	286,373	279,064	308,569	284,320	287,914	3,160,245
1882	256,784	244,654	274,959	242,806	253,419	240,177	318,613	381,637	.....	.....	.....	.....	.....
ST. LOUIS, ALTON AND TERRE HAUTE:													
1880	153,139	163,737	168,994	155,462	147,928	150,207	191,077	216,759	204,295	221,863	188,773	184,503	2,146,741
1881	175,725	166,012	201,137	197,447	172,177	165,896	165,393	189,180	187 299	179,921	162,544	153,852	2,112,801
1882	168,987	149,619	178,145	157,450	162,842	142,742	192,017	236,137	.....	.....	.....	.....	.....
ST. LOUIS, IRON MOUNTAIN AND SOUTHERN:													
1880	555,983	490,195	451,560	408,241	349,053	363,454	432,655	565,869	671,219	688,365	632,052	656,951	6,265,597
1881	570,957	560,791	704,002	548,300	479,075	474,302	533,512	644,386	690,400	719,239	687,280	709 498	7,319,744
1882	516,370	501,127	585,008	581,977	519,120	529,700	515,519	675,981	.....	.....	.....	.....	.....
ST. PAUL, MINNEAPOLIS AND MANITOBA:													
1880	180,239	137,645	261,798	333,014	281,899	243,407	272,089	232,579	274,188	345,057	300,675	297,641	3,160,231
1881	254,187	159,482	320,962	425,685	382,642	405,322	387,488	414,954	485,736	605,708	508,530	528,262	4,878,960
1882	395,461	418 358	531,004	570,890	858,902	856,417	853,296	801,759	.....	.....	.....	.....	.....
TEXAS AND PACIFIC:													
1880	245,785	219.165	215,070	174,177	141,083	153,066	195,711	226,073	266,570	303,666	312,184	301,858	2,754,408
1881	281,176	260,781	319,928	295,066	281,782	285,105	328,063	381,331	337,117	578,668	357,724	381,218	3,921,569
1882	310,785	255,644	332,911	359,543	409,228	384,713	367,215	439,918	.....	.....	.....	.....	.....
UNION PACIFIC RAILWAY:													
1880	1,433,636	1,393,992	1,730,509	1,937,220	2,027,269	1,928,528	1,934,215	1,913.035	2,270,179	2,707,860	2,251.148	1,869,335	23,448,445
1881	1,339,799	1,374,740	1,674,860	1,766,894	2,319,238	2,884,774	2,528,826	2,638,659	2,844,357	3,289 350	2,773,608	2,267,004	27,451,831
1882	1,961,088	1,759,863	2,226,832	2,462,004	2,491,590	2,508,453	2,301,000	2,762,107	2,949,112	.....	.....	.....	.....
WABASH, ST. LOUIS AND PACIFIC:													
1880	776,790	759,451	978,629	892,024	948,773	953,468	1,966,742	1,189,478	1,178,950	1,501,203	1,131,787	1,050,816	12,428,112
1881	811,617	818,922	1,121,592	1,023,482	1,144,660	1,308,993	1,131,752	1,542,838	1,490,027	1,396,300	1,399,555	1,328,278	14,461,870
1882	1,229,965	1 134 768	1,315,776	1,378,194	1,204,864	1 149 682	1 418,837	1,772,544	.....	.....	.....	.....	.....

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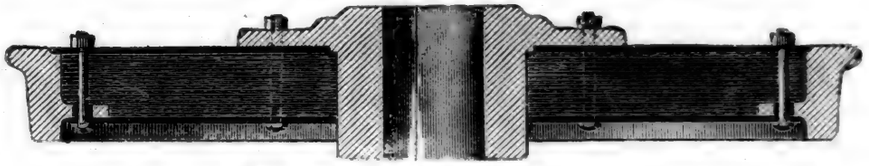
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OUR CANADIAN LETTER.

[From our Special Correspondent.]

RAILWAY construction is being vigorously pushed forward in the Dominion, and the present may well be described as a railway period. There are already nearly 12,000 miles of railways in operation in Canada. The railway connection between the Maritime Provinces and Quebec and Ontario being complete, the country is now looking anxiously forward to the time when there shall be an all-rail route between British Columbia and Halifax, N. S., through Canadian Territory.

THE OTTAWA AND GATINEAU VALLEY RAILWAY.

The Ottawa and Gatineau Valley Railway Company, with James M. Currier, Esq., ex-M. P., president; C. H. Mackintosh, Esq., M. P., vice-president; J. Murray Mitchell, Esq., C. E., F. G. S., managing director and chief engineer, and H. B. Mackintosh, Esq., secretary, in addition to the early construction of their main line, between Hull opposite Ottawa to Desert River, have in contemplation an extensive exploratory survey from the Desert River to James' Bay (in the Hudson Bay); the distance from Ottawa to the Bay by the Hurricanaw River route being only 450 miles. This route will traverse a line of country full of valuable minerals of a highly merchantable character, offering a field for capitalists and farmers second to none on the Continent. Professor Bell and other eminent authority say that the 60,000 square miles situated between James' Bay and the Height of Land, north of Lake Superior and Lake Huron, are exceeding valuble in lumbering and mining resources, and owing to its comparatively warm climate, adapted to sustain a very considerable agricultural population. Professor Bell reports that around James' Bay and up the eastern side of Hudson's Bay lie great deposits of iron and coal; so close together that with the cheap water freights which the region may afford, the district about James' Bay may yet become another Pennsylvania. It is expected that work will be commenced on the railway this fall. The Ottawa and Gatineau Valley Railway, between Ottawa and the Desert, taps the richest phosphate, iron and other minerals of Canada; and the energetic gentlemen at its head are guarantors of success.

THE INTERNATIONAL RAILWAY.

The International Railway, which is now nearly completed between Sherbrooke and a point 16 miles over the National border—near Lake Megantic—will, it is intended, join the road at Mattawanka, Maine, which extends from New Brunswick west, and is called the "European and North American." When the Sherbrooke extension of about 130 miles is completed (this fall), it is proposed to consolidate the line from St. Johns to Sherbrooke. The consolidated bonds will be issued upon the credit of the whole road. This road—which does not compete with water—will be some 350 miles shorter from Montreal to St. John than the Intercolonial, and 150 miles shorter then any other possible route. The International, when extended to Montreal, will tap the Canadian Pacific and Grand Trunk, and will no doubt become one of the most important of Canadian railways. The Hon. John Henry Pope, Minister of Agriculture, is the principal owner of the road. He is a man of the highest standing for integrity and energy, and no doubt when the bonds of the "International and North American Railway are placed on the market, they will be eagerly taken up.

THE CANADA AND ATLANTIC RAILWAY.

This railway is now completed between Coteau Landing on the Grand Trunk and Ottawa. Trains have just begun running between Ottawa and Montreal, and the trip can be made in three hours, being three-quarters of an hour shorter than any other route. When the bridge is built across the St. Lawrence at Coteau, and the road completed to Rouses Point, immense quantities of lumber and other freight will be carried over it. Mr. Linsley, the contractor, deserves great credit for the speedy completion of the road, which is without doubt one of the finest in America.

The following gentlemen are stopping at the Russell House: W. K. Muir, Detroit; Edmund Wragge, Toronto, chief engineer T., G. & B.; Walter Townsend, general manager T., G. & B.; L. D. Boulton, solicitor Northern Railway; E. M. Chadwick, solicitor T., G. & B.; Hector Cameron, solicitor O. & Q.; Mr. Blackstock, O. & Q.; H. D. Lumsden, chief engineer O. & Q.; and Hugh Ryan, of Perth. The object of their visit is to confer with the Minister of Railways in reference to the way in which one road shall cross another.

THE PONTIAC AND PACIFIC RAILWAY.

Work on the Pontiac and Pacific Junction Railway is being pushed forward with all possible dispatch, seven miles being graded. Notwithstanding that $1.40 per day is paid to laborers and fare paid to works, very few can be hired, although many are required.

A number of representatives of the Ontario and Quebec Railway, together with representatives of the Northern, T., G. & B., and Midland railways, waited on the railway committee of the Privy Council this afternoon with reference to the O. & Q. Railway's application for leave to cross the other railways. The committee decided to permit the crossing by the O. & Q. R. R. of the Midland at Belmont, Peterboro, Ashburnham and Myrtle, and the Kingston and Pembroke at Sharbot Lake. The committee reserved decision in reference to the crossings at Davenport, near Toronto, of the Northern and T., G. & B. railways, as there are some gradings to be made for shunting yards of other railways.

"W."

OTTAWA, CANADA, Oct. 3, 1882.

Reduction in the Price of Paper Wheels.

THE completion of their large works at Morris, Ill., the improvements of those at Pullman and Hudson, thus enabling them to meet the largely increased demand, has caused the Allen Company to announce a reduction of the price of their 42 inch Broad Tread wheel to $95, and the 42 inch Narrow Tread to $85. This is a reduction of $5 per wheel, and must result in still further increasing the orders for this popular wheel.

ADVERTISE in the RAILROAD JOURNAL.

OUR MEXICAN LETTER.

[From Our Special Correspondent.]

ON September 4th the Mexican National Construction Company opened the first seventy-four kilometres of this end of their road, to Laredo, to passenger traffic. This division (Toluca division) passes over a mountain chain ten thousand feet above the level of the sea. The grades, curves, bridges and views are said by one of the officials of the Vera Cruz line to surpass those of that company. The first fifteen kilometres pass over the fertile plain of Mexico, and then strike the mountains, rising fifteen hundred feet in as many miles. The ascent gives a grand panoramic view of the Mexico Valley, dotted over with romantic looking villages. The old historic city, framed in by silvered lakes and green mountains, seems to rest just beneath the glittering peaks of Popocatapitle and the "Whilo Lady."

Salazar, the highest station on the line, rests on a sterile plateau on the top of the mountain, and a passenger train that leaves the warm temperature of the valley an hour before frequently enters here a heavy snowstorm.

The descent on the west side of the mountain is not less varied and beautiful, with its long stretch of the Lerma River and the clean, white city of Toluca in the distance. Toluca is the capital of the State of Mexico, and is credited with fifty thousand inhabitants. Agriculture is its principal support. It is surrounded by one of the finest farming valleys in the Republic.

Railroading in Mexico is a success beyond expectation. Both the National and Central roads, are pushed beyond their capacity to handle freight, so far as opened, and the passenger traffic is a surprise to the most sanguine. The "National" completed on September 13 ninety-three miles of road, which entitles them to three million of dollars from the Mexican Government. The City of Mexico has made rapid progress during the past year. It is fast approaching the cities of the North with its net-work of wires.

The Mexican Telephone Company have seven hundred wires run into their new Exchange, at Calle Tacuba No. 2, and are doing a "rattling" business. J. D. Haines, secretary and treasurer of the above company, is expected in this city October 1.

W. L. Thompson, chief engineer of the Mexico and Hidalgo Railroad, is in town.

Walter Hinchman, president of the Mexican National Construction Company, will likely remain in the city some months.

We are now entering the dry season, so railroad work will progress more rapidly than in the past six months.

We did not get our mail until the 13th instead of the 11th, on account of a "norther" at Vera Cruz keeping the steamer out of harbor. She finally had to land in Sacrificios Bay.

"J. O., JR."

CIUDAD DE MEXICO, Sept. 14, 1882.

A NEW line of ferry-boats between the terminus of the Second avenue elevated railroad on the Harlem River and the New York and New Haven Railroad immediately opposite began running on the 2d inst.

American Railroad Journal.

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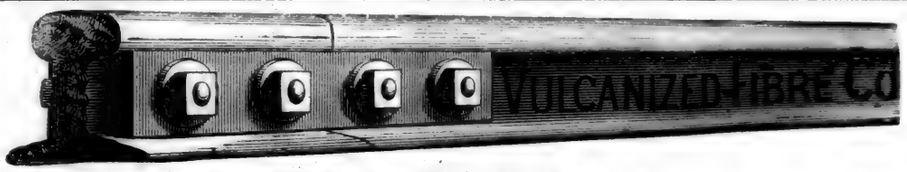
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We give on editorial page our new subscription rates, which are so changed in the belief that it will not only prove acceptable to many who desire to become regular readers of the paper, but that it will meet with the hearty approval of our advertising patrons, who are rapidly filling up the pages offered to them since the improvements in the JOURNAL have been started.

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Office and Factory, Wilmington, Del.



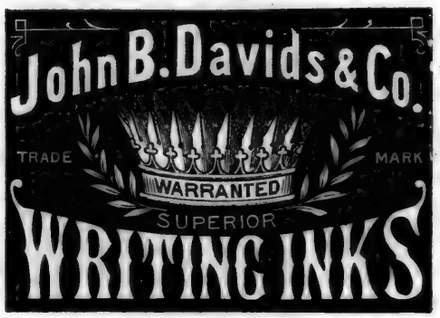
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RUBBER CLOTHING, LACE LEATHER, BELT HOOKS,

RAILROAD, MINING, AND MILL SUPPLIES.

No. 21 Park Place,

NEW YORK.

Imports of Dry Goods at New York.

THE Imports of Foreign Dry Goods at New York for the month of September, were :—

ENTERED FOR CONSUMPTION.

	1880.	1881.	1882.
Manufs. of wool....	$1,714,521	$2,025,466	$2,402,550
Manufs. of cotton...	1,385,117	1,664,868	1,569,154
Manufs. of silk.....	2,851,823	3,390,794	3,685,368
Manufs. flax.....	756,369	1,150,570	1,110,438
Miscell. dry goods...	713,184	888,511	778,307
Total ent. for consumption.....	$7,420,954	$9,120,209	$9,545,817

WITHDRAWN FROM WAREHOUSE.

	1880.	1881.	1882.
Manufs. of wool.....	$1,181,035	$981,377	$1,084,115
Manufs. of cotton...	398,226	233,392	318,482
Manufs. of silk.....	796,869	473,969	570,177
Manufs. of flax.....	508,105	357,925	369,266
Miscell. dry goods..	227,118	191,019	162,001
Total withdr'n from warehouse.....	$3,111,353	$2,237,622	$2,504,041
Add ent. for con....	7,420,954	9,120,209	9,545,817
Total thrown on the market.....	$10,532,307	$11,357,831	$12,049,858

ENTERED FOR WAREHOUSING.

	1880.	1881.	1882.
Manufs. of wool....	$1,033,241	$682,575	$925,650
Manufs. of cotton..	327,375	159,721	226,533
Manufs. of silk.....	728,164	338,450	582,858
Manufs. of flax....	421,016	341,158	357,844
Mis. dry goods.....	181,536	176,162	161,534
Total ent. for warehouse	$2,691,332	$1,698,066	$2,254,419
Add entered for consumption	7,420,954	9,120,209	9,545,817
Total ent. at port....	$10,112,286	$10,818,275	$11,800,236

The Imports of Foreign Dry Goods at New York for nine months from January 1, were:—

ENTERED FOR CONSUMPTION.

	1880.	1881.	1882.
Manufs. of wool...	$16,431,409	$14,552,410	$18,579,289
Manufs. of cotton	18,038,103	17,150,507	19,054,555
Manufs. of silk....	24,423,895	22,633,533	29,469,203
Manufs of flax....	10,756,705	9,525,894	10,923,125
Mis. dry goods....	6,779,934	6,514,938	7,095,193
Total entered for consumption ...	$76,430,046	$70,377,282	$85,121,367

WITHDRAWN FROM WAREHOUSE.

	1880.	1881.	1882.
Manufs. of wool..	$6,107,931	$6,769,279	$6,149,296
Manufs. of cotton.	3,242,304	3,726,482	3,033,558
Manufs. of silk....	4,683,234	4,226,059	4,716,786
Manufs. of flax...	3,472,701	4,029,566	3,187,057
Mis. dry goods....	1,489,846	1,838,501	1,766,779
Total withdrawn from warehouse.	$18,996,016	$20,589,887	$18,853,476
Add entered for consumption ...	76,430,046	70,377,282	85,121,367
Total thrown on the market.....	$95,426,062	$90,967,169	$103,974,843

ENTERED FOR WAREHOUSING.

	1880.	1881.	1882.
Manufs. of wool...	$8,588,929	$5,528,644	$6,907,381
Manufs. of cotton.	3,713,931	3,049,252	3,264,143
Manufs. of silk....	5,222,536	3,666,177	4,816,689
Manufs. of flax....	4,990,693	3,252,721	3,232,888
Mis. dry goods....	1,854,634	1,966,209	1,875,933
Total entered for warehouse	$24,372,713	$17,463,003	$20,097,034
Add entered for consumption ...	76,430,046	70,377,282	85,121,367
Total ent. at port.	$100,800,769	$87,840,285	$105,218,401

Trees Along Railways.

THE Union Pacific managers commenced two years since ornamenting their stations with trees, evergreens, etc., such as is practiced by the leading lines in the East. Large parks are planted around the stations; and, for the first three hundred miles west of the Missouri River, already make a good showing. The importance of timber growing, both for fuel, protection, and beautifying the landscape, is well understood and acted upon in Nebraska, as one hundred thousand acres of cultivated timber within its limits attest.

For deciduous trees the company have a preference for catelpa speciosa, which grows rapidly and is perfectly hardy. Box Elder, Hard and Soft Maple, White Ash and Elm have done well. On the Laramie plains the Aspen and narrow-leaved Cottonwood seem to be the most suitable. The latter is a much better shade tree than the white or yellow, and the Box Elder of the mountains and valleys is superior to the Negundo of the East, having a more upright growth. The beautiful Evergreens of the Rocky Mountains have proved more successful in their growth, and have suffered much less in transplanting, than Eastern nursery-grown trees. Six hundred of the Silver and Douglass Spruce, the Silver Fir and two varieties of pine have been planted the present season. The trees are from four to five feet high, and succeed well with proper digging, careful planting and mulching. At the stations on the sage plains, when there is an abundant supply of water, there is no doubt of the success of Evergreen growth. The farthest point reached this year is 620 miles west of Omaha.

The Union Pacific Railway, besides setting the example of planting trees largely, have used every persuasion to induce farmers along their line to set out trees, and that largely, particularly of those kinds of timber which will be of service for ties. Forest planters are realizing that there is no more profitable crop than timber, and Western farmers that there is no section of the country better adapted for the purpose than the prairies. Pine forests cannot be planted too soon on the great plains, and there cannot be a question as to their success and great future profit. Trees thrive wonderfully well on the prairie soil, and take but a few years to furnish fuel, and soon are large enough for other purposes.—*Tribune and Farmer.*

What Made the Other Passengers Glad.

THE seventh passenger was a lady. There was an abundance of room in the car, but as she entered an elderly man rose up with a great flourish and called out: "Take my seat, madame. I am not the kind of a man to keep a seat in the street car and oblige a lady to stand up." She sank down with a half-bow in acknowledgment, and he held out his hand for her fare with the remark: "Some men are brutal enough to permit a lady to stumble to the fare-box and back, but that isn't me." He took her ticket and deposited it, and then hung to the strap and continued: "And I know men who think that passing a lady's fare to the box gives them the privilege of entering into conversation with her about the weather, crops, rate of mortality, politics, and so forth. That isn't me, however." The speech had its due effect upon all the other passengers, including the victim, and the man let out another link by remarking: "Giving up my seat in the car to a lady does not entitle me to offer to assist her off the car, or ask if she is married or single, or in any manner break down the stern barriers of social formality, and I know it. It is simply an act of courtesy, and I shall so consider it." There was something painful in the situation to the other six, but relief came by the man reaching the end of his journey. As he was ready to get off he looked back and said: "I have seen men whose conceit obliged them to lift their hats and bow to everybody in the car before stepping off, but that isn't me. I shall step off without any formality, and without hoping that I will be missed." When the six looked back and saw him sprawled in the dust they were glad of it.—*Detroit Free Press.*

Smith's Improved Railroad Signal.

FOR ALL ROAD CROSSINGS AND PLACES OF DANGER.

THE following brief description of this valuable appliance will be of interest to railroad companies :

When a train is at a distance off it strikes a bowed spring, so arranged in close connection to the rail that the passing train will cause the spring to give way six inches. This motion is carried by a steel wire or cable to the point of danger in a tube or pipe imbedded in the ground to be out of the way of repairing the track. At a point of danger, in a suitable box where it can be seen, is a signal and gong; when this wire is pulled by the spring, it rings a gong or bell and pushes out a signal, and leaves the signal exposed till the train has passed; and if there is a train each way there will be a signal each side the crossing. When the train passes it operates another spring, which will push back the signal, showing the danger is passed. It can also be used in tunnels, so that a train entering the tunnel will raise or expose a signal, and by a bowed spring at the other end of the tunnel will lower or put back the signal, thus showing that the train is out of the tunnel and the track clear. So in passing through deep cuts and crooked places a series of signals can be left up at a distance back of the train, so that one train need not run into another except through carelessness.

BEFORE long some enterprising church, awakening to the fact that it is behind the age, will discard its bell and put in a steam whistle.

THE European and North American Railway Company assumed control of the Maine Central Railroad under the terms of a recent lease on the 1st inst.

COAL will be burned on the locomotives of the Canadian Pacific Railway this winter. The steamers will leave it at the Government dock at Fort William, as there will be no room at Prince Arthur's Landing, on account of all the docks being used for freight.

THE other day an Arkansaw man secured a free pass over a railroad. He was very much pleased at first, but after discovering that if injured in an accident he could not recover damages, he approached the superintendent and said: "Look here! how about this thing?" "What's the matter with it?" "What if I get killed on the road; my wife wouldn't recover damages." "No, sir." "Then I don't want the pass. I ain't got no wife nor no relations, but I want to feel that if I had a wife she'd get pay for my death. I'm much obliged to yer, but reckon I'll have to walk."—*Arkansaw Traveller.*

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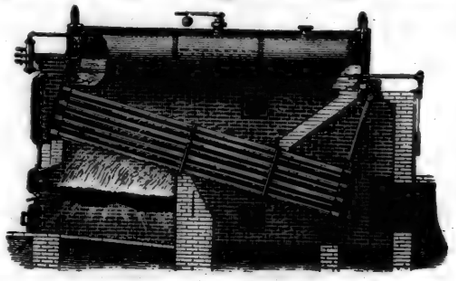
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Editor AMERICAN RAILROAD JOURNAL:

In your issue of the 26th ult. I notice an article in relation to the Therm Motor. The article contains several misstatements; but the Motor, owing to faulty adjustments and a combination of circumstances, did not work to our entire satisfaction. We are now remedying the defects and shall very shortly again try the Motor, when we shall be glad to have your JOURNAL represented. We are well satisfied that we can do all we claim, and that but a short time will elapse before it can be proven that petroleum, as a fuel for locomotives, can be used more advantageously than coal.

ELBRIDGE BAKER.

BOSTON, Sept. 29, 1882.

Wood Finish.

RICHNESS of effect may be gained in decorative woodwork by using woods of different tone, such as amaranth and amboyna, by inlaying and veneering. The Hungarian ash and French walnut afford excellent veneers, especially the burls or gnarls. A few useful notes on the subject are given by a recent American authority. In varnishing, the varnishes used can be toned down to match the wood, or be made to darken it, by the addition of coloring matters. The patented preparation known as "wood fillers" are prepared in different colors for the purpose of preparing the surface of wood previous to the varnishing. They fill up the pores of the wood, rendering the surface hard and smooth. For polishing mahogany, walnut, etc. the following is recommended: Dissolve beeswax by heat in spirits of turpentine until the mixture becomes viscid; then apply by a clean cloth, and rub thoroughly with a flannel or cloth. A common mode of polishing mahogany is by rubbing with linseed oil and then by a cloth dipped in very fine brickdust; a good gloss may also be produced by rubbing with linseed oil, and then holding trimmings or shavings of the same material against the work in the lathe. Glass paper, followed by rubbing, also gives a good luster.

There are various means of toning or darkening woods for decorative effect—logwood, lime, brown soft soap, dyed oil, sulphate of iron, nitrate of silver exposed to sun's rays, carbonate of soda, bichromate and permanganate of potash, and other alkaline preparations are used for darkening the wood; the last three are especially recommended. The solution is applied by dissolving one ounce of the alkali in two gills of boiling water, diluted to the required tone. The surface is saturated with a sponge or flannel, and immediately dried with soft rags. The carbonate is used for dark woods. Oil tinged with rose madder may be applied to hard woods like birch, and a red oil is prepared from soaked alkanet root in linseed oil. The grain of yellow pine can be brought out by two or three coats of japan much diluted with turpentine, and afterwards oiled and rubbed. To give mahogany the appearance of age, lime water used before oiling is a good plan. In staining wood, the best and most transparent effect is obtained by repeated light coats of the same. For oak stain, a strong solution of oxalic acid is employed; for mahogany, dilute nitrous acid. A primary coat, or a coat of wood-fillers, if advantageous. For mahogany stains the following are given: two ounces dragon's blood dissolved in one quart of rectified spirits of wine, well shaken; or raw sienna in beer, with burnt sienna to give the required tone; for darker stains boil half a pound of madder and two ounces of logwood chips in one gallon of water, and brush the decoction while hot over the wood. When dry, paint with a solution of two ounces of potash in one quart of water. A solution of permanganate of potash forms a rapid and excellent brown stain.—*Building News.*

List of Recent Patents for Inventions Relating to Railway Interests.

264,849. Street-Railway Car: SYLVESTER BISSEL, Hartford, Conn. Filed March 10, 1882.

264,871. Boiler-Furnace: MARK S. FOOTE, Burlington Iowa. Filed Aug. 8, 1882.

264,892. Device for Loading and Landing Floating Lumber-Cribs: SUMNER T. MCKNIGHT, Hannibal, Mo. Filed Aug. 18, 1882.

264,905. Smoke-Consumer for Locomotives: HENRY A. SPEAR, Charlestown, and ALBION P. WIGHT, JR., North Adams, assignors of one-half to FRANK BROWNELL, Boston, Mass. Filed Aug. 14, 1882.

264,913. Means for Warming Railway-Cars by Steam: WILLIAM H. WARD, Pittsburg, Pa. Filed Jan. 19, 1881.

264,921. Car-Spring: SUMNER A. BEMIS, Springfield, Mass. Filed Aug. 2, 1882.

264,926. Car-Coupling: DANIEL CARLOUGH, Paterson, N. J. Filed July 28, 1882.

264,929. Car-Coupling: JOHN E. H. CHAPMAN, Harrisburg, Tex. Filed April 25, 1882.

264,937. Compound Engine: HENRY D. DUNBAR, North Hartland, Vt. Filed Dec. 29, 1881.

264,948. Street-Car: SAMUEL HOWE, Oakland, Cal. Filed July 25, 1882.

264,976. Railroad-Rail: AARON C. VAUGHAN, Shane's Crossing, Ohio. Filed Feb. 7, 1882.

264,991. Device for Changing Gauge of Railway-Cars: DAVID ANDERSON, Fairview, Stawell, Victoria. Filed Aug. 10, 1882.

265,011. Car-Coupling: KIRK S. BLANCHARD, Clarendon, N. Y. Filed May 26, 1882.

265,023. Electric Car-Brake: PHILIP V. CONOVER, Uvalde, Tex. Filed Aug. 8, 1882.

265,031. Car-Coupling: DANIEL W. DEAL, Toddville, Iowa, assignor to himself and JOSEPH VOWELS and JOHN ALL, both of same place. Filed June 21, 1882.

265,039. Grate for Boiler-Furnaces: MURILLO DOWNER and JOSEPH MOHR, Chicago, Ill. Filed Aug. 2, 1882.

265,055. SPARK-ARRESTER: SAMUEL L. FRENCH and RICHARD B. MELLON, Ligonier, Pa. Filed Jan. 31, 1882.

265,058. Car-Coupling: DAVID W. GLIDDEN, Montrose, Pa. Filed Jan. 14, 1882.

265,063. Car-Coupling: HALE E. HAWK, Kansas City, Mo. Filed Jan. 4, 1882.

265,065. Car-Coupling: FRANCIS M. HAZLETON, Red Bluff, Cal. Filed March 11, 1882.

265,082. Rotary Steam-Engine: GEORGE HOPKINS, Glen Allen, Va. Filed Aug. 17, 1882.

265,129. Pneumatic Elevator for Railways: CHAS. A. NEEDHAM, New York, N. Y., assignor to himself and E. P. NEEDHAM, same place. Filed July 24, 1882.

265,132. Switch Stand and Lock: DANIEL O'CONNOR, Little Rock, Ark. Filed April 18, 1882.

265,133. Car-Coupling: JAMES W. OULTON, Charlestown, Mass. Filed Dec. 31, 1881.

265,138. Steam-Engine. ALBERT T. POWELL, Stanfordville, N. Y., assignor to the Powell Steam Motor Company, (Limited,) same place. Filed Nov. 4, 1881.

265,145. Fare Register and Recorder: NEWMAN A. RANSOM, Chicago, Ill., assignor to the Railway Register Manufacturing Company, Buffalo, N. Y. Filed Aug. 30, 1879.

265,162. Car-Coupling: JAMES E. SMITH, Wilkes-Barre, Pa. Filed March 10, 1882.

265,180. Lubricator: ALLEN W. SWIFT, Elmira, N. Y. Filed Aug. 21, 1882.

265,200. Car-Brake: WATSON P. WIDDIFIELD and ANSON T. BUTTON, Uxbridge, Ontario, Canada. Filed Feb. 17, 1882.

TRACK-LAYING has commenced on the Correctionville branch of the Chicago and Northwestern Railway. On the Iowa division of this road, known as the Calliope branch, tracklaying has reached Orange City, twenty-five miles beyond the last reported terminus.

THE Chicago, Milwaukee and St. Paul Railway Company has contracted with the Pullman Car Company to take control of the sleeping-car system over its 4,000 miles of road. This forms a continuous system of Pullman sleeping cars from New York to Portland, Oregon.

A DEPOSIT of mica and kaolin of excellent quality has been discovered in Lancaster county, Penn. The mica was struck at a depth of twenty-five feet, and between the stratas layers of the finest quality of kaolin were found. Samples of mica taken out are valued at $8 per pound.

IN the Supreme Court of Pennsylvania, at Pittsburgh, on the 2d inst., Judge Trunkey decided that a railroad company must honor its tickets, whosoever sells them, and that, therefore, the ticket on its face entitles the holder to the rights of a passenger between points named on the ticket.

THE Winnipeg *Sun* says that the estimate of work done by Messrs. Langdon, Shepherd & Co., contractors for the Canadian Pacific Railway, during the month of August, was five hundred thousand dollars. They completed in the same time ninety-two miles of railway, and their bill of quantities for each month was fourteen hundred thousand yards.

AN underground telegraph system between Paris and Marseilles is nearly ready for use in France. Four weeks ago 150 men were engaged in pushing forward the work from both ends, following the main roads and the right bank of the Rhone. From a description by *Iron*, the English journal, it appears that the pipes are laid at a depth of more than a metre and a half, and chambers for facilitating repairs are placed at about every 500 metres. They resemble large cast iron cauldrons with covers, and have apertures for receiving the ends of the two pipes which they connect. Every 100 metres the pipes are united by cast-iron couplings, which will permit of inspecting and repairing the cable, and the joint between each pipe is made with an india-rubber washer or lead collar. "The work is pushed forward with vigor," adds the same paper, "and it is proposed eventually to connect this cable, which will traverse France from north to south, with the cables of the Mediterranean and Atlantic."

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BEARDSLEY, D. N. & CO., MANUFACTURERS OF Superior Oak and Chestnut Lumber, and Railroad Ties, 9 Murray Street, N. Y.

CHESTER STEEL CASTING CO., MANUFACTURE Steel Castings, Cross-heads, Rocker-arms, Piston-heads, etc., for Locomotives, 407 Library St., Phila., Pa.

DAVIDS, JOHN B. & CO., WRITING INKS, 184 William Street, N. Y.

DAVIS, JOHN H. & CO., BANKERS AND BROKERS, 17 Wall Street, N, Y.

DODGE & SINCLAIR, MANUFACTURERS OF RUBber and Leather Belting, 21 Park Row, N. Y.

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EAGLE TUBE CO., BOILER TUBES, 614 to 626 WEST Twenty-fourth Street, N. Y.

EAMES VACUUM BRAKE CO., RAILWAY TRAIN Brakes, 15 Gold Street, N. Y.

FAIRBANKS & CO., STANDARD SCALES, RAILROAD and Warehouse Trucks, and Copying-presses, 311 Broadway N. Y.

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SHUGG BROS., DESIGNERS AND ENGRAVERS ON Wood and Photo-Engravers, 18 Cortlandt St., N. Y.

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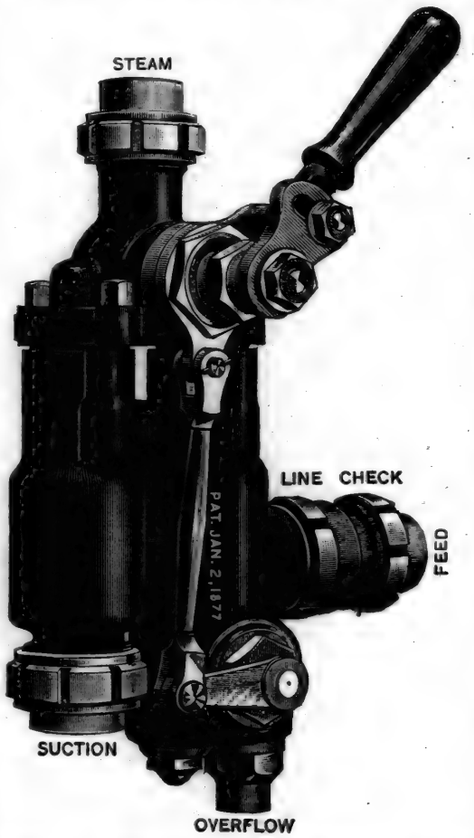
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Statement of the Public Debt of the United States, October 1, 1882.

DEBT BEARING INTEREST.

	Amount Outstanding.	Accrued Interest.
6 per cent loan 1863-'81 continued at 3½ per ct	$3,693,200 00	$32,315 50
5 per cent funded loan of 1881, continued at 3½ per cent	177,062,900 00	1,032,866 92
3 per cent loan of July 12, 1882	237,233,200 00	1,186,166 00
4½ per cent funded loan of 1891	250,000,000 00	937,500 00
4 per cent funded loan of 1907	738,916,250 00	7,389,162 50
4 per cent refunding certificates	435,800 00	4,358 00
3 per cent navy pension fund	14,000,000 00	105,000 00
Aggregate of debt bearing interest	$1,421,341,350 00	$10,687,368 92
Interest due and unpaid		1,532,344 05

DEBT ON WHICH INTEREST HAS CEASED SINCE MATURITY.

	Amount Outstanding.	Interest due and unpaid.
4 to 6 per cent. old debt, 1837.	$57,665 00	$64,174 81
5 per cent. Mexican indemnity stock, 1846-'52	1,104 91	85 74
6 per cent. bonds, 1847-'67	1,250 00	22 00
6 per cent. bounty land scrip, 1847-'49	3,275 00	213 06
5 per cent. Texas indemnity stock, 1850-'64	20,000 00	2,945 00
5 per cent. bonds, of 1858-'74	7,000 00	875 00
5 per cent. bonds, of 1860-'71	10,000 00	600 00
6 per cent. 5-20 bonds, 1862, called	366,900 00	7,888 11
6 per cent. 5-20 bonds, June 1864, called	57,400 00	1,056 37
6 per cent, 5-20 bonds, 1865, called	70,550 00	18,548 11
5 per cent. 10-40 bonds, 1864, called	301,000 00	64,692 85
6 per cent. Consol. bonds, 1865, called	369,700 00	12,205 69
6 per cent. Consol. bonds, 1867, called	862,450 00	111,172 92
6 per cent. Consol. bonds, 1868, called	261,000 00	21,040 42
6 per cent. loan, Feb. 8, 1861, matured Dec. 31, 1880	77,000 00	4,830 00
5 per cent. funded loan 1881, called	849,600 00	7,795 60
Oregon War Debt, March 2, 1861, matured July 1, 1881.	8,100 00	1,579 50
6 per cent loan of July 17 and Aug. 5, 1861, matured June 30, 1881	526,850 00	11,242 50
6 per cent loan of July 17 and Aug. 5, 1861, continued at 3½ per cent, matured Dec. 24, 1881, called	4,395,500 00	60,380 38
6 per cent. loan of March 3, 1863, matured June 30, 1881.	158,600 00	5,488 50
6 per cent loan of March 3, 1863, continued at 3½ per cent, matured August 1, 1882, called	6,855,200 00	43,743 73
1-10 to 6 per cent. Treasury notes, prior to 1846	82,525 35	2,668 06
1-10 to 6 per cent. Treasury notes, 1846	5,900 00	200 60
6 per ct. Treasury notes, 1847	950 00	57 00
3 to 6 per cent. Treasury notes, 1857	1,700 00	99 00
6 per ct. Treasury notes, 1861.	3,000 00	364 50
7 3-10 per cent. 3 years' Treasury notes, 1861	16,300 00	1,104 43
5 per cent. 1 year notes, 1863	41,735 00	2,098 5
5 per cent. 2 year notes, 1863.	32,700 00	1,622 30
6 per ct. compound interest notes, 1863-64	219,860 00	44,920 47
7 3-10 per cent. 3 years' Treasury notes, 1864-65	138,850 00	20,422 62
6 per cent. certificates of indebtedness, 1862-63	4,000 00	253 48
4 to 6 per cent. temporary loan, 1864	2,960 00	244 19
3 per cent. certificates, called.	5,000 00	394 31
Aggregate of debt on which Interest has ceased since maturity	$15,959,625 26	$515,030 10

DEBT BEARING NO INTEREST.

Demand notes, 1861-62	$59,485 00	
Legal tender notes, 1862-63	346,681,016 00	
Certificates of Deposit	10,670,000 00	
Coin certificates, 1863	4,907,440 00	
Silver certificates, 1878	71,569,260 00	
Unclaimed interest		5,339 96
Fractional currency, 1862, 1863 and 1864 $15,404,012 77		
Less amount estimated as lost or destroyed, act of June, 21, 1879 8,375,934 00	7,028,078 77	
Aggregate of debt bearing no interest	$440,915,229 77	$5,339 96

RECAPITULATION.

	Amount Outstanding.	Interest.
Debt bearing interest in coin, viz:		
Bonds at 6 per cent., continued at 3½ per cent.	$3,693,200 00	
Bonds at 5 per cent, continued at 3½ per cent.	177,062,900 00	
Bonds at 4½ per cent	250,000,000 00	
Bonds at 4 per cent	738,916,250 00	
Bonds at 3 per cent	237,233,200 00	
Refunding certificates	435,800 00	
Navy pension fund, 3 p.c	14,000,000 00	
	$1,421,341,350 00	$12,219,712 97
Debt on which interest has ceased since maturity.	15,959,625 26	515,030 10
Debt bearing no int., viz:		
Old demand and legal-tender notes	$346,740,501 00	
Certificates of deposit	10,670,000 00	
Coin & silver certificates.	76,476,650 00	
Fractional currency	7,028,078 77	
	$440,915,229 77	
Unclaimed interest		5,339 96
	$1,878,216,205 03	$12,740,083 03
Total debt, principal and interest to date, including interest due and unpaid	$1,890,956,288 06	

AMOUNT IN TREASURY.

Interest due and unpaid	$1,532,344 05
Debt on which interest has ceased	15,959,625 26
Interest thereon	515,030 10
Gold and silver certificates	76,476,650 00
U. S. notes held for redemption of certificates of deposit	10,670,000 00
Cash balance available Oct. 1, 1882	141,682,415 52
	$246,836,064 93
Debt, less am't in Treas'y Oct. 1, 1882	$1,644,120,223 13
Debt, less am't in Treasury Sept. 1, 1882	1,658,926,171 96
Decrease of debt during the month	$14,805,948 83
Decrease of debt since June 30, 1882	$44,794,237 59

BONDS ISSUED TO THE PACIFIC RAILROAD COMPANIES, INTEREST PAYABLE IN LAWFUL MONEY.

	Amount Outstanding.	Accrued Interest not paid.
Central Pacific bonds, 1862-64	$25,885,120 00	$388,276 80
Kansas Pacific bonds, 1862-64	6,303,000 00	94,545 00
Union Pacific bonds, 1862-64	27,236,512 00	408,547 68
Cent. Branch Union Pacific bonds, 1862-64	1,600,000 00	24,000 00
West'n Pacific Bonds, 1862-64	1,970,560 00	29,558 40
Sioux City & Pacific bonds, 1862-64	1,628,320 00	24,424 80
Totals	$64,623,512 00	$969,352 68

Interest paid by the United States, $55,344,682.74; interest repaid by transportation of mails, &c., $15,286,467.92; interest repaid by cash payments: 5 per cent net earnings, $655,198.87; balance of interest paid by United States, $39,403,015.95.

The foregoing is a correct statement of the public debt, as appears from the books and Treasurer's returns in the Department at the close of business, September 30, 1882.

CHARLES J. FOLGER,
Secretary of the Treasury.

THE Chicago *Inter-Ocean* says that a manufactory of railroad supplies is to be established at Garfield, a suburb two miles northwest of that city. It will be run in connection with the locomotive works now building there and controlled by the same men. Plans have been adopted for the works, which will be larger than any similar establishment in the country, and give employment to 1,000 men, who will be housed by the company in adjacent cottages. The construction of buildings will begin within a month, and the works will be operated early in the spring.

THE Indianapolis *Journal* says that what is known as the Royal Limited Express over the Pennsylvania Railroad, as ordinarily made up, represents over $120,000, as follows: Engine, $12,000; baggage car, $1,200; smoking-car, $5,000; dining-room car, $12,000; five elegant Pullman cars, $18,000 each, $90,000. While this may seem to be an exception, the ordinary express trains represent $83,000 to $85,000. The average value of a freight train is still greater than that of a passenger train, when the value of the property carried is included. Sometimes the freight aggregates $250,000 to $300,000.

BALTIMORE and Ohio parlor and sleeping cars have commenced running through to Indianapolis over the new Indiana, Bloomington and Western connection.

THE steamship "Tacoma," recently built by Wm. Cramp & Sons, is owned by the Central Pacific Railroad Company and will be used for freighting purposes exclusively. She has compound engines and registers 3,500 tons. She will leave in a few days for the Pacific coast.

THE Harlan & Hollingsworth Company, of Wilmington, Del., have made a contract with the Northern Pacific Railroad Company, to build for them an immense transfer ferryboat, to convey a whole train of cars across the Willamette River in Oregon. The boat will be of iron, with paddle wheels and independent engines. The same firm has contracted to build a duplicate of the City of Worcester, to run on the same line.

THE iron twin-screw steamer, "Victoria," built to the order of a New York firm for freight trade with South American ports, was launched at the Pusey & Jones Company's works, Wilmington, Del., on the 23d inst. The dimensions of the vessel are: Length, 130 feet; breadth, 26 feet; depth of hold, 7 feet. The vessel will be driven by two compound engines, 12 and 21 by 18 inches stroke, with jet condensers and two locomotive boilers.

THE Shaw locomotive, which ran a mile in fifty-two seconds on the Camden and Atlantic Railroad while drawing a train of seven loaded passenger cars, has been withdrawn from service temporarily. There are certain repairs to be made, and after these have been completed the engine will be placed upon the Bound Brook Route. Drawings of the engine have been sent to London to be exhibited at a meeting of the Board of Directors of the London and Northwestern Railway.

ACCORDING to a St. Louis reporter, Miss Susan B. Anthony left that city recently for Leavenworth with two medium sized trunks for baggage. At first the baggage-master objected to check them both on a single ticket, and demanded pay for extra weight. "But," said she, "they together weigh less than the ordinary sized 'Saratoga.' I distribute the weight in this way purposely to save the man who does the lifting." The clerk looked at her incredulously. "And you tell me seriously that you do this simply out of consideration for the baggage-men?" "I do." "How long have you done it?" "All my life. I never purchased a large trunk, for fear I might add to the overburdened baggage-man's afflictions." The clerk walked off and conferred with the head of the department. Then the two returned together. "Do I understand," said the chief, "that you, of all women, have been the first to show humanity toward railroad people?" "That is a tenet of my creed." "Check that baggage," said the chief with emphasis; "and when you run for office, Miss Anthony, you shall have my vote." "Mine too," echoed the clerk, handing her the checks, and the trio parted, happy.

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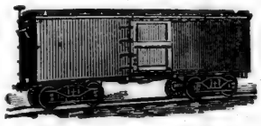
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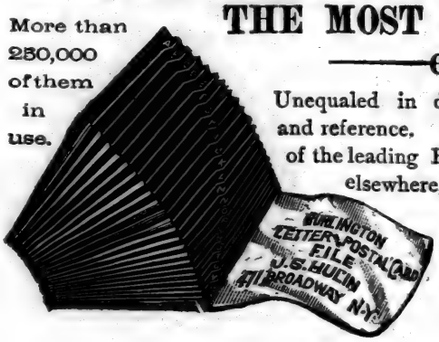
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England's New Port.

On Monday last a new line of railway, giving the Southwestern Railway Company direct access to the Medway at a point nearly opposite to Queensborough, and which has been named Port Victoria, was opened for traffic. The powers to make this line, as stated by the London *Daily News*, were originally obtained by the Hundred of the Hoo Railway Company, whose rights the Southeastern directors acquired, and the line has since been constructed by their engineer, Francis Brady. At Port Victoria a pier has been built which is 450 feet long and 50 wide, with a depth of water 22 feet at the lowest spring tides, so that all but the very largest ocean-going vessels may take in and discharge cargo at all times. It is in contemplation to replace this by an entirely new pier to be constructed about 100 yards further out in the stream, which will be 600 feet in length, 60 in width, and with a depth of water of 27 feet. In that event the line just finished would be carried on by means of rails placed upon iron cylinders with lattice-work girders, so as to allow of the free flow of the tide, and trains would then be enabled to transfer their passengers and goods directly to the steamers and other vessels as they lay alongside the pier. The Southeastern Company has also acquired at Port Victoria something like 500 acres of land, a portion of which is intended to be utilized in the construction of docks which shall be capable of accommodating ships of the very largest tonnage, inasmuch as they will have a depth of at least 30 feet from the sill of the dock. It is claimed for the new harbor that it is perfectly sheltered from the sea and the winds blowing up Channel, by Garrison Point, near Sheerness, and ships making use of it will be saved from the risks attending the difficult navigation of the Thames. It is probable that the Southeastern Company will speedily establish a packet service between the port and Flushing, and in that case they look forward to securing a considerable Continental traffic in addition to their ocean-going trade.

Imports and Exports of the United States.

The Chief of the Bureau of Statistics at Washington, in his second monthly statement for the current fiscal year, of the imports and exports of the United States, reports that the excess of imports or of exports of merchandise was as follows:

Month ending Aug. 31, 1882, (excess of imports,) $3,086,439; same time 1881, (excess of exports,) $5,783,425; two months ended Aug. 31, 1882, (excess of imports,) $14,453,467; same time 1881, (excess of exports,) $16,394,361; eight months ended Aug. 31, 1882, (excess of imports,) $53,890,497; same time 1881, (excess of exports,) $114,394,327; 12 months ended Aug, 31, 1882, (excess of imports,) $4,945,145; same time 1881, (excess of exports), $251,468,899.

The excess of imports or of exports of gold and silver coin and bullion was as follows: Month ending Aug. 31, 1882, (excess of exports,) $2,147,204; same time 1881, (excess of imports,) $4,796,109; two months ended Aug. 31, 1882, (excess of exports,) $7,975,435; same time 1881, (excess of imports,) $4,618,887; eight months ended Aug. 31, 1882, (excess of exports,) $41,437,318; same time 1881, (excess of imports), $27,429,541; 12 months ended Aug. 31, 1882, (excess of exports,) $19,539,411; same time 1881, (excess of imports,) $86,224,747.

The values of the imports of merchandise into the United States during the 12 months ended Aug. 31, 1882, were $741,983,917, and for the corresponding months of the preceding year, $643,248,555, being an increase of $98,735,362 for the year ended Aug. 31, 1882.

The values of the exports of domestic and foreign merchandise from the United States during the 12 months ended Aug. 31, 1882, were $737,038,772, and for the 12 months ended Aug. 31, 1881, $894,717,454, a decrease of $157,678,682 for the 12 months ended Aug. 31, 1882.

Domestic and Foreign Patents.

The *Official Gazette* of the United States Patent Office, published on the 3d inst., contains a decision of importance to inventors. The case was that of the Bate Refrigerating Company against Gillett, tried in the United States Circuit of New Jersey. The syllabus of the decision is as follows:

Section 4,887 of the Revised Statutes expressly requires the Commissioner of Patents to limit the term of a domestic patent for an invention previously patented in a foreign country to the period of time which the foreign patent has to run, or, if there be more than one such foreign patent, to so limit the domestic patent that it will expire at the same time with the one having the shortest term. The limitation is the same even if the domestic application was filed before the application for, or the grant of, the foreign patent, the word "previously," in the last clause of section 4,887 referring to time prior to the application therefor. The grant of a Canadian patent is to be determined by its date and issue, and not by the time of its delivery. The term of the domestic patent is limited to the term of the foreign patent in force when the domestic patent was granted, and is not prolonged by any subsequent extension of the foreign patent.

At the breaking of the ground for the Clinton and Point Caswell Railroad of North Carolina, on the 27th ult., fifty young ladies, from six counties, threw the first dirt, while a crowd of five thousand persons looked on.

Mr. Geo. D. Benton, of Boston, Mass., has invented and patented a system of electric lighting for locomotive head-lights and railway cars. Taking steam directly from the boiler he carries it to a steam chest on the platform in front of the smoke box. With two oscillating cylinders of *very* small size, with the pistons acting directly ou a dynamo machine, he obtains 900 revolutions with 120 lbs. pressure of steam. The whole machine, with the steam chest, occupies but little space and is capable of lighting 27 incandescent lights and still have power to spare. Steps are being taken to place it on a through train running out of Boston.

How the Northern Pacific Railroad is being built.

One of the United States Railroad Commissioners, who has just returned from inspecting the Northern Pacific Railroad, says: "I went over the western section from Portland to the scene of the present track-laying east, a distance of 550 miles. I found construction proceeding with rapidity in the best possible manner. The cuts are wide, the sides clear and well sloped and guttered, the embankments broad and well built, and the roadbed as good as it can be made, and the ballasting perfect. Fast trains could be safely run over the entire line. The construction has been effectively done, and I do not hesitate to say that the Northern Pacific's western end is a first-class road. There is a very large force at work, and track laying is proceeding at the rate of one mile per day. There was a little delay at one of the tunnels, but no hindrance to the very rapid work. There will be an abundance of business waiting for the completion of the road. There will be a very large freightage from the interior to the Pacific, and a very large Eastern business. The mining and other resoures of the country are rapidly developing, and no other transcontinental line has such brilliant prospects."

The railroad bridge at Owego has been completed, and the Delaware, Lackawanna and Western trains are now running direct to Ithaca without using the Erie tracks.

Two suits have just been entered on the criminal docket of the United States District Court at Boston, in which the United States is the complainant, and in one of which the Fitchburg Railroad Company, and in the other the Boston and Albany Railroad Company, is the defendant. The complaint is made under an act of Congress relative to the transportation of live-stock on railways, and charges that the defendants have violated this law by forwarding swine and other cattle over their several roads and not giving them the prescribed exercise, food, water, etc. The maximum penalty is $100 for each animal, but in these cases the sum sought to be recovered is $10,000 in bulk from each corporation.

An opinion was rendered in the Supreme Court of Illinois, on the 28th ult., in a case involving the questions as to the power of the State Legislature to regulate the rates charged by railroad companies for freight carried to points outside of Illinois, and whether the act prohibiting unjust discrimination in such rates is not in contravention with the Constitution of the United States. The case was one in which 66 per cent greater rate was charged for hauling freight from Gilman to New York than from Peoria to New York, although the distance from Peoria is greater by 86 miles. It was held by the Court that the charge was unjust, excessive, extortionate and unlawful, and in effect the Court upholds the authority of the Railroad and Warehouse Commissioners to regulate the freight charges from points in Illinois to points outside the State.

AMERICAN Railroad Journal.

ESTABLISHED 1831.

Steam Navigation, Commerce, Finance, Banking, Machinery, Mining, Manufactures.

SECOND QUARTO SERIES.—VOL. XXXVIII., No. 40.] NEW YORK, OCTOBER 14, 1882. [WHOLE No. 2,425.—VOL. L.

PERSONAL.

STRICKLAND KNEASS has been appointed President of the Belvidere Delaware Railroad, in place of Ashbel Welch, deceased.

H. M. WITTER has been chosen President of the Boston, Barre and Gardner Railroad Co. in place of the late Chas. Heywood.

ALBERT GRIGGS has been appointed Superintendent of the Cincinnati, Hamilton and Dayton Railroad, vice J. B. Barrett, resigned.

Wm. H. STEVENSON has been appointed Superintendent of the New York and New Haven division of the consolidated road, vice John T. Moody, resigned. O. M. Shepard has been appointed Superintendent of the Shore Line division.

ROBERT A. SHAILER, formerly Asst. Eng. of the Edge Moor Iron Works, and more recently Prin. Asst. Eng. Chicago, Milwaukee and St. Paul Railway, has been appointed Engineer of the Department of Bridges and other Structures of the latter company, with headquarters at General office, Milwaukee, Wis.

CONSOLIDATION.

ARTICLES of agreement and consolidation between the Chicago and Northwestern Railway, the Menominee River Railroad and the Escanaba and Lake Superior Railway have been filed with the Secretary of State.

AT Indianapolis, Ind., on the 5th inst., the directors of the Union Railway Company ratified the lease of the Belt Railway for ninety-nine years. The former company owns the Union Passenger Depot and all the tracks in the city. The latter company's road is just outside the city limits, connecting all the roads and the stock yards. The stock yards are not included in the lease.

CONSTRUCTION.

IT is expected that the Phœnixville and West Chester Railroad will be ready for travel by January next.

THE Buffalo, Pittsburgh and Western Railroad Company is now operating its new road from Brocton to Buffalo.

THE Mexican Government has contracted with Delfin Sanchez for the construction of the whole Tehuantepec Railroad.

THE iron men of Wythe county, Va., are moving actively for the construction of the proposed Crippled Creek railroad.

THE New York, Susquehanna and Western Railroad was opened for traffic on the 9th inst., when the first train left Stroudburg for New York.

A STREET railway has been laid between Athens, Greece, and the Piræus, which serves the whole city, passing by the Parthenon and the Acropolis.

A RAILROAD is to be built from a point in Coahoma county, opposite Helena, Arkansas, through Sardis, Oxford, Pontotoc east to Birmingham, Alabama.

GROUND was broken on the Washington Street Railroad in Portland, Oregon, on the 27th ult. The manager promises to have it completed by the 1st of November.

RAIL-LAYING on the new Pemigewasset Valley Railroad has reached Mad River in Campton, about five miles north of the starting point. Grading, ballasting, etc. are still progressing.

THE old Long Island Railroad running between Hunter's Point and Jamaica, abandoned some two years ago, has been relaid with steel rails and will be opened again for travel in a few days.

PREPARATIONS are now complete for having two extra tracks on the Pennsylvania Railroad for a distance outside of Pittsburgh of fifteen miles. These will make four tracks in that distance, all of the best steel rails.

THE contractors for that portion of the Canadian Pacific Railway line between Thunder Bay and Rat Portage are empowered to open the road immediately for traffic. Sir Charles Tupper will inspect the line while he is in Manitoba.

THE last spike in the Rome Extension of the East Tennessee, Virginia and Georgia Railway was driven by Henry W. Grady on the 7th inst., with appropriate ceremonies. This completes the link between Rome and Macon, and trains commenced running through on the 9th inst.

SURVEYS are now being made between Finleyville and the Monongahela River, laying out a route for a coal feeder, 15 miles in length, to the Pittsburgh and Lake Erie Railroad. The connection will be made at Hays Station, on the Pittsburgh, McKeesport and Youghiogheny Railway.

THE Alexandria, Va., *Gazette* has been informed that the engineer corps of the Washington and Ohio Railroad has succeeded in getting a route over the Blue Ridge Mountains with a grade of only 85 feet to the mile. This road is now taxed to its utmost capacity in moving the large quantities of freight which are now being shipped over it. New engines and cars have been ordered from the North which are expected to arrive soon.

THE Chenango and Allegheny Valley Railroad Company are building an extension of their main line from Coalville, a point near their present terminus, to Butler, Butler county, a distance of 25 miles, where it will connect with the lines of the Western Pennsylvania Railroad Company. The Pittsburgh *Chronicle* says that the latter company has made an arrangement with the former for the transfer of traffic over the new branch, giving the Pennsylvania Railroad a new outlet for coal and other freight to the Lake regions and the Northwest.

THE directors of the Maryland Central Railroad Company have contracted with L. B. & James McCabe for the construction of 18 miles of road from the Gunpowder to Forest Hill, four miles beyond Belair. The work is to be finished in five months, but the contractors expect to have the road ready for service to Belair by January 1, 1883. They are ready to put a large force of men at work immediately. The board authorized the president to sign the contract, and a deposit of $50,000 will be made on behalf of the company, the contractors agreeing to complete the construction before they receive their pay.

FROM Portland, Oregon, October 6, we learn that a party of fifty gentlemen—prominent citizens of Portland—met, on that day, the U. S. Government Commissioners who had been examining the completed road of the Northern Pacific Railroad Company in Montana, in the vicinity of Multnomah Falls, and in an informal manner performed the recemony of driving the last spike which completes the railway of the Oregon Navigation Company between Portland and Wallulu Junction, where it connects with the Northern Pacific. The Oregon Railway Navigation Company's road and the Northern Pacific Railroad together make a completed road from Portland east a distance of 515 miles to a point in western Montana.

THE Cleveland *Leader* says that the officers of the New York, Chicago and St. Louis Railway "have at last abandoned the impracticable idea of opening the line in its entirety as a full-fledged line on October 15, and will only ope

'in a small way' on that date. The task of equipping a road 520 miles in length with a full operating force, including trainmen, yardmen, agents, operators, etc., is a great one, and cannot be accomplished in a day, and even if equipped it would not be a prudent move to undertake with a green force of men to move everything in direct and close competition with the competing trunk lines, which are the most thoroughly organized and systematic roads in the United States, without first breaking in the men. For this and other reasons, among them delays in getting the passenger equipment, the road will not be opened for through business October 15, as is generally expected by the public."

[Special from our Correspondent.]

CANADA.

Phosphate Mining, etc.

A FIELD FOR LEGITIMATE MINING OR INVESTMENT IN MINING PROPERTIES—IT WOULD BE DIFFICULT TO FIND A BETTER ONE THAN IN THE OTTAWA VALLEY.

The rapid exhaustion of the agricultural lands of this continent, and the recognition of the fact that agricultural produce is the great staple of the United States, as well as of Canada, has of late years directed attention to the best means of supplying the deficiencies arising from over-cropping. The vast quantities of fertilizers raised in South Carolina, manufactured in the States and imported annually from Europe, employed at first in enriching the impoverished lands of New England and the Eastern States, have during the last two or three years become a necessity to the great cotton fields of the South, and already the extensive wheat plains of the West are claiming a share. The fertilizer business, now one of the National industries, is one that must grow with increasing years. Hitherto, because the consumption of superphosphates was purely local, the American manufacturers have confined themselves to the use of the cheaper and low grade materials, but as the demand has extended, involving the payment of high freight it has been found necessary to concentrate the greatest amount of phosphoric acid in the smallest bulk, and this can only be arrived at by the use of high grade materials. For years the West Indian Islands were the source of supply, but these deposits are now quite exhausted, and to Canada must the manufacturer now look for his supply of apatite or phosphate of lime. Deposits of this mineral exist in the Lawrentian Hills, in the neighborhood of Ottawa, and have been worked for twenty years past in a more or less active way—the produce, nearly 20,000 tons a year, going to England and to Germany. A few firms in Massachusetts have used the mineral during the last three years and its use is apparently extending. Some have even purchased properties, and send the produce to their own factories. The mineral consists of hard crystalline masses of a reddish and greenish color, and is usually found embedded in granite, gneiss and mica slate. The quality is very high, averaging from 80 to 85 per cent tribasic phosphate of lime, and it is claimed that it is valuable as a drying-out agent, and gives superphosphate a rich inviting color. The mining of the material is carried on in the simpliest manner, and as none of the properties have been worked to any depth, the cost is very little. Much of it is obtained in a pure condition, but where it is associated with other minerals, it can be hand-cobbed to the requisite quality at little expense. From $5 to $10 per ton can be taken as the average cost of mining and delivering at the shipping point on the River Ottawa or the railway, where it at present readily realizes $20 per ton. It will thus be seen that a handsome profit can be made, which no doubt might be considerably increased if the work was prosecuted with the well-known energy of the practical American capitalist. One important feature about this mining industry is that no expensive machinery or mining plant is necessary, and nearly all the deposits are situated so that they may be readily drained by the use of syphon pipes. It is not yet clear to geologists whether the deposits are pockets or veins. Some properties show deposits presenting all the appearance of true fissure veins—notably that of Mr. J. A. Gemmill, of Ottawa City. This location comprises about 1,000 acres and is situated in Wakefield Township, some twenty miles from Ottawa, and has been worked very successfully during the last three years. The main workings show a network of veins, some of which have been followed, showing all the features of pinching and expanding so peculiar to mineral veins. These veins lie with the strike or "grain" of the gneiss. A large quantity of rich apatite has been extracted from this property, and, owing to its accessibility, was marketed at such a price as to give its owner a handsome profit. Recently he has discovered new and more extensive deposits almost alongside the main workings indicating that there must be an immense supply at that point. On a hill in the rear of the property there exists an extensive deposit of rich magnetic iron ore, an acre wide by a quarter of a mile long. The projected Gatineau Valley Railway when constructed will at once render this iron deposit of very great value. It may be of interest to your readers to learn that almost every known deposit of iron in Canada is at present either owned or bonded by American capitalists. In a few instances "good things" have been made by Americans out of phosphate mining properties. Four years ago, a New York gentleman purchased some 1,200 acres for $20,000. He worked a portion of the property at a splendid profit, sold 400 acres to an English firm for $60,000 cash, and last year refused $80,000 for the remainder. As a field for legitimate mining, or investment in mining properties, it would be difficult to find a better one than in the neighborhood of Ottawa City.

THE Fitchburg Railroad Company announce their annual fall excursions from Boston to North Adams and return for October 17 and 18 at the very low rate of $2 for the round trip, with the number of tickets limited.

SUBSCRIBE for the RAILROAD JOURNAL.

Telegrap ic Communication with South America.

BY the completion of the cables of the Central and South American Telegraph Company on the 2d inst. telegraphic communication has been established between the United States and Mexico and Central and South America. The cables of the Mexican Telegraph Company, starting from Galveston, Texas, reach Vera Cruz by way of Tampico, at which point the cables of the Central and South American Telegraph Company extend to the isthmus of Tehuantepec, thence by land line to the Pacific, thence by cables to Lima, in Peru, where they connect with the cables of the West Coast Telegraph Company, now laid to Valparaiso, Chili. These lines comprise 5,610 miles of submarine cable and 567 miles of land line, and connect exclusively with 20,000 miles of wire in Mexico and Central and South America. These lines bring into communication with the United States and Europe a population estimated at 35,000,000, transacting an annual commerce of over $600,000,000. The success of these lines appears to be undoubted, judging from the large traffic passing over them the first week of their operation. On the opening of the lines a congratulatory message was sent by President Arthur to Domingo Santa Maria, President of the Republic of Chili, and similar messages were sent to the Presidents of Peru, Bolivia, Ecquador, United States of Colombia, Costa Rica, Honduras, Nicaragua, San Salvador, Guatemala, and Mexico, and fitting responses were received.

Central Pacific Railroad.

THE earnings of the Central Pacific Railroad for the years ending December 31, 1880 and 1881, were as follows:—

	1880.	1881.
From through freight	$2,633,127 24	$3,423,499 00
" local freight	10,612,730 55	12,418,640 01
" through passengers	1,616,259 73	2,048,090 15
" local passengers	4,203,534 50	4,644,738 22
" through express	63,273 78	87,857 18
" local express	175,665 94	230,164 03
" mails	510,979 38	457,188 23
" miscellaneous	286,908 08	329,230 21
" through sleeping-cars	102,048 00	107,612 00
" local sleeping-cars	91,077 32	104,912 25
" telegraph	87,017 25	92,000 00
" rental	61,853 33	62,278 22
" through baggage	33,377 76	47,182 14
" local baggage	21,387 23	36,449 54
" mileage	6,872 79	4,279 76
Total earnings	$20,508,112 88	$24,094,100 95
Operating expenses, viz:		
Expenses of Supt	$74,208 86	$78,486 94
Station service	659,120 04	743,337 13
Telegraph service	116,538 30	122,451 13
Train service	653,296 21	827,896 26
Sleeping-car service	26,260 84	36,437 82
Ferry service	703,656 47	735,498 79
Wharf service	45,237 73	31,901 64
Locomotive service	2,286,114 93	2,989,766 65
Snow service	78,297 86	38,035 54
Repairs of track	1,910,942 01	2,108,375 58
Repairs of snow shed	102,675 83	24,496 62
Repairs of bridges	136,568 75	254,061 80
Repairs of buildings	90,721 20	118,042 26
Repairs of engines	417,918 10	466,041 41
Repairs of cars	668,887 88	666,916 95
Office expenses	263,106 79	284,929 16
Stationery and printing	67,550 84	73,597 04
Advertising	21,244 77	20,570 25
Loss and damage to freight	11,619 87	47,666 58
Damage—persons and property	15,098 99	25,773 04
Miscellaneous expenses	88,359 76	88,804 22
Water	99,087 24	110,647 79
Insurance and loss by fire	44,293 11	54,290 53
Mileage	10,437 03	30,426 41
Leased lines	3,454,427 50	3,880,855 43
Total operating expenses,	$12,045,668 89	$13,859,306 97
Earnings over operating expenses	$8,462,443 79	$10,234,793 98

Compared with the previous year the gross

earnings of 1881 show an increase of $3,585,988.07, with an increase in operating expenses of $1,813,638.08, making an increase in the earnings of $1,772,349.99.

The length of the Central Pacific Railroad and branches, operated December 31, 1881, was as follows: main line, 883.23 miles; Oregon branch, 151.60 miles; Visalia branch, 146.08 miles; Oakland and Alameda branches, 17.69 miles; San Jose branch, 17.54 miles—total, 1,215.14 miles.

At the commencement of the year the number of miles operated (including leased lines) was 2 644.95; to this was added by lease of the Southern Pacific Railroad of Mexico, and the Galveston, Harrisburg and San Antonio Railway, 220.80 miles—making a total to December 31, 1881, of 2,865.75 miles. Between which time and the 30th of June there were added by the lease of the Galveston, Harrisburg and San Antonio Railway, 170.60 miles—making the total to that date 3,036.35 miles, of which 2,050.82 miles is steel.

During the year there were built in the east 25 engines for the Southern Pacific Railroad of Arizona, 38 for the Southern Pacific of New Mexico, 12 for the Galveston, Harrisburg and San Antonio Railway, and 1 built at company's shops for local service at Oakland—making a total owned and leased of 372 engines, of which an average of 21 were undergoing repairs, and 47 were employed in switching, etc., leaving available for regular transportation purposes 304 engines. The car equipment at the same time consisted of: 54 sleeping, 196 passenger, 31 mail and express, 110 second-class and smoking, 56 baggage, 4 officers', 1 pay, and 8,168 freight, etc., cars.

The number of miles run by engines on passenger trains was 2,706,780; on freight trains, 5,797,758; on miscellaneous trains, 767,274; switching, 1,175,244—total, 10,447,056, against 8,650,451 in 1880. The cost per mile run for repairs, wages, fuel, stores, etc., was: in 1881, 32.57 against 30.76 in 1880.

The tonnage for the year 1881 was: local freight, 3,725,424,290 pounds; through freight, 618,658,120 pounds; company's freight, 1,130,264,990 pounds—a total of 5,474,347,400 pounds, against 4,281,759,640 pounds in 1880. The average length of haul in miles per ton was: in 1881, 267.9; in 1880, 263.9. The number of tons hauled per mile operated in 1881 (on a basis of 2,704.42 miles, average) was 1,010.98; and in 1880 (on a basis of 2,467.02 miles average) 867.80. The freight earnings per mile upon the same basis were: in 1881, $5,851.31; in 1880, $5,373.22.

The number of through passengers carried in 1881 was 77,998; local do., 1,507,318; ferry, 5,447,050—total, 7,032,366, against 6,707,345 in 1880.

The capital stock authorized is $100,000,000. The amount subscribed is $62,608,800, and the amount paid in $59,275,500—the remainder, $3,333,300, being held in trust for the company.

There has been paid over from the profits of the company into the various sinking funds, for the redemption of its mortgage bonds, to December 31, 1881	$6,092,779 98
Of this amount there was used in the redemption of Convertible Mortgage Bonds	1,276,120 81
Leaving a balance in the funds of	$4,816,659 17

Of this balance in the Sinking Funds $3,947,900.00 is invested in bonds, the par value of which is $4,375,000.00, and the present market value is considerably above par; leaving January 1st, 1882, $868,759.17 in cash, which has since been invested under the order of the Board of Directors.

The amounts as found due the Government by the U. S. Commissioner of Railroads under the various Acts of Congress, have all been promptly paid by the company into the United States Treasury.

The following is a statement of these accounts to December 31, 1881.

Amount of company's accounts against the U. S. Government to December 31st, 1880, as shown in last annual report	$5,499,761 77
Amount of transportation furnished in 1880, charged on the books of the Auditor of the company	142,306 95
Cash paid in 1881 on account of requirements for 1880	144,436 74
Transportation performed for the year 1881	960,162 84
Total to December 31, 1881, as shown in "General Ledger Balance Sheet"	$6,746,668 30

The total amount required to be paid the United States from the earnings of 1881, from that portion of the road aided in its construction by a loan of the United States Bonds, is $1,038,935.25; of which there was paid by transportation performed for the United States as shown above, $960,162.84, leaving a balance to be paid in cash in annual settlement with United States Commissioner of Railroads, of $78,772.40.

The application of the amount required for the year is as follows:—

To the credit of the U. S. Bonds and Interest	$424,310 02	
To the credit of the Sinking Fund of the Company in the U. S. Treasury	614,625 22	
		$1,038,935 24

In addition to the assets enumerated in the annexed Balance Sheet, the company have: farming lands unsold, the estimated value of which is $27,000,000; land contracts—deferred payments on time sales—$1,372,430.80; amount in hands of Trustees Land Grant Mortgage, to be used in redeeming land bonds, $612,517.56; also, undivided half 60 acres land in Mission Bay, in San Francisco, 500 acres water front in Oakland, and about 140 acres and water front in Sacramento, the estimated value of which, independent of improvements, is $7,750,000, amounting in the aggregate to $36,734,948.36-and increasing the total assets of the company to $193,800,862.08.

The capital stock, as stated, is $59,275,500; and the funded debt, less sinking funds, $50,100,340.83; to which add interest on funded debt accrued but not due, $1,341,420, and Trustees of Land Grant mortgage, $612,517.56, making with the other items mentioned in the Balance Sheet, the sum of $144,656,195.19. The interest accrued on U. S. Subsidy bonds was $22,613,793.01, less $6,746,668.30 repaid by transportation and cash, leaving $15,867,124 17, to be added to the above, making $160,523,319,90; but as this sum is not payable until the maturity of the bonds (the average date of which is July 1, 1898,) and bears no interest, the real present liability of the company on this account would be its present equivalent, *i. e.*, a sum which, set aside, would produce the amount at the time of its maturity. The sum of $8,000,000 invested at 4 per cent would produce this amount. This makes the actual liabilities of the company over $7,500,000 less than the amount shown above.

GENERAL LEDGER BALANCE SHEET, DEC. 31, 1881.

Construction		$137,207,563 86
Equipment		8,065,865 56
Real Estate		1,541,461 07
Shops		1,115,980 50
Machinery in shops		718,904 76
Steamers, Sacramento River		767,677 52
Furniture, telegraph instruments, safes, etc		155,772 04
Sinking fund No. 1, for redemption of Convertible Mortgage bonds		7,000 00
Sinking fund No. 2, for redemption of California State Aid bonds		932,868 30
Sinking fund No. 3, for redemption of First Mortgage bonds of the company, Series A, B, C and D		932,868 30
Sinking fund No. 4, for redemption of First Mortgage bonds of the company, Series E, F, G, H and I		699,585 65
Sinking fund No. 5, for redemption of First Mortgage bonds of the Western Pacific, Series A and B		174,069 25
Sinking fund No. 6, for redemption of First Mortgage bonds of the California and Oregon, Series A and B		731,871 75
Sinking fund No. 7, for redemption of Income bonds		1,033,379 87
Sinking fund No. 8, for redemption of First Mortgage bonds of the San Francisco, Oakland and Alameda R. R.		203,344 03
Sinking fund No. 9, for redemption of First Mortgage bonds of the San Joaquin Valley R. R.		101,672 02
United States Transportation and Sinking Fund Accounts		6,746,668 30
Materials and fuel		2,784,008 99
Stocks and bonds		160,128 13
Bills receivable		949,527 46
Accounts receivable		2,947,768 50
Cash		643,255 33
		$168,629,241 19
Capital stock		$59,275,500 00
Funded debt		54,917,000 00
Government bonds		27,855,680 00
Bills payable		20,000 00
Accounts payable		4,470,480 00
Unclaimed dividends		7,575 00
Trustees' Land Grant Mort	$612,517 56	
Sinking fund uninvested	868,759 17	
Hospital fund	103,921 76	1,585,198 49
Profit and loss		20,497,806 83
		$168,629,241 19

President.—LELAND STANFORD.

Vice-Pres't and Gen'l Agent.—C. P. HUNTINGTON.

Second Vice-President.—CHARLES CROCKER.

Directors.—Leland Stanford, E. H. Miller, Jr., Charles Crocker, E. W. Hopkins, W. V. Huntington, C. F. Crocker, of San Francisco, Cal.; C. P. Huntington, of New York City.

Treasurer.—E. W. HOPKINS.

Secretary.—E. H. MILLER, JR.

Gen'l Manager.—A. N. TOWNE.

Land Agent.—B. B. REDDING.

Gen'l Sup't.—J. A. FILLMORE.

Chief Engineer.—S. S. MONTAGUE.

Transfer Agent.—GEO. WATKINS.

THE Fitchburg Railroad Company is experimenting with a new patent for keeping dust, etc. out of passenger cars, which it is hoped will be a success.

ABRAHAM and WHARTON BARKER, of Philadelphia, have purchased the Jonathan Tyson farm, comprising 102 acres, in Abington township, Montgomery county, Penn. The purchase is thought to be in the interest of the Wharton Switch Company. Possession will be given April 1, 1883.

ALLEN MANVEL, general manager of the St. Paul, Minneapolis and Manitoba Railway, during his recent visit at the East made arrangements for equipping his road with new passen ger engines, sleeping-cars, coaches, etc., to enable it to run uniform trains for its through passenger business. The new rolling-stock, he says, for style, comfort and elegance is equal to anything of the kind on any road in the country.

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WE invite railroad officers to send us notice of elections, transfers, appointments, resignations, etc.; and all our readers would oblige us by furnishing for our columns any items of personal information, that may come to their knowledge, adapted to this department. We aim to record all new railway enterprises in the United States and Canada, and to note the progress of construction on all new roads and extensions; and we request all concerned in railway building to give us early information regarding the above, that our report may be as complete as possible.

Subscribers are requested to report to our office any irregularity in receiving the JOURNAL.

Contributed articles relating to Railroad matters generally, Mining interests, Banking and Financial items, Agricultural development, and Manufacturing news, by those who are familiar with these subjects, are especially desired.

Entered at the Post Office at New York City as Second-Class Mail Matter.

New York, Saturday, October 14, 1882.

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AN important decision was rendered in Canada a few days since, by Judge Galt, at the Ottawa Assizes Court, relative to the liability of husbands for debts contracted by their wives. The law established by cases in England is that "where a wife is living with her husband the law presumes that she has his authority to bind him by her contract for articles suitable to the station which he permits her to assume in society; but that this presumption may be rebutted by showing that this implied authority has been countermanded. And if a man *privately* forbids his wife to pledge his credit *even though the tradesmen have no knowledge of the fact*, the husband cannot be made liable for goods furnished after such private revocation of the wife's authority." Some twenty years ago this last proposition was established in England, and the decision affirmed in the case of Debenham vs. Mellon in the English High Court two years ago. In the case just decided, it was proven that defendant had told his wife, in the presence of a servant girl, not to buy goods on credit. After this the wife went to plaintiff's store and purchased dress material, etc., on her husband's name. The Court decides on the authority of the cases above referred to, and non-suits the plaintiff on the ground that the wife's authority was extinguished by the *private* direction which was given to her, even though it was not communicated to the plaintiff. The Judge also charged the jury in this case, "save in case of necessaries, the husband was not liable for goods supplied to his wife without his authority."

THE WESTWARD RACE OF THE TRUNK LINES.

COMMON rumor credits MR. WM. H. VANDERBILT with having acquired a controlling ownership in the Chicago and Northwestern Railway, a system comprising more than 3,000 miles of road, and traversing the greater part of the States of Wisconsin and Minnesota, as well as the northern parts of Iowa and Illinois. This, of itself, is an important feeder to the Vanderbilt system, especially as its western extremity extends to the Missouri River at Fort Pierre, in Central Dakota, all within about 250 miles of the Black Hills. MR. VANDERBILT is now on a tour to the West, and is reported to have said at Chicago that his trip might extend to Salt Lake City via Denver. He travels southwest over the Chicago, Burlington and Quincy Railroad, and speculation is rife as to whether or no some combination of this system with the Vanderbilt roads east of Chicago is not also on the tapis. The two tributaries are not directly competitive; although both have a line from Chicago to Council Bluffs. This portion of their lines has heretofore been very important, because in addition to their local business they carry part of the overland business. That business, however, between Chicago and Council Bluffs has been pooled, being equally divided between the Chicago and Northwestern, the Chicago, Rock Island and Pacific, and the Chicago, Burlington and Quincy roads. Two other new lines, the Chicago, Milwaukee and St. Paul, and the Wabash, St. Louis and Pacific, have been completed between the same places, and will ask to be admitted to that pool. It is not improbable, therefore, that the value of this combination will be much diminished, and that the pool may go to pieces. It is not surprising, however, that the individual members of it should, each for itself, be casting about for some equivalent alliance.

The Chicago, Burlington and Quincy, which had some special advantages under the Pacific Railroad legislation of 1862, and at an early date pushed a line into Nebraska, seems to have taken the opportunity early, and has extended its line to Denver, which at present marks the western boundary of competitive trunk lines. There are, however, no less than five trunk lines from Denver East, three of them under the control of the Union Pacific Railway Company. Everything points to an extension of the Chicago and Northwestern and the Chicago, Milwaukee and St. Paul into the region of the Black Hills, or to within about 500 miles of Salt Lake, or in about the same latitude as Denver. With the same motives and probabilities, it may be expected that the Chicago, Burlington and Quincy will not be halted at Denver; and here comes in the question of gauges.

The Denver and Rio Grande has a road of a 3 ft. gauge extending from Denver some 300 miles west, and is constructing, with extraordinary energy, a line through to Salt Lake. Will this suffice as a connection of the Chicago, Burlington and Quincy Railroad without building its own line through to Salt Lake? Some of the Eastern narrow gauge roads have constructed their bridges and tunnels of such dimensions as to admit the bodies of the standard gauge cars upon them, and by changing trucks are enabled to carry through freight and passengers, to all intents and purposes, the same as if there were no break of gauge. Should this be feasible, it would, in effect, give the Chicago, Burlington and Quincy and the Atchison, Topeka and Santa Fe railroads a through line to Salt Lake, and to a connection with the Central Pacific Railroad. The managers of the Union Pacific Railway, no doubt, see this invasion of their territory and this duplication of

their lines; but what can they do to prevent it, or to offset it? The newspapers credit them with the purpose of establishing one branch northwestward to Oregon, which is already under way, and the pushing another of branch southwestward through Utah into southern California, a part of which is already built. The Oregon line, it is true, may be built, but it traverses 1,000 miles of as poor country for local traffic as can be found on this continent—unless the 1,000 miles between Salt Lake and Los Angeles be the exception.

It is hardly likely that such ambitious designs will be carried out to the end. Long before they could be finished disaster must overtake the company, and a change of management be effected by the stockholders. Besides, it is hardly to be supposed that the Central Pacific Railroad Company would stand idly by and see its business cut to pieces without striking back. The Central Pacific, in its turn, would only have to build a short piece to connect with the two more northerly Chicago lines, on the one hand, while the Denver and Rio Grande could be made to suffice for the two lines leading between Denver and Kansas City; so that the relative position of the Union Pacific would not be at all bettered after the expenditure of the enormous amount of money required to build 1,800 miles of road over territory which does not support 100 inhabitants to the 1,000 square miles. At the same time, this paralleling of the Eastern trunk lines must continue; and the longitude where competitive lines exist must be pushed further and further west, until Salt Lake is reached, and perhaps the Pacific Ocean. MR. VANDERBILT'S movements will be watched with interest to see whether he will strengthen his holdings in the Union Pacific, or be tempted to make an alliance with the Chicago, Burlington and Quincy. In either case, it is not improbable that important changes in the policy of the Union Pacific will be made.

CITY AND COUNTRY.—The October number of this valuable publication comes to our table filled as ever with good things. As illustrations it has "Chock-full of Mischief"—a full page plate, "A Festival in a Shanghai Tea Garden," "The Lansing Evaporator," "City and Country Homes," and "The Hansell Raspberry." "Honor's Debt" is concluded this issue, and a short serial, "A Strange Discovery," is commenced by Miss JOSIE C. MALOTT. The editorials cover every ground, and the one on "Politics in Ohio" is able and will be largely quoted. "Articles on Farm Law" by Hon. EDMUND H. BENNETT still continues. This valuable publication should be a regular visitor at every fireside. Only fifty cents per year with choice of two premiums. WILL C. TURNER, Editor. A. W. LINCOLN, Associate. CITY AND COUNTRY CO., Publishers, Columbus, Ohio.

CANADA.

[From our Special Correspondent.]

OTTAWA, CANADA, Oct. 9, 1882.

[The following letter from us appeared in the Toronto Telegram last year—and is here re-printed by special request.]

The Great Iron Belt.

AMERICA VS. CANADA.

THE ENTERPRISE OF BROTHER JONATHAN SECURES CANADA'S MINERAL WEALTH.

(From our own Correspondent.)

OTTAWA, July 23.—Sweden is the principal charcoal iron producer in the world, supplying all other countries. England obtains all her charcoal iron from Sweden. Yet she has a colony whose ores are similar in character and were pronounced "equal if not superior in quality" by the judges sent to the Centennial Exhibition in '76 by the Swedish Government. The production of charcoal iron is limited in Sweden in consequence of the laws which restrict the annual production of charcoal. The question arises, How is it that Canada, with an unlimited supply of wood suitable for charcoal, and possessing as she does the finest quality of specular, hematite and magnetic ores, has not embarked in manufacturing charcoal iron for her own use, as well as for exportation?

THE REASON WHY.

The answer is, that we in Canada have been indifferent or ignorant of the value of our vast natural resources. It is also to be feared that a lack of enterprise gives us another reason. Our neighbors from the United States have discovered the great value of our iron ores, and have secured nearly all the principal deposits of iron ore in the immediate neighborhood of rail and water communication.

OFFICIAL FIGURES.

The following are official figures of exports of iron ore to the United States in the past five years:—

YEAR.	TONS.	VALUE.
1876	14,286	$30,702
1877	7,755	14,854
1878	5,421	13,405
1879	3,562	7,530
1880	50,524	76,474

SUPERIORITY OF CANADIAN ORE.

The cause of this increase in purchases by American firms of Canadian ores is the result of successful tests made in American furnaces, demonstrating that Canadian ores are equal if not superior to the African and Spanish ores, which have been so largely imported of late years into the United States. This attention to the quality of ores, with improved furnaces, has increased the iron trade of the United States in a greater proportion than that of any other country in the world.

IRON IN THE UNITED STATES.

According to the United States census returns, the iron and iron manufactured in the United States amounted in:—

1860	$ 94,945,452
1870	347,471,694
1880 (estimated)	459,000,000

The last official statistics showing the rapid increase in the manufacture of iron in the United States. What have Canadians been doing during this period of twenty-five years to promote and encourage the manufacture of iron?

IMPORTING WHEN WE SHOULD BE MAKING.

It is to be regretted that in place of utilizing our vast resources, we have been importing iron and iron manufactures at the rate of over $12,000,000 annually, or in other words we have imported for the creative wealth of other countries, instead of providing employment for our people, and thus increasing our own industrial wealth.

COMPARATIVE FIGURES.

An idea of the importance of the iron trade in manufacturing countries may be had from the following tonnage and value of pig iron produced in the countries named in 1877:—

	Tons.	Value.
Great Britain	6,608,064	$78,685,306
United States	2,314,585	34,000,000
Belgium	418,300	5,857,124
Canada	15,000	210,000

In 1878 the production of pig iron in Great Britain was 6,381,051 tons, and in 1879, 5,995,337 tons. We may compare Canada to Belgium, which has about five millions population to our four millions, yet with our vast natural resources and territory we are behind the little kingdom in the production of iron.

IMPORTS OF IRON.

The total imports into Canada of iron and iron manufactures during the ten years 1870-71 to 1879-80 were:—

1870-71	$10,311,188
1871-72	12,291,908
1872-73	20,202,753
1873-74	18,897,411
1874-75	15,783,960
1875-70	11,000,897
1876-77	9,530,982
1877-78	8,298,517
1878-79	8,519,321
1879-80	10,217,228
Total in ten years	$125,435,165

This large amount of ten years' importation was made up as under:—

Iron	$33,704,154
Steel	5,408,121
Rails, plates, etc., for railways—iron and steel	31,357,532
Machinery, hardware and iron manufactures generally	54,965,558
	$125,135,165

THE AGE OF STEEL.

The present may well be called "The iron age" and "The age of steel." The great improvements and the recent discoveries of new processes have brought iron and steel into use for various purposes which were previously made of other materials. Recent reports from iron authorities in iron producing countries show that a great increase in the use of iron and steel has taken place, and a still greater consumption is anticipated.

WHERE ARE WE.

It may well be asked, Where are we in this race of iron production, with our vast resources of iron not confined to one Province alone? The writer being in the neighborhood of Ottawa, visited the various mills, etc., and found they were alive to the march of progress as shown by the introduction of the electric light and improved machinery. Crossing over to the Quebec side, and nearly opposite Ottawa, I found myself in the "great iron belt region," containing specular and magnetic ores. I visited the Forsyth mine, which is operated by an American firm who export all their ores to the United States, a large proportion going to Cleveland, Ohio. This ore, to pay for shipment, must at least contain 60 per cent of metallic iron. All under is left behind as worthless.

"WERE THERE FURNACES HERE"

all of this could be used.

The whole mining region shows unmistakable evidence of volcanic action, especially the iron region. It may be said that these ores are untried, but I have seen steel made from it, and cold-chisels that are of the best temper. It is to be hoped that these mines may be developed, as they will give employment to a large number of people. The Americans, with customary shrewdness, are now in possession of nearly all the best mines that are situated near water or railway.

AN IMPORTANT QUESTION

for Canadians is, whether it is better to receive $2 or $2.50 for our ore and import the same manufactured at $60 to $100 per ton—the difference being in the amount of labor given to our American cousin—or to manufacture iron ourselves, retaining the difference as wages to our people. The latter would show our wisdom, the former shows our folly.

Rights of Passengers.

As already briefly announced in these columns, the Supreme Court of Pennsylvania, in an opinion rendered by Judge Trunkey on the 2d inst., has decided an important question in railroad law. The point raised was, whether the Pennsylvania Railroad Company was bound to carry a passenger from New York to Philadelphia on a ticket purchased from a person not an authorized agent of the company. The effect of the decision is to give equal validity to all railroad tickets, whether sold by "scalpers" or authorized agents. The court says:—

"By the act of May 6, 1868, P. L. 582, it is made the duty of every railroad company to provide each agent authorized to sell tickets entitling the holder to travel upon its road with a certificate, attested by the corporate seal and signature of the officer whose name is signed to the ticket; and any person not possessed of such authority who shall barter or transfer for any consideration the whole or any part of a ticket or other evidence of the holder's title to travel on any railroad, shall be guilty of a misdemeanor and shall be liable to be punished by a fine and imprisonment. The purchasing and using a ticket from a person who has no authority to sell is not made an offense. That the plaintiff's ticket on its face entitled him to its rights as a passenger between the points named is unquestioned. The only reason for denying him such right was that he bought from one who sold in violation of the statute in Pennsylvania. It is not said that the vender in New York is actually guilty of the statutory offense, but that the defendant, being a corporation in Pennsylvania, and the stipulated right of passage being partly in Pennsylvania, her courts will not enforce a contract resting upon acts which the Legislature has declared criminal. The presumption is that the ticket was properly issued by the company, and that the holder had the right to use it. Such tickets are evidence of the holder's title to travel on the railroad. Prior to the statute in Pennsylvania it was lawful for holders to sell them. The property in them passes by delivery. The act of 1863 confers no right upon a railroad company to question passengers as to when or where or how they procured their tickets, or to eject them from the cars upon suspicion that the tickets were sold to them by a person who was not an agent for the company.

"At common law, which is deemed in force in absence of evidence to the contrary, the contract made by the plaintiff in New York was valid. It was executed; no part remained to be performed. It vested in him the evidence of title to a passage over the railroad. His act had no savor of illegality or immorality. It was a mere purchase of the obligation of a common carrier to carry the holder according to its terms. The defendant issued the obligation, received the consideration and became liable for its performance at the date of issue. As transferree the plaintiff claimed performance. This is the contract which is the basis of the cause of action. It is purposely made to entitle the bona fide holders to its performance, and for breach of an action in his own name. Let it be assumed that defendant made the contract in Pennsylvania. It is quite as reasonable to assume that tickets for passengers coming from New York into Pennsylvania were sold in New York. But, whoever the contract was made by, it is true, as claimed by the defendant, this action is to enforce, not the contract between the ticket scalper and the plaintiff in error, but between the defendant in error and the plaintiff in error. The sale of the ticket to the plaintiff in New York was lawful. That being an executed contract, there is no question respecting its enforcements. But surely it is not an exception to the rule that contracts valid by the law of the place where they are made are generally valid everywhere. Then, as the plaintiff has a valid title to the ticket, the contract between himself and the defendant is valid. The judgment of the lower court is reversed."

Barrel Hoops by Machinery.

Hoops of the half-round shape, made from stout saplings, are in great demand. An expert cooper can make between three and four hundred of these hoops in a day; and when it is considered that Chicago alone uses over two hundred millions yearly, the necessity of some rapid method of manufacture exclusively by machinery is apparent. After repeated failures by all who have endeavored to overcome the difficulties incident to the construction of a hoop-making machine the barriers seem to have been surmounted by a couple of Bostonians, whose invention, lately completed, makes from twenty to thirty thousand half-round hoops a day, cutting two, three or four from a pole as occasion requires. This branch of barrel-making is thus placed on a level with all the others in which machinery is the principal agent of construction. One of the results of the introduction of this new machine will be the utilization of ironwood saplings for hoops. This tough and almost indestructible wood, which easily resists the tools of the cooper, is handled without difficulty by the Boston hoop making machine.

The green grocer is one who trusts the new family in the next block system.

A LETTER was received at Portland, Oregon, on the 28th ult., from the Commissioner of Indian Affairs at Washington, inclosing an order of President Arthur that the Malheur Indian reservation be restored to the public domain. This opens to settlement the largest arable region in one body lying between the Blue mountains on the north and east and the Cascades on the west. It is more than sixty miles square. The Baker City extension of the Oregon Railroad and Navigation Company and the Oregon Short Line will run within hailing distance of the reservation.

OUR CANADIAN LETTER.

[From our Special Correspondent.]

A FINANCIAL STATEMENT, REVENUE AND EXPENDITURE — EXPORTS—RAILROAD, STEAM NAVIGATION AND INDUSTRIAL NOTES, ETC.

FINANCIAL.

OWING to the number of local banks in Chicago and the insufficiency of business the Merchants' Bank of Canada Branch at Chicago has been closed.

The Bank of Nova Scotia has called a meeting of shareholders for November 20th, to consider the proposition to amalgamate with the Union Bank of Prince Edward's Island.

Mr. Gilman, an advocate of Montreal, has entered suit against J. C. Brydges for $10,000, in connection with the old Mechanics' Bank affairs.

The following is a condensed statement of the revenue and expenditure of the Dominion of Canada, on account of the Consolidated Fund, for the fiscal year 1881–1882, which closed on 30th June last :

REVENUE.

To 30th June, 1882		$32,188,793 06
From 30th June to 30th September :		
Customs	$684,290 54	
Excise	78,527 72	
Post Office	34,372 88	
Public Works, including railways	36,929 83	
Miscellaneous	368,476 16	
		1,192,588 14
Total revenue		$33,381,381 20

The foregoing statement of revenue does not include the sum of $1,744,456.48, received during the year from the sale of Dominion lands.

EXPENDITURE.

To 30th June, 1882	$23,753,193 59
From 30th June to 30th September	3,402,709 36
Total	$27,155,902 95
Total revenue	$33,381,381 20
Total expenditure	27,155,902 95
Surplus for the year	$6,225,478 25

The expenditure on capital account for the year will be about $8,000,000. This includes Pacific Railway enlargements and improvements of canals and survey of lands. The surplus of last year and the proceeds of sales of lands amount to nearly $8,000,000, showing that there will be little or no increase of the net debt of the Dominion during the year 1882–1883.

The Finance Minister, Sir Leonard Tilley, is to be congratulated on the success of the tariff, and the realization of his expectation. Canada is more prosperous to-day than at any time during her previous history.

The following is a statement of exports for the month of July :

	Produce of Canada.	Produce of other countries.	Totals.
Produce of the Mine.	$184,954	$11,704	$196,658
Produce of the Fisheries	792,804	1,608	794,412
Produce of the Forest	4,330,659	127,314	4,458,173
Animals and their Produce	2,491,791	256,030	3,747,821
Agricultural Products	1,209,360	320,457	1,529,817
Manufactures	329,210	50,544	381,754
Miscellaneous Articles	39,693	48,567	88,265
Totals	$9,378,676	$818,224	$10,196,900
Coin and Bullion	.....	.....	.....
Grand Total	$9,378,676	$818,224	$10,196,900

STEAM NAVIGATION NOTES.

The Allan cargo steamships which have arrived up to September 26th, at British ports, since opening of the St. Lawrence season of navigation, took out—

	Oxen.	Horses.	Sheep.
From Montreal	4,499	14	3,445
From Boston	1,153	..	....

which all landed in good order, excepting 4 oxen and 22 sheep—the mortality being only 1 ¼ on oxen, and ⅞ of 1 per cent on sheep.

C. R. Coker, Esq., of St. Johns, N. B., Lloyds surveyor for that city has been appointed by the Dominion Government Inspector of Hulls and Equipments of Steamers, a good appointment.

Government has directed experts to examine the engine of the steamer "Richelieu," which exploded at Montreal lately.

THE CHANNEL BETWEEN MONTREAL AND QUEBEC.

The formal opening of the 25 feet channel in the St. Lawrence, last week, is a matter of vast importance to Montreal and Canada generally. In 1850 the natural channel of the river was 11 feet, and since it has gone through all the grades of deepening until it has reached its present depth. The following statement will illustrate how Montreal, Canada, has been affected by this water improvement :

	Tonnage.	Imports.	Exports.
1850	46,156	$7,174,780	$1,744,772
1854	70,740	16,221,004	1,833,640
1860	121,599	15,479,453	6,020,715
1866	205,755	28,793,453	7,286,878
1878	397,266	26,223,290	21,660,937
1881	531,929	46,622,719	31,296,000

It is proposed to continue the dredging, etc., to get a greater depth.

THE INTER-COLONIAL RAILWAY.

The general condition of this railway is most satisfactory. The receipts are in excess of any previous year, owing to the splendid management and close supervision of Collingwood Schrieber, Esq., Engineer-in-Chief of the Government Railways.

A few days since a deputation of locomotive engineers called on Sir Charles Tupper, Minister of Railways, in reference to the dismissal of some of their members from the Inter-Colonial. Sir Charles said that no doubt the men had been misrepresented to the officials of the road during his absence. He informed the deputation that the men would be reinstated and suffer nothing from the dismissal.

Yesterday Mr. Duncan McIntyre, of the Canadian Pacific Railway; Mr. Chaffee, of the Southeastern Railway; Mr. Senecal, of Montreal, and others, visited the harbor works, etc., of Quebec, in company of the Mayor. Their visit has caused a rumor that negotiations are on foot to sell the North Shore to the Canadian Pacific.

The Ottawa, Waddington and New York Railway and Bridge Company meeting on Monday last at Morrisburg, was a success, and over $10,000 of stock subscribed.

Mr. John James Macdonald, of Manning, Macdonald & Co., contractors of the Canadian Pacific Railway, informs me that an order-in-Council was passed to-day, empowering the firm to open for traffic the Central Pacific Railway, between Thunder Bay and Rat Portage. This work is pronounced first class in every respect, and the contractors are to be congratulated. The gentlemen connected with this firm are among the most energetic and reliable men in Canada. Mr. John Shields, one of the company, and Mr. Macdonald leave to-night for Rat Portage.

THE CANADA ATLANTIC RAILWAY.

This railway is now doing a splendid business; although but a few days open it has a very large share of travel. A very fine passenger depot and freight sheds were erected last week. There are two trains running each way between Montreal and Coteau Landing on the Grand Trunk. This company have also purchased a fine piece of property in Ottawa City for offices.

ST. EUSTACHE AND ST. ANDREW RAILWAY.

A railway is projected between St. Eustache and St. Andrew, P. Q. The proposed railway will run through the rich and populous parishes of St. Joseph, St. Benoit, St. Placide and St. Andrews—and would in case of construction no doubt be a financial success. Messrs. C. A. Globensky, Dauserau and Senecal are interested in the scheme and that means success.

The total receipts of the Toronto, Grey and Bruce for the week ending September 30th, were $5,822.55, a decrease of $609.33, from the amount of corresponding week last year.

Pontiac and Pacific Railway have now some 500 men employed, and have taken possession of the Alymer branch of the Canada Pacific, paying therefor some $12,000 a mile. This company have made arrangements to procure rolling stock.

The North Shore Railway will be extended to Tadonsac, and a winter Canadian port will be established. The revenue of this road for the months of June, July and August was $184,000, showing a large increase.

Trains of steel rails are made up weekly and sent on to the western extension of the Canadian Pacific Railway.

Allan Grant & Co., of Ottawa, have a contract to ship 2,000 car-loads of square timber. They are now shipping 40 cars a day.

On an average four barges of iron ore are shipped every week to Cleveland, Ohio, via Kingston, where it is transferred to schooners. This week 10 barges will be shipped.

INDUSTRIAL NOTES.

The "American Association of Charcoal Workers" will be invited to visit Ottawa and hold their next annual meeting. Iron ores of the very best quality can be had in the immediate vicinity, and any amount of timber available for charcoal, besides an immense quantity of saw dust could be utilized that is now thrown away to the detriment of the river and navigation. It is to be hoped that some step will be taken to develop industries in these parts.

A company has been organized at St. Henri, Montreal, under the name of the St. Henri Carriage Leather Co., for manufacturing heavy carriage leather, and upholstering—about 50 hands will be employed.

The Canada Pacific Railway have sold 175,000 acres of land since placing them on the market the first of October.

TORONTO BRIDGE CO.

Mr. Phelps Johnson, of the Toronto Bridge Co., informed me that the company finding it necessary to enlarge their works are arranging for the immediate construction of extensive shops at Montreal, and where plant will be put in with a view of using steel only in the construction of railroad bridges. They claim they are the only bridge builders who use steel entirely.

Mr. C. H. MacKintosh, M. P., President of the Ottawa Colonization Railway, and Vice-President of the Ottawa and Gatineau Valley Railway, left for England last Wednesday on business connected with these railways.

A proposition has been made to Secretary Keefer, of the Ottawa and Waddington and New York Railway, on behalf of a syndicate of New York and English capitalists, having in view the acquiring of the charter and the immediate construction of the railway and bridges over the Ottawa and St. Lawrence, and he has been asked upon what terms the transfer will be made.

Mr. Bannerman, a prominent citizen of Pembroke, who has the contract of the Kingston and Pembroke Railroad, has for partners Rochester, N. Y., gentlemen.

CHARLES S. LAURENCE, in jail at Worcester for causing a railroad disaster, says that he is subject to fits, and that while he is under their influence is impelled to put obstructions on railroad tracks.

THE forthcoming report of the State Bureau of Labor will show that Illinois is second only to Pennsylvania in the production of coal, and that the output has increased from 6,000,000 tons in 1880 to 9,000,000 tons this year. Forty-six out of the 100 counties produce coal, and the aggregate value at the mines has been nearly $14,000,000.

THE Mutual Union Telegraph Company begins a new era in telegraphic communication by offering the use of its wires after 4:30 p. m. for conversational purposes. Correspondents are brought into direct communication, and they save time and money over the ordinary method of exchanging messages. The charges for the service are made dependent upon the length of circuit used and the time occupied. They will be based in general upon the customary telegraphic rate. Contracts by the month or year will be made for daily service. Between some of the points on the company's lines this method of correspondence is available at all hours.

The Stock Exchanges and Money Market.

New York Stock Exchange.

Closing Prices for the week ending Oct. 11.

	Th. 5.	F. 6.	Sat. 7.	M. 9.	Tu. 10.	W. 11.
Adams Express	.....	.....	.....	.....	.....	.....
Albany and Susq.	.....	.....	.....	.....	.....	.....
1st mortgage	.....	.....	.....	.....	.....	.....
2d mortgage	.....	.....	.....	.....	.....	.....
American Express	95	.....	.....	.....	.....	96
Burl., C. R. & Nor.	80	.....	80	.....	.....	.....
1st mortgage 5s	100⅜	100⅛	.....	101	100⅜	100⅛
Canada Southern	64⅝	63¾	64	65	67½	67⅝
1st mortgage guar	93	93⅜	92½	.....	93	93
Central of N. Jersey	74⅝	73⅝	70⅛	72	73⅛	71⅜
1st mort. 1890	.....	.....	116	.....	.....	.....
7s, consol. ass	.....	.....	.....	.....	.....	.....
7s, convertible ass.	110	.....	.....	108¼	.....	109
7s, Income	.....	80	.....	.....	.....	82
Adjustment	.....	107	.....	.....	.....	.....
Central Pacific	90⅝	90⅝	90⅝	91¼	91¼	91¼
6s, gold	.....	.....	114⅞	114⅞	.....	.....
1st M. (San Joaq)	.....	.....	.....	.....	.....	.....
1st M. (Cal. & Or.)	.....	.....	105	.....	.....	.....
Land grant 6s	.....	103x	.....	.....	.....	.....
Chesapeake & Ohio	26¼	25⅛	26	.....	26⅛	26⅜
1st pref	38⅛	39	38⅛	39¾	39¼	39
2d pref	28⅛	.....	.....	.....	.....	.....
1st mort., series B	88¾	88	88⅛	90⅛	90	.....
Chicago and Alton	139½	140	139¾	.....	141¾	.....
Preferred	.....	.....	.....	.....	.....	.....
1st mortgage	.....	.....	.....	.....	.....	.....
Sinking Fund	.....	.....	.....	.....	.....	.....
Chi., Bur. & Quincy	130¼	131¼	130⅞	131	132	131½
7s, Consol. 1903	.....	127⅜	127⅛	.....	.....	.....
Ll., Mil. & St. Paul	108⅜	108⅛	108⅞	110	110⅜	110⅛
Preferred	122⅜	122⅞	123	124	125⅛	.....
1st mortgage, 8s	.....	.....	.....	.....	.....	.....
2d mort., 7 3-10s	.....	.....	.....	.....	.....	.....
7s, gold	.....	.....	.....	.....	.....	125
1st M. (La. C. div)	.....	.....	.....	.....	123¾	.....
1st M. I. & M. div.)	.....	.....	.....	.....	.....	.....
1st M. (I. & D. ext.)	.....	.....	.....	.....	.....	.....
1st M. (H. & D. div.)	.....	.....	117½	.....	.....	.....
1st M. (C. & M. div.)	.....	.....	.....	.....	.....	.....
Consolidated S. F.	.....	.....	.....	.....	.....	.....
Chi. & Northwestern	143⅛	143¼	144⅛	145⅛	145⅜	144⅜
Preferred	102⅛	103⅛	103	104¼	.....	103¾
1st mortgage	107¼	.....	.....	.....	.....	.....
Sinking Fund 6s	.....	110⅛	.....	.....	.....	.....
Consolidated 7s	.....	.....	.....	.....	.....	.....
Consol. Gold bo'ds	.....	125⅞	.....	.....	.....	126
Do. reg	.....	.....	.....	.....	.....	.....
Chi., R. Isl. & Pac.	133⅛	133	133¼	134	134	133
6s, 1917, c	.....	127	.....	.....	.....	.....
Clev., Col., Cin. & Ind.	81	81⅛	82⅛	83	84⅛	83⅛
1st mortgage	.....	.....	.....	.....	.....	.....
Clev. & Pittsburg gr.	.....	.....	.....	.....	139	.....
7s, Consolidated	.....	128	.....	.....	.....	127
4th mortgage	.....	.....	.....	.....	.....	.....
Col., Chi., & Ind. Cent	8⅞	9	.....	8½	9⅜	9⅛
1st mortgage	.....	.....	.....	.....	.....	.....
2d mortgage	.....	.....	.....	.....	.....	.....
Del. & Hud Canal.	112⅜	112¼	112⅞	113	113⅛	113¼
Reg. 7s, 1891	.....	.....	.....	.....	.....	116½
Reg. 7s, 1884	.....	.....	.....	.....	.....	.....
7s, 1894	.....	.....	113¾	.....	.....	.....
Del., Lack. & Western	135⅝	135⅛	134½	135⅞	135⅞	133¾
2d mortgage 7s	.....	.....	.....	.....	.....	.....
Consol. 1907	.....	.....	.....	.....	.....	.....
Erie Railway	.....	.....	.....	.....	.....	.....
1st mortgage	.....	128¼	128	128½	.....	.....
2d mort. 5s, ext.	.....	.....	.....	.....	.....	.....
3d mortgage	100⅞	.....	.....	100⅞	.....	100¼
4th mort. 5s, ext.	.....	105x	.....	.....	.....	.....
5th mortgage	.....	.....	.....	.....	.....	.....
7s, Consol. gold	.....	.....	127	.....	.....	.....
Great West. 1st mort	.....	.....	.....	.....	.....	.....
2d mortgage	103⅛	.....	.....	103	.....	.....
Hannibal & St. Jo.	.....	.....	.....	.....	.....	.....
Preferred	85⅛	85	81¼	83	.....	83
8s, Convertible	.....	.....	.....	106	.....	.....
Houston & Tex. Cen	80	81	78	79	80⅛	82
1st mortgage	.....	109	109	.....	.....	109½
2d mortgage	.....	.....	.....	.....	.....	.....
Illinois Central	138⅜	138¾	138¾	140⅛	141¾	143⅞
LakeShore & MichSo	112⅛	111⅞	111	112	112⅜	111¼
Consol. 7s	.....	.....	.....	.....	.....	.....
Consol. 7s, reg	.....	.....	.....	.....	.....	.....
2d Consolidated	.....	125⅛	.....	125⅛	.....	.....
Leh. & W. B. con. ass	.....	.....	.....	.....	102½	.....
Long Dock bonds	116	.....	.....	.....	.....	.....
Louisville & Nash.	56¾	55⅛	56	56¾	56⅞	56⅜
7s, Consolidated	115⅛	.....	115	.....	.....	114⅛
Manhattan	49¾	.....	51	.....	50	49⅛
1st pref	.....	.....	88	.....	.....	87⅛
Met. Elevated	91	.....	93	.....	.....	92
1st mortgage	100	99⅞	100	.....	99⅞	99⅛
Michigan Central	97¼	96¼	96⅜	98⅛	99⅞	99⅜
7s, 1902	.....	.....	.....	.....	128	.....
Morris & Essex	125	126	.....	.....	124	125
1st mortgage	.....	.....	.....	.....	.....	.....
2d mortgage	.....	.....	.....	.....	.....	.....
7s of 1871	.....	.....	.....	.....	.....	.....
7s, Convertible	.....	.....	.....	.....	.....	.....
7s, Consolidated	.....	.....	.....	.....	.....	124
N. Y. Cen. & Hud. R.	132¾	132⅛	132½	132⅝	133¼	133
6s, S. F. 1883	.....	.....	.....	.....	102⅜	102⅜
6s, S. F., 1887	.....	.....	.....	.....	.....	.....
1st mortgage	.....	.....	.....	134	.....	.....
1st mortgage, reg.	.....	.....	.....	133½	.....	.....
N. Y. Elevated	.....	.....	.....	.....	.....	.....
1st mortgage	.....	.....	117	.....	117	.....
N. Y. & Harlem	.....	.....	200	.....	.....	.....
Preferred	.....	.....	.....	.....	.....	.....
1st mortgage	.....	.....	.....	.....	.....	.....
1st mortgage, reg	.....	.....	.....	.....	.....	.....
N. Y. Lake Erie & W	42¾	41⅞	42	42⅝	43⅜	42⅞
Preferred	85	84	.....	.....	87	87
2d Consolidated	100	99½	99⅛	100	100⅜	100⅛
New 2d 5s fund	.....	.....	.....	.....	.....	.....
N. Y., N. Hav'n & Hart	.....	.....	.....	184	.....	182½
North Mo. 1st mort	.....	.....	.....	118	.....	.....
Northern Pacific	49⅜	48⅝	48	48⅜	49⅜	48⅜
Preferred	95	94¼	92⅞	94½	94⅜	93⅞
Ohio & Mississippi	38⅜	38⅛	38¼	39½	39⅛	39⅛
Preferred	.....	.....	.....	.....	.....	.....
2d mortgage	.....	.....	120	.....	.....	120⅛
Consolidated 7s	.....	.....	.....	.....	.....	.....
Consol. S. Fund	.....	.....	.....	.....	.....	.....
Pacific Mail S. S. Co	43⅛	43⅝	43⅞	43½	43½	.....
Pacific R. R. of Mo.	.....	.....	.....	.....	.....	.....
1st mortgage	.....	.....	105½	.....	.....	105¾
2d mortgage	.....	.....	.....	.....	.....	.....
Panama	.....	.....	.....	.....	.....	.....
Phila. & Reading	63¾	63⅛	63	63	63⅛	62¾
Pitts, Ft. W. & Chi. gtd	136¾	.....	.....	134⅛	.....	.....
1st mortgage	.....	.....	136¾	.....	.....	.....
2d mortgage	.....	.....	.....	.....	.....	.....
3d mortgage	.....	.....	.....	128	127⅛	127⅛
Pullman Palace Car	127¼	127⅛	.....	127	128	130
Quicksil'r Min'g Co	.....	.....	.....	.....	.....	.....
Preferred	.....	.....	.....	.....	.....	42
St. Louis & San Fran	.....	.....	38⅛	.....	.....	39
Preferred	58¾	59	58¾	.....	58¾	58¾
1st Preferred	.....	97	97	.....	97	97
St. L., Alt'n & T. H.	43	44	.....	45	47	45
Preferred	.....	.....	.....	86	88	.....
1st mortgage	.....	.....	.....	.....	.....	.....
2d mort. pref	.....	.....	.....	.....	.....	.....
Income bonds	.....	.....	.....	.....	.....	100
St. L., Iron Mt. & S	.....	.....	.....	.....	.....	.....
1st mortgage	.....	.....	.....	.....	.....	113⅛
2d mortgage	.....	.....	.....	.....	.....	.....
Toledo and Wabash	.....	.....	.....	.....	.....	.....
1st mortgage	.....	.....	.....	.....	.....	.....
2d mortgage	.....	.....	.....	.....	.....	.....
7s, Consolidated	.....	.....	.....	.....	.....	.....
St. Louis Division	.....	.....	.....	.....	.....	.....
Union Pacific	106½	105⅝	106⅞	108	108⅜	107⅞
1st mortgage	115¼	115	.....	114¾	.....	.....
Land Grant 7s	.....	.....	.....	.....	.....	110
Sinking Fund 8s	116⅞	117⅜	117⅞	.....	.....	.....
United States Ex	.....	.....	.....	70	.....	.....
Wabash, St. L. & Pac	35⅞	35⅛	35⅝	35⅜	35⅜	35⅝
Preferred	65¼	64⅜	64⅜	65⅜	66⅛	66⅜
New mort. 7s	.....	.....	.....	.....	.....	.....
Wells-Fargo Ex	.....	.....	.....	131	130¼	.....
Western Pacific b'ds	.....	.....	.....	.....	.....	113
Western Union Tel.	88⅛	87¾	88	88⅜	89⅛	88⅛
7s, S. F conv., 1900	118	118	.....	.....	.....	.....
FEDERAL STOCKS :—						
U. S. 4s, 1907, reg	.....	.....	.....	119	119½	.....
U. S. 4s, 1907, coup	118⅝	.....	.....	.....	119½	119
U. S. 4½s, 1891, reg	112⅜	.....	112⅞	112¾	113¾	113
U. S. 4½s, 1891, coup	112⅜	.....	.....	.....	113¾	113
U. S. 5s, cont'd at 3⅛	100⅛	100⅛	.....	.....	.....	.....
U. S. 6s cont'd at 3⅛	.....	.....	.....	.....	.....	.....
Dt. of Col. 3-65s, reg	.....	.....	.....	.....	.....	.....
Dt. of Col. 3-65s, coup	.....	.....	.....	.....	108	.....

Boston Stock Exchange.

Closing Prices for the Week Ending Oct. 11.

	Th. 5.	F. 6.	Sat. 7.	M. 9.	Tu. 10.	W. 11.
Atch., Top. & San. Fe.	91⅝	91½	90⅜	90¾	91¼	91
1st mortgage	.....	.....	.....	119¼	.....	.....
Land Grant 7s	.....	.....	.....	.....	.....	.....
Boston & Albany	.....	173	173	171	172	172⅜
Boston and Lowell	.....	.....	.....	.....	.....	.....
Boston & Maine	.....	.....	154	154	.....	154
Boston & Providence	.....	.....	.....	.....	160	160
Bos'n, Hart. & Erie 7s	.....	.....	.....	.....	.....	.....
Burl. & Mo. R. L. G. 7s	.....	.....	.....	.....	.....	.....
Burl. & Mo. R. in Neb	.....	.....	.....	.....	.....	.....
6s, exempt	.....	.....	.....	.....	.....	.....
4s	.....	.....	82½	.....	82½	.....
Chi., Burl. & Quincy	130¼	131	.....	131¼	132	132
Cin., Sand. & Clev ($50)	28¾	.....	.....	26¾	.....	.....
Concord ($50)	.....	.....	.....	.....	.....	.....
Connecticut River	.....	.....	.....	.....	.....	.....
Eastern	.....	.....	.....	.....	.....	42
New 6s, Bon	.....	.....	.....	.....	.....	.....
Fitchburg	130	.....	.....	.....	131	.....
N. Y. & New England	55⅛	55	55	.....	55	55
7s	.....	.....	.....	116½	.....	.....
Northern N. H	.....	.....	.....	111¼	.....	.....
Norwich & Worcester	.....	.....	.....	.....	.....	160
Ogden & Lake Cham	.....	.....	.....	.....	.....	.....
Old Colony	137½	139	.....	.....	138	.....
Ph., Wil. & Balt. ($50)	.....	64	.....	64	64	.....
Portl'd, Saco & Ports	112	.....	.....	.....	.....	.....
Pueblo & Ark Val 7s	.....	.....	.....	.....	113¾	112
Pullman Palace Car	129	.....	129	.....	128	129
Union Pacific	105½	106¾	106	108½	108⅞	108
6s	.....	.....	.....	.....	113¾	.....
Land Grant 7s	.....	.....	.....	.....	.....	.....
Sinking Fund 8s	.....	117	.....	.....	.....	.....
Vermont & Mass	.....	.....	.....	.....	.....	.....
Worcester & Nashua	.....	.....	60	.....	59	.....
Cambridge (Horse)	.....	.....	.....	.....	.....	.....
Metropolitan (Horse)	.....	.....	.....	.....	.....	.....
Middlesex (Horse)	.....	.....	.....	.....	.....	.....
Cal. & Hecla Min'g Co	254	254	.....	252	252	252
Quincy	67½	67¼	67¾	67⅜	67¼	67⅛

Philadelphia Stock Exchange.

Closing Prices for the Week Ending Oct. 10.

	W. 4.	Th. 5.	F. 6.	Sat. 7.	M. 9.	Tu. 10.
Allegh'y Val. 7 3-10s	.....	122½	.....	.....	.....	.....
7s, Income	.....	50	47	.....	.....	.....
Buff., Pitts & West.	21⅛	21¼	21⅛	21	21¼	21⅛
Camd'n & Am. 6s, '83	.....	101½	.....	.....	101¼	.....
6s, 1889	.....	.....	.....	.....	.....	.....
Mort. 6s, 1889	.....	.....	.....	.....	.....	.....
Camden & Atlantic	.....	.....	.....	.....	.....	.....
Preferred	.....	.....	.....	.....	.....	.....
1st mortgage	.....	.....	.....	.....	.....	.....
2d mortgage	.....	.....	.....	.....	.....	.....
Catawissa	.....	.....	.....	.....	20	.....
Preferred	.....	.....	.....	.....	.....	.....
2d pref	.....	.....	.....	.....	.....	.....
7s, new	.....	.....	.....	.....	.....	.....
Del. & Bound Brook	.....	.....	.....	.....	.....	.....
7s	126¼	.....	.....	.....	.....	.....
Elmira & Williamsp't	.....	.....	.....	.....	.....	.....
Preferred	.....	.....	.....	.....	.....	.....
Hunt. & B. Top Mt.	16	.....	16½	16	16¼	18¼
Preferred	.....	.....	33	33	.....	35
2d mortgage	.....	.....	.....	.....	.....	.....
Lehigh Navigation	43⅞	43¾	43⅞	43¾	44⅜	44⅞
6s, 1884	103	.....	.....	.....	103¾	.....
Gold Loan	.....	.....	.....	112¾	.....	.....
Railroad Loan	.....	.....	.....	.....	.....	.....
Conv. Gold Loan	.....	.....	.....	.....	.....	.....
Consol. Mort, 7s	.....	.....	.....	.....	.....	.....
Lehigh Valley	66⅛	66¼	66¾	66⅞	66¼	66¾
1st mort. 6s, coup	.....	.....	.....	.....	.....	122⅜
1st mort. 6s, reg	.....	.....	.....	.....	.....	122⅜
2d mort. 7s	.....	.....	.....	.....	.....	.....
Consol mort. 6s	.....	.....	122⅜	.....	.....	.....
Consol. mtg. 6s, reg	.....	122½	122	.....	.....	122
Little Schuylkill	.....	58¼	.....	.....	.....	58
Minehill & Sch. Hav'n	.....	.....	62½	62½	.....	.....
North Pennsylvania	.....	.....	.....	65	65	65
1st mortgage 6s	.....	.....	.....	.....	.....	.....
2d mortgage 7s	.....	.....	.....	.....	.....	.....
Genl. mtg. 7s, coup	.....	.....	.....	.....	.....	.....
Genl. mtg. 7s, reg	.....	.....	.....	.....	.....	.....
Northern Central	56⅛	56	56⅜	56⅜	56⅛	57¼
5s	.....	.....	97⅞	97¾	.....	.....
Northern Pacific	49⅛	49⅛	48⅝	48	49	49⅜
Preferred	95⅜	94⅜	94⅛	93	94⅜	94⅞
Pennsylvania R. R.	63¾	63⅞	64	63⅞	64⅞	64⅜
1st mortgage	.....	.....	.....	.....	.....	.....
Gen'l mort	.....	.....	.....	.....	.....	.....
Gen'l mort reg	.....	.....	.....	.....	.....	.....
Consol. mort. 6s	.....	.....	.....	.....	120	.....
Consol. mort. reg	120½	.....	.....	.....	121⅛	.....
Pa. State 5s, new	.....	.....	117⅞	.....	117⅛	118⅛
do 4s, new	.....	117	116¾	.....	.....	.....
do 3½s, 1912	.....	.....	.....	.....	.....	.....
Phila. & Reading	31⅞	31⅞	31⅝	31⅜	31⅛	31⅞
1st mortgage 6s	.....	.....	.....	.....	.....	.....
7s of 1893	.....	.....	.....	.....	118	.....
7s, new convert	.....	.....	.....	74⅜	.....	75
Consol. mort. 7s	.....	.....	127	.....	.....	127⅜
Consol. mort. reg	.....	.....	.....	.....	.....	.....
Gen'l mort. 6s	95	95	95	95	95	95
Def. Income bonds	.....	.....	.....	.....	.....	.....
Philadelphia & Erie	22⅛	22⅛	.....	.....	.....	22⅜
1st mortgage 5s	102¾	103	103	.....	.....	.....
2d mortgage 7s	.....	.....	.....	.....	.....	.....
Pittsb., Cin. & St. L. 7s	.....	.....	121	.....	.....	121
Pitts., Tit. & Buff. 7s	.....	.....	.....	.....	.....	.....
Schuylkill Navi't'n	.....	.....	.....	.....	.....	.....
Preferred	.....	.....	.....	.....	.....	.....
6s, 1895	.....	.....	.....	.....	.....	.....
6s, 1907	.....	.....	.....	90	.....	90
United Co. of N. J.	.....	190	.....	.....	.....	190½
Hestonville, (Horse)	17⅛	.....	17⅛	.....	.....	.....
Cehstnut & Walnut)	.....	.....	.....	.....	.....	.....

Baltimore Stock Exchange.

Closing Prices for the Week Ending Oct. 10.

	W. 4.	Th. 5.	F. 6.	Sat. 7.	M. 9.	Tu. 10.
Baltimore & Ohio....	.....	199	197	.....	.....	.....
6s, 1885.....	104	104	104	104	.....	.....
Central Ohio ($50)...	.....	.....	.....	.....	.....	.....
1st mortgage.....	.....	.....	108	.....	.....	108
Marietta & Cincin'ti.	.....	.....	.....	.....	.....	.....
1st mortgage, 7s..	.....	.....	.....	.....	.....	.....
2d mortgage, 7s....	.....	.....	90¾	.....	.....	100
3d mortgage, 8s...	.....	.....	56½	.....	.....	.....
Northern Cen. ($50).	56	56¾	56¾	56½	.....	56½
2d mort. 6s, 1885..	.....	.....	.....	.....	.....	.....
3d mort. 6s, 1900..	.....	.....	.....	.....	.....	116
6s, 1900, gold.....	.....	.....	.....	.....	.....	116¼
6s, 1904, gold.....	.....	.....	.....	.....	.....	.....
Pitts. & Connelsv. 7s.	.....	.....	121¼	121½	.....	.....
Virginia 6s Consol..	57⅛	57¼	57¾	.....	.....	58⅛
Consol. coupons...	.....	.....	.....	59½	.....	59⅜
10-40 bonds.....	.....	42¼	.....	.....	.....	.....
Def'd Certificates	.....	.....	.....	.....	.....	.....
Western Maryland..	.....	.....	.....	.....	16	16¼
1st M., end. by Balt	.....	.....	.....	.....	.....	.....
2d M., do.	.....	.....	.....	.....	.....	.....
3d M., do.	.....	.....	.....	.....	.....	.....
1st M., unendorsed	.....	.....	.....	...	.....	.....
2d M., end. Wash Co	.....	.....	.....	.....	.....	.....
2d M., preferred...	.....	.....	.....	.....	.....	.....
City Passenger R. R.	.....	.....	.....	.....	43	.....

London Stock Exchange.

	Closing Prices			
	Sept. 22.		Sept. 29.	
Baltimore and Ohio 5s, 1027.....	107	109	107	109
Central of N. J., $100 shares.....	85	90	85	90
Do. consol. mort.....	109	111	109	111
Do. Income Bonds.....	88	92	89	92
Central Pacific of Cal., $100 shs..	94	95	94	95
Do. 1st mort. 6s, 1895-'98.....	117	119	117	119
Det., G'd Haven & Mil. Equip bds.	115	117	115	117
Do. Con. M. 5p.c., till '83 after 6p.c.	113	115	113	115
Illinois Central $100 shares.....	144	146	143	145
Do. S. F. 5s, 1003.....	106	108	106	108
Lehigh Valley Cons. mort. 1923...	115	119	115	119
Louisville and Nashville mort. 6s	97	99	97	99
Do. capital stock $100 shares...	73	75	71	73
N. Y. Cen. & Hud. R. mort. bonds.	132	136	132	136
Do. $100 shares.....	138½	139½	136½	137¼
Do. mort. bonds (stg.).....	121	123	121	123
N. Y. Lake Erie & West. $100 shs.	42½	43	43½	44⅛
Do. 6 p. c. pref. $100 shares....	87	89	88	90
Do. 1st Con. Mort. bonds (Erie).	127	130	127	130
Do. do. Funded Coupon bonds.	124	127	124	127
Do. 2d Consol. Mort. bonds....	102	104	102	104
Do. do. Funded Coupon bonds.	98	100	98	100
N. Y., Pa. & Ohio 1st mort. bonds.	54	55	55	56
Do. Prior Lien bonds (sterling).	100	105	100	103
Pennsylvania $50 shares.....	65½	66	65⅛	66
General Mortgage.....	121	123	121	123
Phil. & Erie Gen. mort. 6s, 1920...	117	119	117	119
Philadelphia & Reading $50 shs..	32¼	32¾	32	32⅛
General Consol Mortgage.	115	117	115	117
Do. Improvement Mortgage....	105	107	106	108
Do. Gen. Mtg. '74, ex-def'd coup.	97½	98	97	99
St. L. Bridge 1st mort. gold bond.	122	124	121	123
Do. 1st. pref. stock.....	97	100	97	100
S. P'fic of Cal., 1st mort 6s, 1905-6.	105	107	104	106
Union Pacific 1st mtg. 6s, 1896-0..	117	119	118	120
Wabash, St. L. & P. $100 shares..	37	38	37	38
Do. $100 pref. shares.....	69	70	69½	70½
Do. gen. mort. bonds.....	88	90	89	91

AMERICAN RAILROAD JOURNAL

Financial and Commercial Review.

THURSDAY EVENING, October 12, 1882.

In the money market this morning call loans on stocks were 6@7 per cent, and on United States bonds 5@6 per cent. Time money was 6 per cent on stocks and 4@4½ per cent on Governments. Prime mercantile paper was 6@8 per cent. In the afternoon the quotation for call loans on stocks was 5@6 per cent, but at the close fell to 3 per cent.

The posted rates for prime bankers' sterling were 4.81½@4.82 and 4.86@⅛. The actual rates were 4.81@½ and 4.85¾@4.86, with cables 4.86⅛@4.86¾, and prime commercial bills 4.79¾@4.79¾. The actual rates for Continental bills are as follows: Francs, 5.24⅜@5.23¾ and 5.20@5.19⅜; marks 94⅛@⅛ and 95⅛@⅜, and guilders 39⅛@¾ and 39⅞@40.

The following securities were "listed" at the New York Stock Exchange on the 11th inst.:

Michigan Central Railroad Company's additional issue of consolidated mortgage bonds, $2,000,000 numbering from 8,001 to 10,000 inclusive, and being the last authorized under the mortgage. Of the proceeds of these bonds, $556,000 is to be used for the redemption of the first mortgage bonds that matured Oct. 1, 1882, and an equal amount for the redemption of equipment bonds maturing April 1, 1883; $400,000 is needed to settle for cars leased and purchased; $70,000 to make up deficit in the sinking fund of the first mortgage bonds maturing Oct. 1, 1882, and the balance $418,000 is to be used for additional depots, shops, and rolling stock.

The Brooklyn, Bath and Coney Island Railroad Company's first mortgage 6 per cent bonds, $200,000 with the stipulation that $80,000 of old bonds, which are to be funded by the issue mentioned, must first be satisfied and the mortgage cancelled.

Fort Worth and Denver City Railway Company's addition issue of bonds and stock on newly completed road: bonds, $1,950,000, numbering from 801 to 2,750 inclusive and $1,400,000 stock.

The Purchasing Committee's receipts for the securities of the Columbus, Chicago and Indiana Central Railway Company.

Oregon Short Line Railway Company's stock, $4,000,000, and adpitional issue of first mortgage bonds, $2,000,000 numbered from 3,001 to 5,000 inclusive.

The President of the Louisville and Nashville Railroad Company notified the Stock Exchange on the 11th inst. that the 30,800 shares of the capital stock of the company, which was originally subscribed for by and issued to the city of Louisville, has been disposed of by the city, and is now active stock in the company; and that this stock will be registered in the books of the transfer agency of the company on after the 10th of November. With this addition the capital stock will amount to $21,213,513, which will be further increased by the issue of $3,786,487 of the additional stock authorized at the stockholder's meeting on the 4th inst., making the registered capital stock $25,000,000. The remaining $5,000,000 of the new stock will be withheld for the present, and when issued due notice will be given to the Stock Exchange.

The gross earnings of the Central Pacific Railroad for the six months ending June 30, 1881, were $10,880,025.76, the operating expenses $6,309,362.47, and the earnings over operating expenses, $4,580,563.29: for the six months ending June 30, 1882, the gross earnings were $12,155,970.92, the operating expenses $7,757,777.83, and the earnings over operating expenses $4,398,193.00—showing an increase in gross earnings of $1,266,045.16, with an increase in operating expenses of $1,448,415.36, making a decrease in the earnings over operating expenses of $182,370.20.

The following quotations of sales of railway and other securities, for the week, are in addition to those given elsewhere in our columns.

New York.—Allegheny Central, 28: American Dock and Imp. 5s, 93: Albany and Susq. consol., 124; Boston and New York Air Line pref., 75⅜: Belleville and Southern Illinois 1st, 114: Cairo and Fulton 1st, 107; Chicago, St. Paul, Minneapolis and Omaha, 50¼: do. pref., 106⅞: do. consol., 108¾: Central Iowa, 34⅜: do. 1st, 110: Chesapeake and Ohio cur. 6s, 55¾: do. 1st, series A, 104½: do. pur. money fund, 116; Chicago, Milwaukee and St. Paul, Southern Minn. div. 1st, 107¼: do. La C. and Dav. div. 1st, 93½: do. Chicago and Pacific West div. 1st, 92¾: do. Mineral Point div. 1st, 91: Chicago, St. Paul and Minneapolis 1st, 114: Chicago and Eastern Illinois 1st, 101: Chicago, Burlington and Quincy 5s, S. F., 101¾: do. Iowa div. 4s, 84¾: Columbus, Chicago and Indiana Central inc., 50: Chicago and Northwestern S. F. 5s, 00: Chicago, St. Louis and New Orleans 5s, 105: Denver and Rio Grande, 54: do. 1st, 113¾: do. consol., 97½: Dubuque and Sioux City, 80: East Tennessee, Va. and Ga., 0: do. pref., 16½: do. inc., 40: do. 5s, 72: Evansville and Terre Haute, 80: do. 1st, 96: Elizabethtown, Lexington and Big Sandy 6s, 95; Fort Worth and Denver 1st, 97¾: Gulf, Colorado and Santa Fe 1st, 107: Houston and Texas Central 1st, western div., 110: Hannibal and St. Joseph 6s, consol., 103¾: International and Gt. Northern coup. 6s, 84: do. 1st, 106½: Indiana, Bloomington and Western, 44: do. 1st, 90: Indianapolis, Decatur and Springfield 1st, 100¾: Joliet and Chicago, 140: Keokuk and Des Moines 1st, 100⅞: Kansas Pacific 1st consol., 103: do. 6s Denver div. ass., 108: Louisville and Nashville genl. mort. 6s, 90½: do. Evansville, Henderson and Nashville 1st, 100: do. Louisville, New Albany and Chicago, 66: Long Island, 63: do. consol. 5s, 97½: do. 1st, 122: Lake Erie and Western, 36½: do. inc., 52: Midland New Jersey 4-5, 6s, 86: Michigan Southern S. F., 108; Minneapolis and St. Louis, 31¾: do. pref., 72½: do. 1st, 116: Missouri, Kansas and Texas, 36¼: do. genl. mort. 6s, 85: do. consol., 78, 105: do. 2d, 61; Missouri Pacific, 107¾: do. 1st consol., 101½: do. 3d, 113; Milwaukee, Lake Shore and Western pref., 51½: do. 1st, 101; do. inc., 78; Mobile and Ohio, 20⅜; Memphis and Charleston, 54; Metropolitan Elevated 2d, 90: Manhattan Beach, 18; Marietta and Cincinnati 2d pref., 5; Nashville and Decatur 1st, 115; New York, Lake Erie and Western inc., 75; New York City and Northern genl. mort., 57: New York, Chicago and St. Louis, 15⅜: do. pref., 31⅜; do. 1st, 90½; Nashville, Chattanooga and St. Louis, 54; do. 1st, 115⅜; New York, Ontario and Western, 27⅞; Norfolk and Western pref., 56⅜; Northern Pacific 1st, 104: New Orleans Pacific 1st, 91½: New York, Pennsylvania and Ohio inc., 54½: Ohio Central, 17½: do. 1st, 92½; do. inc., 40; Oregon Railway and Nav. 1st, 108½; Ohio Southern, 17; do. 1st, 84; do. inc., 37; Oregon Trans-Continental, 89⅜; Oregon Short Line 6s, 100; Peoria, Decatur and Evansville, 31½: Rochester and Pittsburgh, 24¾: Richmond and Danville, 71½: do. 1st, 94¾; do. deben., 63; Richmond, Danville and West Point, 34½: Richmond and Alleghany, 10: do. 1st, 95: Rome, Watertown and Ogdensburg extended 5s, 72; do. inc., 41; St. Paul, Minn. and Man., 150½ do. 1st, 110½; do. 2d, 110; do. Dakota div. 1st, 108¾: St. Paul and Duluth 3s; do. pref. 93½; St. Paul and Sioux City 1st, 110½: St. Louis, Kansas City and Northern R. E. 7s, 105; do. Omaha div. 1st, 100: South Pacific of Mo. 1st, 103; St. Louis and San Francisco 2d, Class A, 63¾: do. B, 91; do. C, 90¾: St. Louis, Iron Mt. 5s, 77; do. Arkansas Branch 1st, 107: South Carolina inc., 61: Toledo, Delphos and Burlington, 14½: Texas and Pacific, 44¾: do. inc. L. G. 62½: do. Rio Grande div. 1st, 82¾: Toledo, Peoria and Western 108¾: Union Pacific col. trust 6s, 106¾: Utah Southern Gen'l mort. 7s, 104¾: Winona and St. Peter 1st, 107; Wabash, St. Louis and Pacific gen'l mort. 6s, 84½; do. Iowa div. 1st, 90; do. Havana div. 1st, 90 do. Cairo div. 1st, 83.

Boston.—Atlantic and Pacific inc, 25: do. blocks, 106; Atchison, Topeka and Santa Fe guar., 114: do. plain 58, 87¾: Boston Water Power, 2¼: Boston Land, 7¼: Burlington and Missouri River in Nebraska 6s, non-exempt, 102¾: Boston, Revere Beach and Lynn, 110: Central of Iowa, 34: do. 1st, 85: Connecticut and Passumpsic Rivers R. R., 95: do. 7s, 115: Chicago, Burlington and Quincy 4s, 84¼: do. 4s, Denver Ext., 83¾: Connotton Valley, 7¼: do. pref., 12: do. 6s, 63: Cheshire R. R., 60¼: Flint and Pere Marquette, 21: do. pref., 56: Iowa Falls and Sioux City, 80: Kansas City, Lawrence and Southern 8s, 101: Kansas City, Fort Scott and Gulf pref., 124: do. 7s, 111: Kansas City, St. Joseph and Council Bluffs 7s, 114: Little Rock and Ft. Smith, 50½: Mexican Central, 23⅜: do. blocks No. 3, 100⅝: do. 7s, 77⅜: Massachusetts Central, 5¼: Marquette, Houghton and Ontonagon, 68: Maine Central, 86: New Mexico and Southern Pacific 7s, 112½: New York and New England 6s, 106: Oregon Short Line 6s, 00: Rutland, 3¼: do. 6s, 00¼: Sonora 7s, 108⅛: Summit Branch, 11: Toledo, Cincinnati and St. Louis, 7¼: do. 6s, 62½: Toledo, Delphos and Burlington Branch inc., 17½: Wisconsin Valley 7s, 112: Wisconsin Central 18½: do. 7s, 1st Series, 78: do. 2d Series, 45¼: Atlantic Mining, 16: Allouez, 1⅞: Copper Falls, 2: Franklin, 16¼: Harshaw, 1⅛: National, 2: Osceola, 26: Pewabic, 12½.

Philadelphia.—Central Transp., 24: Chesapeake and Delaware Canal 6s, 87: Huntingdon and Broad Top Mt. consol., mort. 6s, 00: do. 1st mort., 11: Nesquehoning Valley, 54: Northern Pacific pref. scrip, 61¾: Philadelphia and Reading deben. 6s, 64: Philadelphia City 4s 1897, 112½: do. 6s, 1001, 133: Pennsylvania Co. 4½s, 96, Pennsylvania Car Trust 5s, 100: Philadelphia Germantown and Norristown, 111: Philadelphia, Wilmington and Baltimore 4s, 94¾: Pennsylvania Canal 6s, 00: Sunbury and Erie 7s, 125: Schuylkill Nav., 6s, 1897, 105¾: Texas and Pacific consol. mort. 6s, 92: West Jersey 6s, 117: do. 6s, 1890, 101¼: do. deben. 6s, 101: West Jersey and Atlantic, 6s, 110: Warren and Franklin 7s, 112. The latest quotations are: City 6s, 108@120: do. free of tax, 127@132: do. 4s, new, 106@114: Pennsylvania State 5s, new loan, 117¾@118: do. 4s, old, 111@114: do. 4s, new, 116@117: Philadelphia and Reading Railroad, 31⅝@31¾: do. consol. mort. 7s, reg., 126¾@127½: do. gen'l mort. 6s, coupon, 94¼@95½: do. 7s, 1893, 118@—: do. new conv., 74¾@75¼: United New Jersey R. R. and Canal, 190@191: Buffalo, Pittsburg and Western, 21¾@21½: Pittsburgh, Titusville and Buffalo 7s, 95@—: Camden and Amboy mort. 6s, 1880, 114½@115: Pennsylvania R. R., 64¾@64½: do. general mort. 6s, coupon, 124½@125¾: do. reg., 121@122: do. consol. mort. 6s, reg., 120@121: Little Schuylkill R. R., 58@58½: Schuylkill Navigatio

pref., 12@13; do. 6s, 1882, 90@90¼; Elmira and Williamsport pref., 58@60; do. 5s, 100@101; Lehigh Coal and Navigation, 44¾@44⅞; do. 6s, 1884, 103@103¼; do. R. R. loan, 114@115; do. Gold Loan, 112@113; do. consol. 7s, 117¼@118; Northern Pacific, 49½@49¾; do. pref., 94¾@94⅞; North Pennsylvania, 64½@65; do. 6s, 106@106½; do. 7s, 122@—; do. 7s, General mort. reg., 124@125; Philadelphia and Erie, 22@23; do. 7s, 113½@114¼; do. 5s, 102@103; Minehill, 62@63; Catawissa 20@23; do. pref., 56@—; do. new pref., 54@55; do. 7s, 1900, 117@—; Lehigh Valley, 66@66¼; do. 6s, coupon, 122@123; do. reg., 122@123; do. 7s, 133@134½; do. consol. mort., 122@122½; Fifth and Sixth streets (horse), 170@—; Second and Third, 114@120; Thirteenth and Fifteenth, 70@75; Spruce and Pine, 42@44; Green and Coates, 90@—; Chestnut and Walnut, 90@93; Germantown, 70@75; Union, 110@111; West Philadelphia, 112@120; People's, 15½@16; Continental, 103@104.

Baltimore.—Atlanta and Charlotte 1st, 107; Baltimore City 6s, 1886, 108; do. 6s, 1890, 115; do. 6s, 1900, 127: do. 5s, 1894, 114½; do. 5s, 1916, 125; Charlotte, Columbia and Augusta, 40; Columbia and Greenville 1st, 100⅝; Canton Co. 6s, 103¼; Marietta and Cincinnati 1st Trust certificates, 127½; do. 2d do., 100; do. 3d do., 57½; Maryland Defense 6s, 106; Northern Central 5s, series A, 97⅞; Norfolk Water 8s, 132; North Carolina consol. 4s, 75; Ohio and Mississippi, Springfield div. 1st, 120½; Parkersburg Branch, 8; Richmond and Danville bonds 1890, 105; Sandusky, Mansfield and Newark 7s, 113¾; Virginia Midland 2d mort., 107; do. 5th mort., 93¼; Wilmington, Columbia and Augusta, 108. The latest quotations are: Atlanta and Charlotte 1st, 106½@106⅝; Baltimore and Ohio, 195@197; do. 6s, 1885, 103½@—; Baltimore City 6s, 1890, 114¾@115; do. 5s, 1900, 117@—; do. 5s, 1916, 124½@124⅞; Canton Co. 6s, 103¼@—; Columbia and Greenville 1st, 100⅝@101; Marietta and Cincinnati 1st, 127@128; do. 2d, 100@101; do. 3d, 57@57¼; Northern Central, 57@57; do. 6s, 1900, 116¼@—; do. 6s, 1900; gold, 115⅞@116; do. 5s, Series A, 97½@97⅞; N. W. Va. 3d guar., 103⅛@106; Ohio and Mississippi, Springfield div. 1st, 120½@—; Richmond and Danville bonds, 1915, 95¼@97; Virginia consols, 58@58½; do. 10-40s, 42½@42¾; Virginia Midland 5th mort., 93@95; do. inc., @—64; Wilmington, Columbia and Augusta, 107⅞@108½.

THE LAKE SHORE AND MICHIGAN SOUTHERN RAILWAY COMPANY.

TREASURER'S OFFICE, GRAND CENTRAL DEPOT,
NEW YORK, Sept. 27, 1882.

The Board of Directors of this company have this day declared a QUARTERLY DIVIDEND of TWO PER CENT upon its Capital Stock, payable on WEDNESDAY, the first day of NOVEMBER next, at this office. The TRANSFER-books will be closed at 3 o'clock P. M., on MONDAY, the 2d day of October next, and will be reopened on the morning of Monday, the sixth day of November next.

E. D. WORCESTER,
Treasurer.

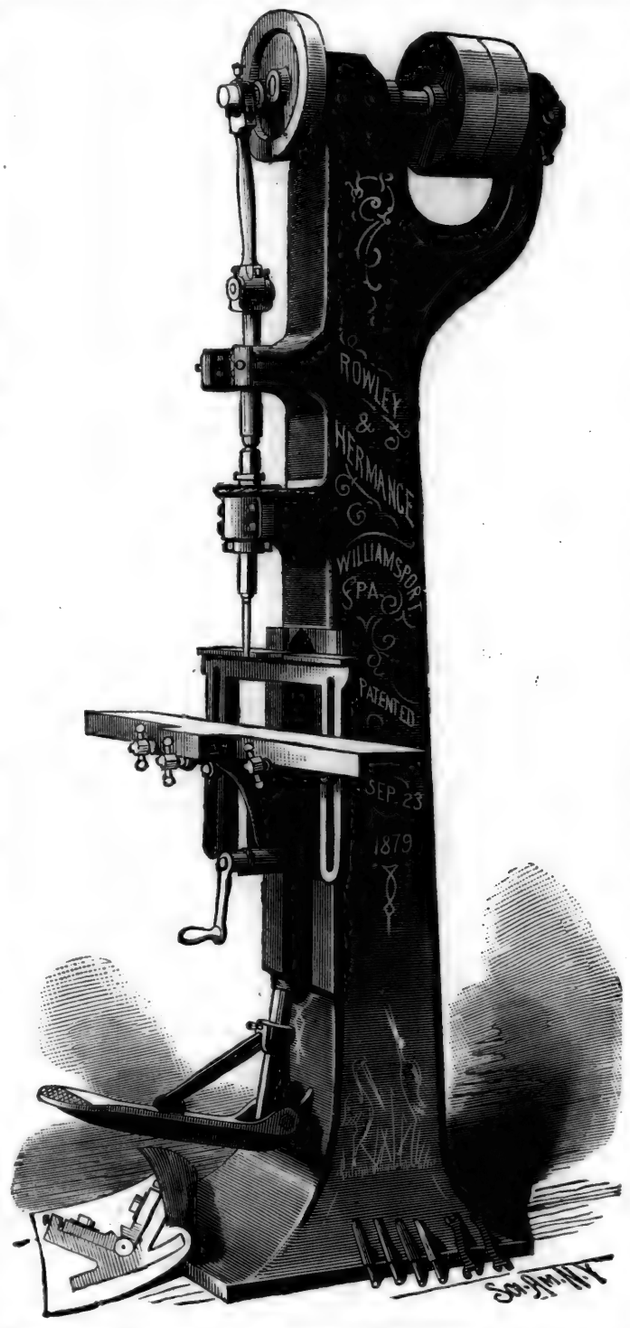
To Contractors.

OFFICE OF THE GEORGETOWN AND LANES RAILROAD COMPANY.
GEORGETOWN, S. C., Sept. 22, 1882.

PROPOSALS ARE INVITED UNTIL OCtober 31, prox., for the construction of the road-bed of the GEORGETOWN AND LANES RAILROAD, as covered by survey and estimate of Major G. W. EARLE, Engineer. For specifications and all other information address the undersigned. The Company reserves the right to reject any or all bids.

P. R. LACHICOTTE,
President G. & L. R. R. Co.

A FINE stone arch bridge is being built over the Mississippi River 200 feet below the falls of St. Anthony, by the St. Paul, Minneapolis and Manitoba Railway Co. It will have twenty-one piers, of which four will be for 100-feet arches and sixteen for 80-feet arches, and the total length will be 1900 feet. Work was commenced last February, and all the piers are completed above the springing line with the exception of three in the main channel of the river, one of which is nearly done.



New Crank-Shaft or Journal Bearing.

EDWIN A. ROWLEY, of Williamsport, Penn., has invented an improvement in crank-shaft or journal bearings, of which a description and illustration will be found useful to our readers.

It is specially adapted for use in mortising machines, but is applicable to all machines in which shafts and journals are exposed to an upward thrust. The object of the invention, when so applied, is to afford increased strength and stability in the supporting member of a mortising machine, and thereby to obviate wear and lost motion, and enable the machine to be operated at a higher rate of speed than without its use.

The accompanying illustration gives a view in perspective of a mortising machine embodying the new invention. As ordinarily constructed, the crank-shafts of mortising machines are located above their bearings, and consequently the strain due to the action of the chisel upon the lumber is exerted upon and sustained by the caps and bolts of the bearings. In the practice of Mr. Rowley's invention, the bearings of the crank-shaft are formed in a single piece with the main body of the frame, and are extended above and around the crank-shaft, which passes through openings in the frame beneath the bearings, the bearings sustaining and communicating directly to the body of the frame the upward strain induced by the operation of the chisel. The caps of the bearings are bolted thereto in the recesses, and consequently below the crank-shaft, and in the instance illustrated caps composed of two independently adjustable sections, secured to the bearings by bolts and provided with adjusting screws, are employed. The ordinarily single piece caps are equally adaptable, and, if preferred, may be used in lieu of sectional caps.

This brief description makes it plain that the ROWLEY CRANK-SHAFT OR JOURNAL BEARING places the entire strain in the work of the machine upon the frame. Moreover, the caps and cap-bolts being relieved from any duty further than that of supporting the weight of the crank-shaft and its connections, the wear of the parts is correspondingly reduced, and such firmness and solidity are obtained in the structure as to materially improve and facilitate the operation of the machine.

Mr. Rowley has assigned his invention to Rowley & Hermance, of Williamsport, Penn.

THE Chesapeake and Ohio Railway Company is receiving ten new locomotives from the Danforth Locomotive Works, Paterson, N. J.

THE receipts of the Cincinnati Exposition, which closed on the 7th inst., were $84,000, leaving $19,000 clear profit.

THE Pennsylvania Railroad Company has experimented with coke as fuel for its engines, and finds that it will only answer for short distances.

THE railroad between Toms River and Island Heights has been taken up by the Pennsylvania Railroad Company, leaving the business of transport to stages and boats.

THE $90,000 monument to Oakes and Oliver Ames, on the Union Pacific Railway, near Salt Lake, has been completed. It is of red granite and stands 60 feet above a high hill.

THE first railway built in Spain was between Barcelona and Mataro, and it was opened in 1848. Now Spain has 4,841 miles of railway, 1,310 in course of construction, and 1,008 miles authorized.

GORDON & DUGGAN RAILWAY SWITCH.

The **Standard** on several and in use on twenty-five Railroads.

Combines Safety, Durability, Simplicity, and Low Cost, with **Fixed Rails.**

The only movable piece weighs 375 lbs., and is without a bolt or rivet.

E. CORDON, Treasurer,
No. 28 STATE STREET, BOSTON, MASS.

FOR SALE.

Locomotives—Four Second-hand Narrow-Gauge Engines in good order.
One Second-hand "Tank" Narrow-Gauge Engine, 10 tons.
Several Second-hand Standard-Gauge Locomotives in good order, immediate delivery.
One new 3ft. Gauge Passenger Engine, 22 tons, prompt delivery.
Six new 4ft. 8½ Gauge Locomotives, cylinders 17x24, weight 35 tons. October and November delivery.
Two new 3ft. Gauge Locomotives, Cylinders 12x18, weight 20 tons. October and November delivery.
Cars—Passenger and Freight Cars of all descriptions for early delivery.
Rails—16lb., 20lb. 30lb. 35lb. and 56lb. Rails.
Car Wheels and Axles.
Narrow-Gauge Rolling-stock a specialty.

BARROWS & CO.,
64 Broadway,
NEW YORK.

McCANN'S EXCELSIOR SELF CAR COUPLING.

Patented August 3, 1880.

For Durability, Simplicity, and Practicability
IT HAS NO EQUAL

MARION W. McCANN,
Patentee and Proprietor,
DUBLIN, IND.

Continuous Automatic FREIGHT BRAKES.

Requiring no other Connection between Cars than the ordinary Coupling-Link and Pin.

SIMPLE, DURABLE, AND EFFICIENT.

Brakes can be applied to every Car in the longest train, from the engine or cabose, or from any car in the train. It can be readily attached to any car, and adapted to ordinary brake beams, shoes, etc. There is no possibility of damaging wheels by "sliding."

PATENTED MAY 23, 1882.

☞ Railroad and manufacturing companies, or partise able to co-operate with patentee in their manufactur and introduction, are invited to correspond with

WM. C. SCHULTZE,
Surgeon C., R. I. and P. Ry.
MARENGO, Iowa Co., Iowa.

NO OTHER LINE IS SUPERIOR TO THE FITCHBURG RAILROAD HOOSAC TUNNEL ROUTE WEST.

6.30 A.M. ACCOMMODATION.

Connecting at Syracuse, N. Y., at 7.15 P.M., with through sleeping cars for Cincinnati, Cleveland, Toledo, *DETROIT AND CHICAGO.*

3.00 P.M. CINCINNATI EXPRESS.

Pullman Sleeping Car attached, running through to Cincinnati without change. (Only Line running Pullman Cars from Boston.) This car runs *via* Erie Railway and N.Y., P. & O. R.R., making direct connection for Louisville, St. Louis, Kansas City, New Orleans, and all points in Texas and New Mexico.

3.00 P.M. ST. LOUIS EXPRESS.

THE ONLY LINE which runs a THROUGH SLEEPING-CAR from

BOSTON TO ST. LOUIS WITHOUT CHANGE!

ARRIVING AT 8.00 A.M. SECOND MORNING.

Through sleeping car for Buffalo, Toledo, Fort Wayne, Logansport, Lafayette, Danville Tolono, Decatur and St. Louis, making direct connection with through Express Trains for Kansas, Colorado, Texas, and all points in the

SOUTHWEST.

6.00 P.M. PACIFIC EXPRESS.

The only line running a through sleeping car *via* Buffalo and Detroit without change, arriving at Chicago at 8.00 A.M. second morning, making sure connections with through Express Trains for Iowa, Nebraska, Kansas, Colorado, the Pacific Coast, Wisconsin, Minnesota and all points in the

WEST AND NORTHWEST.

THE ABOVE TRAINS RUN DAILY, SUNDAYS EXCEPTED.

This Great Short Line passes through the most celebrated scenery in the country, including the famous HOOSAC TUNNEL, four and three-quarters miles long, being the longest Tunnel in America, and the third longest in the world.

Tickets, Drawing-Room and Sleeping-Car Accommodations may be secured in Advance by Applying to or Addressing

250 WASHINGTON STREET, BOSTON. 250

JOHN ADAMS, General Superintendent. F. O. HEALD, Acting Gen'l Passenger and Ticket Agent.

In effect January 9th, 1882, and subject to change.

RAILROAD AND CANAL DIVIDEND STATEMENT.

Showing the amount of Stock Outstanding, the Dividend Periods and the date of last Dividend.

Marked thus(*)are leased roads.	Stock out-standing.	Divide'd Periods.	Last Dividend Payable.
Albany and Susq*...100	2,500,000	semi-an	July '82 2
Ashuelot.....100	210,000	q'arterly	Oct. '81 3½
Atch., Top. and S. Fe100	54,000,000	q'arterly	Nov. '82 1½
Atlanta and W. Point100	1,232 200	semi-an	Jan. '82 6
Atlantic and St. Law*100	5,840,000	semi-an	Mar. '82 3
Augusta and Savan'h100	1,022,900	semi-an	June'81 3½
Avon, Geneseo&MtM*100	225,000	semi-an	July '81 3
Baltimore and Ohio.100	14,792,566	semi-an	Nov. '82 5
" " pref.100	5,000,000	semi-an	July '82 3
Washington Br....100	1,650,000	semi-an	Nov. '82 5
Berkshire*.....100	600,000	q'arterly	Apl. '82 1¾
Boston and Albany..100	20,000,000	q'arterly	Sept.'82 2
Bos.&N.Y.AirLine pf.100	2,795,227	q'arterly	June'82 1
Bos., Cl., F.&N.B.pref.100	1,750,100	semi-an	Oct. '82 3½
Bos., Conc.&Mont.pf*100	800,000	semi-an	May '82 3
Boston and Lowell..500	3,940,000	semi-an	July '82 2
Boston and Maine...100	6,921,274	semi-an	May '82 4
Boston & Providence100	4,000,000	semi-an	May '82 4
Attleborough Br...100	131,700	semi-an	July '82 3½
Bos., Revere B&Lynn100	419,400	semi-an	July '82 3½
Buffalo, N. Y. & Erie*.100	950,000	semi-an	June'82 3
Camden & Atlantic.. 50	377,400	q'arterly	Nov. '82 3
" " pref. 50	880,650	q'arterly	Nov.'82 4
Camden & Burl. Co..100	381,925	semi-an	July '82 3
Canada Southern....100	15,000,000	.....	Feb. '81 2½
Cape May & Millville* 50	447,000	semi-an	June'81 3
Catawissa*..... 50	1,159,500	annual	Oct.'81 $1 ½
" pref..... 20	2,200,000	semi-an	May '82 3½
" new pref.. 50	1,000,000	semi-an	May '82 3½
Cayuga and Susq.*.. 50	589,110	semi-an	July '81 4½
Cedar Rapids&Mo.R*100	6,850,400	q'arterly	Aug. '82 1½
" " pref.100	769,600	semi-an	Aug .'82 3½
Central of Georgia...100	7,500,000	semi-an	June '82 4
Central of New Jersey100	18,563,200	q'arterly	July '76 2½
Central Ohio*..... 50	2,437,950	semi-an	July '82 3
" pref.... 50	411,550	semi-an	July '82 3
Central Pacific 100	59,275,500	semi-an	Aug. '82 3
Chemung*..... 100	380,000	q'arterly	July '81 1½
Cheshire preferred ..100	2,155,300	semi-an	July '82 1½
Chicago and Alton...100	11,181,741	semi-an	Sept. '82 4
" " pref 100	2,245,400	semi-an	Sept. '82 4
Chi., Burl. & Quincy.100	55,337,455	q'arterly	Sept. '82 2
Chi., Iowa & Nebras*.100	3,916,200	semi-an	July '82 4
Chi., Mil. & St. Paul.100	20,404,261	semi-an	Oct. '82 3½
" " pref 100	14,401,483	semi-an	Oct. '82 3½
Chi. & N. Western...100	14,988,257	semi-an	June'82 3½
" pref.100	21,525,353	q'arterly	Sept. '82 2
Chi., R. I. & Pacific..100	41,960,000	q'arterly	Nov. '82 1¾
Chi. and West Mich .100	6,151,000	semi-an	Feb. '82 2½
Chi., St.P., M.&O.pref.100	10,390,000	q'arterly	Oct. '82 1¾
C., Ind., St. L. & Chi..100	6,000,000	q'arterly	July '82 1½
Cin., Sand. & Clev.pf. 50	420,037	semi-an	May '82 3
Clev. and Mahoning* 50	3,759,200	semi-an	Nov. '81 3½
Clev. and Pittsburg* 50	11,244,336	q'arterly	Sept. '82 1¾
Columbus & Xenia*. 50	1,786,200	q'arterly	Sept,'82 2
Colum.&HockingVal.100	2,500,200	semi-an	Aug. '81 208
Concord 50	1,500,000	semi-an	May '82 5
Concord and Ports.*.100	350,000	semi-an	July '82 3½
Conn.& Passump.Riv100	2,244,400	semi-an	Aug '82 3
Connecticut River ..100	2,100,000	semi-an	July '82 4
Cumberland Valley.. 50	1,292,950	q'arterly	Oct.' 82 2½
" 1st pref 50	241,900	semi-an	Apl. '82 4
" 2d pref. 50	243,000	semi-an	Apl. '82 4
Danbury & Norwalk. 50	600,000	.....	Oct. '82 2½
Dayton and Mich.*.. 50	2,402,573	semi-an	Apl. '82 1¾
" " pref. 50	1,211,250	q'arterly	July '82 2
Delaware*..... 25	1,468,040	semi-an	July '82 3
Del. & Bound Brook*100	1,652,000	q'arterly	Aug. '82 1¾
Del., Lack.& Western 50	26,200,000	q'arterly	Oct., 82 2
Denver & Rio Grande.100	20,160,000	q'arterly	Jan '82 1½
Den., South P. & Pac.100	3,500,000	.....	Aug.'80 4
Detroit, Lans. & Nor.100	1,825,600	semi-an	Aug.'80 2½
" " pref.100	2,503,380	semi-an	Aug.'82 3½
Dubuque&Sioux C'y*100	5,000,000	semi-an	Oct. '82 3
East Pennsylvania*., 50	1,709 550	semi-an	July '82 3
East Mahanoy*..... 50	392,950	semi-an	July '82 3
Eastern (N. H.)..... 50	492,500	semi-an	June'82 2¾
Eel River..... 100	3,000,000	q'arterly	Sept. '82 $1
Elmira, Jef.&Canand*100	500,000	annual	Sep. '80 5
Elmira&Williamsp't* 50	500,000	semi-an	May '82 1½
" " pref. 50	500,000	semi-an	July '82 3½
Erie and Pitsburg*.. 50	1,998,400	q'arterly	June '82 1¾
Evansville & Terre H.100	100,000	semi-an	Nov.'81 2
Fitchburg..... ..100	4,500,000	semi-an	July '82 3
F. & P. Marquette pf.100	6,500,000	semi-an	July '82 3
Ft.W. & Jackson pref.100	2,000,000	.....	May '82 2
Georgia. ..... .100	4,200,000	q'arterly	July '82 2½
Granite 100	1,250,000	semi-an	July '82 3
Han. & St. Jo. pref .100	5,083,024	semi-an	Aug. '82 3½
Harriabg&Lancaster 50	1,182,500	semi-an	July '82 3½
Housatonic pref. ...100	1,180,000	q'arterly	Oct. '82 2
Illinois Central.....100	39,000,000	semi-an	Sept. '82 3½
Ia.Falls & Sioux City*100	4,623,500	q'arterly	Sept. '82 1¾
Iowa B. Land Co....100	7,620,000	q'arterly	Aug. '82 1
Jeffersonv. Mad.&Ind100	2,000,000	q'arterly	May '82 1¾
Joliet and Chicago*..100	1,500,000	q'arterly	June'82 1¾
Kan.C., Ft.S.&Gulf....100	4,000,000	.....	Feb. '82 2
" " pref..100	2,750,000	semi-an	Aug. '82 4
Kentucky Central...100	500,000	semi-an	June'81 1
" " pref..100	5,583,500	semi-an	June'83 1
Lake Shore&Mich.So.100	49,466,500	q'arterly	Nov. '82 2
" (guar.)100	533,500	semi-an	Aug. '82 5
Lawrence*..... 50	450,000	q'arterly	July '82 2
Lehigh Valley..... 50	27,496,895	q'arterly	Oct. '82 2
pref. 50	106,300	q'arterly	Oct. '82 2

Marked thus(*)are leased roads.	Stock out-standing.	Divide'd Periods.	Last Dividend Payable.
Little Miami..... 50	4,637)300	q'arterly	Sept. '82 2
Little Rock & Ft. S..100	4,096,135	.....	July' 81 10F
Little Schuylkill*.. . 50	2,646,100	semi-an.	July '82 3½
Long Island..... 50	10,000,000	q'arterly	Nov. '82 1
Louisville & Nashv..100	19,130,913	semi-an.	Feb. '82 3
Lowell & Andover...100	500,000	semi-an.	Jan. '82 3½
Lykens Valley.....100	600,000	q'rterly.	Oct.' 81 2½
Manchester & Law...100	1,000,000	semi-an.	May '82 5
Manhattan 100	13,000,000	.....	.....
" " 1st pref.100	6,500,000	q'rterly.	Oct. '82 1½
" " 2d pref.100	6,500,000	q'rterly.	Oct. '82 1½
Marietta& Cincinnati 50	1,386,250	.....	.....
" " 1st pref 50	8,105,600	semi-an.	Sep. '66 3F
" " 2d pref 50	4,440,000	semi-an.	Sep. '66 3F
Marq.Hont.&Ont.pf...100	2,259,026	.....	Aug. '82 4
Massawippi*..... 100	400,000	semi-an.	Aug. '82 3
Metropolitan 100	6,500,000	q'rterly.	Oct. '82 1½
Michigan Central....100	18,738,204	q'rterly.	Aug.'81 1
Middlesex Central...100	280,000	semi-an.	Aug.'82 3
Mill Creek&Minehill* 50	323,000	semi-an.	July '82 5
M.Hill& Schuyl.Hav* 50	4,022,500	semi-an.	July '82 2½
Missouri Pacific.....100	28,169,800	q'rterly.	Oct. '82 1½
Mobile&Montgomery100	3,022,517	semi-an.	Feb. '82 2½
Morris and Essex.... 50	15,000,000	semi-an.	July '82 3½
Mt Carbon&PtCarbon 50	282,350	semi-an.	July '82 6
Nashua and Lowell..100	800,000	semi-an.	July '82 4
Nashua & Rochester.100	1,305,800	semi-an.	Oct. '82 1½
Nashv. & Decatur...100	1,827,000	semi-an.	June'81 3
Nash.,Chat.&StLouis 25	6,670,325	semi-an.	Apl. '82 1½
Naugatuck.....100	2,000,000	semi-an.	July '82 5
Nesquehoning Val'y* 50	1,200,000	semi-an.	Sept.'82 3
N.Castle&Beaver Val* 50	600,000	q'rterly.	Oct. '81 —
NewLondonNorth'n*100	1,500,000	q'rterly.	July '82 1½
N. Y. Cen. & Hud. R.100	89,428,330	q'rterly.	Oct. '82 2
N. Y. and Harlem....100	7,950,000	q'rterly.	July '82 4
" " pref.100	1,500,000	q'rterly.	July '82 4
" City Line.. —	....	annual	Apl. '82 3
N.Y.,LakeErie&West.100	77,083,000	.....	.....
" " pref.100	8,156,825	.....	Jan. '82 6
N. Y., N. H. & Hart..100	15,500,000	semi-an.	Jan. '82 5
N. Y., Prov. & Boston100	3,000,000	q'rterly.	Aug. '82 2
Niag.Bridg&Canand*100	1,000,000	semi-an.	July '81 3
North Carolina*.....100	3,000,000	semi-an.	Sep. '81 3
" " pref.100	1,000,000	semi-an.	Sep. '81 3
N. Eastern (S.C.) pref100	86,000	semi-an.	May '81 4
Norfolk & Western pref.	15,000,000	q'rterly.	Sept. '82 $1
North Pennsylvania. 50	4,527,150	q'rterly.	Aug. '82 1¾
Northern Central.... 50	6,142,000	semi-an.	July '82 3
Northern N. Hampsh100	3,068,400	semi-an.	June'82 3
Northern N. Jersey*.100	1,000,000	semi-an.	July '80 2½
Norwich&Worcester*100	2,604,400	semi-an.	July '82 5
Ohio and Miss. pref..100	4,030,000	semi-an.	Mar.'75 3½
Old Colony.....100	7,333,800	semi-an.	July '82 3½
Oregon R'way&Nav.100	6,000,000	q'rterly.	Aug. '82 2
Oswego & Syracuse..100	1,320,400	semi-an.	Aug.'81 4½
Panama..... 100	7,000,000	.....	July '82 6½
Paterson & Hudson*.100	630,000	semi-an.	July '82 4
Paterson & Ramapo.100	248,000	semi-an.	July '82 4
Pember.&Hightst'n*. 50	342,150	semi-an.	Jan. '82 3
Pennsylvania..... 50	77,672,750	semi-an.	May '82 4
Pennsylvania Co..... 50	20,000,000	semi-an.	June'81 2½
Peoria & Bureau Val*100	1,200,000	semi-an.	Feb. '82 4
Philadelphia & Erie*. 50	7,013,700	semi-an.	.....
" " pfd 50	2,400,000	semi-an.	Jan. '75 4
Phil,Ger.&Norrist'n* 50	2,231,900	q'rterly.	Sept.'82 3
Phil. and Reading... 50	32,726,375	q'rterly.	Jan. '76 2½
" " pref. 50	1,551,800	q'rterly.	July '76 3½
Phila. and Trenton..100	1,250,100	q'rterly.	Oct. '82 2½
Phila., Wil. and Balt. 50	11,585,750	semi-an.	July '82 4
Pittsb. Ft. W. & Chi.*100	19,714,285	q'rterly.	Oct. '82 1¾
" Special Imp..100	6,770,900	q'rterly.	Oct. '82 1¾
Pittsfield&N.Adams..100	450,000	semi-an.	July '82 2½
Portl., Saco & Portsm100	1,500,000	semi-an.	July '82 3
Providence & Worces.100	2,000,000	semi-an.	July '82 3
Rensselaer& Saratog.*100	7,000,000	semi-an.	July '82 4
Rhode Island& Mass.100	100,000	.....	Jan. '81 3
Richmond& Danv...100	3,866,000	q'rterly.	Aug. '82 2
Richmond & Petersb100	1,009,300	semi-an.	Jan. '81 3
Roch.&Genesee Val.*100	555,200	semi-an.	July '82 3
Rutland preferred.. 100	4,000,000	semi-an.	Sept. '82 1
St.L., Alt. & T.Haute. 100	2,300,000	.....	.....
" " pref.100	2,468,406	.....	May '82 3
St.L.&S.Fran.1st pref100	4,500,000	.....	Aug. '82 3½
St.L., I.Mt.&South'n.100	21,459,027	semi-an.	Feb. '74 3
St.L.,Jac'ville & Chic.100	1,293,000	.....	Aug. '82 4½
" " pref.100	1,034,000	.....	Aug. '82 4½
St. P. & Duluth pref.100	4,705,000	q'rterly.	June'82 1½
St. P., Minn. & Man..100	20,000,000	semi-an.	Aug. '82 3½
Schuylkill Valley*... 50	576,050	semi-an.	July '82 2½
Seaboard & Roanoke.100	1,229,600	semi-an.	May '82 5
Shamokin V.&Pottsv 50	669,450	semi-an.	Feb.'82 3
Shore Line*.....100	1,000,000	semi-an.	July '82 4
Sioux C.&Pacific pref100	160,000	semi-an.	Oct. '82 3½
South Br. (N. J.)*....100	438,300	semi-an.	Jan. '82 3
South Western (Ga.)*100	3,892,300	semi-an.	Dec. '81 3½
Stockbridge&Pitts.*.100	448,700	semi-an.	Oct. '81 1½
Syr.,Bingham&N.Y.*100	2,500,000	semi-an.	Feb. '81 2
Terre Haute & Ind...100	1,088,150	semi-an.	Aug. '82 4
Troy and Boston....100	1,609,000	semi-an.	Feb. '80 2
Union Pacific. 100	61,000,000	q rterly.	Oct. '82 1¾
United Cos of N. J.*.100	20,490,000	q'rterly.	Oct. '82 2½
Utica, Shenango&S V100	4,000,000	semi-an.	Nov.'81 3
Utica and Black Riv.100	1,772,000	semi-an.	Mar.'82 2
Vermont and Mass. 100	3,050,000	semi-an.	Oct .'82 3
Wab. St.L.&Pac.pref.100	22,615,100	q'rterly.	Nov.'81 1½

Marked thus(*)are leased roads.	Stock out-standing.	Divide'd Periods.	Last Dividend Payable.
Ware River*.....100	750,000	semi-an.	July '82 3
Warren (N. J.)..... .100	1,800,000	semi-an.	Apl. '82 3
Warwick Valley.....100	340,000	semi-an.	July '82 2½
Westchest&Phil.pref100	821,300	semi-an.	July '80 2
West Jersey..... ...100	1,350,750	semi-an.	Sept. '82 3
Wilmingt'n&Weld'n.100	1,456,200	semi-an.	July '82 3
Wil., Col., & Aug 100	960,000	semi-an.	July '82 3
Winchester&Toto'c.*100	180,000	semi-an.	July '82 3
Winchester&Strasb.*100	74,700	semi-an.	July '82 8
Worcester & Nashua. 75	1,789,800	semi-an.	July '82 1½
HORSE-POWER R. R.			
Albany City.....100	200,000	annual	.....'80 5½
Baltimore City..... 25	1,000,000	semi-an.	Oct. '82 3
Balt.,Cat.&Fl.Mills..100	....	semi-an.	July '82 2
FleeckerSt.&Ful.Fy.100	600,000	semi-an.	July '82 ¾
Boston&Chelsea pref. 50	110,000	semi-an.	Oct. '82 3
Broadway (Brooklyn)100	250,000	q'arterly	Oct. '82 6
B'way&7th Av.(N.Y.)100	2,100,000	q'arterly	Oct, '82 2
B'klyn&Hunter's Pt.100	400,000	semi-an.	Oct. '82 6
Brooklyn City..... .100	2,000,000	q'arterly	Aug. '82 3½
Bushwick (Brooklyn)100	300,000	semi-an.	Oct. '82 6
Can bridge..... ...100	600,000	q'arterly	Oct. '82 4½
Cen.Park,N.& E.Riv.100	1,800,000	q'rterly.	Oct. '82 6
Christopl.t&TenthSt100	650,000	semi-an.	Aug. '82 2½
Citizens' (Phil.)..... 50	102,500	q'rterly.	Jan. '82 2½
Citizens' (Phg.)... .. 50	200,000	annual..	.....'80 14½
Coney Island&Phlyn100	500,000	semi-an.	Oct. '80 5
Continental (Phil.).. 50	580,000	semi-an.	July '82 6
D.Dock,E.B'way&Bat100	1,200,000	q'arterly	Aug.'82 4
Eighth Av. (N. Y.)..100	1,000,000	q'rterly.	Oct. '82 3
42d St. & G. St. Ferry100	747,000	semi-an.	May '82 6
Frankf.&Southw (Ph) 50	600,000	q'rterly.	Oct. '82 6
Germantown, (Ph.).. 50	572,800	q'rterly.	Oct. '82 2¾
Girard College (Ph.) . 50	500,000	semi-an.	July '71 3
Grand St. & Newton..100	170,091	semi-an.	July '81 2½
Green&Coates St.(Ph) 50	150,000	q'rterly.	Oct. '82 3
Heston,Mantua&F'm 50	200,381	semi-an.	Jan. '75 4
Highland.....100	600,000	semi-an.	July '82 4
Lomb.&SouthSts(Ph) 25	105,000	semi-an	Oct. '75 4
Lynn and Boston....100	200,000	semi-an.	May '82 4
Malden and Melrose.100	165,000	... ...	.....
Metropolitan (Bost.). 50	1,500,000	semi-an.	July '82 4
Middlesex (Boston)..100	650,000	semi-an.	May '82 2½
N.Y.,Bay Ridge&Jam100	150,000	.....	Oct. '78 7
Ninth Av. (N. Y.)....100	707,320	.....	... ...
Orange & Newark.... 100	282,555	.....	.....
People's (Phila.) pref. 25	124,744	.....	July '82 2
Philadelphia City.... 50	475,000	semi-an	July '82 4
Phila. and Darby.... 20	200,000	semi-an.	July '81 3½
Phila.&Grey's Ferry. 50	208,000	semi-an.	Jan. '82 6
Phg.Alleg.&Manch'r. 50	200,000	q'rterly.	Oct. '81 3
Ridge Avenue (Ph.).. 50	420,000	semi-an.	Oct. '81 11
Second Avenue (N.Y.)100	1,100,800	semi-an.	July '82 4
Second&ThirdSt.(Ph) 50	771,076	q'rterly.	Jan. '82 4½
17th &19th sts (Ph.).. 50	250,000	semi-an.	July '81 3
Sixth Avenue (N. Y.)100	750,000	semi-an.	May '82 5
Somerville (Boston).100	112,000	semi-an.	May '82 3
South Boston..... . 50	600,000	semi-an.	July '82 4
Third Avenue, N. Y..100	2,000,000	q'rterly.	Aug '82 5
13th and 15th sts..Ph 50	334,520	q'rterly.	Jan. '82 4
23d street, N. Y..... 100	600,000	semi-an.	Aug.'82 4
Union, Boston.....100	374,200	semi-an.	Jan. '82 4
Union, Phila..... 50	1,005,000	semi-an.	Jan. '82 7
West Philadelphia... 50	750,000	semi-an.	July '77 10
CANALS.			
Chesapeake and Dela 50	2,078,028	semi-an.	June'75 2
Delaware Division... 50	1,633,350	semi-an.	Aug. '82 $1
Delawa. and Hudson100	20,000,000	q'rterly.	Sept. '82 1¾
Delaware & Raritan*.100	5,847,400	q'rterly.	Oct. '82 2½
Lehigh Coal and Nav 50	11,204,250	semi-an.	June'82 2
Monongahela Nav... 50	1,004,500	semi-an.	July '82 $3
Morris, consolidated.100	1,025,000	semi-an.	Aug. '82 2
" preferred.....100	1,175,000	semi-an.	Aug.'82 5
Pennsylvania..... 50	4,501,200	.....	.....
Schuyl. Nav., com.*. 50	850,100	annual..	Oct.'82 50c.
" " pref... 50	3,200,000	annual..	Oct. '82 $1
MISCELLANEOUS.			
Adams Express.....100	12,000,000	q'rterly.	Sept.'82 2
American Express... 50	18,000,000	semi-an.	July '82 3
Amoskeag Manuf.Co.100	3,000,000	semi-an.	June'81 5
Calumet&HeclaMin'g 25	100,000	S. q'rterly.	Nov. '82 $5
Central Mining Co....100	.....	semi-an.	Feb.'82 2½
Consolidation Coal..100	10,250,000	semi-an.	Jan. '82 2
George's Creek C.&I.100	....	semi-an.	Jan. '82 3
Maryland Coal.....100	4,400,000	semi-an.	Feb. '76 1½
Mariposa L. &Mining100	10,000,000	..... .	.....
" pref100	5,000,000	..... .	.....
Missouri Val.LandCo100	200,000	semi-an.	July '82 12
National Tube Works100	1,000,000	q'rterly.	Oct. '82 3
Pac. Mail Steamship.100	20,000,000	q'rterly.	Sept.'69 3
Pennsylvania Coal. . 50	5,000,000	q'rterly.	Aug. '82 3
Pullman Palace Car..100	10,032,800	extrs.	Sept.'82 1½
Quicksilver, com.....100	5,708,700	..... .	May '82 0.4
" pref....100	4,201,200	..... .	May '82 6
Quincy Mining Co.... 25	40,000 shs	semi-an.	Aug. '82 $5
Quincy R. R. Bridge.100	1,750,000	semi-an.	July '82 5
SiouxC.&I.F.L.&L.Co100	500,000	semi-an.	June'82 5
Spring Mt. Coal..... 100	1,500,000	semi-an.	June'82 1
Topeka Equip'nt Co.100	255,500	semi-an.	Oct. '82 5
United States Ex.... 100	7,000,000	q'rterly.	Aug. '82 1
Wells-Fargo & Co. Ex100	56,250,000	semi-an.	July'82 4
Western Union Tel..100	80,000,000	q'rterly.	Oct. '82 1½

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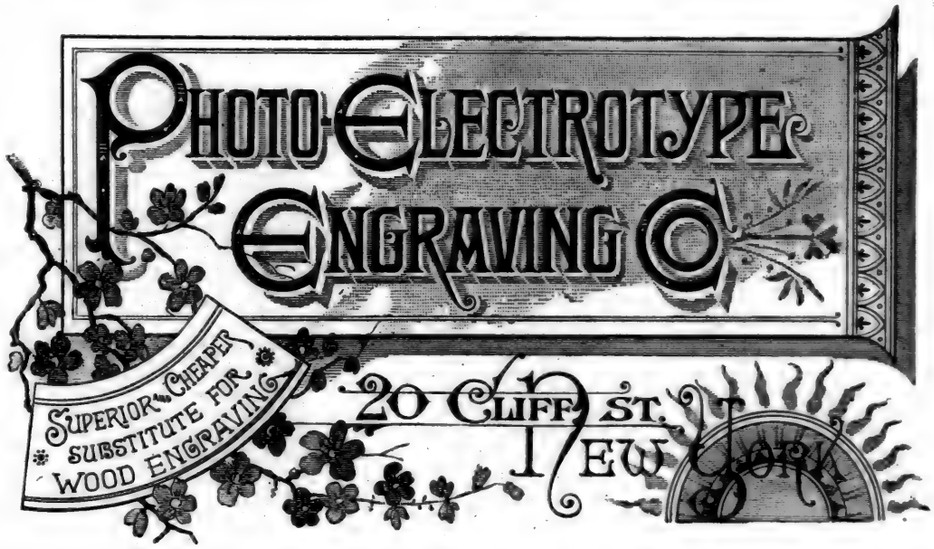
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RAILROAD EARNINGS.—MONTHLY.

	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total.
BURL., CEDAR RAP. & NORTHERN:													
1880	184,316	165,170	188,325	141,652	149,504	153,378	143,432	160,160	179,804	204,991	189,330	193,419	2,053,484
1881	167,750	124,510	148,551	184,680	165,630	205,912	174,351	209,112	221,801	221,748	203,880	232,812	2,259,037
1882	252,823	225,631	224,107	178,304	199,278	211,257	198,276	224,921	261,439	.....	.....	.....	.....
CENTRAL PACIFIC:													
1880	1,200,615	1,070,487	1,373,438	1,356,716	1,778,488	1,724,950	1,840,067	1,973,438	1,994,997	1,120,229	2,199,466	1,905,221	20,508,113
1881	1,602,907	1,454,218	1,709,638	1,872,370	2,091,411	2,159,382	1,899,346	2,088,519	2,185,303	2,507,857	2,297,971	2,225,179	24,094,101
1882	1,839,469	1,720,675	1,969.737	2,054,687	2,342,298	2,229,105	2,020,000	2,277,000	2,474,000	.....	.....	.....	.....
CHESAPEAKE AND OHIO:													
1880	202,335	198,681	222,762	221,559	199,443	214,352	238,236	259,110	247,303	211,820	240,795	218,009	2,674,308
1881	162,540	184,389	228,479	227,343	252,235	241,135	225,096	262,858	247,144	237,303	235,585	203,562	2,702,762
1882	210,455	209,708	208,981	267,454	255,939	260,753	306,831	371,175	305,065	.....	.....	.....	.....
CHICAGO AND ALTON:													
1880	534,054	497 013	626,473	542,961	616,128	617,524	708,906	761,120	767,349	785,199	696,776	574,695	7,718,198
1881	487,890	461,641	529,915	558,190	548,556	635,860	676,205	769,751	774,790	750,359	680,133	635,307	7,553,988
1882	579,447	530,480	584,483	561,787	553,412	613,886	671,537	800,624	881,109	.....	.....	.....	.....
CHICAGO AND NORTHWESTERN:													
1880	1,154,632	1,131,683	1,361,725	1,294,573	1,875,608	1,671,177	1,699,686	1,767,938	2,020,245	2,105,217	1,855,671	1,477,902	19,416,007
1881	1,240,667	963,208	1,178,795	1,474,612	1,879,006	2,306,640	1,983,031	2,315,164	2,292,676	2,341,097	2,019,037	1,855,476	21,849,209
1882	1,620,336	1,471,945	1,696,568	1,634,819	2,058,133	2,022,700	2,025,736	2,099,755	2,497.053	.....	.....	.....	.....
CHICAGO, BURLINGTON AND QUINCY:													
1880	1,432,740	1,411,870	1,732,518	1,489,894	1,909,627	1,682,956	1,773,643	1,834,321	1,862,285	1,934,762	1,837,860	1,552,018	20,454,494
1881	1,307,948	1,034,821	1,418,149	1,574,371	1,679,455	2,083,803	1,888,358	2,173,945	2,262,981	2,031,001	1,816,133	1,905,490	21,324,150
1882	1,658,834	1,457,300	1,566,217	1,530,838	1,505,261	1,437,164	1,625,006	.....	.....	.....	.....	.....	.....
CHICAGO, MILWAUKEE AND ST. PAUL:													
1880	764,298	738,749	900,675	871,041	1,134,745	1,037,958	1,026,708	991,297	1,257,677	1,493,620	1,472,037	1 397,308	13,086,119
1881	990,847	682,717	916,989	1,259,946	1,538,491	1,729,811	1,568,706	1,678,361	1,644,676	1,590,000	1,569,000	1,855,000	17,025,462
1882	1,435,000	1,377,000	1,561,000	1,518,000	1,629,000	1,620,000	1,465,000	1,545,000	1,950,000	.....	.....	.....	.....
CHICAGO, ST. PAUL, MINNEAPOLIS AND OMAHA:													
1880	193,827	173,078	259,783	259,208	232,146	218,093	236,995	251,013	300,833	342,052	342,894	312,173	3,122,097
1881	257,786	158,594	251,648	261,211	350,124	404,562	383,202	385,586	373,370	382,714	380,733	391,950	3,981,296
1882	307,498	315,100	405,779	356,558	406,420	363,109	331,480	394,555	483,462	.....	.....	.....	.....
CINCINNATI, INDIANAPOLIS, ST. LOUIS AND CHICAGO:													
1880	155,697	172,541	198,220	168,199	186,995	200,332	204,138	233,478	343,627	239,881	209,014	198,254	2,412,185
1881	182,523	171,511	191,005	183,710	191,096	192,299	177,161	229,858	228,653	212,606	194,805	192,623	2,296,916
1882	200,042	186,879	208,066	204,269	199,110	195,948	209,564	.....	259,379	.....	.....	.....	.....
DENVER AND RIO GRANDE:													
1880	124,759	126,922	160,883	164,882	193,925	295,455	373,132	400,133	406,583	473,318	408,562	349,196	3,478,007
1881	307,476	317,681	398,493	433,111	514,767	584,230	548,284	606,193	589,287	665,686	566,819	643,417	6,206,812
1882	491,914	412,987	535,055	559,917	614,298	537,462	495,797	574,040	595,306	.....	.....	.....	.....
HANNIBAL AND ST. JOSEPH:													
1880	176,079	166,965	216,061	206,735	191,317	179,396	224,312	238,081	233,448	242,214	207,147	279,635	2,561,366
1881	154,401	122,874	176,356	190,812	172,950	190,740	201,899	210,240	215,103	313,433	201,782	180,376	2,230,961
1882	138,284	154,717	168,798	148,913	154,917	155,030	184,347	258,628	239,196	.....	.....	.....	.....
ILLINOIS CENTRAL:													
1880	595,212	613,806	613,008	535,732	665,120	681,736	724,095	732,755	806,836	880,211	783,120	673.182	8,304,812
1881	631,281	524,499	557,789	662,493	673,259	803,887	720,004	868,407	828,847	815,238	737 218	763,475	8,586,397
1882	728,173	689,387	695,371	674,603	674,749	663,746	752,251	813,600	828,238	.....	.....	.....	.....
INDIANA, BLOOMINGTON AND WESTERN:													
1880	80,498	89,690	116,185	90,374	85,733	106,954	103,438	116,732	110,622	121,343	96,621	104,619	1,233,079
1881	90,283	83,261	192,085	203,677	200,064	199,846	199,125	272,114	247,932	181,674	160,826	156,697	.....
1882	195,824	175,755	206,235	205,934	182,554	186,133	206,072	278,814	273,100	.....	.....	.....	.....
LOUISVILLE AND NASHVILLE:													
1880	674,455	575,035	612,593	563,883	655,014	976,229	772,537	827,088	931,910	1,000,326	953,086	949,184	9,491,346
1881	816,960	805,124	947,959	850,862	828,726	1,227,885	817,135	876,192	951,566	1,002,950	1,065,223	1,122,285	11,326,859
1882	950,065	960,036	1,073,745	950,007	946,435	1,187,385	1,038,385	1,030,385	1,107,985	.....	.....	.....	.....
MOBILE AND OHIO:													
1880	250,116	204,094	168,301	140,091	129,249	121,855	131,621	140,593	184,246	264,714	251,368	287,373	2,373,621
1881	224,347	216,768	230,916	163,551	145,803	136,517	135,548	160,789	210,262	252,921	252,434	262,025	2,406,437
1882	161,433	158,154	152,651	145,272	137,645	132,572	136,398	140,443	160,030	.....	.....	.....	.....
NASHVILLE, CHATTANOOGA AND ST. LOUIS:													
1880	205,633	191,154	169,457	155,466	158,839	144,155	151,594	169,326	167,473	178,266	182,087	175966'	2,049,484
1881	178,143	190,866	207,710	183,525	104,430	154,549	150,430	168.317	179,979	172,121	152,059	173,127	2,075,256
1882	156,994	159,961	161,005	154,155	137,645	119,074	160,991	1,030,385	.....	.....	.....	.....	.....
NEW YORK AND NEW ENGLAND:													
1880	164,232	149,907	183,845	179,689	183,701	219,891	205,056	249,885	235,642	215,491	210,856	198 108	2,396,302
1881	189,749	173,614	212,019	216,913	217,185	231,518	246,821	280,524	299,573	261,199	242,412	237,729	2,809,255
1882	213,840	217,261	265,222	263,544	283,244	290,060	308,920	353,726	338,490	.....	.....	.....	.....
NEW YORK, LAKE ERIE AND WESTERN:													
1879	1,147,173	1,207,391	1,356,780	1,372,755	1,350,574	1,230,419	1,273,533	1,450,223	1,492,497	1,713,697	1,515,835	1,398,224	16,509,127
1880	1,296,381	1,252,218	1,644,958	1,643,151	1,592,544	1,661,812	1,580,976	1,606,874	1,786,417	1,899,910	1,799,338	1,726,788	19,149,361
1881	1,443,437	1,425,765	1,847,261	1,709,057	1,776,891	1,794,982	1,787,081	1,772,895	1,734,200	.....	.....	.....	.....
NORTHERN CENTRAL:													
1880	334,494	330,860	415,325	386,130	329,788	419,193	450,298	453,923	464,093	512,918	459,054	494,310	5,050,387
1881	386,157	382,657	452,906	487,273	465,588	487,287	440,811	498,008	429,565	449,664	487,160	476,622	5,443,697
1882	407,368	413,551	430,194	435,129	482,607	482,762	509,683	667,488	.....	.....	.....	.....	.....
NORTHERN PACIFIC:													
1880	81,390	77,259	119,357	185,700	217,613	253,105	241,277	223,500	330,300	358,456	300,822	220,993	2,629,710
1881	116,508	78,803	162,984	216,210	312,705	412,024	393,260	434,085	534,363	565,485	428,903	434,331	4,044,576
1882	239,800	269,000	384,000	438,000	568,332	631,342	679,240	727,377	789,700	.....	.....	.....	.....
PHILADELPHIA AND ERIE:													
1880	224,307	245,372	327,678	334,947	311,470	331,024	308,699	347,532	322,737	367,082	324,966	281,919	3,727,733
1881	224,303	225,501	285,573	293,323	343,792	350,585	291,669	303,849	276,522	292,392	284,078	282,772	3,454,309
1882	252,727	246,246	265,311	277,851	341,415	347,614	377,206	420,329	.....	.....	.....	.....	.....
ST. LOUIS AND SAN FRANCISCO:													
1880	198,091	195,948	193,146	176,164	167,664	173,607	213,297	259,995	280,873	328,194	290,329	226,063	2,698,371
1881	212,435	178,234	262,050	265,298	283,399	260,254	252,333	286,373	279,064	308,569	284,320	287,914	3,160,245
1882	256,784	244,654	274,959	242,806	253,419	240,177	318,613	381,637	336,805	.....	.....	.....	.....
ST. LOUIS, ALTON AND TERRE HAUTE:													
1880	153,139	163,737	168,994	155,462	147,928	150,207	191,077	216,759	204,295	221,863	188,773	184,503	2,146,741
1881	175,725	166,012	201,137	197,447	172,177	165,896	165,393	189,180	196 368	179,921	162,544	153,852	2,112,801
1882	168,987	149,619	178,145	157,450	162,842	142,742	192,017	236,137	217,659	.....	.....	.....	.....
ST. LOUIS, IRON MOUNTAIN AND SOUTHERN:													
1880	555,983	490,195	451,560	408,241	349,053	363,454	432,655	565,869	671,219	688,365	632,052	656,951	6,265,597
1881	570,957	560,791	704,002	548,300	479,075	474,302	533,512	644,386	708,325	719,239	687,280	709 498	7,319,744
1882	516,370	501,127	585,008	581,977	519,120	529,700	515,519	675,981	724,168	.....	.....	.....	.....
ST. PAUL, MINNEAPOLIS AND MANITOBA:													
1880	180,239	137,645	261,798	333,014	281,899	243,407	272,089	232,579	274,188	345,057	300,675	297,641	3,160,231
1881	254,187	159,482	320,962	425,685	382,642	405,322	387,488	414,954	485,736	605,708	508,530	528,262	4,878,960
1882	395,461	418 358	531,004	570,890	858,902	856,417	853,296	801,759	832,776	.....	.....	.....	.....
TEXAS AND PACIFIC:													
1880	245,785	219.165	215,070	174,177	141,083	153,066	195,711	226,073	266,570	303,666	312,184	301,858	2,754,408
1881	281,176	260,781	319,928	295,066	281,782	285,105	328,063	381,331	345,790	578,668	357,724	381,218	3,921,569
1882	310,785	255,644	332,911	359,543	409,228	384,713	367,215	439,918	470,613	.....	.....	.....	.....
UNION PACIFIC RAILWAY:													
1880	1,433,636	1,393,992	1,730,509	1,937,220	2,027,269	1,928,528	1,934,215	1,913,035	2,270,179	2,707,860	2,251.148	1,869,335	23,448,445
1881	1,339,799	1,374,740	1,674,860	1,766,894	2,319,238	2,884,774	2,528,826	2,638,659	2,844,357	3,289 350	2,773,608	2,267,004	27,451,831
1882	1,961,088	1,759,863	2,226,832	2,462,004	2,491,590	2,508,453	2,301,000	2,762,107	2,949,112	.....	.....	.....	.....
WABASH, ST. LOUIS AND PACIFIC:													
1880	776,790	759,451	978,629	892,024	948,773	953,468	1,966,742	1,189,478	1,178,950	1,501,203	1,131,787	1,050,816	12,428,112
1881	811,617	818,922	1,121,592	1,023,482	1,144,660	1,308,993	1,131,752	1,542,838	1,490,027	1,396,300	1,399,555	1,328,278	14,461,570
1882	1,220,965	1 134 768	1,315,776	1,378,194	1,204,864	1 149 687	1 418,837	1,772,544	1,682,382	.....	.....	.....	.....

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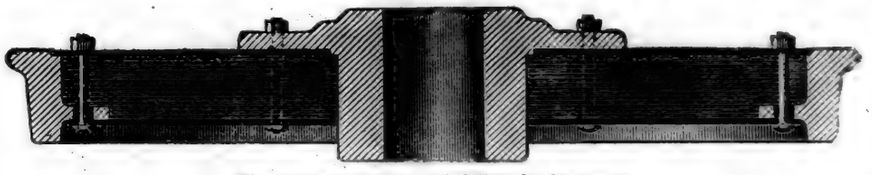
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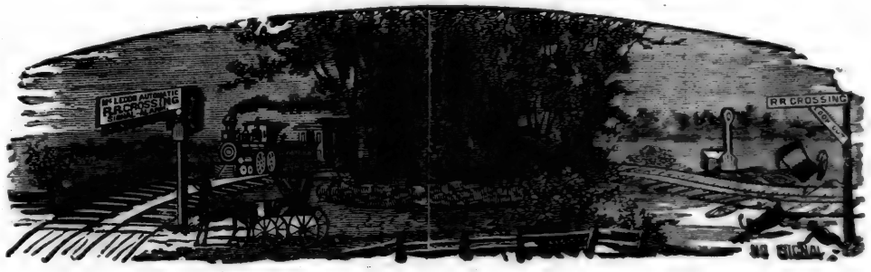


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OUR BOSTON LETTER.

[From Our Special Correspondent.]

In accordance with the promise of his last letter, the JOURNAL man again sallied forth to finishing the Railroad part of the New England Manufacturers' and Mechanics' Institute Fair, in order that the JOURNAL might retain its ancient reputation of always keeping its word. One of the first exhibits fallen in with was the Cooper Patent Cushions and Steel Wheels, manufactured by the Boston Standard Wheel Company, who have a creditable display in the further gallery from the entrance. They manufacture an easy-riding wheel warranted to run 500,000 miles. The body of it is made of the best car wheel iron in one piece, and is provided with a recess, upon its outer rim, of sufficient depth and width to receive a corresponding projection on the inside of the tire, leaving between the wheel and tire ample space for the rubber cushion. The tire is made of steel, and is so shaped on the inside as to correspond to the shape of the outer rim of the wheel. The tire is expanded by heat and put upon the wheels; it cools as it contracts, and wheel and tire fit together inseparably. After this is done rubber, prepared by vulcanizing, is forced in by a hydraulic pressure of several hundred tons. This being done, the wheel is complete. This combination of a steel tire and a rubber combination between it and the wheels make the running of a car wear much less on the rail, and makes it run easily. It is a very good thing and over 1,000 of them are now in use, and several prominent railroad men recommend them from experience. Directly under this exhibit is a Brayton Petroleum Engine doing good work and at small expense.

Not far from this the writer next fell in with an engine illustrating the practical working of the Siebert Cylinder Oil Cup Company, which have a good thing for oiling the piston-head of an engine while it is working at full speed, which must be a great invention for locomotive uses. By it the steam coming from the boiler passes through a short condensing pipe turning at right angles, and going through a pipe for condensed water, which it drives under the oil in the oil cup, crowding the oil, which is lighter than water, up until it is forced down through a small pipe, whose open top is near the top of the oil cup, from which it passes through a glass tube so that it can be seen to be working all right, and from that it joins the steam and passes with that into the cylinder, keeping the cylinder head and packing constantly moist and in good condition. Quite near this exhibit is that of the Crosby Steam Gauge and Valve Company, with all their inventions, making one of the most interesting exhibits to one fond of mechanics which is to be found in the hall. It is, with the exception of a patent oil cup, essentially a display of record-keeping instruments, by which a man may know all about the steam which is doing his work for him. There is here to be seen an immense assortment of steam gauges, from one the size of a watch to the father of gauges, 37½ inches in diameter. There are water, steam and vacuum ganges, *ad libitum*; engine registers, by which the number of revolutions of a trip are told; a crank index, on which a pointer shows just how far around a crank may be, so all trouble caused by stopping on the center is done away with. Also a steam thermometer for measuring the temperature of steam. This company here show an automatic self-closing glass gauge tube, by the use of which all danger of explosions is obviated, as upon the breaking of the glass the steam is instantly shut off. A new single valve chime steam whistle is also manufactured by this company, which is divided into three chambers, each producing a different tone, having all the effect of the triplex whistle in such common use. They make also the Victory Lubricator, for which they claim great things. This is rather more simple than the Siebert, and the relative merits of the two are warmly discussed, some preferring one and some the other. An improved plain meter and a nicely adjusted instrument called an indicator, for showing what the steam is doing inside of a cylinder, as well as many other inventions, are explained by the gentleman in charge, who must resemble Job of old in the equanimity with which he stands the numerous and oft-times foolish questions which passers-by and reporters put to him.

The Weston Electric Company have just erected a 150 foot tower, outside the main entrance to the fair, and put upon it 16 arc lights of 2,000 candle power each, and it does good service in preventing collisions among the throngs of vehicles and street cars always congregated here. The whole electric display of the fair is one of the best ever held in this country. The Weston, Thompson-Houston and Edison incandescent competing for the honors. The Edison display is very complete, its small lights being found in every room and corner, in chandeliers, student lamps and over desks and machinery, and is pronounced a success by all who stop to examine it. The Weston people have a number of arc lights about the hall, and the Thompson-Houston, of New Britain, Conn., have theirs also. A fine thing about their lamps is a patent automatic governor, so that if one light gets out of order the current will regulate itself to the demand, even lowering from 28 lights to 1, if necessary. The main pulley of their engine had belts 3 deep over it, each of them extended to a different sized wheel on the dynamos. Of course to do this the machines must set in a line and the largest one be furtherest away, saving the use of considerable counter-shafting. The arrangement worked first rate.

Near these machines there was a display of Korting's Jet Apparatus, condensers and injectors, new in design.

The above and my previous letter cover the bulk of the railroad exhibits, under which class the electric lights come, as the time is not far distant when steam cars will be lighted with it, and even now depots and freight yards find it very useful. As regards the remainder of the Fair, it is full of interest and should be visited by all who go to Boston, let their interests be what they may, and they will discover speedily that many things are used in this world about which they had no idea.

CINDERS.

After a silence of six months the New York and Boston Inland Railway comes to the surface again. This time they have submitted papers to the Railroad Commissioners for them to examine and will soon apply to the Legislature for a location in Boston.

At the present time the Eastern Railroad and the Boston, Revere Beach and Lynn Railroad are having a lively fight for business. Bad feeling had been gathering for some time, and now it is so bitter that each road is running for five cents a fare—Boston to Lynn, 9 miles. Each claims that they will hold out, but the Eastern is losing money, while the Boston, Revere Beach and Lynn carried 30,000 people last Sunday.

A new Pullman car which cost $20,000 has been sent here by Mr. Pullman for President Arthur to go to the mountains in. It is very handsome.

The New York Railway line managers are making efforts to reduce the rates on cotton low enough to take the business away from the water lines, who at present take the larger part of it coming to Boston. At a meeting held here last Saturday, the 7th, a friendly agreement was entered into by all concerned, it being to charge lower rates to competing points and higher to others.

The New York and New England Railroad pays its freight conductors an average of $79.25 per month, and the brakemen, $50.88.

The Boston and Providence Railroad is having great success with the Pintisch system of lighting cars. The light is made from crude petroleum, and a tank of 344 feet of gas is fastened under the car. The gas is compressed into this at a pressure of 127 pounds to the inch. From this tubes lead over the car to the gas-burners as in a house. So far it has given universal satisfaction to all who have witnessed it. Other railroad superintendents have been to see it, and its early adoption on the cars of other lines is looked for.

Since my last letter the railroad year in this State has closed, and the auditors are busy getting their accounts ready for the Commissioners October 31st. All roads leading from here report a heavy business and increased earnings for the year ending September 30, 1882.

It is always a reason for great complacency in an individual for him to feel that he is of great use to the traveling public, and that if he should die the world would remain in a state of helpless ignorance and unutterable darkness on account of his untimely end. In a car coming over the Fitchburg Railroad the other day was one of those public nuisances, who felt it to be his duty to read at every station the train stopped, in a loud voice, so as to be heard all over the car, every sign which was in sight, so that his fellow travelers might have a full knowledge of the route. At Lincoln station this useful and kind individual first spelled out the name of the station, then read through the Western Union Telegraph sign, followed by the signs on the doors indicating the gents' and ladies' rooms, after which the lettering of the baggage truck was perused, and the names and numbers of all the freight cars in sight. At this stage the train pulled out into the woods, and there being nothing more of public interest in sight the people in the car had a rest.

"CURTIS."

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We are amply justified in reducing the price from its old time rate of $5.00 per year to $3.00, on account of the numerous indications we are receiving of late of the increased interest that is being taken in the JOURNAL, which warrants us in believing that the sacrifice we make in price will be much more than compensated for by the promised liberal increase in the number of subscribers, it is gratifying to us to know that the alterations made in the Journal during the past year are meeting with such general favor as is expressed in the frequent words of commendation and congratulation sent to us from old and new readers, and we feel called upon to try in every way to merit their approval and to spare no pains to place the paper before as many as possible of those who might derive benefit and profit from it. During its fifty years' experience the JOURNAL has been highly favored by an especially choice class of readers, counting among its subscribers some of the most noted banking houses, commercial bodies, financiers, and railroad men of this country and Europe. Its aim in the future will be to prove itself of more value and interest than ever to its patrons of many years standing, while by its new features it makes itself of service and interest to a broader field and to more varied departments of life and business. We desire to make the JOURNAL as useful and welcome as possible to our readers and advertising patrons, and to this end we hope to have our columns of correspondence, communications and general information full and diversified. The columns we have devoted to general communications have proved especially interesting and popular of late, and we are pleased to have our rraders favor this department with suitable contributions

We give on editorial page our new subscription rates, which are so changed in the belief that it will not only prove acceptable to many who desire to become regular readers of the paper, but that it will meet with the hearty approval of our advertising patrons, who are rapidly filling up the pages offered to them since the improvements in the JOURNAL have been started.

We will send you the "Journal" for three months for $1. Try it, and you will be glad to continue taking it.



SOLE MANUFACTURERS OF

IMPROVED VULCANIZED FIBRE TRACK-BOLT WASHERS,

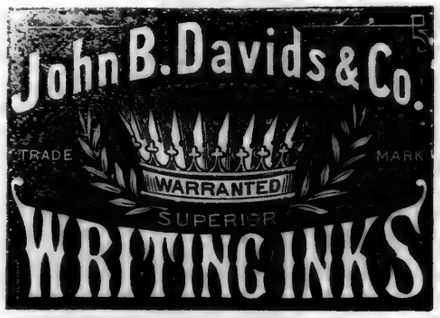
which form non-metalic, permanently elastic compensating cushions, absorbing shocks and vibrations, and absolutely locking the nuts. These Washers have been adopted by a large number of railroads as the cheapest and best device in use. Flexible vulcanized-fibre dust guards and oil box packings, which are absolutely unaffected by oil and grease, are far more durable than leather and much cheaper.

Office and Factory, Wilmington, Del.



THE JENKINS STANDARD PACKING is acknowledged by users as the *Best* in the world. Unlike all other Packings, the **Jenkins Standard Packing** can be made any thickness desired in a joint by placing two or as many thicknesses together as desired, and following up joint it vulcanizes in place and becomes a metal of itself (it is frequently called Jenkins Metal), and will last for years, as it does not rot or burn out. Avoid all imitations, as a good article is always subject to cheap imitations. The **genuine** has stamped on every sheet, **"Jenkins Standard Packing,"** and is for sale by the Trade generally. Manufactured only by

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PROPRIETORS JENKINS PATENT VALVES, PACKING, &c.
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For the preparing of estimates no charge is made, and the applicant is placed under no obligation to transact his advertising business through us unless it appears to him that by doing so he will best advance his own interests.

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RUBBER CLOTHING, LACE LEATHER, BELT HOOKS,

RAILROAD, MINING, AND MILL SUPPLIES.

No. 21 Park Place,
NEW YORK.

NEW INVENTIONS.

Self-Acting Car-Coupling.

THE following is a brief description of the Martin & Dickenson Automatic Car-Coupler, which is one of recent invention. It embraces the addition to the old link and pin (that is universally used), of a ratch block, in which the end of the link is placed before the coupling is ready; also a tumbler on which rests the end of the pin. As soon as the link enters the drawhead the tumbler is thrown out of place, and the pin at once drops through the link and makes the connection. There is also provided an iron rod running across the end of the car and hanging perpendicularly at each end, forming a handle. On the center of this rod is firmly fixed a segment, the grooved edge of which hangs right over the coupling-pin, and a chain, the end of which is attached to the coupling-pin, and passing over the groved segment to which it is firmly fastened, and again to an iron rod running to the top of the car, so it can be coupled or uncoupled from the top or sides of the car and no accident can happen, as the link is always first set at the regular angle, and the brakeman moves out from between the cars before they come together. The coupling is done as quick as thought, and makes the best, safest and simplest automatic freight-car coupling in existence. Patents applied for in all countries. For any further information, terms, etc. address Wm. H. Martin, Mgr., Mobile, Ala.

A New Shaft Coupling.

ALL those having had experience in driving machinery where a constant and perfectly uniform motion is required, know the difficulty of overcoming the unequality of crank motion, especially with cut-off engines, where a long stroke and slow to medium travel of piston are essential to economy; the impetus given by the full pressure of steam in the first quarter of stroke, followed by the lessening pressure toward the end of stroke and ending at O, at the dead center, causes a pulsation which no fly-wheel, however massive, can entirely overcome. This difficulty has caused the use of rigid connections and gearing to be abandoned for the more expensive, and in many respects less effective, use of belting. There has recently been patented in the United States and Canada a Shaft Coupling that entirely overcomes this difficulty.

It consists of a shell having two or more concentive pockets which are filled with rubber. The opposite sections of shell are cut away to allow the arms of the other half of coupling to enter, which said arms radiate from a hub and at their ends are bent concentric with hub, so as to fit into the pockets in shell, and their faces bear on the rubber filling, by the compression of which a large amount of elasticity is obtained, which is taken up and given out as required, relieving the driven machinery entirely from backlash and jerk, which is so destructive not only to the quality of the work but to the machinery itself.

The same device is useful, also, where the work to be done is of an irregular nature, such as Trip Hammers, Rolling Mills, Gang or other Reciprocal Saws, etc., which by their backlash are so destructive to belts and other driving machinery. The coupling when together has a neat and finished appearance, is a perfect lock, has no tendency to end pressure, keeps the opposite ends of shaft concentric, and in all respects is a good, cheap and practical appliance and will prove a great saver in the wear and tear of machinery, belting, etc., besides producing a better quality of work in many instances.

The Patentee is Mr. C. Barber of Meaford, Ont., Canada, who will be happy to supply all information asked for, and fill orders promptly.

Porter's Automatic Car-Coupler.

WE give, in as few words as possible, a description of the Automatic Car-Coupler invented by Mr. A. A. PORTER, of Griffin, Ga.

The device couples both and uncouples automatically. It is equally adapted for long, short and crooked links, any kind in fact, and is intended for use in the common draw-heads. The device contains a spiral spring, nicely encased within it, which, with the aid of a small pin that goes through the neck, or stem, of the drawhead, holds the link adjuster in its place. The pin rests on the link adjuster, and when the car backs up, the link pushes back the adjuster, the pin drops and the coupling is effected. Uncoupling seems to be equally easy. It is provided for by means of a lever in each corner of the car. One of these levers being depressed, the pin is thereby raised and the cars uncoupled. When this has been accomplished the pin rests on the link adjuster ready for recoupling. PORTER'S AUTOMATIC CAR COUPLER is accompanied by the means of detaching a car without stopping the train. This is simply the addition of a cord with eye, and a pulley. The cord is fastened at the end of one of the levers, before mentioned, through the eye, and comes down under a pulley. Pulling the cord uncouples the car without stopping the train.

Dawson's Automatic Car-Coupler.

THIS is the invention of W. J. Dawson, of Lawrence, Kansas. A patent upon it was issued on the 19th ult. Mr. Dawson claims for it, on the authority of many railroad men, that it is the best and simplest device of the kind yet patented. It is described as being cheap, strong and simple, durable as the car itself, and not liable to get out of order, because no spring is used in its construction; it can be applied to every kind of a drawhead now in use. The Dawson coupler has been in actual use on the Union Pacific Railway during several months past, and is attached to some of the caboose cars on the same road. The inventor is willing to allow it to be fully tested on any railroad, and will give a right for its introduction to the first company which adopts it.

Mr. Dawson claims for his coupler that it can be used for coupling with any car not provided with it, because the link can be raised or lowered to enter the drawhead so that its (the drawhead's) height makes no difference. The raising or lowering of the link is effected by the brakeman without his going between the cars, and the same link, pin and drawhead now in use can be continued in use in connection with the new coupler. Dispensing with the use of the hands in coupling, and preventing the possibility of injury to the brakeman, Mr. Dawson believes that, these advantages being taken into account with those already mentioned, his is the best and most economical automatic car-coupler yet invented. He invites any company to test it thoroughly, and will make no charge for the experiment. His address is: "W. J. Dawson, Box 738, Lawrence, Kansas."

Philadelphia and Reading Railroad.

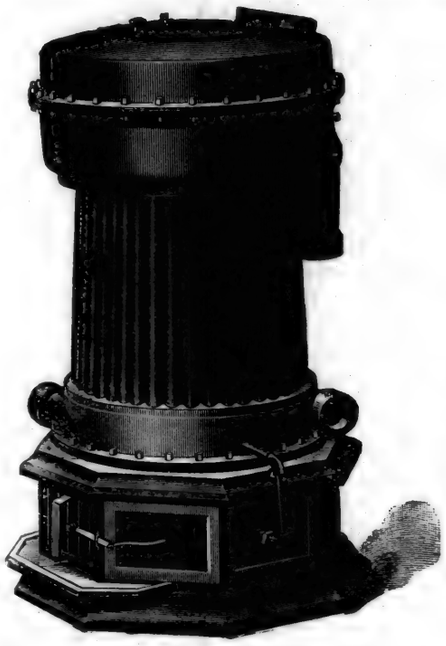
THE Philadelphia *Record*, after referring to the fact that Friday, October 6, was the last day upon which the stock of the Philadelphia and Reading Railroad Company could be registered in order to be eligible for voting purposes at the next election for officers of that company in January next, says:—

"There is at present no organized opposition to Mr. Gowen for the presidency, and it is thought that there will not be. The vote will not be large, and the election, therefore, will be spiritless. Mr. Gowen has been in Europe over four months, engaged in placing his financial schemes, and has been successful in realizing about $8,000,000 on his deferred bonds, with which he has released valuable collateral pledged for floating debt and met interest accounts which were imperative. His 5 per cent consols have not been so successful, and there are rumors coming from reliable sources in Europe that he has absolutely failed in negotiating his loan. His friends, however, state that he has not failed, but is only awaiting better offers than those that have been made him before finally accepting. The absence of organized opposition to his re-election and the prosperity of the road will relieve Mr. Gowen of any anxiety concerning his absence from America, and, according to the statement of his friends, he will probably not return to this city until within the shortest reasonable time before the election, thus gaining opportunity with additional time to present the merits of his consolidated loan. There have been within the past few days some large blocks of the stock of the company transferred to New York account, and to such quarters as to point suspiciously to a sudden opposition to Mr. Gowen, which may not manifest itself until the day of election. It is intimated that the purchases were for Mr. Gould, who has a grievance against Mr. Gowen for the defeat he sustained at the hands of the latter gentleman in the Jersey Central contest. Within the past three days 28,000 shares of Reading stock have been transferred to the account of Mr. Vanderbilt, which is interpreted by many as meaning that that gentleman intends to protect Mr. Gowen in the event of an opposition to his election."

[*Ottawa Free Press, Oct. 4th*, 1882.]

MR. JAMES J. WHITE, of this city, has been appointed to the charge of the Canadian Department of the AMERICAN RAILROAD JOURNAL. Mr. White is an active and thoroughly competent journalist, and will add considerably to the editorial strength of the JOURNAL by his long experience and practical ability.

THE SALMON CAR HEATER



"36 per cent of coal saved and the car kept noticeably warmer!"

by using THE SALMON CAR HEATER.

It Insures Safety from Fire in case of Accident, Economy in Fuel and RAPID CIRCULATION. It heats quickly, is SELF-REGULATING, and can be used for either STEAM OR HOT WATER.

The Water Tubes do not come in contact with the Coals, but occupy the Smoke Flue in such a manner as to absorb the greatest amount of heat from Coal in a low state of combustion without danger of chilling the fire.

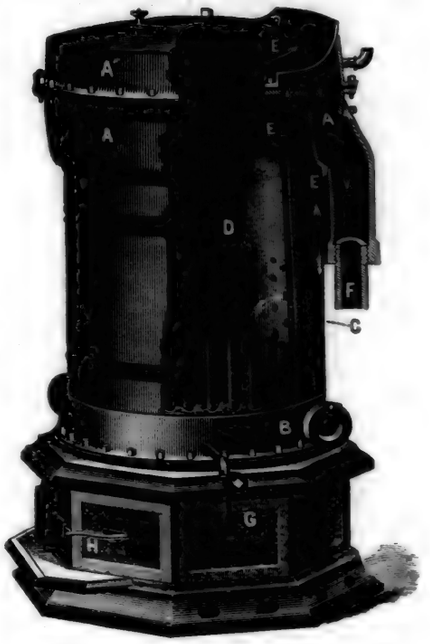
Once filled with coal the fire will last from 24 to 60 hours, according to weather, without replenishing, as proved by actual test.

At the last "Mechanics' Fair" it received the Silver Medal, being the highest award to heaters of any kind.

CORRESPONDENCE SOLICITED.

The Salmon Heater Co.

OFFICE, 35 CONGRESS STREET, BOSTON, MASS.



Established 1863

MOLLER & SCHUMANN

Manufacturers of Fine

COACH AND CAR VARNISHES.

BROOKLYN, N.Y., U.S.A.

STEEL CAR PUSHER

MADE ENTIRELY OF STEEL. ONE MAN with it can easily move a loaded car.

Manufactured by E. P. DWIGHT, DEALER IN RAILROAD SUPPLIES, 407 LIBRARY ST., PHILADELPHIA.

ESTABLISHED IN 1836.

LOBDELL CAR WHEEL COMPANY,

Wilmington, Delaware.

GEORGE G. LOBDELL, *President.*
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P. N. BRENNAN, *Treasurer.*

First-Class English

IRON AND STEEL RAILS

AT LONDON PRICES, F. O. B.

We also purchase all classes of Railroad Securities and negotiate loans for Railroad Companies.

Wm. A. Guest & Co.,
MECHANICS' BANK BUILDING,
Nos. 31 and 33 Wall Street, - New York.

SAFETY RAILROAD SWITCHES,

WITH MAIN TRACKS UNBROKEN.

Railroad Crossings, Frogs, and other Railroad Supplies,

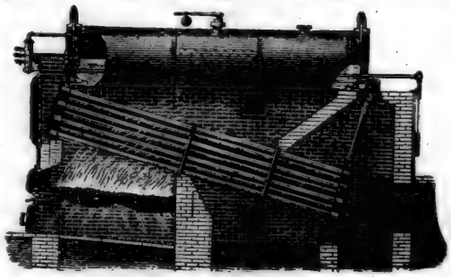
MANUFACTURED BY THE

WHARTON RAILROAD SWITCH CO.,

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Works: 23d and Washington Avenue.
Office: 28 South 3d Street.

WATER TUBE STEAM BOILERS.



THE BABCOCK & WILCOX CO.,
30 Cortlandt St, New York.
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HILL'S IMPROVED TICKET PUNCHES

Were Awarded Gold Medals

At the Melbourne International Exhibition, Australia, 1880, and at Adelaide, 1881.

PATENTED NOV. 7, 1876.



Suitable for any ticket in use.

No. 3 Punches adapted for limited and duplex tickets, also B C ½ and L Punches, six styles; the most perfect and durable in use. Before purchasing, send for descriptive catalogue giving full list.

WARREN HILL, Manufacturer,
232 Friend Street, Boston, Mass.

A FREE GIFT.

Any of our readers who will enclose two 3 cen stamps in a letter to the **Columbus Buggy Co., Columbus O.,** will receive in return a beautifu engraving in colors, representing an **Australian scene,** and their manner of traveling in that country with **Ostriches** as a motor. They **give** this picture (the packing costing six cents) to **all** who may send for it, desiring in this manner to make themselves more widely known to the people.

[Mention this paper].

CORRESPONDENCE.

[We pay no attention to communications unless the name and address of the writer are given, though the same will not be published if so requested. We assume no responsibility for statements made by correspondents, and we do not necessarily endorse ideas advanced by them. Under these conditions we think it of value to our readers to devote a liberal space to the free discussion by others—whose opinions may be at variance with our own—of subjects pertinent to our department of journalism.]

Editor American Railroad Journal:

I would be pleased if you could give me an account of the old New Castle and Frenchtown Railroad. I believe the first engine was placed on the track in June, 1831, and I would like to know all about its organization, how long in building, the fare, etc. I use to live within less than a mile of that road in 1836 to 1840. I remember Capt. R. H. Barr, who use to sell tickets and then collect them before starting the trains. I used to see the signal men do the telegraphing by going up a pole and hoisting a ball, a flag, etc., as per regulation. I remember when the first steam whistle was used on an engine; it must have been Jan. 1838 or '39. I was with some others in the field shining corn; and the squeeling thing nearly scared me out of my wits. I believe only about seven miles of the original road is in use, now forming a part of the Delaware Railroad. I remember the old (slaves) darkies, who use to catch hold of the cars to break the speed when coming into the depot, sometimes sticking a piece of wood between spokes of the car wheels.

C. E. L.

Cartersville, Ga., Oct. 7, 1882.

Editor American Railroad Journal:

Gentlemen;—In regard to my method of feeding boilers of locomotives, I do not claim that it is new. I only claim an improvement in connection with the injector. The great drawback and objection of the injector with railroad men is its liability to "break," as we term it, and it is most apt to occur when on a fast run, and that is the time it is most needed to be all right—it generally occurs when the engine is running fast over rough places in the track or "lurches" going round sharp curves, causing a check in the flow of water through the hose to the injector. My improvement consists of a cone-shaped air chamber connected to the feed pipe near the hose coupling, standing between the feed pipe and frame of engine, from 12 to 14 inches long, and 8 to 10 inches in diameter at top, tapered toward the bottom to screw into a pipe T the same size as the feed pipe. The benefit of this arrangement is, that when the water is turned on from the tender, it flows through the pipe into the chamber, rising into it high as the air will allow it, compressing the air in the chamber according to the weight of water in the tender. In addition, when the engine makes a "lurch" it checks the flow of water from the tender, then the air in the chamber forces the water down into the feed pipe, thereby keeping up a supply of water to the injector until the supply is restored from the tender. Roads that are not well ballasted find the injector worthless when going at a high rate of speed, and most of them have to keep one pump on their engine to be used at such times. Hoping you may think this of sufficient interest to your many readers to cause you to publish it, I remain, Yours truly,

W. H. Turrentine.

Company's Shops, N. C., Oct. 3d, 1882.

List of Recent Patents for Inventions Relating to Railway Interests.

265,248. Car-coupling: William Coughlan, New Haven, Conn. Filed April 18, 1882.

265,257. Railway-Switch: Seth Goodhue, Wilmot, N. H. Filed April 14, 1882.

265,262. Car-Wheels: Thomas B. Howe, Scranton, Pa. Filed July 29, 1882.

265,271. Peripheral Runner for Cars: James E. Miller, Brooklyn, N. Y. Filed Jan, 30, 1882.

265,273. Underground Cable for Street-Car Propulsion: Laurence Myers, Philadelphia, Pa. Filed Dec. 19, 1881.

265,264. Car-Heating Apparatus: Daniel D. Sewall, Augusta, and James H. Sewall, Portland, Me. Filed Apr. 27, 1882.

265,285. Nut-Lock: Samuel E. Shute, Richmond, Ind., assignor of five-eighths to Elliott Holbrook and Edward Cockayne, both of same place. Filed Mar. 22, 1882.

265,318. Car-Coupling: Benedict Hickok, Buffalo, N. Y., and John H. Putnam, Tioga, Pa., assignors of one-third to Robert C. Hickok, Buffalo, N. Y. Filed June 17, 1882.

265,336. Car-Heater: Thomas S. Page, New York, N. Y., assignor to James E. Gregg, Santa Fe, N. Mex. Filed Dec. 6, 1881.

265,343. Spark-Arrester: Lewis C. Sparks, Philadelphia, Pa., assignor to himself and Charles Zane and Andrew Zane, Jr, Filed May, 10, 1882.

265,366. Apparatus for Changing Car-Trucks: Geo. W. Atkinson, Petersburg, Tenn. Filed Aug. 21, 1882,

265,374. Car-Axle Box: Isaac F. Bissell, Brooklyn, N. Y. Filed July 3, 1882.

265,388. Locomotive: Ezra Coleman, New York, N. Y. Filed Feb. 9, 1882.

265,393. Car-Coupling: Thomas A. Cullinan and Augustus W. Baldwin, Junction City, Kan. Filed May 14, 1882.

265,405. Car-Coupling: Henry A. Gibson, Otterville, Mo. Filed June 22, 1882.

265,406. Car-Coupling: Eli H. Goodwin, Antone, Kans. Filed June 13, 1882.

265,426. Car-Coupling: Uriah Long and John J. Quinn, Denver, Colo. Filed July 19, 1882.

265,427. Freight-Car: Alexander Morison, Alpena, Mich., assignor of one-third to D. E. Thomas, same place. Filed June 2, 1882.

265,440. Car-Coupling: Frederick H. Rudd, Hebron, Nebr. Filed Mar. 30, 1882.

265,479. Railway Rail Coupling: George W. Baker, St. Louis, Mo. Apr. 12, 1882.

265,533. Car-Coupling: Theodore Mosher, Albany, N. Y. Filed Apr. 1, 1882.

265,538. Railroad: James M. Reid, Allegheny, Pa. Filed Feb. 20, 1882.

265,543. Tie-Bar for Railroad-Rails: E. Daniel Samain, Pierceville, Kans. Filed Mar. 1, 1882.

265,547. Car-Starter: Geo. W. Smith, Boston, assignor of one-half to Benjamin F. Smith, Somerville, Mass. Filed Apr. 22, 1882.

There was quite a discussion in a car on one of our eastern railroads recently as to the right of an official of the train to remove the valise and coat of an occupant of a seat—a gentleman who was then temporarily absent. He contended that he had that right, while a learned Judge, who was in the same car, on being appealed to, decided that the first occupant was entitled to his seat. On a railway train in Canada, also, the claim of an occupant to a seat, whose baggage had been removed by an official to accommodate another person, was sustained, and it was returned and he resumed his seat.

Advertise in the Railroad Journal.

Illinois Central Railroad.

During the month of September, 1882, the traffic on the lines operated by this Company was (estimated):—

In Illinois	$643,494 00
In Iowa (leased lines)	184,744 00
Total	$828,238 00

The traffic for the same month in 1881, on the same mileage, was (actual):—

In Illinois	$646,410 57
In Iowa (leased lines)	182,437 30
Total	$828,847 87

During September, 1882, the land sales were 3,828.97 acres for $17,447.20, and the cash collected on land contracts was $16,706.43.

L. A. Catlin, *Secretary.*

A Deed of Trust Made Before Marriage Declared Void.

The equity suit of Honora T. Baird, widow of the late James Baird, against the trustees of her husband's estate, was decided in favor of the plaintiff in the Court of Common Pleas No. 4, Philadelphia, on the 7th inst. Mrs. Baird sought to have set aside a deed of trust made by her husband disposing of his property to the benefit of his children by a former marriage and cutting his wife out from participation in his estate. Baird inherited property valued at nearly $100,000, and executed the deed of trust a few days before his engagement. The Judge declared that the husband had no right to make a deed that would prejudice the rights of his wife. If it were made in ignorance of its effect upon the rights of his intended wife it would be declared to be void upon that ground. If it were made with knowledge of its effect, then it was a fraud upon her just expectations and her conjuga rights. Continuing, Judge Ludlow said: "It not necessary in the present case to find that actual fraud was intended either by James Baird or by the Trustees who procured him to execute this deed. The weight of the evidence appears to be that it was not; but the deed is nevertheless a fraud in law. No discussion is therefore necessary of the remaining point relative to the alleged testamentary character of the deed to the Trustees."

In Europe electric railways are growing rapidly in public estimation, not only on the Continent, but in Great Britain. Already 100 miles of electric transit are in operation, and there is every probability of the total mileage being considerably increased before the end of the present year.

The United States Treasury Department at Washington has decided to act in accordance with the decision of the Circuit Court at San Francisco relative to the right of Chinese subjects to visit the United States under the recent act of Congress. This decision was substantially that the statute must be made to harmonize with the Chinese treaty, and that the law cannot be construed as forbidding the landing of merchants, travelers, students, &c., they not being laborers.

BUSINESS CARDS.

ALLEN PAPER CAR WHEEL CO., 240 BROADWAY, New York.

BROWN BROTHERS & CO., BANKERS AND BROKERS, 59 Wall Street, N. Y.

BABCOCK & WILCOX CO., WATER TUBE STEAM Boilers, 30 Cortlandt Street, N. Y.

BROWN MANUFACTURING CO., ABSORBENT Wiper Cloths, Providence, R. I.

BEARDSLEY, D. N. & CO., MANUFACTURERS OF Superior Oak and Chestnut Lumber, and Railroad Ties, 9 Murray Street, N. Y.

CHESTER STEEL CASTING CO., MANUFACTURE Steel Castings, Cross-heads, Rocker-arms, Pistonheads, etc., for Locomotives, 407 Library St., Phila., Pa.

DAVIDS, JOHN B. & CO., WRITING INKS, 184 William Street, N. Y.

DAVIS, JOHN H. & CO., BANKERS AND BROKERS, 17 Wall Street, N, Y.

DODGE & SINCLAIR, MANUFACTURERS OF RUBber and Leather Belting, 21 Park Row, N. Y.

EVANS, GEO. A. IRON AND STEEL RAILS, 74 WALL Street, N. Y.

EAGLE TUBE CO., BOILER TUBES, 614 to 626 WEST Twenty-fourth Street, N. Y.

EAMES VACUUM BRAKE CO., RAILWAY TRAIN Brakes, 15 Gold Street, N. Y.

FAIRBANKS & CO., STANDARD SCALES, RAILROAD and Warehouse Trucks, and Copying-presses, 311 Broadway N. Y.

GORDON & DUGGAN, RAILWAY SWITCHES, 28 State Street, Boston, Mass.

GUEST, WM. A. & CO., IRON AND STEEL RAILS, 41 and 43 Pine Street, N. Y.

GEORGE, EVAN P. Jr., COUNSELLOR AT LAW AND Solicitor of Patents, 4 and 6 Warren Street, N. Y.

HARLAN & HOLLINGSWORTH CO., MANUFACTURE Passenger Cars, Wilmington, Del.

HAYWARD, S. F. GENERAL AGENT BABCOCK Fire Extinguisher, 407 Broadway, N. Y.

IVISON, BLAKEMAN, TAYLOR & CO., STEEL PENS 753 and 755 Broadway N. Y.

JOHN STEPHENSON CO., TRAM-CAR BUILDERS, New York.

KAOLATYPE ENGRAVING CO., 104 FULTON ST., New York.

KNOX & SHAIN, MANUFACTURERS OF ENGINEERing and Telegraphic Instruments, 716 Chestnut Street, Philadelphia, Pa.

MOLLER & SCHUMANN, MANUFACTURERS OF Coach and Car Varnishes, Brooklyn, N. Y.

NATIONAL TUBE WORKS CO., MANUFACTURE Wrought Iron Pipes and Tubes, 104 and 106 John Street, N. Y.

NATIONAL RAILWAY PATENT WASTE COMPANY 240 Broadway, N. Y.

PARDEE CAR WORKS, PARDEE, SNYDER & CO., (Limited) Watsontown, Pa.

PERKINS & CHOATE, AGENTS FOR STEEL OR IRON Rails, 23 Nassau Street, N. Y.

RIEHLE BROS., STANDARD SCALES AND TESTING Machines, 115 Liberty Street, N. Y.

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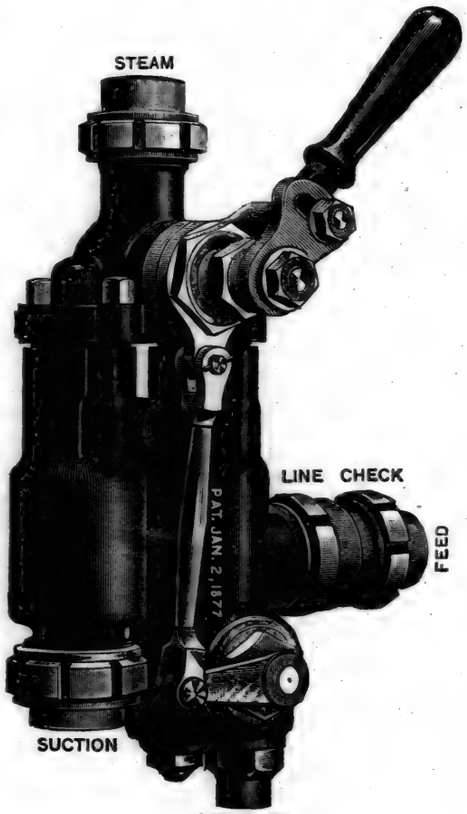
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To those never testing it by experience the rare exhilaration and complete immunity from cinders and dust attending such a trip as indicated by our heading is quite inappreciable. Having enjoyed such an experience on one of the pleasant days and evenings of last week, we herewith jot down a few items premising that the route taken was by the Boston and Albany line from Boston to Springfield, the machine, a fine specimen of a 40-ton passenger engine (No. "196"), and the engineer that prince among the genial men of his class, Mr. John Smith, who has been running over the rails of this line for almost thirty continuous years. And we may as well say it here as anywhere that the occasion was simply a scientific testing of the economic mechanism of that particular machine.

And now let the reader fancy himself or herself perched on the extreme front of this monster of a steam carriage, something like seven feet above the rails, privileged to sit or stand on the narrow ledge, once styled the "bunter," and the situation will be tolerably well taken in. Steam is up for the start, and the surplus accumulating during the wait for the conductor's send-off is madly hissing at the safety-valve, as though out of all patience at the delay; but at the wave of the uplifted hand we feel the engine fairly jumping to its task, and we are off. The first impression one derives on getting under head-way is that of the immensity of the power which you are conscious is being exerted around and under you. Riding on a nicely upholstered car seat, one can scarce help noticing the gradual change from inertia to motion, but the dynamics involved in the thought are left entirely to guess work. Not so from our standpoint. We know the instant the engineer touches the throttle. No blood horse responds more promptly to the spur pressing his flank as he springs to his task than ours does at the bidding of his master in the cab. At first the quivering of the huge frame, from cow-catcher to footboard, then an ominous grinding of the massive wheels as though in very rage at the terrible strain, especially if the hind feet of our iron horse (as the driving-wheels may well be called), touch a "frog" at starting, gives you something of an idea at least of the power requisite to move a train of cars as never before; and as the machine gets warmed up to its work the feeling is precisely as if the Titans themselves were pushing mightily from behind. At every opening of the admission parts to the cylinders you feel the throbbing of the vast power within, and the exhausting of the waste steam literally thumps off upon the walls of the vacuum chamber the energy and also the rapidity with which the enormous work is being accomplished. Any uncertainty on this point is dispelled the instant the throttle closes; it goes without saying that the fearful power is withdrawn, and the engine literally seems to exult at the release as it comes to a halt.

It is almost strange, but nevertheless unquestionably true, that no adequate idea is usually given to the passengers in the cars of the actual retarding power exerted by the modern system of automatic brakes; and one is almost under the necessity of seeing from such standpoint as that of which we write the really breakneck speed of running to fully appreciate the safeguard against danger thus afforded. On our return trip, and nearly at nightfall, on rounding the curve nearest the Westboro' station a red flag suddenly gleamed out ahead, and ere we were aware that the brakes had been applied the head and upper portion of our body were thrown forward at no small angle by the abruptness of the stop to which we were brought. Indeed, one of the brakemen hinted that he had much rather encounter an actual collision than to endure the shaking up when by the parting of a train the apparatus automatically exerts its maximum force, which it always does in such an emergency, to a degree which the engineer rarely ventures to risk.

If one wishes to obtain a tolerably clear idea of the capacity of a first-class boiler to generate steam let such put himself under the tuition of one which is gauged to 160 lbs. pressure, like "No. 196." Remember it is throughout of standard boiler steel, and one must drop utterly all his notions on this point graduated by the traditional tea-kettle on the kitchen stove. Evidently provision for the escape of waste steam in all engines must be well cared for; and when we remember that the rapid vibration of the piston of a locomotive making three hundred revolutions a minute necessitates providing for the escape of 600 cylinder measures of steam in that short time, we have begun to appreciate the generating capacity of the boiler. During our novel ride we were all the time in such close proximity to the exhaust chamber that we could not help being impressed with this fact by the constant hammering of this exhausting process. Of course no sign is given when this well-nigh omnipotent agent enters the cylinder; the demonstration of its force and frequency comes only as it escapes, and we could not help comparing this to the "roll" of a snare drum in the hands of an expert with the drum-sticks, so rapid as well as distinct was the report it made of its release from bondage.

Another of the revisions imparted to our ideas on railroading was the absolute necessity of the most rigid supervision of the sub-structure of our iron highways, as well as the construction of engines and cars. Of the monotonous and somewhat annoying click-clack, click-clack of the car wheels in passing from one rail to another almost all travelers are well aware—but to get the full impression of the force with which these apparently harmless noises are produced one needs to take an outside berth. Happily in these days the fish-jointing the head and foot of abutting rails has reduced nearly or quite to a minimum this annoyance; but no amount of precautionary appliances has thus far broken the force with which the truck wheels of the engine come in contact with the heavy switch-plate, which is as though a 1,000-pound sledge hammer in the hands of a giant had dealt the terrible blow that well-nigh shocked us.

A word or two as to the status of the road itself and we close. We cannot adequately describe the satisfaction we felt at the splendid condition in which we found the line. From the terminus in Boston to the depot in Springfield we could scarce perceive so much as a single weed or a bit of rubbish encumbering the roadbed. The slopes on either side were everywhere graded with the nicety and symmetry of a lawn, and we watched in vain from our most favorable position for observation to see the first protruding spike from the ties, or the slightest defect in the alignment of the rails. The signals automatically giving warning or notice were all in admirable working order, and we could but feel that from all this pains-taking and care there must accrue to the traveling public as much of immunity from peril as is predicable of the very peaceable state in which our common humanity is ordinarily found.—*Cor. Boston Journal.*

The Coal Trade.

THE leading coal-carrying companies make the following reports of their tonnage for the week ending Sept. 30, and for the year to that date, compared with their respective amounts carried to the same time last year:—

	Week.	1882.	1881.
Reading Railroad	221,432	6,679,095	6,452,757
Schuylkill Canal	26,941	385,340	444,395
Lehigh Valley	123,758	5,044,852	4,625,602
Delaware, Lackawanna and Western	109,352	3,313,105	3,118,065
Shamokin	25,020	811,578	806,084
Central R. R. of New Jersey	117,318	3,226,254	3,208,623
United R. R. of New Jersey	28,514	1,243,134	1,147,512
Pennsylvania Coal	37,911	1,023,448	1 010,076
Delaware and Hudson Canal	104,090	2,563,450	2,639,763
Huntingdon and Broad Top Mountain	15,098	340,927	394,589
Penn. and New York	28,916	1,177,612	1,213,381
Clearfield, Pa	43,588	2,127,013	1,777,016

The total tonnage of anthracite coal from all the regions for the week ending Sept. 30, as reported by the several carrying companies, amounted to 714,095 tons, against 513,449 tons in the corresponding week last year, an increase of 200,646 tons. The total amount of anthracite mined for the year is 20,903,307 tons, against 20,219,163 tons for the same period last year, an increase of 684,141 tons. The quantity of bituminous coal sent to market for the week amounted to 86,069 tons, against 83,187 tons in the corresponding week last year, an increase of 2,882 tons. The total amount of bituminous mined for the year is 3,166,752 tons, against 3,614,717 tons for the corresponding period last year, a decrease of 447,965 tons. The total tonnage of all kinds of coal for the week is 800,164 tons, against 596,686 tons in corresponding week last year, an increase of 203,528 tons, and the total tonnage for the coal year is 24,070,659 tons, against 23,833,880 tons to same date last year, an increase of 236,170 tons. The quantity of coal and coke carried over the Pennsylvania Railroad for the week ending Sept. 30, was 224,952 tons, of which 169,212 tons were coal and 55,740 tons coke. The total tonnage for the year thus far has been 8,199,908 tons, of which 6,072,732 tons were coal and 2,127,172 tons coke. These figures embrace all the coal and coke carried over the road, east and west. The shipments of bituminous coal from the mines of the Cumberland coal region for the week ended Sept. 30 were 44,455 tons, and for the year to that date 865,050 tons, a decrease of 678,495 tons as compared with the corresponding period of last year. The shipments were: To the Baltimore and Ohio Railroad—For the week, 22,87 tons; year, 635,121 tons; decrease as compared with 1881, 364,898 tons. Chesapeake and Ohio Canal—Week, 16,701 tons; year, 110,952 tons; decrease as compared with 1881, 223,221 tons. Pennsylvania Railroad — Week, 4,696 tons, year, 112,470 tons, decrease from last year, 97,579 tons. The Reading Railroad shipment for last week, ending October 7, was about 183,500 tons, of which 42,000 tons were sent to and 43,500 tons shipped from Port Richmond, and 15,700 tons sent to and 14,500 tons shipped from Elizabethport.—*Philadelphia Ledger, Oct. 9.*

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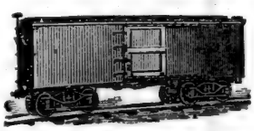
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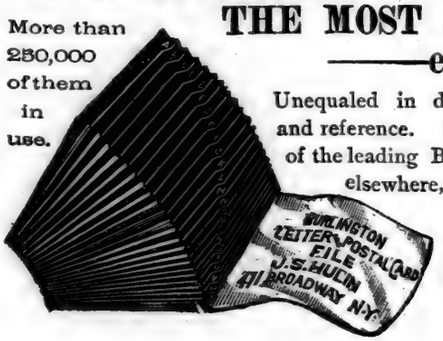
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Central Pacific Railroad.

LAND AGENT'S REPORT.

LAND DEPARTMENT, CENTRAL PACIFIC RAILROAD COMPANY,
SAN FRANCISCO, CAL., July 1, 1882.

HON. LELAND STANFORD, President.

SIR:—In former reports I have shown that:—

	ACRES.
The land grant from the United States Government to the Central Pacific Railroad Co. of 12,800 acres per mile, for 742 miles, is	9,497,600
Deduct for lands previously granted and reserved, say	1,500,000
Leaves	7,997,600
The land grant to the California and Oregon Railroad of 12,800 acres per mile for 291 miles, is	3,724,800
Total	11,722,400
Deduct lands sold to December 31, 1881	945,786
Leaves lands unsold	10,776,614
The grant to the California and Oregon Railroad Co. provides that where lands are lost to the company by reason of previous grants or reservations, they can be made good from an indemnity grant of ten miles wide on either side of the twenty mile limit, which insures to the railroad company the full amount of land granted. The value of these lands, at the Government minimum price for adjoining lands, $2.50 per acre, would be	26,941,535

A large portion of this is the choicest agricultural and timber lands in the country, and will sell for a much greater price.

The policy of the company and of the Trustees under the Land Trust Mortgage has been to sell the farming lands at low prices, and on easy terms of payment to actual settlers, believing the best interests of the company and the bondholders are promoted by selling in limited quantities to those who cultivate the soil, and who will own the land they cultivate. By this means an industrious agricultural population is invited, whose improvements and the product of whose labor tend to enhance the value of the unsold lands.

Most of the lands that have been sold were on a credit of five years; a payment of twenty per cent being made at the time of purchase, the remainder to be paid at the end of the term with annual interest payable in advance on all sums remaining due.

There were sold prior to October 1, 1870, 127,797.55 acres for $295,065.50, averaging $2.31 per acre; and up to December 31, 1881, there has been sold the timber on 14,090.40 acres of land reserved by the Government as mineral, for $27,648.60, and there has been received for stumpage $24,640.45.

Of the lands sold prior to October 1, 1870, there have been reconveyed to the company by credit purchasers who declined to conclude their purchases by payments of the balances due from them, 280 acres, upon which there remained due for balance of principal $560.

Of the lands in the California and Oregon Railroad grant, there were sold, prior to the consolidation of that company with the Central Pacific Railroad Co., 9,760.87 acres, for $18,443.36.

There remained due and unpaid, December 31, 1881, on lands sold prior to October 1, 1870, $2,640 on account of the principal, and $1,983.96 on account of interest.

Since the execution of the Land Trust Mortgage, October 1, 1870, there have been sold to December 31, 1881, 835,217.52 acres of land for $4,498,482.49, being at the average price o $5.39 per acre. For the year ending December 31, 1881, there were sold 195,254.61 acres.

From the date of the Land Trust Mortgage, October 1, 1870, to December 31, 1881, there have been reconveyed to the company by purchasers who had purchased land on credit, and who were unable or unwilling to make their final payment of purchase and interest, 26,709.87 acres of land, upon which there remained due and unpaid $309,279.90.

There were received from December 31, 1875, to December 31, 1881, from leases of railroad lands, $925, and from stumpage of railroad trust lands, $12,219.13.

There has been paid to the Trustees of the Land Grant Mortgage to December 31, 1881, $3,850.450.82.

There remained due and unpaid to December 31, 1881, on lands sold since October 1, 1870, $1,304,858.79 on account of principal, and $62,949.05 on account of interest.

The success that has attended the cultivation of grapes, berries and fruit in the foot-hills of the Sierra, below an elevation of three thousand feet, has caused an increased demand for this class of lands. It is found by experience that these lands are not so subject to late frosts as lands in the lower parts of the great valley. Many of the immigrants coming to the State are seeking lands in the northern portion of Tehama, and in Shasta counties, where the annual rains are so abundant that crops never fail. The lands of these counties are also found to be admirably adapted to vineyard and fruit culture; and it is confidently expected that this northern portion of the Sacramento Valley will in a short time have a large increase in population.

The lands in Nevada near the Humboldt River, and the lands of adjoining, valleys are appreciating in value not only because found to be well adapted to the cultivation of the cereals, but also in consequence of the increased price of beef-cattle. Many extensive sales have been made of these lands to the owners of herds of cattle who desire to preserve their pastures.

The action of the Land Department at Washington in removing the mineral reservation from large tracts of land in the foot-hills of the Sierra, is received with approval by miners as well as farmers. It allows the settlement and cultivation of valuable tracts of lands heretofore withheld, and creates homes, and makes taxable for school and other purposes large bodies of land to which, prior to the removal of this reservation, no agricultural title could be obtained from the Government. Whenever any of this land is ascertained to be really more valuable for mineral than for agricultural purposes, the proof of the fact again withdraws the land, and the miner can obtain title to it under the mineral law. The action of the Land Department at Washington does justice both to the farmer and the miner.

The grape interests of the State are advancing with great rapidity; our wines are commanding good prices, and are in large demand throughout the country. It is a safe estimate to state that lands planted in vineyards have doubled in value within the past two years. The company has still unsold at least one million acres in different part of the State, admirably adapted to the growth of the vine.

Immigration to the State is increasing, and fortunately large numbers of the immigrants are of a class in search of farming, vineyard, and grazing lands. The company has still large bodies of lands suitable for these purposes, and homes can be found on lands still belonging to the company for many thousand families.

I again desire to call attention to the fact that as the State fills up with population and experiments are made, it is found that lands once considered as fit only for grazing are really valuable for grain and orchards. Ten years since only prairie lands were ploughed for wheat and barley; now the low foot-hills bordering the plains are found equally productive.

The statistics heretofore given will show that the lands of this company may be considered as among its most valuable assets. Respectfully,

B. B. REDDING, Land Agent.

Erie Railway Company's Stock.

JUDGMENT was entered on the 9th inst. in favor of Henry A. Vatable and others, against the New York, Lake Erie and Western Railroad Company. The plaintiffs were holders of 300 shares of stock of the old Erie Railway Company. Prior to the sale of the franchises and property of that corporation under a judgment of foreclosure, an agreement was made between the persons who proposed to purchase the franchises and property and certain Erie stockholders, by the terms of which any new corporation which should succeed the Erie Railway Company was bound to deliver its common stock in exchange for Erie common stock and a payment in gold of $4 per share, with interest from March, 1877. The plaintiffs applied to the New York, Lake Erie and Western Railroad Co. for the issuance to them of 300 shares of its common stock, offering in return 300 shares of Erie stock and the sum of money provided for by the agreement. Their request was denied on the ground that the time for them to become parties to the agreement had expired by limitation. This plea was overruled by Judge Lawrence, before whom the suit was tried in Supreme Court, Special Term, about a year ago. The findings of law and fact in the case were not settled until last month, and the decree was not signed until the 5th inst.

MR. WARREN HILL, of Boston, has just delivered to the Louisville and Nashville Railroad three dozen punches for the use of the conductors on that road.

THE project of establishing a Mexican Exchange in this city is receiving considerable attention from business men. The progress of railroad building in Mexico brings nearer every day the mercantile centers of the United States to those of that country, and it is felt that preparations for the great increase of international trade that must result from this opening should now be going on. Already business in this direction has received a strong impetus.

American Railroad Journal.

ESTABLISHED 1831.

Steam Navigation, Commerce, Finance, Banking, Machinery, Mining, Manufactures.

SECOND QUARTO SERIES.—VOL. XXXVIII., No. 41.] NEW YORK, OCTOBER 21, 1882. [WHOLE No. 2,426.—VOL. L.

CONSOLIDATION.

THE Irolo, Morelos and Acapulco Railroad companies, of Mexico, have been consolidated under the presidency of Delfin Sanchez.

THE Broadway Railroad Company, of Brooklyn, filed, on the 13th inst., a certificate of consolidation with the Yates Avenue and Flatbush Railroad Company.

THE Ontario Car Works and London Car Wheel Company have been amalgamated under the name of the Ontario Car and Foundry Company. The directors are: Andrew Robertson, Hugh McKay, Jonathan Hodgson, Montreal; W. K. Miers, Detroit; and Thomas Muir, of London East, managing director.

CONSTRUCTION.

SURVEYS are now in progress for a railroad through Pleasant Valley and Putah Cañon to Lakeport, Col.

TRACK-LAYERS on the Northern Pacific Railroad have reached Countryman's Ranch, on Stillwater, 90 miles from Bozeman.

THE last rail of the Columbia River division of the Oregon Railway and Navigation Company has been laid a few hundred yards above Multnomah Falls.

THE Grand Southern Railway, which now runs via Carleton on the Carleton Branch Railway, has commenced to build 2 miles of road, for the purpose of having a line of its own.

A SURVEY has been made with a view of connecting the branch railroad from Valley Stream, recently purchased by the A. T. Stewart estate, with Stewart's Central Railroad, running through Garden City.

IT is now proposed to construct a railway in New Zealand connecting the city of Auckland with the railways of Taranaki and Wellington, and the colonization of eleven or twelve millions of acres hitherto kept closed.

THE statutes of the Elqui Railway Company, Chile, S. A., have received official sanction. The sum with which it is empowered to commence operations is $25,000, and 90 days' time is conceded to raise the total capital of $600,000.

A SURVEY party recently left Winnipeg for the purpose of surveying the route for the Southeastern Railway, which is again to be taken in hand under the general act passed by the Norquay Government at the last session of the local Legislature.

THE Fort Worth and Denver City Railway was completed to its present terminus, Wichita Falls, Texas, a distance of 110 miles from Fort Worth, in the latter part of the last month, and during the last week of September was operated to that point.

THE Wisconsin Central Railroad Company has commenced the construction of a new line from Chelsea, a station on the main line, to Rib Lake, a lumbering point 16 miles to the northeast. The work will be hurried and will be finished this fall, at an estimated cost of $200,000.

THE East Tennessee, Virginia and Georgia Railroad is now in full operation between Chattanooga, Dalton, Rome, Atlanta, Macon, etc. The distances have been considerably reduced from Chattanooga. For instance, the old distance to Macon was 241 miles, now 228; Brunswick was 443, now 432, and Savannah, formerly 433, is now 420 miles.

THE track of the Northwestern division of the St. Paul, Minneapolis and Manitoba Railroad is laid within 12 miles of the junction with the Northern Pacific, 2 miles from Superior City. The officers say it will reach there this month, and be completed and opened for business to Ashland, Wis., and Bayfield early next year. The line will have a large lumber traffic.

THE Chicago and Block Coal Railroad, extending from Attica, Ind., to Veedersburg, and designed to connect Terre Haute or Bloomington with the Indianapolis and Chicago Air Line, has been secured for the Louisville, New Albany and Chicago Railway Company, and the line will become part of the Chicago and Great Southern. Upon the completion of the Air Line division the name of the system will probably be changed to that of the Chicago, Indianapolis and Louisville.

C. C. WHEELER, general manager of the Atchison, Topeka and Santa Fe Railroad, states that the Sonora Railway (Guaymas extension of the Atchison, Topeka and Santa Fe) will be completed on the 1st of November, and will be ready for business through to Guaymas shortly afterward. About 175 miles of the Southern Pacific Railroad are being used by the new line. The completion of this line will give the Atchison, Topeka and Santa Fe a through route to the Gulf of California, and will shorten the distance to Australia and South America.

A SPECIAL from Vicksburg, Miss., says that work on the Mississippi Valley Railroad south and north of that city is progressing rapidly. The contractors have a force of 500 men and 90 teams working the cut through the dividing ridge between the Big Black River and Bayou Pierre. A construction train is now laying steel rails south of the Big Black River. Two engineer parties are locating the line between Baton Rouge and Port Gibson, working from each point, and the contract for the construction of this section will be let as soon as the line is located. North of Vicksburg 30 miles of the road-bed has been completed, and a large force is at work constructing a bridge over the Yazoo River.

ORGANIZATION.

THE stockholders of the Lake Erie and Western Railroad Co. have elected the following directors: J. H. Cheney, Columbus Cummings, George Martin and William Howard.

THE Augusta, Elberton and Chicago Railroad Company was organized at Augusta, Ga., on the 12th inst. by electing James P. Verdery, President; Henry J. Lang, Vice-President, and H. P. Moore, Treasurer.

A. GAMBRILL and J. S. Frayser, of Nashville, Tenn., have been elected directors of the Chicago and Eastern Illinois Railroad Company, in the place of H. B. Hammond and Peter Hegenor of New York.

THE officers of the Cairo, Ills., Street Railway Company for the ensuing year, are: J. A. Goldstine, President; A. Lewis, Vice-President; H. Schulze, Secretary; Thomas Lewis, Treasurer; Calvin Neff, Superintendent.

AT a meeting of the stockholders of the Cumberland and Pennsylvania Railroad Company, held at Cumberland, Md., on the 9th inst., directors were elected as follows: C. F. Mayer, Robert Garrett, William Whitewright, D. H. Miller, and W. F. Frick.

AT the annual meeting of the stockholders of the Ohio and Mississippi Railway Co., held in Cincinnati, Ohio, on the 12th inst., for the purpose of electing three directors, there was no opposition to the following, who were elected: William McClintick, of Chillicothe, O.; John M. Douglass, of Chicago and Charles E. Beecher, of Cincinnati.

AT the recent annual meeting in Indianapolis, Ind., of the stockholders of the Indianapolis, Decatur and Springfield Railroad Co., the following directors were elected to serve for

four years, Henry Groves and John R. Elder, re-elected, and J. J. McNeal in place of J. C. New. The road is leased to the Indiana Bloomington and Western Railway Co.

At a recent meeting of the stockholders of the Profile and Franconia Notch Railroad Co., the following directors were elected for the ensuing year: Samuel F. Bell, of Manchester; Emmons Raymond, of Boston; Edward Spaulding, of Nashua; John H. George, of Concord; John H. White, of Concord; Walter Aiken, of Franklin; James Crufts, of Bethlehem.

At the annual meeting of the Concord and Portsmouth Railroad Corporation, held in Manchester, N. H, on the 5th inst., the following officers and directors were chosen: President, Stephen Kenrick of Franklin; Treasurer, Moody Currier of Manchester; Clerk, Wm. H. Hackett of Portsmouth; Directors, Stephen Kenrick and John H. Bell of Exeter, Benjamin F. Martin of Manchester, Joseph S. Walker of Concord, Samuel N. Bell of Manchester, Walter M. Parker of Manchester, John J. Pickering of Portsmouth.

At the annual meeting of the stockholders of the Western Union Telegraph Company, held in this city on the 11th inst., the following board of directors was elected:—Norvin Green, Thos. T. Eckert, Edwin D. Morgan, John Van Horne, Augustus Schell, Harrison Durkee, Jay Gould, Russell Sage, Alonzo B. Cornell, Sidney Dillon, C. P. Huntington, Geo. B. Roberts, Zalmon G. Simmons, Samuel Sloan, Erastus Wiman, Cyrus W. Field, John Pender, M. P., Henry Weaver, Percy R. Pyne, Robert Lennox Kennedy, Hugh J. Jewett, J. Pierpont Morgan, Frederick L. Arrico, Edwin D. Worcester, William D. Bishop, Amasa Stone, Geo. J. Gould, Chauncey M. Depew, James W. Clendenin, George F. Baker. At a meeting of the new board of directors held on the 12th inst., the following officers were elected:—President, Dr. Norvin Green; Vice-President and General Manager, Gen. Thomas T. Eckert; Vice-Presidents, Augustus Schell, John Van Horn, Harrison Durkee. D. H. Bates was elected acting Vice-President and Assistant General Manager, and J. B. Van Every was elected Acting Vice-President. The Executive Committee is as follows: Norvin Green, Thos. T. Eckert, Augustus Schell, Edwin D. Morgan, John Van Horn, Jay Gould, Russell Sage, Harrison Durkee, Cyrus W. Field, Alonzo B. Cornell, Sidney Dillon, and George J. Gould.

INCORPORATION.

The articles of incorporation of the proposed railroad between Frederick and Middletown have been drawn up. The capital stock will be $250,000.

The Dominion Cattle Company, limited, has been incorporated with a capital of $800,000. The promoters are W. B. Ives, Hon. M. H. Cochrane, Hon. A. W. Ogilvie, R. H. Pope, Hugh Ryan, of Perth, and J. P. Wiser, of Prescott.

The Rome and Boonesville Railroad Company of New York, with a capital of $3,000,000, filed articles of incorporation at Albany, on the 13th nst. The road is to run from Rome, in a northeasterly direction, through or into the towns of Rome, Weston and Ava, and terminating at Boonesville. Its length is to be twenty-four miles.

The Dominion Bridge Company, limited, has been incorporated with a capital of $500,000. The promoters are Job Abbott and Phelps Johnson, of Toronto; A. M. Thom, of Montreal; H. McFarlane, of Stratford; and Luke Lyman, of Northampton, Mass.

The Telegraphic and Telephonic Protector Company, of New York, capital $1,000,000, was incorporated on the 6th inst. The object of this company is to manufacture, sell and grant licenses to manufacture and use telegraphic and telephonic protectors.

The West Shore and Mohawk Valley Transportation Company, of Schenectady, was incorporated at Albany, N. Y., on the 16th inst., with a capital of $250,000. The object of the company is to carry freight between New York and Buffalo over the New York Central and the New York, West Shore and Buffalo railway lines.

A stock company has been organized in Brooklyn for the purpose of making a very novel experiment in the building and operation of a new steam railroad. The road, upon which a large force of workmen are now engaged, is building at East New York, and will be called the Bicycle Double-Track Single-Rail Elevated Railway.

Articles of incorporation have been filed in Illinois for the Northwestern Construction Company, the principal office to be at Dubuque. The company will construct and equip the railroad lines of the Chicago, Freeport and St. Paul Railroad Company. The capital stock of the new construction company is fixed at $1,000,000.

The articles for the incorporation of the Macomb and Fort Madison Railway have been prepared and signed. The road is to be built from Macomb, Ill., to Fort Madison, Ia., with a capital stock of $600,000, five-sixth of which is said to have been already subscribed. This road will be operated in connection with the Burlington and Ohio River Railway.

Articles of incorporation were filed for record in the Clerk's office in Carlinville, Ill., on the 9th inst., of the Roodhouse Branch of the Burlington and Ohio River Railroad, with a capital stock of $200,000. The incorporators are George H. Merrill, Toledo, O.; M. McClure, Robert B. Shirley, Carlinville; Samuel J. Williams, Gillespie; James Walker, Scottville; John Roodhouse, H. L. Patterson and George Jones, of Roodhouse.

The Illinois, Iowa and Minnesota Railway Company filed articles of incorporation with the Illinois Secretary of State on the 9th inst.; capital stock $2,000,000. It is proposed to start a line from Streator to a point near Princeton or Clinton, Ia., on the Mississippi River, through the counties of La Salle, Bureau, Whiteside and Rock Island. The first board of directors are: Ralph Plumb, Elmer Baldwin, Edwin Evans, J. D Harvey, E. H. Thayer, A. Means and Alex. Campbell.

A charter was issued at Harrisburg, Penn., on the 6th inst., to the Gettysburg and Harrisburg Railroad Company, whose line is to extend from Hunter's Run, on the South Mountain Railroad, between Mount Holly and Pine Grove Furnace, to Gettysburg, a distance of twenty-two miles. The capital stock is $250,000 and is owned by Jay Cooke, J. C. Fuller, John M. Butler, Jay Cooke, Jr., R. J. Woodward, Charles D. Barney, Spencer Ervin, Philadelphia; Wm. H. Woodward, Carlisle; and Daniel King, Pine Grove Furnace.

The Chicago and Hannibal Railroad Company filed articles of incorporation in the office of the Secretary of State of Illinois, on the 11th inst. The road is to be constructed from Chicago upon such a line or route as may be deemed advisable to a point on the Mississippi River in Pike County, Illinois, nearly opposite the city of Hannibal, Missouri. The capital stock is $2,000,000. The corporators are: Moses J. Richards, Chicago; Thomas. P. Robb, Park Ridge, Ill.; William Wilson, Earlville, Ill.; J. Bowen Waterman, Aurora; Munson D. Dean and George W. Acklin, Chicago. The principal office is to be in Chicago. The road is to be 280 miles long. The incorporators expect to begin work in the spring, and to run the first train by May, 1884.

The Mineral Wealth of Canada.

H. B. Small, of the Department of Agriculture of the Dominion of Canada, has compiled a little treatise upon the above subject which contains a large amount of valuable information obtained from the most reliable authorities. It says: 'According to Professor Dawson' there is scarcely a stream in British Columbia in which the color of gold is not found." In the last twenty years the Pacific Province has dug $40,000,000 worth of gold, and it is estimated that $10,000,000 worth a year could be obtained by means of increased working capital. British Columbia exported 500,000 tons of coal last year. Nova Scotia contains inexhaustible coal beds and valuable coal deposits. On the Cape Breton coast there are submarine coal beds of incalculable wealth. The Lake Superior region is rich in silver, copper and iron, but the best deposits can only be reached by the expenditure of a large amount of capital. In the country drained by the Lievres, north of Ottawa, Vennor has discovered and developed great beds of phosphate, and the same article is found in considerable quantities in Frontenac. Thousands of tons are exported annually to Liverpool from this region, the price sometimes reaching $25 per ton, and the mines of the Kingston and Ottawa districts are said to be rich enough to supply the world for an indefinite period. As for coal, the valuable formations of Nova Scotia and British Columbia are supplemented by beds in the northwest of surpassing extent and importance. West of Edmonton there is a coal field 25,000 square miles in extent. At a moderate calculation this will yield 250,000,000 tons. North of it lies another coal field of incalculable wealth, and further north still the croppings prove the existence of endless seams of coal. Petroleum is found floating on the surface of the streams and is gathered by the Indians. In the extreme north, away towards the watershed of the Mackenzie River, gold is

found but no attempt has yet been made to test its abundance. There are also indications of silver and copper, and the iron deposits are rich and well defined."

Chicago and Northwestern Railway.

THE earnings of the Chicago and Northwestern Railway for the years ending May 31, 1881 and 1882, were as follows:

	1881.	1882.
From passengers	$ 4,158,129 81	$ 5,171,423 19
" freight	14,414,151 09	17,525,134 19
" express	310,233 24	316,547 99
" mail	297,380 02	431,584 19
" miscellaneous	154,177 89	194,966 63
Total	$19,334,072 05	$23,684,656 19
Expenses, viz:		
Operating expenses	$9,979,619 66	$12,117,075 72
Taxes	446,201 39	522,558 39
Interest on bonds	3,647,897 45	3,999,208 94
Sinking fund	98,120 00	98,120 00
Rental of leased roads	1,384,731 75	1,569,618 00
Total	$15,556,570 25	$18,306,581 05
Net income	$3,777,501 80	$5,378,075 14

During the past fiscal year the following dividends were declared, viz:

Sept. 7, 1881—1¾ per cent on preferred stock	$387,588 25	
Dec. 5, 1881—1¾ per cent on preferred stock	387,588 25	
Dec. 5, 1881—3 per cent on common stock	452,643 00	
March 8, 1882—1¾ per cent on preferred stock	387,633 75	
June 1, 1882—2 per cent on preferred stock	443,010 00	
June 1, 1882—3½ per cent on common stock	528,174 50	
		2,586,637 75
Surplus		$2,791,437 39
The balance of income account June 1, 1881, was		7 533,987 51
Total		$10,325,424 90
Less reduction of nominal assets, representing company's property, being cost of securities advances to proprietary companies, etc. during several years, now charged off to surplus income		3,060,843 39
Balance of income account May 31, 1882		$7,264,581 51

Compared with the preceding year there was an increase in gross earnings from passengers of $1,013,293.38; from freight, $3,110,983.10; from express, $51,314.75; from mails, $134,204.17; and from miscellaneous sources, $40,788.74—total increase, $4,350,584.14. The increase in operating expenses was $2,137,456.06; in taxes, $76,357; in interest on bonds, $351,311.49; and in rental of leased lines, arising from increase of traffic, $184,886.25—total increase, $2,750,010.80. The increase in net income amounted to $1,600,573.34. The ratio of operating expenses to earnings was 51.16 per cent, and, including taxes, 53.37 per cent, against 51.62 and 53.92 respectively for the preceding year.

The number of miles of road in operation at the commencement of the year was 2,774.04; during the year 504.18 miles were added, viz: Toledo and Northwestern Railway, 207.32 miles; Chicago, Milwaukee and Northwestern Railway, 140.88 miles; Iowa Southwestern Railway, 51.81 miles; Menominee River Railroad, 16.69 miles; and Dakota Central Railway, 87.48 miles—making the total number of miles at the end of the year, 3,278.22, viz: Chicago and Northwestern Railway, 1,037.73: leased roads in Iowa, 487.51; proprietary roads, 1,752.98; of which 500.15 miles were in Illinois, 895.84 in Wisconsin, 224.41 in Michigan, 912.75 in Iowa, 414 in Minnesota, and 331.07 in Dakota. The average number of miles operated during the year was 3,032.90, against 2,644,16 in 1881—an increase of 388.74.

The gross earnings per mile of road operated were equal to $7,809.24, against $7,311.99 in 1881; the expenses and taxes $4,167.51, against $3,904.96; and the net receipts $3,641.73, against $3,369.03.

The number of passengers carried was 6,754,717, against 4,482,317; the number carried one mile 205,574,178, against 164,333,508; and the average rate per passenger per mile 2.52 cents, against 2.53 cents. The average number of miles each passenger was carried was 30.43 against 36.66 in 1881.

The number of tons of freight carried was 8,190,893, against 6,662,112; do. carried one mile 1,192,188,039, against 980,522,774; and the average rate per ton per mile 1.47 cent in both years. The average number of miles each ton was carried was 145.56, against 147.17 in 1881.

At the commencement of the year the company had 476 locomotive engines, and at its close 558. The total mileage of engines in 1882 was 18,157,257, against 15,301,154 in 1881. The total cost for repairs per mile run, including wages, fuel, oil, waste, etc., was 20.51 cents, against 19.25 cents in 1881.

The car equipment consists of 206 first-class and 29 second-class passenger, 7 parlor, 6 dining, 99 baggage and express, 18 mail, 4 paymasters', directors, etc., and 1,981 freight, stock, ore, etc. cars—a total of 18,650 against 16,673 in 1881. The total mileage of passenger cars was 19,801,642 against 16,222,257; and of freight cars (loaded and empty) 194,547,302, against 152,347,391 in 1881.

The common stock and scrip of the company at the close of the fiscal year was $15,117,655.97, of which $21,731.60 was owned by the company, and the preferred stock and scrip $22,210,844.56, of which $57,725.84 was owned by the company—the total amount being $37,328,500.53, against $36,823,500.53 at the commencement of the year, an increase of $505,000, arising from $500,000 of preferred stock issued for La Crosse, Trempealeau and Prescott stock pursuant to the terms of consolidation with that company June 6, 1877, and representing the cost of its property; and from $2,500 of preferred stock and $2,500 of common stock issued for the conversion of Peninsula Railroad bonds.

The total amount of bonds issued during the year was $8,913,000, and the total amount retired $1,671,000—leaving the net increase $7,242,000, and making the aggregate bonded debt at the close of the year (including $478,500 bonds in the sinking fund) $64,248,000, against $57,006,000 at the close of the preceding year. Of the bonds issued, $5,175,000 were for 330 miles of new road of the Dakota Central, the Toledo and Northwestern, Iowa Southwestern, Rock River, and Menominee River companies, and 15 miles of extension; $2,070,000 were for bonds guaranteed by this company of the Escanaba and Lake Superior, the Dakota Central, the Chicago, Milwaukee and Northwestern, and the Des Moines and Minneapolis companies; and $1,668,000 in substitution for an equal amount of the first mortgage bonds of the Galena and Chicago Union, the Beloit and Madison, and the Peninsula railroads, the latter, together with $3,000 Winona and St. Peter second mortgage bonds, being taken up and cancelled.

CONDENSED BALANCE SHEET, May 31, 1882.

Roads and equipment	$131,419,070 82
Trustees of sinking funds	1,321,000 00
Bonds on hand	828,600 00
Cost of securities proprietary companies	37,219 31
Outside real estate in Chicago	200,000 00
Material and fuel on hand	2,291,340 46
Debts due from U. S. Government, express companies, agents and others	1,215,358 47
Bills receivable	66,674 16
Cash	1,760,608 02
Total	$139,139,871 24
Capital stock—common	$15,095,924 37
" " preferred	22,153,118 72
" " proprietary roads	22,883,150 00
Funded debt	64,248,000 00
Bonds purchased with proceeds of Winona and St. Peter Railroad Land Grant	366,000 00
Sinking funds paid	1,321,000 00
General Consol. Gold bonds on hand	407,000 00
Material, fuel, etc., bills for May	1,309,491 03
Pay rolls for May	831,819 61
Uncollected coupons, old dividends, etc.	74,820 85
Accrued interest, not due	675,430 00
Dividends declared, not due	971,184 50
Accrued rents of roads in Iowa	439,934 80
Balance due railroad companies	4,098 47
Notes and mortgages on real estate, etc.	404,774 10
Land income	689,534 28
Income account—surplus	7,264,581 51
Total, as above	$139,139,871 24

President.—ALBERT KEEP.

Directors.—Augustus Schell, Chauncey M. Depew, Samuel F. Barger, F. W. Vanderbilt, D. O. Mills, Jay Gould, Sidney Dillon, C. J. Osborn, A. G. Dulman, David Dows, R. P. Flower, John M. Burke, M. L. Sykes, New York; Wm. L. Scott, Erie, Pa.; Albert Keep, Martin Hughitt, Anson Stager, Chicago.

Vice-Pres't, Sec'y and Treas.—M. L. SYKES.

Ass't Sec'y and Ass't Treas.—S. O. HOWE.

Second Vice-Pres't and Gen'l Manager.—MARVIN HUGHITT.

General Sup't.—T. D. LAYNG.

Winter Trip to California.

A WINTER trip to the Pacific coast, with five months sojourn at one of the most delightful resorts to be found in this country or Europe, the Hotel del Monte, Monterey, is the latest announcement in the way of a Raymond excursion. The party will leave the East November 30th, and proceed over the southern route, which is especially attractive at that time of the year. Halts will be made at Chicago, Kansas City and Los Angeles, on the outward trip, and at Salt Lake City on the return, the party getting back on the 2d of June, 1883. There will be 10 days in San Francisco in addition to the sojourn at Monterey. W. Raymond, 240 Washington street, Boston, will send a descriptive circular.

THE Harlan & Hollingsworth Company, of Wilmington, Del., shipped three elegant dining cars to the Chicago, Milwaukee and St. Paul Railway Co. on the 14th inst.

BY the close of the present year the Tunnel Line will lack but a few miles of having a double track for the entire line between Boston and the New York State line. The Fitchburg will then have a second track between Boston and Greenfield, with the exception of 13 miles, and the State will have all but 11 miles of its 44 miles of railroad in the same condition. The Boston, Hoosac Tunnel and Western is also at work upon a second track west of the State line, with the promise of an early completion to Schenectady.

American Railroad Journal.

ESTABLISHED 1832.

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WE invite railroad officers to send us notice of elections, transfers, appointments, resignations, etc.; and all our readers would oblige us by furnishing for our columns any items of personal information, that may come to their knowledge, adapted to this department. We aim to record all new railway enterprises in the United States and Canada, and to note the progress of construction on all new roads and extensions; and we request all concerned in railway building to give us early information regarding the above, that our report may be as complete as possible.

Subscribers are requested to report to our office any irregularity in receiving the JOURNAL.

Contributed articles relating to Railroad matters generally, Mining interests, Banking and Financial items, Agricultural development, and Manufacturing news, by those who are familiar with these subjects, are especially desired.

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New York, Saturday, October 21, 1882.

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IMPORTANT ANNOUNCEMENT.

THAT department of the AMERICAN RAILROAD JOURNAL which contains descriptions of new inventions properly coming within its range of subjects, is regarded with great notice and favor, particularly by those directly interested in learning what the latest applications of mechanical ingenuity in railroading are, and by those who have produced inventions which they desire to make as widely known as possible. The large and widespread circulation of this paper, its prestige as the oldest railroad journal in the world, and the weight attached to its contents by the general consent of leading railroad men in all countries, give such value to its carefully prepared descriptions of new machinery and appliances as cannot be found outside of its columns. The interest manifested by inventors in supplying us with information of their doings, and the eagerness with which this is received, encourage us to give an increased attention to that department of this paper treating of new inventions. We therefore repeat our invitation to all persons who have produced what they regard as improvements coming within the wide range of railroad operations, to communicate with us promptly regarding the same. All matter sent us will be thoroughly examined and considered, and no inventions in our opinion likely to be practicable and useful will be passed over without receiving due attention from us.

PREPARATIONS on a large scale are being made for the London Fisheries Exhibition of 1883. The prizes to be awarded are: $500 for the best essay on catching and distributing sea fish; $500 for the best essay on the food for fish; and $3,000 for the best life-boat exhibited. It is expected that even the great Berlin Fish Show will be surpassed by the London Exhibition.

THE Cambria Iron Works, at Johnstown, Pennsylvania—an industrial establishment of the first order in size, equipment and outfit—have 35 miles of railroad on their property, and employ ten large and ten small locomotive engines for yard service. The 900,000 tons of coal and limestone annually used in the manufacture of iron and steel at these works are mined by the company, as well as a part of 400,000 tons of iron ore required by it. The works are valued at $7,000,000, and give employment to nearly 8,000 men.

ACCORDING to the Columbus, Ga., *Enquirer*, there are now in operation in Virginia, North Carolina, South Carolina, Tennessee, Georgia, Alabama, Kentucky, Louisiana and Texas 14,788 looms and 659,512 spindles, employing 17,941 hands and consuming 179,121 bales of cotton annually. During the years 1881 and 1882 about 394,600 new spindles were added. It is estimated that $13,225,250 are in these enterprises of which $10,502,200 have been expended in the purchase of machinery and the balance is being used as operating capital.

THE Hartford, Conn., *Times* has unearthed another swindle in the River and Harbor Improvement bill. The sum of $5,000 was appropriated for the "improvement" of the Salmon River, in that State, which the reporter found was a mere creek emptying into the Connecticut River, near East Haddam, and that it was not even navigable for a row-boat a distance of more than four miles from its mouth. He describes it as being of little use for any purpose whatever, and says it is difficult to see how anyone can be benefitted by deepening its channel; and if there was anyone to be benefited by it, the amount appropriated would not be sufficient to accomplish any useful purpose. The people of the neighborhood are represented as being more disgusted with this attempt to purchase their favor than pleased with the prospective expenditure of the money among them.

The Venezuelan Exposition.

THE Government of Venezeula has proclaimed that the 24th day of July, 1883—which will be the centenary of the birthday of Simon Boliver, the liberator of Venezuela, New Grenada, Ecquador and Peru, and the founder of the republic of Bolivia—shall be observed as a national holiday, and has ordered that the day shall be celebrated by the inauguration of the railroad between the port of Laguayra and the city of Caracas the capital of the republic of Venezuela; with the unveiling of a monumental statue to George Washington, the father of the great people who created in the New World the republic which has been a model for the Spanish American nations; and with a national exposition in Caracas. Senor Simon Camachos, Venezuelan Charge d'Affairs in this city, and the author of the above announcement, adds that he is "authorized to give notice that all authors, inventors, manufacturers, and artisans who may wish to have their productions made known there, will be welcome, our country being every day more anxious to enlarge its relations with this republic, and so far as possible to unify the interests and destinies of both countries. Considering that Venezuela exports $6,000,000 every year to the United States and only imports some $2,000,000 from them, it will be readily perceived that the commerce of this enterprising nation with our country is far behind what is due to its gigantic production and inventive genius; or in other words, that there is a market in South America for the products of this country not sought for by its commerce to the extent that it might advantageously do so. The exposition

at Caracas offers a favorable opportunity to all who may desire to obtain a new and profitable outlet for their goods. Messrs. E. Valiente & Co., No. 76 Broad street, New York, have been appointed as agents for the shipment and forwarding of exhibits, and at their office all necessary information will be received."

Inspecting the Pacific Railroads.

COMMISSIONER of Railroads Armstrong has returned to Washington from a three months' tour of inspection of the Pacific railroads. The lines inspected by him were the Union Pacific, the Northern Pacific, the Central Pacific, the Oregon and California, and a number of lateral roads which stand in the relation of feeders to these trunk lines. The object of the visit was not only too pass upon the sufficiency of the equipment and mechanical construction of the railroads, but to forecast, if possible, financial prospects and to ascertain whether or not the Government is amply secured for the payment of the interest and bonds of the roads according to guarantee. The Commissioner is highly pleased with the results of his observation, and says that the roads are now generally in a prosperous condition, and so far as construction is concerned they are in admirable order. The greatest courtesy was shown toward the Commissioner by railroad officials throughout his trip, and they accorded him every facility for investigation into the operation of the lines, mechanically and financially. Engineer Blackstone is detained in the northwest, inspecting a section of the Northern Pacific Railroad, and as soon as he returns the work of compiling the annual report will be commenced.

The East River Bridge.

THE annual report of the Controller of Brooklyn, which was presented to the Common Council of that city on the 16th inst., shows that during the year new loans were made to the amount of $4,659,551.19, and bonds and certificates paid to the amount of $5,598,000. The sinking fund was reduced $1,459,252.26, and the city debt increased $520,816. Upon the subject of the East River Bridge the Controller says:—

"Up to the close of last year the two cities had contributed for the bridge and its accessories $14,750,000, of which Brooklyn's proportion was two-thirds. The Legislature of the present year authorized an additional expenditure of $1,250,000, no part of which has been disbursed, at least by this city. By the means of the bridge Brooklyn and New York are to become one community. With the bridge an accomplished fact, and a good system of rapid transit, there is a future for Brooklyn and Kings county of which few have formed a just conception. The bridge, as it is now being constructed, will be able to bear heavy trains across it, and by this means make possible the establishment of lines of ocean steamers, with their entrepots at Montauk Point. These, once established, will revolutionize the present system of passenger transportation, and by shortening by hours the time now occupied in making the passage via Sandy Hook, will open up a new avenue to wealth and prosperity, not only for Brooklyn and New York City, but in half a century the whole of Long Island, from Coney Island to Montauk Point, will be covered with a thrifty and prosperous population.

Railroad Building in Mexico.

A LETTER to the *World* from its resident correspondent in the city of Mexico, dated Sept. 27, says that several works of public improvement were formally begun in that city and in the interior on the 16th, and then adds:—

The railroad from Puebla to San Martin, Texmelucan, was opened to traffic amid great rejoicing of the people of the adjacent country.

Traffic was begun on the Mexican Central Railway from El Paso through to Chihuahua, and the line on the Merida and Calkini Railroad was opened as far as the "hacienda," of Chansinkin, and on the same day work was begun on the construction of a street railroad in San Juan del Rio.

The railway progress here at present is remarkable.

A telegram received lately announces that the Altata Railroad will be completed to Culiacan by the 16th of next month.

It is stated that the railroad from Campeche to Lerma will also be completed by the end of October.

Work is being pushed with great energy on the National Interoceanic Railroad—the narrow-gauge line to connect this city with Alvarado on the Gulf and Acapulco on the Pacific. An excursion party composed of 400 persons celebrated lately the completion of the Mexican National Railroad to Monterey by making a trip to Nuevo Laredo.

The following work is reported on the Irolo Railroad, which is ultimately to extend through the state of Puebla and form connections that will constitute a new line to Vera Cruz: 21 kilometers from this city to Reyes, 21 kilometers from Reyes to Texcoco, and 18 kilometers from Texcoco to Irolo completed; 15 kilometers are also completed beyond Irolo, and work is active on the next 5 kilometers. The line from Irolo to Tepetlaxtoc is also under construction.

The Department of Public Works has extended the time for making the surveys of the railroad from San Luis Potosi to Aguascalientes six months. On the railroad from Tampico to San Luis Potosi 165 kilometers of line have been located, 95 kilometers cleared of undergrowth and 48 kilometers completed.

There is much activity displayed on the Guanajuato branch of the Mexican Central, and it is expected that it will be opened for traffic about the 20th of next month.

A train conveying Messrs. Hinchman, Buchanan and Ibarrola went out on the Mexican National Railroad on the 13th as far as Puerto Medina, 126 kilometers from this city. An immense crowd, composed of the residents of the surrounding towns, had assembled to greet the arrival of the train, and great enthusiasm was manifested. The citizens of Tlapujahua presented a Mexican flag to the company bearing the following inscriptions. On the green stripe: "Viva el progreso"; on the white: "Tlapujahua and vicinity congratulate the company on reaching Puerto de Medina with their engine," and on the red: "Tlapujahua, district of Maravatio, to the Company Sullivan, in honor of its railroad progress. September 13, 1882."

The road is reported to be solidly built and in good condition.

The regulations proposed by the Government for the management of railroads have become a matter of deep interest to these enterprises.

The code, which contains no less than 391 articles, deals with almost everything that concerns a railroad, from the right of way to the issue of baggage checks.

They say that the rules are based on those enforced by a French company, which framed them for the guidance of its own staff, not caring whether they were adapted for use elsewhere.

Denver and Rio Grande Through Line to Salt Lake.

A TELEGRAM from W. H. Palmer, President of the Denver and Rio Grande Railway Company, addressed to W. W. Nevin, 47 William street, this city, dated "From end of track, Western Colorado, Oct. 10, 1882," says:—

"I have ridden here over the works, from the end of our track in Utah. The entire gap of about 200 miles is lined with men and teams finishing up. Three thousand men are employed. The Denver and Rio Grande track will reach the Utah border in two months. This completes the Denver and Rio Grande portion. The Denver and Rio Grande Western in Utah will finish earthwork about the same time, leaving then only 90 miles of track-laying to be done, which will continue at the rate at which rails are manufactured for us by the Colorado Coal and Iron Co., namely, a mile and a half daily.

"Entirely satisfactory traffic awaits the completion of this link. Three-fourths of the entire line from Denver to Salt Lake City follows running streams.

"This line traverses nine good-sized agricultural valleys; much of the way at such moderate altitude as is adapted to corn and fruit, including peaches, grapes, etc.

"A marked feature of this line is the opportunities for settlement afforded for a large farming population, with enough to produce the necessary grain, vegetables, meat and forage for twice the present population of Colorado and Utah.

"Coal outcropping occurs at frequent intervals along 300 miles between Gunnison and Wahsatch Summit.

"The mining districts of Colorado and Utah, of silver, gold, lead and copper, are tributary to four-fifths of the entire line.

"The Denver and Rio Grande Western promises all we have ever expected. Its commercial earnings for September were $31,000 for 155 miles in operation. We estimate its earnings first year, after connection is made, at $5,000 a mile; the Denver and Rio Grande at $8,000 per mile.

"The issue of Denver and Rio Grande, and Denver and Rio Grande Western in bonds and stock, although the lines are almost entirely in the mountains, is but one-third of that of the Union Pacific, from Omaha to Salt Lake City.',

OUR CANADIAN LETTER.

CORONER'S VERDICT IN THE ASIA DISASTER.—CANADIAN SIGNAL SERVICE.—NORTH WESTERN NOTES.—RAILROAD AND OTHER NOTES.—MARITIME PROVINCE NOTES, ETC.

CANADA.

CAPTAIN SCOTT, R. N., says that the majority of Canadian vessels (on the lakes) that he saw while investigating the "Asia disaster" were little better than floating coffins, and that the whole style of lake marine architecture needs a radical reformation. Many of the harbors are so bad that deck-loading becomes a necessity.

Chatham will give $30,000, Dresden $10,000, Blenheim $11,000, and Wallaceburg $11,000 toward building the Erie and Huron Railway.

Notwithstanding the great scarcity of teams and men, 75 horses and carts were recently sent out to work on the Kingston and Pembroke Railroad.

NORTHWEST NOTES.

William Murdock, C. E., has left Winnipeg to survey a route for the Southeastern Railway, which it is expected can be built under the general Railway Act of Manitoba; but many railway men think otherwise.

They are moving in the matter of organizing a Stock, Mining and Corn Exchange in Winnipeg; a preliminary meeting was held Oct. 10, and the Exchange was started with a capital stock of $20,000, divided into 400 shares of $50 each.

Six thousand immigrants arrived at immigration sheds, Winnipeg, from April to August inclusive—mostly English, Irish, and Scotch, though all nationalities are represented.

Although Brandon is but one year old it contains 3,000 inhabitants. Its first assessment has just been completed and amounts to $4,000,000!

The Hon. Dr. John Shultz, ex-M. P. of Manitoba, and now Senator from that Province and lately President of the Canadian Board of the Manitoba Southwestern Railway—the road with which Mr. Henry Villard had so much trouble—is now dying in New York City. The Dr. has a host of friends in Canada and the United States who will hear this with regret.

Chief Engineer James has returned from the western end of the track. He says that the track is now preliminarily located to Calgarry and permanently located to South Saskatchewan. Two good crossings of the South Branch have been found, but a definite choice has not yet been made. The Saskatchewan Valley is entered by way of Bull's Head Creek and Medicine Hat Coulee. Grading will be completed to Maple Creek, 90 miles west of Strong Current Creek, by November 1. The graders are now at work within twenty miles of South Branch, and their work will probably be completed to the crossing by the 15th of November. Track-layers will reach Strong Current Creek by the 26th inst. It is intended to reach South Saskatchewan this autumn if possible, and the winter terminus will probably be there. It is hoped to have the line in full running order to that point this autumn.

Sir Chas. Tupper, President Stephen and General Manager Van Horne, of the Canadian Pacific Railway, left yesterday by special train for Regina and the west. The West Lynne offers $100,000 bonus to the Grand Trunk Railway for railway connection with the Eastern System, and a line from West Lynne to Portage le Prairie.

The Canadian Pacific Railway will on and after Nov. 1, run two express trains daily each way between Montreal and Ottawa, the trip to be made in three hours and twenty minutes. New and handsome carriages are to be placed on the line.

IRON FURNACES.

Hamilton, Kingston, London, and Toronto are just now agitating the establishment of iron smelting works. Ottawa has greater advantages than all combined. Within cannon shot are inexhaustible depots of the finest iron ores (Hematite, Specular and Magnetic), with unsurpassed facilities of river and water transportation; and fuel can be had as cheap by proper management as at any place where coal is not found.

Three gangs of 250 men and 80 teams are now at work on the Murray Bay Canal.

An action was commenced in Montreal on Tuesday of last week, by the Richelieu and Ontario Navigation Co. against Capt. Lunt & Co. of Toronto, for breach of contract in running two steamers on the St. Lawrence in opposition to Plaintiff's line.

RAILROAD NOTES.

Mr. Senecal, it is said, has made a proposition to the Grand Trunk Railway, to lease of them the Montreal and Sorel Railway at $20,000 per year for the first five years, and rising $5,000 per annum for the second five years and to $30,000 thereafter. The Montreal and Sorel has a charter to run along the south shore of the St. Lawrence from opposite Montreal to opposite Quebec—It was in the hands of Messrs. Armstrong & Co., of Sorel, who after trying in vain to interest American capitalists leased it to the Grand Trunk.

Mr. F. N. Finney, the manager of the Wisconsin Central Railway, visited St. Thomas, Ont., lately. Mr. Finney was the chief engineer and manager of the Canada Southern, having built and managed it. Mr. F. has a host of friends in Canada.

CANADIAN SIGNAL SERVICE.

The Canadian government propose to establish a signal station at some point on the St. Lawrence, where in-coming vessels may be signaled and out-going vessels cabled to Great Britain. With this in view, the Canadian government have made a proposal to Lloyd's, at London, to forward such reports, provided Lloyd's defrayed one-half the cost of transmission. Lloyds received the proposition favorably, but before making permanent arrangements they ask that the reports be forwarded for three months on trial, and if they prove satisfactory they will accept the offer of the Canadian government.

MARITIME PROVINCE NOTES.

The people are moving in the matter of having a railway between St. John, N. B., and St. Martins, via Lake Lomond, and have secured the services of an engineer to survey the prospected line.

The people of St. John, N. B., will hold a Centennial Exhibition next year, to commemorate the anniversary of the founding of the Province.

Large quantities of partridge are being shipped from New Brunswick to Boston and New York markets.

THE CHIGNECTO MARINE RAILWAY.

H. G. C. Ketchum, C. E., the energetic and untiring promotor of the Chignecto Marine Railway from Amherst, on the Bay of Fundy, to Tidnish, on the Gulf of St. Lawrence, has just returned from England, where he has completed arrangements with a firm of leading English railway contractors to have their engineer, Mr. Darnton Hunton, make a thorough examination of the country to be traversed. Mr. Hunton will make borings, etc. along the proposed route, and satisfy himself in regard to the probable cost of the undertaking, and this at the expense of the English contractors. There is hardly any doubt of the work being pushed forward at an early day. The Dominion government have subsidized the work to the amount of $150,000 a year for ten years, subject to certain conditions.

FREDRICKTON WATER WORKS.

The Holly Manufacturing Company have received the contract for supplying engines, pipe laying and hydrant setting in connection with the Fredrickton, N. B., Water Works, and their agent, C. G. Hildreth, is now in Fredrickton awaiting material to commence work.

Three firms of Halifax, Nova Scotia, have thus far shipped (in 1882) some one hundred vessels of lumber and timber, amounting to 45,000,000 feet. In the spring the average price realized was 55 shillings per standard. It is now selling for 70 shillings, but the rise in freights has prevented any profits.

Several of the passengers of the Herder, lately wrecked on the coast of New Foundland, assert that the officers and crew were drunk, and that the vessel was lost through gross neglect. They also complain that their trunks were broken into and robbed by the ship's crew. The American and German consuls at St. John are investigating.

REVENUE FRAUDS.

Some writer in the Toronto *Mail* of Oct. 13 says that gross frauds are being practiced on the revenue by the entry of American hammers at much less than the proper value. No. 1 cast-steel hammers are sold in Buffalo to the trade at $8 per dozen, less twenty per cent, equal to six dollars net, and the duty on these when imported into this country should be $1.80 per dozen—thirty per cent. But the American manufacturer sells to the Canadian dealer at $8 per dozen, less forty per cent, and again less fifteen per cent, equal to $4.08 net. The duty on the hammers at thirty per cent, calculated on this figure, would be $1.22 instead of $1.80, or a fraud on the revenue to the extent of fifty-eight cents per dozen.

The law distinctly provides that the value for duty shall be the fair market price at the time and place of purchase, and not on the slaughtering price.

American shippers should keep this in view, and thereby save themselves much trouble. The customs department are determined to fully carry out the law without discrimination or favor.

The following is the verdict of the coronor's jury in the "Asia" disaster:

"We, the jury, empanelled to inquire into the death of Isaac Lecadie and others, found dead in the Georgian Bay, after duly considering all the evidence laid before us relating to the matter, as follows :—

"1st. That the said Isaac Lecadie came to his death from exposure and exhaustion while escaping from the steamer 'Asia,' which foundered on the 14th of September, 1882;

"2nd. That the loss of the 'Asia' was owing to an unprecedented storm which prevailed on the Georgian Bay on the 14th of September last, and through narrow judgment on the part of the captain in leaving Presqu' Isle with the reading of the barometer so exceedingly low;

"3rd. That the Board of Steamboat Inspectors are indirectly to blame for the loss of lives in not notifying the Collector of Customs at Collingwood to detain the 'Asia' until a new certificate was granted or refused her.

"4th. We also find from the evidence produced that the 'Asia' was in a good state of repair, and, as far as repairs go, seaworthy.

"5th. From the evidence produced we do not consider the old Welland Canal style of propellers suitable for lake navigation, on account of their bluffness, fore and aft, causing them to draw the water after them, thereby rendering the steering of them difficult in bad weather, especially on local routes, where the quantity of freight varies from one to three or four hundred tons. We also condemn them for the slightness of construction and height of upper works;

"6th. We also condemn the practice of granting certificates to steamboats to carry more passengers than they have life-saving apparatus for, and recommend that all passenger steamers be compelled to carry life-boats and life-rafts sufficient to save all the passengers and crew they are allowed by law to carry, and would also strongly recommend that all captains and mates of all vessels, steam and sail, be subjected to a strict examination before they be allowed to hold such position.

"7th. In conclusion, we would suggest that, as far as practicable, a list of passengers from the principal ports of embarkation be kept on shore."

THE BANK OF OTTAWA.

This bank, with an authorized capital of $1,000,000, and a paid up capital of $600,000, is one of the most substantial and flourishing banks in Canada, with men at its head who have the highest standing for commercial credit and character. The business of the bank has been steadily increasing, and the losses have been small. They have lately established branches in the flourishing towns of Arnprior and Pembroke, Ontario, and Winnipeg, Manitoba. Messrs. J. H. Goodby and B. E. Walker are their New York agents. The head office is at Ottawa, Canada, and is under the able management of Mr. George Barns, cashier, assisted by Mr. N. I. Christie, accountant, and Mr. John Bangs, teller. We recommend the Bank of Ottawa to our friends having banking business, etc. in Canada. The gentlemen connected with the bank will be found obliging and prompt.

Owing to the numerous works, railways, canals, surveys, etc. going on, labor is very scarce and it is with difficulty that men can be procured. The lumber districts require their quota, and what with works under construction and perfected ones—and the demand from the Canada Pacific, from here to British Columbia with very highest wages offered, ranging there from $2.50 per day, to $1.50 and $1.75 hereabouts—it is difficult to say where it will all end.

The first sod of the extension of the Montreal and Champlain Junction Railway was turned at Dundee, Province of Quebec, on Monday last.

Charles O'Dell, C. E. will immediately begin locating line and bridge of the Ottawa and Waddington and New York Railway.

The Ontario and Quebec Railway, now under construction between Toronto and Ottawa, is being rapidly pushed forward—but owing to the great scarcity of hands there are but 2,000 men employed, although many now are wanted.

"W."

OTTAWA, Oct. 19, 1882.

Utilizing Slack.

A NEW PROCESS THAT WILL DO AWAY WITH WASTE COAL.

MR. W. H. CORY, of England, now staying in Philadelphia, read a paper before the Engineers' Club of Philadelphia on Saturday, October 7, upon the subject of his process for the utilization of slack or dust coal. After giving a short history of his invention, in which he stated that works capable of manufacturing 640 tons per day had been successfully operated in South Wales, he informed the meeting that he had obtained patents for his process and press in nearly every coal-yielding country in the world. Most favorable reports upon the process were then read. Mr. Cory then drew a comparison as to cost and efficacy between the pitch processes and his own, in which the former showed considerably to disadvantage. He explained his process, which consists of first crushing the coal (when necessary) and mixing it with a very small percentage of fine ground fire-clay, and another small percentage of silicate of soda, in solution. These materials are thoroughly incorporated, and subjected to a pressure of one ton to the square inch of the block surface, the blocks are stacked to dry, and in twenty-four hours (the chemical action of the alumnia in the clay having converted the silicate of soda into silicate of alumnia, or into an insoluble substance, in that time) the blocks are fit for use, and are as hard as ordinary coal. Among the many advantages claimed by Mr. Cory for his fuel, we will mention the following: The fuel is generally better than lump coal, and will do at least seven per cent more work, as in the case of fuel there is no loss from small particles being lost to combustion by falling through the bars, etc. The silicate being only a mixture of sand and soda-ash boiled together under steam-pressure for three or four hours, it can be manufactured at the fuel works at little expense; and fire-clay can be obtained from wherever the coal is. The fuel, being compressed, only occupies 30 cubic feet in stowage per ton, coal taking 42 feet. The fuel does not smoke, smell or decrepitate in the furnace, is weather proof, does not cause clinkers (silicate of alumnia only fusing as the very highest furnace heats), nor injure the fire-bars. The machinery (as the manufacture is continuous, only a small quantity of coal being under manipulation at a time) is light, automatic and inexpensive, and the press is constructed to manufacture 40 ten-pound blocks per minute, and the only apparatus needed for making the silicate is a steam boiler. Mr. Cory then quoted several high authorities on the action of the clay upon the silicate, and came to the most important part of the subject, namely, the cost of production, which he estimates as follows:—

For the production of 240 tons (with one press) in 20 hours.—Cost of Chemicals, $46.75; Skilled Labor, $16.50; Unskilled Labor, $44; Sundry expenses, $12.75; Total, $120, or fifty cents per ton. This Mr. Cory claims to be an outside estimate. Mr. Cory, continuing, told the meeting that he had entered into arrangements which would enable him to erect the necessary fuel machinery for his licensees at a comparatively small cost, and guarantee it in every respect, and also start the works and instruct the licensee in the business. Mr. Cory then exhibited some fine samples of his fuel made from anthracite, bituminous and lignite coals, and said he had every facility for making samples from any description of coal, and thoroughly demonstrated the value of his process as applied to the special coal of intending licensees, and that he was prepared either to sell territorial rights, or grant licenses on royalty on very moderate terms. In conclusion, in order to show the great value of his invention he gave statistical reports of the waste coal of this country, and showed how each description of coal could be utilized by his invention. He claimed that his process was the only one fitted for the agglomeration of anthracite culm, and that when applied to lignite would make its calorific power; at least coal could be utilized by his invention. He claimed that his process was the only one fitted for the agglomeration of anthracite culm, and that when applied to lignite would make its calorific power at least one-third greater than that contained in the natural coal, while even for those bituminous coals that will coke, he claimed that it would be far more profitable to convert the slack into fuel.

Finally, Mr. Cory read a table giving the output of coal in each State, the average selling price per ton, the profit on mining, the estimated production of slack or waste coal, the net cost of converting slack into fuel, the profit per ton on fuel in each State, and the excess of profit on fuel in comparison with coal mining; also the amount of profit lost to each State by the non-utilization of slack, which Mr. Cory estimates for the census year of 1880 to amount to the large total of $23,218,100, not including the profit to be made from the lignite regions, or in any way interfering with the mmense mountains of waste slack coal (the accumulation of former years) throughout the country, and this, even if dirty, could be converted into a superior fuel, at a cost of from 3 to 4 cents extra per ton, for washing. At the conclusion of this paper, Professor Haupt, of the University of Pennsylvania, after a few remarks upon the utility of Mr. Cory's process, informed the meeting that the Northern Pacific Railroad was greatly interested in this invention and was making arrangements for its easy adoption. Mr. Cory added that although he had only commenced the introduction of his process in the States last June, he had already received orders for the erection of several sets of fuel machinery in different parts of the country.

The Stock Exchanges and Money Market.

New York Stock Exchange.

Closing Prices for the week ending Oct. 18.

	Th. 12.	F. 13.	Sat. 14.	M. 16.	Tu. 17.	W. 18.
Adams Express	.....	.....	140	.....	.....	.....
Albany and Susq.	.....	....	.....	.....	.....	.....
1st mortgage	.....	.....	....	.....	....	.....
2d mortgage	.....	.....	.....	.....	.....	.....
American Express	96	.....	95	95	96	96⅛
Burl., C. R. & Nor.	.....	.. .	.....	.....	.....	.....
1st mortgage 5s	100¾	101	.....	.....	.....	.....
Canada Southern	66¾	65¼	66	65⅜	67¼	67⅜
1st mortgage guar	93½	93⅜	.....	.....	93½	.....
Central of N. Jersey	71⅜	71¼	71¼	71¼	73¾	73⅝
1st mort. 1890	.....	116½	.....	.....	.....	116⅛
7s, consol. ass	109	.....	.....	.....	109	.....
7s, convertible ass.	.....	110½	.....	....	.....	....
7s, Income	.....	.....	83	85	87	.....
Adjustment	.....	.....	.....	....	108	.....
Central Pacific	91	90½	90	90¼	90¾	90⅞
6s, gold	.....	.....	....	114¾	.....	114¾
1st M. (San Joaq)	.....	.....	.....	.....	.....	.....
1st M. (Cal. & Or.)	.....	.....	.....	.....	.....	.....
Land grant 6s	103¾	.....	104	104¾	....	.....
Chesapeake & Ohio	26	25½	24¼	24¾	25⅛	25¼
1st pref.	39	38⅝	.....	37	37	38
2d pref	.....	....	....	26¾	26½	.....
1st mort., series B	89¾	89¾	89	.....	38¼	89¾
Chicago and Alton	.....	....	141¼	140	140	142½
Preferred	....	.....	.....	..	.....	.....
1st mortgage	.....	.....	.....	.....	.....	.....
Sinking Fund	.....	.....	.....	.....	116¼	....
Chi., Bur. & Quincy	130¼	130½	129¼	129¾	130½	132
7s, Consol. 1903	128	.....	.....	....	.....	.....
Chi., Mil. & St. Paul	109¼	108⅝	108⅛	108¼	110	110¼
Preferred	.....	123	122	122	123	124¼
1st mortgage, 8s	.....	.....	.....	.....	.....	.....
2d mort., 7 3-10s	.....	.....	.....	.....	.....	.....
7s, gold	.....	....	124½	124¼	124½	....
1st M. (La. C. div)	.....	.....	.....	123	.....	.....
1st M. I. & M. div.)	.....	125	.....	...	.....	123
1st M. (I. & D. ext.)	.....	....	.....	.....	.....	.....
1st M. (H. & D. div.)	.....	.....	....	.....	.....	.....
1st M. (C. & M. div.)	.....	.....	.....	.....	.....	....
Consolidated S. F.	.....	124⅛	124¼	125	.....	.....
Chi. & Northwestern	143⅛	142¼	142⅞	142½	143⅜	144⅜
Preferred	162	161⅜	160⅜	160	160⅞	161¼
1st mortgage	.....	.....	.....	.....	.....	.....
Sinking Fund 6s	.....	.....	.....	.....	.....	.....
Consolidated 7s	.....	.....	.....	.....	.....	.....
Consol. Gold bo'ds	.....	....	.....	.....	.....	.....
Do. reg	.....	.....	126½	.....	.....	126
Chi., R. Isl. & Pac.	132¾	131⅜	131	131½	135	134¼
6s, 1917, c	.	127⅛	.....	.....	.....	.....
Clev., Col., Cin. & Ind.	83⅛	83⅛	.....	82	82¾	84
1st mortgage	.....	.....	....	.....	.....	.....
Clev. & Pittsburg gr.	.....	.....	.....	.....	140	.....
7s, Consolidated	....	.....	....	.....	127	.....
4th mortgage	.....	.....	.....	.....	.....	.....
Col., Chi., & Ind. Cent	9⅛	9⅛	9⅛	9⅛	9	9⅛
1st mortgage	.....	123½	.....	.....	....	.....
2d mortgage	.....	.....	.....	.....	.....	.....
Del. & Hud Canal.	113¼	112¾	112⅛	112	112⅛	113¼
Reg. 7s, 1891	.....	.....	.....	.....	.....	.....
Reg. 7s, 1884	.....	.....	.....	.....	.....	.....
7s, 1894	.....	....	.....	115	115	.....
Del., Lack. & Western	133¾	132¾	133⅜	133¼	136	137⅜
2d mortgage 7s	.....	.....	.....	.....	.....	.....
Consol. 1907	.....	.....	.....	.....	.....	.....
Erie Railway	....	.....	.....	.....	.....	.....
1st mortgage	.....	.....	.....	.....	.....	.....
2d mort. 5s, ext.	....	.....	.....	.....	.....	.....
3d mortgage	....	.....	101	.....	101	101½
4th mort. 5s, ext.	.....	.....	.....	.....	.....	...
5th mortgage	.....	.....	.....	.....	.....	.....
7s, Consol. gold	.....	.....	.....	.....	126¼	.....
Great West. 1st mort	.....	106½	.....	...	.....	.....
2d mortgage	.....	.....	.....	102½	102½	102¾
Hannibal & St. Jo.	.....	.....	. ...	.....	.....	.....
Preferred	81	79	77⅞	75¼	78	79
8s, Convertible	.....	.....	....	105	.....	104
Houston & Tex. Cen	82	.....	...	.....	.....	81
1st mortgage	109¼	.....	.....	109¾	.....	111
2d mortgage	.....	.....	.....	.....	.....	.....
Illinois Central	144¾	144½	143⅜	145⅝	145⅝	146
LakeShore & MichSo	111⅛	111⅛	111⅛	110¾	112¼	112½
Consol. 7s	.....	.....	.....	.....	.....	.....
Consol. 7s, reg	.....	.....	.....	.....	.....	.....
2d Consolidated	.....	125	.....	.....	.....	.....
Leh. & W. B. con. ass	.....	100	.....	.....	.....	.....
Long Dock bonds	....	.....	.....	.....	.....	.....
Louisville & Nash.	55¼	54⅜	54⅛	54	56	57¼
7s, Consolidated	.....	115	.....	.....	115¾	.....
Manhattan	49	49¼	49	48	47¼	.....
1st pref	.....	.....	.....	.....	88¾	.....
Met. Elevated	.....	.....	.....	.....	.....	86
1st mortgage	100	.....	100¾	100¾	.....	100
Michigan Central	99¼	98¾	98¼	98	100½	100⅝
7s, 1902	.....	.....	.....	.....	.....	.....
Morris & Essex	.....	125¼	.....	.....	.....	.....
mortgage	.. ..	.....	.....	.....	.....	.....
2d mortgage	.....	.....	.....	.....	.....	.....
7s of 1871	.....	.....	.....	.....	121	121
7s, Convertible	...	.....	.....	.....	.....	.....
7s, Consolidated	.....	.....	.....	.....	.....	.....
N. Y. Cen. & Hud. R.	133	132⅝	132	131⅞	132⅞	133¼
6s, S. F. 1883	... .	.....	102¾	.....	.....	102⅜
6s, S. F., 1887	.....	.....	.....	.....	.....	.....
1st mortgage	.....	.....	.....	.....	.....	.....
1st mortgage, reg.	...	.....	.....	.....	.....	.....
N. Y. Elevated	.....	....	.....	.....	.....	.....
1st mortgage	117	117	.....	.....	.....	116
N. Y. & Harlem	.....	.....	.....	.....	.....	.....
Preferred	.....	.....	.....	.....	.....	.....
1st mortgage	.....	.....	.....	.....	.....	.....
1st mortgage, reg	..	.....	.....	.....	.....	.....
N. Y. Lake Erie & W	42½	42⅜	41⅞	42⅛	42⅜	42⅛
Preferred	87	86¼	....	.....	.....	87
2d Consolidated	100	100	100	100	100	100⅛
New 2d 5s fund	.....	.....	.....	.....	.....	.....
N. Y., N. Hav'n & Hart	182¾	.....	.....	.....	183¼	.....
North Mo. 1st mort	.....	.....	.....	.....	.....	.....
Northern Pacific	48¾	47⅛	45¼	43⅛	45⅝	48¾
Preferred	93¾	91¾	9(	90¼	93¼	94¼
Ohio & Mississippi	38½	.....	38¼	39	38¾	.....
Preferred	.....	.....	105½	.....	.....	.....
2d mortgage	.....	120½	.....	.....	.....	.....
Consolidated 7s	.....	.....	.....	116½	.....	.....
Consol. S. Fund	.....	.....	.....	.....	.....	.....
Pacific Mail S. S. Co	41½	39¼	38⅛	38⅝	39⅜	40
Pacific R. R. of Mo.	.....	.....	.....	.....	.....	.....
1st mortgage	105½	.....	.....	105⅝	.....	.....
2d mortgage	.....	.....	.....	.....	.....	.....
Panama	.....	.....	.....	.....	.....	.....
Phila. & Reading	62¾	61⅞	61¼	60⅜	61⅜	62⅝
Pitts, Ft. W. & Chi. gtd	136	138½	.....	.....	137½	.....
1st mortgage	.....	.....	.....	.....	.....	.....
2d mortgage	.....	.....	.....	.....	.....	.....
3d mortgage	.....	.....	.....	.....	.....	.....
Pullman Palace Car	130	130	.....	128⅛	129¼	129⅞
Quicksil'r Min'g Co	.....	.....	.....	.....	8¼	.....
Preferred	.....	.....	.....	.....	40	41⅛
St. Louis & San Fran	39	37⅛	.....	.....	.....	.....
Preferred	59	58¾	56	.....	.....	58½
1st Preferred	... .	97	95½	.....	.....	96
St. L., Alt'n & T. H.	44¼	43	.....	. ...	38¼	43⅜
Preferred	86	80	82¾	.....	80	83
1st mortgage	.....	.....	.....	.....	.. .	.....
2d mort. pref.	.....	.....	.....	.....	.....	.....
Income bonds	...	.....	99	.....	99	99
St. L., Iron Mt. & S	.....	.....	.....	.....	.....	.....
1st mortgage	.....	.....	.....	.....	.....	.....
2d mortgage	107⅞	.....	....	.....	107½	107⅛
Toledo and Wabash	.....	.....	.....	.....	.....	.....
1st mortgage	.....	.....	....	.....	.....	.....
2d mortgage	...	.....	.....	.....	.....	.....
7s, Consolidated	.....	.....	....	....	.....	.....
St. Louis Division	.....	.....	.....	102¾	.....	.....
Union Pacific	108¼	107⅛	107⅛	106¾	108⅞	108
1st mortgage	115	115⅛	.....	115	115⅛	.....
Land Grant 7s	110	....	.....	.....	110⅛	110⅛
Sinking Fund 8s	.....	.....	117¼	.....	117	117
United States Ex	70	70	. ...	.....	.....	.....
Wabash, St. L. & Pac	35⅛	34⅛	33¼	32¼	34⅛	33¾
Preferred	65¼	63⅞	63½	61	61¼	63⅛
New mort. 7s	.....	.....	.....	.....	.....	.....
Wells-Fargo Ex	132	.....	131	.....	.....	....
Western Pacific b'ds	.....	.....	.....	.....	.....	.....
Western Union Tel.	88¾	88	87	87	87¾	88⅜
7s., S. F conv., 1900	.....	....	.....	.....	.....	....
FEDERAL STOCKS :—						
U. S. 4s, 1907, reg	119⅜	.. ..	.....	119	.....	119¼
U. S. 4s, 1907, coup	.....	.....	.....	119	.....	.....
U. S. 4½s, 1891, reg.	.....	.....	.....	.....	....	113
U. S. 4½s, 1891, coup	....	.....	... .	.....	.....	.....
U. S. 5s, cont'd at 3½	.....	... .	.....	.....	.....	.....
U. S. 6s cont'd at 3½	.....	.....	.....	.....	.....	.....
Dt. of Col. 3-65s, reg	.....	.....	.....	.....	.....	.....
Dt. of Col. 3-65s, coup	.....	.....	.....	.....	.....	.....

Boston Stock Exchange.

Closing Prices for the Week Ending Oct. 18.

	Th. 12.	F. 13.	Sat. 14.	M. 16.	Tu. 17.	W. 18.
Atch., Top. & San. Fe.	90¾	89⅝	87x	86¾	88⅛	88¾
1st mortgage	.....	.....	.....	123	.....	121½
Land Grant 7s	.....	.....	.....	.....	.....	113⅜
Boston & Albany	172½	.....	172½	172¾	173	173
Boston and Lowell	.....	.....	.....	.....	...	.....
Boston & Maine	155¼	156	.....	155	.....	.....
Boston & Providence	.....	.....	.....	.....	160	.....
Bos'n, Hart. & Erie 7s	.....	.....	.. .	.....	....	.....
Burl. & Mo. R. L. G. 7s	.....	.....	.....	.....	.....	.....
Burl. & Mo. R. in Neb	.....	.....	.....	.....	.....	.....
6s, exempt	.....	112	.....	.....	.....	.....
4s	...	83	.....	.....	.....	82¾
Chi., Burl. & Quincy	131	131	129¾	130	130¼	133
Cin., Sand. & Clev ($50)	27½	28	28½	28	28	29
Concord ($50)	....	.....	.....	.....	.....	.....
Connecticut River	.....	.....	....	.....	.....	.....
Eastern	.....	.....	.....	39	40	41
New 6s, Bonds	.....	.....	.....	.....	.....	.....
Fitchburg	.....	131	.....	130	130	.....
N. Y. & New England	54⅝	54	52½	52⅜	53⅞	54
7s	116¾	116¾	.....	116¾	.....	116¼
Northern N. H.	.....	.....	.....	.....	.....	.....
Norwich & Worcester	159½	.....	.....	.....	.....	.....
Ogden & Lake Cham	.....	.....	.....	.....	.....	.....
Old Colony	137	135	135	135	135	.....
Ph., Wil. & Balt. ($50)	.....	.....	.....	.....	.....	164
Portl'd, Saco & Ports	112	112¼	.....	....	112¾	.....
Pueblo & Ark Val 7s	....	.....	.....	.....	.....	114
Pullman Palace Car	....	.....	127¾	.....	127	130
Union Pacific	108	107⅞	107¼	106¾	.....	108¼
6s	.....	.....	.....	.....	.....	113¼
Land Grant 7s	.....	.....	.....	.....	.....	.....
Sinking Fund 8s	....	....	.....	.....	.....	.....
Vermont & Mass	.....	.....	.....	131¼	.....	.....
Worcester & Nashua	.....	.....	.....	.....	.....	59
Cambridge (Horse)	.....	.....	.....	.....	.....	.....
Metropolitan (Horse)	74	.....	.....	.....	74	.....
Middlesex (Horse)	.....	.....	.....	.....	.....	.....
Cal. & Hecla Min'g Co	252	252	245x	245	246½	.....
Quincy	.....	67½	....	68	68	.....

Philadelphia Stock Exchange.

Closing Prices for the Week Ending Oct. 17.

	W. 11.	Th. 12.	F. 13.	Sat. 14.	M. 16.	Tu 17
Allegh'y Val. 7 3-10s	.....	.....	.....	.....	.....	.....
7s, Income	.....	.....	48	48	50	50
Buff., Pitts & West.	.....	.....	20¾	19⅝	19½	20
Cam'd'n & Am. 6s, '83	.....	101¼	.....	101	.....	.....
6s, 1889	....	.....	.....	.....	.....	.....
Mort. 6s, 1889	....	.....	115¼	....	.....	115¼
Camden & Atlantic	.....	.....	.....	.....	.....	.....
Preferred	....	.....	.. .	.....	.....	.....
1st mortgage	.....	.....	.....	.....	.....	.....
2d mortgage	.....	.....	.....	.....	.....	.....
Catawissa	.....	.....	.....	.....	.....	.....
Preferred	....	.....	56	.....	.....	56
2d pref	.....	....	54	54	.....	53⅛
7s, new	.....	.....	.....	.....	.....	.....
Del. & Bound Brook	.....	.....	.....	.....	.....	.....
7s	125	.....	.....	.....	.....	.....
Elmira & Williamsp't	.....	.....	.....	.....	.....	.....
Preferred	....	.....	.....	.....	.....	.....
Hunt. & B. Top Mt.	.....	...	.....	.....	18	18
Preferred	34⅛	34⅞	34⅞	34⅜	.....	.....
2d mortgage	.....	.....	.....	.....	.....	.....
Lehigh Navigation	44⅜	44¼	43⅜	43⅛	43⅜	44½
6s, 1884	.....	103⅜	.....	.....	.....	102¾
Gold Loan	115	....	115	.....	112¾	.....
Railroad Loan	.....	.....	.....	.....	.....	.....
Conv. Gold Loan	....	.....	.....	.....	.....	.....
Consol. Mort, 7s	....	.....	.....	.....	.....	.....
Lehigh Valley	66,	66	66	.....	65¼	65¾
1st mort. 6s, coup	122½	.....	.....	.....	.....	.....
1st mort. 6s, reg	.....	.....	.....	.....	.....	.....
2d mort. 7s	.....	.....	.....	.....	.....	.....
Consol mort. 6s	.....	.....	.....	.....	.....	.....
Consol. mtg. 6s, reg	122	.....	.....	.....	.....	122
Little Schuylkill	.....	.....	.....	.....	.....	.....
Minehill & Sch. Hav'n	62½	.....	.....	.....	.....	....
North Pennsylvania	65	.....	65	65	65	65
1st mortgage 6s	.....	.....	.....	.....	.. ..	.....
2d mortgage 7s	.....	.....	122½	.....	.....	.....
Genl. mtg. 7s, coup	.....	.....	.....	.....	.....	.....
Genl. mtg. 7s, reg	.....	.....	.....	...	.....	...
Northern Central	.....	57	.....	56½	56⅞	57¾
5s	97⅝	97⅝	.....	.....	.....	97⅜
Northern Pacific	48¾	48¾	47	45¼	43⅜	45⅜
Preferred	93⅛	93⅜	91⅜	90⅞	90¼	93¾
Pennsylvania R. R.	64⅜	64¼	64¾	64¼	63⅜	64⅛
1st mortgage	.....	.....	.....	.....	.....	.....
Gen'l mort	.....	.....	.....	.....	.....	.....
Gen'l mort reg	.....	.....	.....	.....	.....	...
Consol. mort. 6s	....	.....	.....	.....	.....	....
Consol. mort. reg	.....	.....	.....	.....	.....	.....
Pa. State 5s, new	.....	.....	.....	.....	.....	118
do 4s, new	.....	.....	.....	.....	.....	.....
do 3½s, 1912	.....	.....	.....	.....	.....	.....
Phila. & Reading	31⅜	31⅛	30⅞	30⅝	30¼	30¾
1st mortgage 6s	.....	.....	.....	.....	.....	.....
7s of 1893	.....	.....	.....	.....	.....	.....
7s, new convert	75	75	.....	74¼	.....	....
Consol. mort. 7s	.....	....	127	.....	.....	127
Consol. mort. reg	127	.....	.....	.....	.....	.....
Gen'l mort. 6s	95	... .	.....	.....	.....	94¾
Def. Income bonds	.....	.....	.....	.....	.....	.....
Philadelphia & Erie	22¼	22	21¼	21	19⅞	20¾
1st mortgage 5s	.....	102¾	102⅛	.....	.....	.....
2d mortgage 7s	.....	.....	.....	.....	.....	.....
Pittsb., Cin. & St. L. 7s	.....	.....	121	.....	.....	.....
Pitts., Tit. & Buff. 7s	....	.....	.....	.....	96	.....
Schuylkill Navi't'n	. ..	.. ..	.....	.....	.....	.....
Preferred	12¼	.....	.....	.....	.....	.....
6s, 1895	.....	.....	.....	.....	.....	.....
6s, 1907	.....	90	.....	.....	90	.....
United Co. of N. J.	190¼	190¼	190¼	190¼	190¾	190¾
Hestonville, (Horse)	18	....	.....	.....	.....	.....
Chestnut & Walnut)	.....	.....	.....	.....	.....	....

Baltimore Stock Exchange.

Closing Prices for the Week Ending Oct. 17.

	W.11.	Th.12.	F.13.	Sat.14.	M.16.	Tu.17.
Baltimore & Ohio....	196	.....	.....	.....	.....	.....
6s, 1885.....	103¾	.....	.....	.....	.....	.....
Central Ohio ($50)...	.....	.....	.....	.....	.....	.....
1st mortgage.....	108¼	.....	.....	108½	.....	.....
Marietta & Cincin'ti.	.....	.....	.....	.....	.....	.....
1st mortgage, 7s..	.....	.....	.....	.....	.....	.....
2d mortgage, 7s....	.....	.....	.....	.....	.....	.....
3d mortgage, 8s...	.....	.....	.....	.....	.....	.....
Northern Cen. ($50).	57	57	.....	57	57	.....
2d mort. 6s, 1885..	.....	.....	.....	105¾	.....	.....
3d mort. 6s, 1900..	.....	.....	.....	.....	.....	.....
6s, 1900, gold.....	.....	.....	116	.....	.....	.....
6s, 1904, gold.....	.....	.....	.....	.....	.....	.....
Pitts. & Connelsv. 7s.	121½	.....	.....	.....	.....	.....
Virginia 6s Consol..	57¾	57	57	57	57	.....
Consol. coupons...	.....	58	.....	.....	.....	.....
10-40 bonds.....	42¼	.....	.....	42¼	42⅝	.....
Def'd Certificates.	.....	.....	.....	.....	.....	.....
Western Maryland..	.....	.....	.....	.....	16¼	.....
1st M.,end,by Balt	.....	.....	.....	.....	.....	.....
2d M., do.	.....	.....	.....	.....	.....	.....
3d M., do.	.....	.....	.....	127½	.....	.....
1st M., unendorsed	.....	.....	.....	.....	.....	.....
2d M.,end.Wash Co	.....	.....	.....	.....	.....	.....
2d M., preferred...	.....	.....	.....	.....	.....	.....
City Passenger R. R.	.....	.....	.....	43	.....	.....

London Stock Exchange.

	Closing Prices			
	Oct. 6.		Sept. 29.	
Baltimore and Ohio 5s, 1927.....	108	110	107	109
Central of N. J., $100 shares.....	80	85	85	90
Do. consol. mort.....	109	111	109	111
Do. Income Bonds.....	88	92	89	92
Central Pacific of Cal., $100 shs..	93⅛	94⅛	94	95
Do. 1st mort. 6s, 1895–'98.....	117	119	117	119
Det., G'd Haven & Mil. Equip bds.	115	117	115	117
Do. Con. M. 5p.c., till '83 after 6p.c.	113	115	113	115
Illinois Central $100 shares.....	142	144	143	145
Do. 8. F. 5s, 1903.....	104	106	106	108
Lehigh Valley Cons. mort. 1923...	115	119	115	119
Louisville and Nashville mort. 6s	92	94	97	99
Do. capital stock $100 shares...	58	60	71	73
N. Y. Cen. & Hud. R. mort. bonds.	132	136	132	136
Do. $100 shares.....	136⅛	137⅛	136½	137½
Do. mort. bonds (stg.).....	120	122	121	123
N. Y. Lake Erie & West. $100 shs.	43¾	44	43½	44½
Do. 6 p. c, pref. $100 shares....	87	89	88	90
Do. 1st Con. Mort. bonds (Erie).	127	130	127	130
Do. do. Funded Coupon bonds.	124	127	124	127
Do. 2d Consol. Mort. bonds....	102	104	102	104
Do. do. Funded Coupon bonds.	99	101	98	100
N. Y., Pa. & Ohio 1st mort. bonds.	54⅛	55½	55	56
Do. Prior Lien bonds (sterling).	100	105	100	105
Pennsylvania $50 shares.....	65¼	66	65⅛	66
General Mortgage.....	121	123	121	123
Phil. & Erie Gen. mort. 6s, 1920...	117	119	117	119
Philadelphia & Reading $50 shs..	32½	33	32	32⅛
General Consol Mortgage.....	115	117	115	117
Do. Improvement Mortgage....	102	104	106	108
Do. Gen. Mtg.'74, ex-def'd coup.	97	99	97	99
St. L. Bridge 1st mort. gold bond.	120	122	121	123
Do. 1st. pref. stock.....	97	100	97	100
S. P'fic of Cal., 1st mort 6s, 1905–6.	105	107	104	106
Union Pacific 1st mtg. 6s, 1896–9..	118	120	118	120
Wabash, St. L. & P. $100 shares..	37	38	37	38
Do. $100 pref shares...	67½	68½	69½	70½
Do. gen. mort. bonds.....	87	88	89	91

AMERICAN RAILROAD JOURNAL

Financial and Commercial Review.

THURSDAY EVENING, October 19, 1882.

CALL loans on stocks this morning were 5@6 per cent, mostly 5 per cent, and on United States bonds 3@4 per cent. Time loans on stocks were 6 per cent, and on Governments 4 per cent. Prime mercantile paper was 6 to 10 per cent according to the grade. In the afternoon the rate for call loans on stocks was 5 per cent, but in the last hour fell to 3 per cent.

The posted rates for prime bankers' sterling were 4.82@4.86½. The actual rates were 4.81¼@¾ and 4.85¾@4.86, with cables 4.86⅛@¾, and prime commercial bills 4.79¾@4.80. The actual rates for Continental bills are as follows: Francs, 5.23¾@5.23¼ and 5.19⅛@5.18¾; Marks 94⅜@½ and 95⅛@¼, and guilders, 39¾@40.

From a statement prepared by the managers of the New York Elevated Railroads we learn that from October 1, 1878, to September 30, 1879, both roads carried 46,045,181 passengers, with cash receipts $3,526,825.26; from October 1, 1879, to September 30, 1880, the number of passengers had increased to 60,831,757, with cash receipts of $4,612,975.56; from October 1, 1880, to September 30, 1881, a further increase was shown to 75,585,778 passengers and $5,311,675.85 cash receipts. During the year ended September 30, 1882, 86,361,029 passengers were carried and $5,973,633.41 were taken in.

The following statement in reference to the 3 per cent loan has been issued from the Treasury Department: Highest numbers issued on cases of 10 A. M., Aug. 1, 1882, 508, No. 305; 1008, No. 2,236; 5008, No. 1,103; 10,008, No. 19,509; 10,0008, No. 18,942. Highest numbers issued on cases to the end of Aug. 1, 1882; 508, No. 342; 1008, No. 2,261; 5008, No. 1,329; 10,008, No. 12,334; 10,0008, No. 21,162. Highest numbers issued to date: 508, No. 526; 1008, No. 5,112; 5008, No. 2,254; 10,008, No. 16,216; 10,0008, No. 24,119.

The total funded debt of the District of Columbia is $21,669,600. Since July 1, 1878, the debt has been reduced $1,183,750, and the annual interest charge has been advanced $69,257.67. The total issue of 3-65s is $14,489,950, and there is outstandtng $5,340.18 on which interest has ceased.

At the regular monthly meeting of the board of directors of the Baltimore and Ohio Railroad Company, held in Baltimore on the 11th inst., the committee of finance submitted their report of the earnings and expenses of the road for the fiscal half year, ended September 30, and upon their recommendation cash dividends of 5 per cent, payable on the 1st of November, were unanimously declared on the stock of the main stem and Washington branch. In connection with the declaration of the dividends the President presented a statement of the earnings of the main line and branches for the month of September, which showed a total of $1,759,291 as against $1,642,634 for the same month of the preceding year, being an increase of $116,657. The President also stated that the result for the fiscal half year which closed on the 30th ult., will show, after payment of 5 per cent cash dividends upon the common stock, more than $600,000 to be added to the surplus fund which is not represented by stock or bonds, and which fund on the 30th of September, 1881, amounted to $42,258,680.61. The sum beyond the cash dividends paid, is being invested in the construction of new and additional lines and other improvements.

The President has accepted the 50 miles of the Northern Pacific Railroad beginning in Idaho and ending in Montana, which was lately examined and reported on by the Government Commissioners.

The Master under the receivership of the Philadelphia and Reading companies, in his thirty-ninth report, which is for the month of June, shows that on July 1 there was a balance in the treasury of the Railroad Company of $63,825,91, and in that of the Coal and Iron Company of $66,562.29.

At the annual meeting of the stockholders of the Texas and St. Louis Narrow Gauge Railway Company, held at Pine Bluff, Ark., on the 17th inst., the old board of directors and officers was re-elected, and a resolution passed authorizing an increase in the capital stock of the company to $15,000,000 but restricting the use thereof so that it cannot be issued at a greater rate than the maximum of $12,500 per mile on the completion of the road or roads that may be acquired. The purchase of the controlling stock of connecting lines was also authorized. The contract previously made with the Illinois Central was ratified; also similar contracts with other connecting lines in Texas and elsewhere.

The Secretary of the Treasury at Washington issued, on the 18th inst., the 118th call for the redemption of bonds of the 5 per cent funded loan of 1881, continued at the pleasure of the Government at 3½ per cent from August 12, 1881, the principal and interest of which will be paid at the Treasury in Washington, on the 18th of January, 1883, on which day interest will cease. The following is a description of the bonds: Registered bonds of the acts of July 14, 1870, and January 2, 1871—$50, No. 551 to No. 850, both inclusive, and No. 1,593 to No. 1,604, both inclusive; $100, No. 4,301 to No. 7,100, both inclusive, and No. 13,223 to No. 13,298, both inclusive; $500, No. 2,251 to No. 3,500, both inclusive, and No. 5,924 to No. 5,947, both inclusive; $1,000, No. 11,501 to No. 14,500, both inclusive, and No. 20,701 to No. 20,759 both inclusive; $5,000, No. 2,081 to No. 4,124, both inclusive, and No. 5,777 to No. 5,800, both inclusive; $10,000, No. 11,501 to No. 13,800, both inclusive and No. 18,403 to No. 18,424, both inclusive; $20,000, No. 1,601 to No. 1,819, both inclusive, and No. 2,242 to No. 2,246, both inclusive; $50,000, No. 4,601 to No. 5,250, both inclusive, and No. 6,034 to No. 6,039, both inclusive. Total $15,000,000.

The bonds described above are those last dated and numbered, as required by section 3, of the act of July 14, 1870.

Many of the bonds originally included in the above numbers have been transferred or exchanged and cancelled, leaving outstanding the amount above named.

The bonds embraced in the highest numbers in the several denominations as given above are the bonds which have been issued on transfers since the 117th call was issued.

The following quotations of sales of railway and other securities, for the week, are in addition to those given elsewhere in our columns.

New York.—Allegheny Central, 27¾; American Dock and Imp. 5s, 93; Chicago, St. Paul, Minneapolis and Omaha, 49⅜; do. pref., 107½; do. consol., 108; Central Iowa, 33; do. 1st, 108; Cedar Falls and Minn., 17½; Chesapeake and Ohio cur. 6s, 54½; do. 1st, series A, 104; Chicago, Milwaukee and St. Paul, La C. and Dav. div. 1st, 94; do. Southern Minn. div. 1st, 104¼; do. Chicago and Pacific West div. 1st, 110; Chicago, St. Louis and New Orleans 5s, 104½; Chicago and Northwestern S. F. 5s, 99¾; Chicago, St. Paul and Minneapolis 1st, 110; Chicago, Burlington and Quincy, Iowa div. 4s, 84⅝; do. Denver div. 4s, 84¾; do. 8s, 102; Dubuque and Sioux City, 90½; Denver and Rio Grande, 54½; do. 1st, 114; do. consol., 98; Danville and Norwalk, 70½; Denver, South Park and Pacific 1st, 102½; East Tennessee, Va. and Ga., 9⅝; do. pref., 16¾; do. 5s, 72; do. inc., 40; Evansville and Terre Haute 1st, 96¾; Fort Worth and Denver, 41½; Green Bay, Winona and St. Peter, 9; Gulf Colorado and Santa Fe 1st, 108; Hudson River 2d, S. F., 108⅛; International and Gt. Northern coup. 6s, 84; do. 1st, 106¾; Indiana, Bloomington and Western, 43¾; do. inc., 47½; do. 1st, 90; do. 2d, 76; do. Eastern div. 6s, 93¼; Kansas Pacific 6s, Denver div. ass., 108⅝; do. 1st consol., 103; do. 6s, 1895, 110; Keokuk and Des Moines 1st, 100½; Lafayette, Bloomington and Muncie 1st, 102½; Long Island, 62½; do. consol. 5s, 97¾; do. 1st, 123½; Lake Erie and Western, 35¾; do. inc., 50½; do. 1st, 101½; Louisville and Nashville, N. O. and Mobile div. 1st, 87; do. genl. mort. 6s, 90¾; Manhattan Co., 43½; Michigan Southern S. F., 108⅜; Metropolitan Elevated 2d, 91; Manhattan Beach, 19; Minneapolis and St. Louis, 31½; do. pref., 73; Missouri, Kansas and Texas, 34⅝; do. genl. mort. 6s, 84; do. consol., 78, 104½; do. 2d, 60; Missouri Pacific, 105¾; do. 1st consol., 102; do. 3d, 113; Memphis and Charleston, 50; Milwaukee, Lake Shore and Western 1st, 101¼; Mobile and Ohio new mort., 109½; New York, Chicago and St. Louis, 14⅞; do. pref., 30; do. 1st, 90¾; Nashville, Chattanooga and St. Louis, 53⅛; do. 1st, 114½; New York, Ontario and Western, 27¾; Norfolk and Western pref., 57; do. genl. mort., 102⅞; New Orleans Pacific 1st, 80; Northern Pacific 1st, 103¾; Ohio Central, 16⅞; do. inc., 37; do. Terminal trust 6s, 93; Ohio Southern, 16; do. 1st, 83; Oregon Railway and Nav., 158; do. 1st, 1st, 108½; Oregon Trans-Continental, 88¼; Oregon Short Line, 35⅞; do. 6s, 100; Peoria, Decatur and Evansville, 20; Rome, Watertown and Ogdensburg inc., 41; Richmond and Alleghany 1st 81; Rensselaer and Saratoga, 142½; Richmond and Danville, 78; do. 1st, 95½; do. deben., 60; Richmond, Danville and West Point, 35⅝; Rochester and Pittsburgh, 23¼; St. Paul and Duluth pref., 93¼; St. Paul, Minn. and Man., 159½ do. 1st, 110¼; do. 2d, 100½; do. Dakota ext. 1st, 108½; St. Louis and Iron Mt. 5s, 77; do. Cairo, Arkansas and Texas 1st, 107; do. Cairo and Fulton 1st, 107; do. Arkansas Branch 1st, 107½; Southern Pacific of Cal. 1st, 103¾; South Carolina inc., 57; do. 1st, 90; do. 2d, 93; St. Louis and San Francisco 2d, Class B, 92; St. Paul and Sioux City 1st, 110½; Texas and Pacific, 41⅜; do. consol. 6s, 93; do. 1st, 104; do. Rio Grande div. 1st 81¾; Texas Central 1st, 102½; Wabash, St. Louis and Pacific gen'l mort. 6s, 85; do. Chicago div. 1st, 82; Winona and St. Peter 1st, 107½; Alabama, Class B, 106¾; Louisiana consol., 69¼; Tennessee 6s, 48½; do. compromise, 57; Virginia 6s, consol., ex-mat. coupon, 56½; Cameron Coal, 20; Colorado Coal and Iron, 42; do. 6s, 87; Consolidation Coal, 31; Maryland Coal, 18½; American Cable, 73; Am. District Telegraph, 35; Mutual Union Tel., 23½; do. 6s, 73; Homestake Mining Co., 17¼; Ontario, 36

Boston.—Atlantic and Pacific Blocks, 106⅜; do. 6s, 96; do. inc., 25; Boston Water Power, 3½; Boston Land, 7 Burlington and Missouri River in Nebraska 6s, non-exempt, 102½; Boston, Revere Beach and Lynn, 110; Boston and Lowell 5s, 104½; Connotton Valley, 7; do. pref. 12; do. 6s, 61¾; Chicago, Burlington and Quincy 7s, 125 do. 5s, 1901, 102; do. 4s, old, 84⅜; Cheshire R. R. 1;

Chicago, Milwaukee and St. Paul, Dayton div. 1st, 103¾; Detroit, Lansing and Northern, 70; do. pref., 112; Flint and Pere Marquette, 22; do. pref., 96; Iowa Falls and Sioux City, 87½; Kansas City, Lawrence and Southern 58, 101½; Kansas City, Fort Scott and Gulf 7s, 110½; Little Rock and Ft. Smith, 48; do. 7s, 107½; Marquette, Houghton and Ontonagon, 68; Massachusetts Central, 6; do. 6s, 39¾; Mexican Central, 22¾; do. 7s, 76⅝; do. blocks No. 3,98½; New Mexico and Southern Pacific 7s, 133½; New York and New England 6s,105½; Oregon Short Line 6s, 99¼; Rutland pref., 21¾; Summit Branch, 10¾; Sonora 1st, 105; Toledo, Delphos and Burlington southeast div. 6s, 63; do. Branch inc., 16; Toledo, Cincinnati and St. Louis, 6¾; do. 6s, 63; Wisconsin Central, 18; Allouez Mining Co., 2¾; Copper Falls, 2; Franklin, 15⅜; Huron, 3⅛; Osceola, 35; Pewabic, 11¾; Ridge, 1.

Philadelphia.—Allegheny Valley, (eastern extension) 7s, 118; Belvidere Delaware 1st 6s, 121; Cambria Iron Co., 120; Chesapeake and Ohio Canal 6s, 89; Central Transp., 34½; Cincinnati 7-30s, 130½; Elmira and Williamsport 1st 6s, 117; Huntingdon and Broad Top Mt. consol. mort. 5s, 90; Harrisburg, Portsmouth, Mt. Joy and Lancaster, 75; Pennsylvania Canal 6s, 90; Pittsburgh Av. 7s, 107; Philadelphia, Wilmington and Baltimore 4s, 95; Pennsylvania Co. 4⅛s, 95½; Philadelphia City 6s, 1895, 128; do. 6s, 1887, 111; do. 6s. 1900, 133¼;do. 4s, 1895, 110; Philadelphia and Reading consol. gold 6s, 113½; do. scrip, 99; do. deben. 6s, 61; Pennsylvania and New York Canal 7s, 1896, 123; Philadelphia, Germantown and Norristown, 109; St. Paul and Duluth, 34; Texas and Pacific, 40¾; do 1st, 104; do. consol. mort. 6s, 93½; Union and Titusville 7s, 96; The latest quotations are: City 6s, 108@ 120; do. free of tax, 127@134; do. 4s, new, 106@114; Pennsylvania State 5s, new loan, 118@119; do. 4s, old, 111@114; do. 4s, new, 116@117; Philadelphia and Reading Railroad, 31⅛@31¼; do consol. mort. 7s, reg., 126¾@127¼; do. gen'l mort. 6s,coupon, 94⅛@95; do. 7s, 1893, 118@120; do. new conv., 73@74; United New Jersey R. R. and Canal, 190@191; Buffalo, Pittsburg and Western, 20¼@20½; Pittsburgh, Titusville and Buffalo 7s, 95¼@96½; Camden and Amboy mort. 6s, 1889, 115@115½; Pennsylvania R. R., 64⅜@64¼; do. general mort. 6s, coupon, 123@126½ do. reg., 122@—; do. consol. mort. 6s, reg., 121½@122; Little Schuylkill R. R., 57¾@58; Schuylkill Navigation pref., 12@13; do. 6s, 1882, 89@91: Elmira and Williamsport pref., 58@60; do. 5s, —@100; Lehigh Coal and Navigation, 44⅛@44¼; do. 6s, 1884, 103⅛@104; do. R. R. loan, 114@116; do. Gold Loan, 112⅛@113; do. consol. 7s, reg., 117@118; Northern Pacific, 46⅛@46¼; do. pref., 94¼@94¾; North Pennsylvania, 64½@65¼; do. 6s 105½@106; do. 7s, 122@123; do. 7s, General mort. reg., 124½@125; Philadelphia and Erie, 21@—; do. 7s, 113⅛@115; do. 5s, 102@103; Minehill, 62½@63; Catawissa 20@21; do. pref., 55¾@—; do. new pref., 53@54; do. 7s, 1900, 117@—; Lehigh Valley, 65⅝@66; do. 6s, coupon, 122@123; do. reg., 122@123; do. 7s, 133@134; do; consol. mort., 122@122½; Fifth and Sixth streets (horse), 170@—; Second and Third, 114@120; Thirteenth and Fifteenth, 76@80; Spruce and Pine, 40@44; Green and Coates, 90@—; Chestnut and Walnut, 90@93; Germantown, 70@75; Union, 110@111; West Philadelphia, 110@120; People's, 14½@15; Continental, 103@105.

Baltimore.—Atlanta and Charlotte, 67; do. 1st, 106; Atlantic Coal, 1.05; Baltimore City 6s, 1890, 115; do. 6s, 1886, 108; do. 5s, 1916, 122½; do. 5s, 1894, 113; Baltimore and Ohio 2d pref., 122: Charlotte, Columbia and Augusta, 40; Central Ohio pref., 51½; Columbia and Greenville 2d, 79; Northern Central 5s, series A, 97½; Maryland Defense 6s, 105½; Marietta and Cincinnati 1st Trust certificates, 127¼; do. 2d do., 99¼; do. 3d do., 56⅜; North Carolina R. R., 102; Ohio and Mississippi, Springfield div. 1st, 120½; Parkersburg Branch, 9; Richmond and Danville 6s, 94⅞; do. 1890, 104; do deben., 62⅝; Virginia new 3s, 50; Virginia Peelers, 35; do. Peeler coupons, 38; Virginia Midland 2d mort., 107; do. inc., 50; Wilmington, Columbia and Augusta, 107. The latest quotations are: Atlanta and Charlotte 1st, 105¾@105⅞; Baltimore and Ohio, 196@197; do. 6s, 1885, 103¾@—; Baltimore City 6s, 1890, 114⅞@115; do. 6s, 1886, 107½@108¼; do. 6s, 1902, 128@130; do. 5s, 1894, 112¾@—; do. 5s, 1916, 122½@—; Columbia and Greenville 1st, 100½@101; Canton Co. 6s, 103@105; Marietta and Cincinnati 1st, 127@129; do. 2d, 99@99¾; do. 3d, 56¼@56¼; Northern Central, 57@57½; do. 5s, Series A, 97½@97¾; N. W. Va. 3d. guar., 104¼@106; Ohio and Mississippi, Springfield div. 1st, 120@120½; Richmond and Danville 1915, 94¾@—; Virginia and Tennessee 2d, 101¾@102; Virginia Midland 5th mort., 93@95; do. inc., 49@—; Virginia consols, 57@57½; do. 10-40s, 42¼@42¾.

THE LAKE SHORE AND MICHIGAN SOUTHERN RAILWAY COMPANY.

TREASURER'S OFFICE, GRAND CENTRAL DEPOT,
NEW YORK, Sept. 27, 1882.

The Board of Directors of this company have this day declared a QUARTERLY DIVIDEND of TWO PER CENT upon its Capital Stock, payable on WEDNESDAY, the first day of NOVEMBER next, at this office. The TRANSFER-books will be closed at 3 o'clock P. M., on MONDAY, the 2d day of October next, and will be reopened on the morning of Monday, the sixth day of November next.

E. D. WORCESTER,
Treasurer.

To Contractors.

OFFICE OF THE GEORGETOWN AND LANES RAILROAD COMPANY,
GEORGETOWN, S. C., Sept. 22, 1882.

PROPOSALS ARE INVITED UNTIL October 31, prox., for the construction of the road-bed of the GEORGETOWN AND LANES RAILROAD, as covered by survey and estimate of Major G. W. EARLE, Engineer. For specifications and all other information address the undersigned. The Company reserves the right to reject any or all bids.

P. R. LACHICOTTE,
President G. & L. R. R. Co.

Railways in Nova Scotia.

THE Halifax and Cape Breton Coal and Railway Company, of which Sir Hugh Allan is chief corporator, has been notified by the Government of Nova Scotia of its intention to take over the Eastern Extension Railway, extending from New Glasgow to Cape Breton Island, eighty miles. The line is required by the Government to give to the Nova Scotia Railway Company, which is under contract to operate the Provincial railways, completing unfinished lines. The Pictou branch of the Intercolonial, from Truro to Pictou, fifty miles, given as a subsidy by the Dominion for the construction of the above line, which joins it, falls into the same hands. There seems to be every prospect of the scheme of railway consolidation adopted by the late Local Government being consummated without delay.

Photography from Trains.

INSTANTANEOUS photography, in its more familiar aspect, supposes motion of the objects photographed; but another form of it is that in which it is the camera, more especially, that has motion of translation, as in photographing from balloons or trains. The practicability of photographing landscapes from the window of a train running at a rate of even forty miles an hour has been recently proved by Dr. Caudeze, who uses what he calls a gyrograph for the purpose. The apparatus comprises a copper tube similar to that which carries the lenses in ordinary cameras, but the lenses are placed on opposite sides parallel to the axis. Within is a shutter similar to the box of a stopcock; it presents two quadrangular apertures which, according to the position of the shutter, do or do not let pass the light-rays in making a quarter of a turn. This rotary movement is obtained by means of a spring liberated from a catch. An exposure of only 1-100 of a second may be had. With a little practice wonderfully distinct views, it is said, can be obtained with the apparatus.—*London Times.*

OF 295 patents issued last week, 13 were to Edison for electric contrivances.

THE Governor of Pennsylvania has appointed Tuesday, October 24, as a legal holiday for the observance of the bi-centennial throughout the State.

SINCE it was discovered that a family at Logan, Kan., had lost five servant girls in succession by marriage, the State Commissioner of Immigration is overwhelmed with letters from Eastern maidens, asking the speediest means of reaching that house.

IT is officially announced that the Chicago, Milwaukee and St. Paul Railway Company has entered Des Moines for local business by a contract with the Des Moines Northern, an independent shore line narrow-gauge road, with its present terminus at Madrid, a station on the St. Paul and Council Bluffs Line.

THERE is an active immigration of laboring people into Mexico. The Italian colonists are represented as well satisfied with the Government's provision for their comfort, and 500 more families are expected to arrive shortly. Arrangements have been completed by parties in Oaxaca to bring 600 families from the Canary Islands to settle on State lands.

THE shops of the Wharton Switch Company at Jenkintown, Penn., commenced operations on the 14th inst. About $150,000 has been expended in the enterprise. Building operations for the erection of 50 houses for the employés of the company have been started, with a view to erecting more shortly. The works when running on full time will have employment for 500 men.

THE biggest blast ever undertaken on the Pacific coast was exploded on the Oregon and California Railway track. Nearly 6,000 pounds of blasting powder were used, and the shock was so tremendous that an adjacent stream was thrown out of its bed for a distance of half a mile; the highway was badly injured and effectually blockaded for the same distance, and damage was inflicted in the workmen's camp 900 yards away.

THE telegraph companies are utilizing the Brooklyn bridge at a rapid rate before it is finished. The secretary of the company says there are no fewer than 350 wires already in position on that structure, many of which are private commercial telephonic wires. Many of them are gathered in a single insulated cable, as in the case of the Metropolitan Telephone Company and the Gold and Stock Telegraph. Some of the cables contain over 30 wires. The Bridge Company receives no inconsiderable revenue from these telegraphic wires, each one of 350 paying $30 per annum. It is a condition that none of these wires shall interfere with the work on the bridge.

GORDON & DUGGAN
RAILWAY SWITCH.

The **Standard** on several and in use on twenty-five Railroads.

Combines Safety, Durability, Simplicity, and Low Cost, with **Fixed Rails.**

The only movable piece weighs 375 lbs., and is without a bolt or rivet.

E. GORDON, Treasurer,
No. 28 STATE STREET, BOSTON, MASS.

FOR SALE.

Locomotives—Four Second-hand Narrow-Gauge Engines in good order.
One Second-hand "Tank" Narrow-Gauge Engine, 10 tons.
Several Second-hand Standard-Gauge Locomotives in good order, immediate delivery.
One new 3ft. Gauge Passenger Engine, 22 tons, prompt delivery.
Six new 4ft. 8½ Gauge Locomotives, cylinders 17x24, weight 35 tons. October and November delivery.
Two new 3ft. Gauge Locomotives, Cylinders 12x18, weight 20 tons. October and November delivery.
Cars—Passenger and Freight Cars of all descriptions for early delivery.
Rails—16lb., 20lb. 30lb. 35lb. and 56lb. Rails.
Car Wheels and Axles.
Narrow-Gauge Rolling-stock a specialty.

BARROWS & CO.,
64 Broadway,
NEW YORK.

F. W. DEVOE & CO.

Manufacturers of Fine

RAILWAY VARNISHES,

COACH AND CAR COLORS,

Ground in Oil and Japan.

Fine Brushes adapted for Railroad use. All kinds of Artists' Materials. Colors for ready use, and all specialties for Railroad and Carriage purposes.

SEND FOR SAMPLE CARD OF TINTS.

Cor. of Fulton and William Sts.
NEW YORK.

Continuous Automatic
FREIGHT BRAKES.

Requiring no other Connection between Cars than the ordinary Coupling-Link and Pin.

SIMPLE, DURABLE, AND EFFICIENT.

Brakes can be applied to every Car in the longest train, from the engine or caboose, or from any car in the train. It can be readily attached to any car, and adapted to ordinary brake beams, shoes, etc. There is no possibility of damaging wheels by "sliding."

PATENTED MAY 23, 1882.

☞ Railroad and manufacturing companies, or parties able to co-operate with patentee in their manufactur and introduction, are invited to correspond with

WM. C. SCHULTZE,
Surgeon C., R. I. and P. Ry.
MARENGO, Iowa Co., Iowa.

NO OTHER LINE IS SUPERIOR TO THE
FITCHBURG RAILROAD
HOOSAC TUNNEL ROUTE
WEST.

6.30 A.M. ACCOMMODATION.

Connecting at Syracuse, N. Y., at 7.15 P.M., with through sleeping cars for Cincinnati, Cleveland, Toledo, *DETROIT AND CHICAGO.*

3.00 P.M. CINCINNATI EXPRESS.

Pullman Sleeping Car attached, running through to Cincinnati without change. (Only Line running Pullman Cars from Boston.) This car runs *via* Erie Railway and N.Y., P. & O. R.R., making direct connection for Louisville, St. Louis, Kansas City, New Orleans, and all points in Texas and New Mexico.

3.00 P.M. ST. LOUIS EXPRESS.

THE ONLY LINE which runs a THROUGH SLEEPING-CAR from

BOSTON TO ST. LOUIS WITHOUT CHANGE!

ARRIVING AT 8.00 A.M. SECOND MORNING.

Through sleeping car for Buffalo, Toledo, Fort Wayne, Logansport, Lafayette, Danville Tolono, Decatur and St. Louis, making direct connection with through Express Trains for Kansas, Colorado, Texas, and all points in the

SOUTHWEST.

6.00 P.M. PACIFIC EXPRESS.

The only line running a through sleeping car *via* Buffalo and Detroit without change, arriving at Chicago at 8.00 A.M. second morning, making sure connections with through Express Trains for Iowa, Nebraska, Kansas, Colorado, the Pacific Coast, Wisconsin, Minnesota and all points in the

WEST AND NORTHWEST.

THE ABOVE TRAINS RUN DAILY, SUNDAYS EXCEPTED.

This Great Short Line passes through the most celebrated scenery in the country, including the famous HOOSAC TUNNEL, four and three-quarters miles long, being the longest Tunnel in America, and the third longest in the world.

Tickets, Drawing-Room and Sleeping-Car Accommodations may be secured in Advance by Applying to or Addressing

250 WASHINGTON STREET, BOSTON. 250

JOHN ADAMS, General Superintendent. F. O. HEALD, Acting Gen'l Passenger and Ticket Agent.

In effect January 9th, 1882, and subject to changes.

RAILROAD AND CANAL DIVIDEND STATEMENT.

Showing the amount of Stock Outstanding, the Dividend Periods and the date of last Dividend.

Marked thus(*)are leased roads.	Stock out-standing.	Divide'd Periods.	Last Dividend Payable.
Albany and Susq*...100	2,500,000	semi-an	July '82 2
Ashuelot.....100	210,000	q'arterly	Oct. '81 3½
Atch., Top. and S. Fe100	54,000,000	q'arterly	Nov. '82 1½
Atlanta and W. Point100	1,232 200	semi-an	Jan. '82 6
Atlantic and St. Law*100	5,840,000	semi-an	Mar. '82 3
Augusta and Savan'h100	1,022,900	semi-an	June'81 3½
Avon, Genesee&MtM*100	225,000	semi-an	July '81 3
Baltimore and Ohio.100	14,792,566	semi-an	Nov. '82 5
" " pref.100	5,000,000	semi-an	July '82 3
Washington Br....100	1,650,000	semi-an	Nov. '82 5
Berkshire*.....100	600,000	q'arterly	Apl. '82 1¾
Boston and Albany..100	20,000,000	q'arterly	Sept.'82 2
Bos.&N.Y.AirLine pf.100	2,795,227	q'arterly	June'82 1
Bos.,Cl.,F.&N.B.pref.100	1,750,100	semi-an	Oct. '82 3½
Bos.,Conc.&Mont.pf*100	800,000	semi-an	May '82 3
Boston and Lowell..500	3,940,000	semi-an	July '82 2
Boston and Maine...100	6,921,274	semi-an	May '82 4
Boston & Providence100	4,000,000	semi-an	May '82 4
Attleborough Br...100	131,700	semi-an	July '82 3½
Bos.,Revere B&Lynn100	419,400	semi-an	July '82 3½
Buffalo,N. Y. & Erie*.100	950,000	semi-an	June'82 3
Camden & Atlantic.. 50	377,400	q'arterly	Nov. '82 3
" " pref. 50	880,650	q'arterly	Nov.'82 4
Camden & Burl. Co..100	381,025	semi-an	July '82 3
Canada Southern....100	15,000,000	.....	Feb. '81 2½
Cape May & Millville* 50	447,000	semi-an	June'81 3
Catawissa*..... 50	1,159,500	annual	Oct.'81 1½
" pref..... 20	2,200,000	semi-an	May '82 3½
" new pref.. 50	1,000,000	semi-an	May '82 3½
Cayuga and Susq.*.. 50	589,110	semi-an	July '81 4½
Cedar Rapids&Mo.R*100	6,850,400	q'arterly	Nov. '82 1½
" " pref.100	760,600	semi-an	Aug .'82 3½
Central of Georgia...100	7,500,000	semi-an	June '82 4
Central of New Jersey100	18,563,200	q'arterly	July '76 2½
Central Ohio*..... 50	2,437,950	semi-an	July '82 3
" pref.... 50	411,550	semi-an	July '82 3
Central Pacific 100	59,275,500	semi-an	Aug. '82 3
Chemung*..... 100	380,000	q'arterly	July '81 1½
Cheshire preferred ..100	2,155,300	semi-an	July '82 1½
Chicago and Alton...100	11,181,741	semi-an	Sept. '82 4
" " pref 100	2,245,400	semi-an	Sept. '82 4
Chi., Burl. & Quincy.100	55,337,455	q'arterly	Sept. '82 2
Chi., Iowa & Nebras*.100	3,916,200	semi-an	July '82 4
Chi., Mil. & St. Paul.100	20,404,261	semi-an	Oct. '82 3½
" " pref 100	14,401,483	semi-an	Oct. '82 3½
Chi. & N. Western...100	14,088,257	semi-an	June'82 3½
" pref.100	21,525,353	q'arterly	Sept. '82 2
Chi., R. I. & Pacific..100	41,960,000	q'arterly	Nov. '82 1¾
Chi. and West Mich .100	6,151,000	semi-an	Feb. '82 2½
Chi.,St.P.,M.&O.pref.100	10,390,000	q'arterly	Oct. '82 1¾
C., Ind., St. L. & Chi..100	6,000,000	q'arterly	July '82 1½
Cin., Sand. & Clev.pf. 50	429,037	semi-an	May '82 3
Clev. and Mahoning* 50	3,750,200	semi-an	Nov. '81 3½
Clev. and Pittsburg* 50	11,244,336	q'arterly	Sept. '82 1¾
Columbus & Xenia*. 50	1,786,200	q'arterly	Sept,'82 2
Colum.&HockingVal.100	2,500,200	semi-an	Aug.'81 208
Concord 50	1,500,000	semi-an	May '82 5
Concord and Ports.*.100	350,000	semi-an	July '82 3½
Conn.& Passump.Riv100	2,244,400	semi-an	Aug '82 3
Connecticut River ..100	2,100,000	semi-an	July '82 4
Cumberland Valley.. 50	1,292,950	q'arterly	Oct.' 82 2½
" 1st pref 50	241,900	semi-an	Apl. '82 4
" 2d pref. 50	243,000	semi-an	Apl. '82 4
Danbury & Norwalk. 50	600,000	.....	Oct. '82 1½
Dayton and Mich.*.. 50	2,402,573	semi-an	Apl. '82 1¾
" " pref. 50	1,211,250	q'arterly	July '82 2
Delaware*..... 25	1,468,940	semi-an	July '82 3
Del. & Bound Brook*100	1,652,000	q'arterly	Aug. '82 1¾
Del., Lack.& Western 50	26,200,000	q'arterly	Oct., 82 2
Denver & Rio Grande.100	29,160,000	q'arterly	Jan '82 1½
Den.,South P. & Pac.100	3,500,000	.....	Aug.'80 4
Detroit, Lans. & Nor.100	1,825,600	semi-an	Aug.'80 2½
" " pref.100	2,503,380	semi-an	Aug. '82 3½
Dubuque&Sioux C'y*100	5,000,000	semi-an	Oct. '82 3
East Pennsylvania*., 50	1,709 550	semi-an	July '82 3
East Mahanoy*..... 50	392,950	semi-an	July '82 3
Eastern (N. H.).....100	492,500	semi-an	June'82 2½
Eel River.....100	3,000,000	q'arterly	Sept. '82 $1
Elmira&Williamsp't* 50	500,000	semi-an	May '82 1½
" " pref. 50	500,000	semi-an	July '82 3½
Erie and Pitsburg*.. 50	1,998,400	q'arterly	June '82 1¾
Evansville & Terre H.100	100,000	semi-an	Nov.'81 2
Fitchburg.....100	4,500,000	semi-an	July '82 3
F. & P. Marquette pf.100	6,500,000	semi-an	July '82 3
Ft.W. & Jackson pref.100	2,000,000	.....	May '82 2
Georgia. ..... .100	4,200,000	q'arterly	July '82 2½
Granite 100	1,250,000	semi-an	July '82 3
Han. & St. Jo. pref .100	5,083,024	semi-an	Aug. '82 3½
Harrisbg&Lancaster 50	1,182,500	semi-an	July '82 3½
H'ford &Conn.West'n.100	.....	.....	Nov.'82 1½
Housatonic pref. ...100	1,180,000	q'arterly	Oct. '82 2
Illinois Central.....100	39,000,000	semi-an	Sept. '82 3½
Ia.Falls & Sioux City*100	4,623,500	q'arterly	Sept. '82 1¾
Iowa R. Land Co....100	7,620,000	q'arterly	Nov. '82 1
Jeffersonv. Mad.&Ind100	2,000,000	q'arterly	May '82 1¾
Joliet and Chicago*..100	1,500,000	q'arterly	June'82 1¾
Kan.C.,Ft.S.&Gulf....100	4,000,000	.....	Feb. '82 2
" " pref...100	2,750,000	semi-an	Aug. '82 4
Kentucky Central...100	500,000	semi-an	June'81 1
" " pref..100	5,583,500	semi-an	June'81 1
Lake Shore&Mich.So.100	49,466,500	q'arterly	Nov. '82 2
" (guar.)100	533,500	semi-an	Aug. '82 5
Lawrence*..... 50	450,000	q'arterly	July '82 2
Lehigh Valley..... 50	27,496,895	q'arterly	Oct. '82 2
" " pref. 50	106,300	q'arterly	Oct. '82 2

Marked thus(*)are leased roads.	Stock out-standing.	Divide'd Periods.	Last Dividend Payable.
Little Miami..... 50	4,637)300	q'arterly	Sept. '82 2
Little Rock & Ft. S...100	4,096,135	.....	July' 81 10s
Little Schuylkill*.. . 50	2,646,100	semi-an.	July '82 3½
Long Island..... 50	10,000,000	q'arterly	Nov. '82 1
Louisville & Nashv..100	19,130,913	semi-an.	Feb. '82 3
Lowell & Andover...100	500,000	semi-an.	Jan. '82 3½
Lykens Valley.....100	600,000	q'rterly.	Oct.' 81 2½
Manchester & Law...100	1,000,000	semi-an.	May '82 5
Manhattan 100	13,000,000	.....	.....
" " 1st pref.100	6,500,000	q'rterly.	Oct. '82 1½
" " 2d pref.100	6,500,000	q'rterly.	Oct. '82 1½
Marietta& Cincinnati 50	1,386,350	.....	.....
" " 1st pref 50	8,105,600	semi-an.	Sep. '66 38
" " 2d pref 50	4,440,000	semi-an.	Sep. '66 38
Marq.Hont.&Ont.pf...100	2,259 026	.....	Aug. '82 4
Massawippi*.... 100	400,000	semi-an.	Aug. '82 3
Metropolitan 100	6,500,000	q'rterly-	Oct. '82 1½
Michigan Central....100	18,728,204	q'rterly.	Aug. '81 1
Middlesex Central....100	280,000	semi-an.	Aug. '82 3
Mill Creek&Minehill* 50	323,000	semi-an.	July '82 5
M.Hill& Schuyl.Hav* 50	4,022,500	semi-an.	July '82 3½
Missouri Pacific.....100	28,169,800	q'rterly.	Oct. '82 1¾
Mobile&Montgomery100	3,022,517	semi-an.	Feb. '80 2½
Morris and Essex.... 50	15,000,000	semi-an.	July '82 3½
Mt Carbon&PtCarbon 50	282,350	semi-an.	July '82 6
Nashua and Lowell..100	800,000	semi-an.	July '82 4
Nashua & Rochester.100	1,305,800	semi-an.	Oct. '82 1½
Nashv. & Decatur...100	1,827,000	semi-an.	June'81 3
Nash.,Chat.&StLouis 25	6,670,325	semi-an.	Apl. '82 1½
Naugatuck.....100	2,000,000	semi-an.	July '82 5
Nesquehoning Val'y* 50	1,300,000	semi-an.	Sept.'82 3
N.Castle&Beaver Val* 50	600,000	q'rterly.	Oct. '81 —
NewLondonNorth'n*100	1,500,000	q'rterly.	July '82 1½
N. Y. Cen. & Hud. R.100	89,428,330	q'rterly.	Oct. '82 2
N. Y. and Harlem....100	7,950,000	q'rterly.	July '82 4
" pref.100	1,500,000	q'rterly.	July '82 4
" City Line.. —	....	annual	Apl. '82 3
N.Y.,LakeErie&West.100	77,083,000	.....	.....
" " pref.100	8,156,825	.....	Jan. '82 6
N. Y., N. H. & Hart...100	15,500,000	semi-an.	Jan. '82 5
N. Y., Prov. & Boston100	3,000,000	q'rterly.	Aug. '82 2
Niag.Bridg&Canand*100	1,000,000	semi-an.	July '81 3
North Carolina*.....100	3,000,000	semi-an.	Sep. '81 3
" " pref.100	1,000,000	semi-an.	Sep. '81 3
N. Eastern (S.C.) pref100	86,000	semi-an.	May '81 4
Norfolk & Western pref.	15,000,000	q'rterly.	Sept. '82 $1
North Pennsylvania. 50	4,527,150	q'rterly.	Aug. '82 1¾
Northern Central.... 50	6,142,000	semi-an.	July '82 3
Northern N. Hampsh100	3,068,400	semi-an.	June'82 3
Northern N. Jersey*.100	1,000,000	semi-an.	July '80 2½
Norwich&Worcester*100	2,604,400	semi-an.	July '82 5
Ohio and Miss. pref..100	4,030,000	semi-an.	Mar. '75 3½
Old Colony.....100	7,333,800	semi-an.	July '82 3½
Oregon R'way&Nav.100	6,000,000	q'rterly.	Nov. '82 2
Oswego & Syracuse..100	1,320,400	semi-an.	Aug. '81 4½
Panama..... 100	7,000,000	.....	July '82 6½
Paterson & Hudson*.100	630,000	semi-an.	July '82 4
Paterson & Ramapo.100	248,000	semi-an.	July '82 4
Pember.&Hightst'n*. 50	342,150	semi-an.	Jan. '82 3
Pennsylvania..... 50	77,672,750	semi-an.	May '82 4
Pennsylvania Co..... 50	20,000,000	semi-an.	June'81 2½
Peoria & Bureau Val*100	1,200,000	semi-an.	Feb. '82 4
Philadelphia & Erie*. 50	7,013,700	semi-an.	.....
" " pfd 50	2,400,000	semi-an.	Jan. '75 4
Phil.Ger.&Norrist'n* 50	2,231,900	q'rterly.	Sept.'82 3
Phil. and Reading... 50	32,726,375	q'rterly.	Jan. '76 2½
" " pref. 50	1,551,800	q'rterly.	July '76 3½
Phila. and Trenton...100	1,250,100	q'rterly.	Oct. '82 2½
Phila., Wil. and Balt. 50	11,585,750	semi-an.	July '82 4
Pittsb., Ft. W. & Chi.*100	19,714,285	q'rterly.	Oct. '82 1¾
" Special Imp.100	6,770,000	q'rterly.	Oct. '82 1¾
Pittsfield&N.Adams..100	450,000	semi-an.	July '82 2½
Portl., Saco & Portsm100	1,500,000	semi-an.	July '82 3
Providence &Worces.100	2,000,000	semi-an.	July '82 3
Rensselaer&Saratog.*100	7,000,000	semi-an.	July '82 4
Rhode Island& Mass.100	100,000	.....	Jan. '81 3
Richmond& Danv...100	3,866,000	q'rterly.	Aug. '82 2
Richmond & Petersb100	1,009,300	semi-an.	Jan. '81 3
Roch.&Genesee Val.*100	555,200	semi-an.	July '82 3
Rutland preferred.. 100	4,000,000	semi-an.	Sept. '82 1
St.L.,Alt. & T.Haute.100	2,300,000	.....	.....
" " pref.100	2,468,406	.....	May '82 3
St.L.&S.Fran.1st pref100	4,500,000	.....	Aug. '82 3½
St.L.,I.Mt.&South'n.100	21,459,921	semi-an.	Feb. '74 3
St.L.,Jac'ville & Chic.100	1,293,000	.....	Aug. '82 4½
" " " pref.100	1,034,000	.....	Aug. '82 4½
St. P. & Duluth pref.100	4,705,000	q'rterly.	June'82 1¾
St. P., Minn. & Man..100	20,000,000	q'rterly.	Nov.'82 2
Schuylkill Valley*... 50	576,050	semi-an.	July '82 2½
Seaboard & Roanoke.100	1,220,600	semi-an.	May '82 5
Shamokin V.&Pottsv 50	669,450	semi-an.	Feb.'82 3
Shore Line*.....100	1,000,000	semi-an.	July '82 4
Sioux C.& Pacific pref100	160,000	semi-an.	Oct. '82 3½
South Br. (N. J.)*....100	438,300	semi-an.	Jan. '82 3
South Western (Ga.)*100	3,892,300	semi-an.	Dec. '81 3½
Stockbridge&Pitts.*.100	448,700	semi-an.	Oct. '81 1½
Syr.,Bingham&N.Y.*100	2,500,000	semi-an.	Feb. '81 2
Terre Haute & Ind....100	1,988,150	semi-an.	Aug. '82 4
Troy and Boston....100	1,609,000	semi-an.	Feb. '80 2
Union Pacific. 100	61,000,000	q rterly.	Oct. '82 1¾
United Cos of N. J.*.100	20,490,000	q'rterly.	Oct. '82 2½
Utica, Shenango&S V100	4,000,000	semi-an.	Nov.'81 3
Utica and Black Riv.100	1,772,000	semi-an.	Mar. '82 2
Vermont and Mass. 100	3,050,000	semi-an.	Oct .'82 3
Wab. St.L.& Pac.pref.100	22,615,100	q'rterly.	Nov.'81 1½

Markedthus(*)are leased roads.	Stock out-standing.	Divide'd Periods.	Last Dividend Payable.
Ware River*.....100	750,000	semi-an.	July '82 3½
Warren (N. J.)..... .100	1,800,000	semi-an.	Apl. '82 1½
Warwick Valley.....100	340,000	semi-an.	July '82 2½
Westchest&Phil.pref100	821,300	semi-an.	July '80 2
West Jersey..... ...100	1,359,750	semi-an.	Sept. '82 3
Wilmingt'n&Weld'n.100	1,456,200	semi-an.	July '82 3
Wil., Col., & Aug 100	960,000	semi-an.	July '82 3
Winchester&Poto'c.*100	180,000	semi-an.	July '82 3
Winchester&Strasb.*100	74,700	semi-an.	July '82 3
Worcester & Nashua. 75	1,789,800	semi-an.	July '82 1½
HORSE-POWER R. R.			
Albany City.....100	200,000	annual	.....'80 5½
Baltimore City..... 25	1,000,000	semi-an.	Oct. '82 3
Balt.,Cat.&El.Mills..100	....	semi-an.	July '82 2
BleeckerSt.&Ful.F'y.100	900,000	semi-an.	July '82 ¾
Boston&Chelsea pref. 50	110,000	semi-an.	Oct. '82 3
Broadway (Brooklyn)100	250,000	q'arterly	Oct. '82 6
B'way&7th Av.(N.Y.)100	2,100,000	q'arterly	Oct, '82 2
B'klyn&Hunter's Pt.100	400,000	semi-an.	Oct. '82 6
Brooklyn City.....100	2,000,000	q'arterly	Aug. '82 3½
Bushwick (Brooklyn)100	309,000	semi-an.	Oct. '82 6
Cambridge..... ...100	968,000	q'arterly	Oct. '82 4½
Cen.Park,N.& E.Riv.100	1,800,000	q'rtelly.	Oct. '82 6
Christoph'r&TenthSt100	650,000	semi-an.	Aug. '82 2½
Citizens' (Phil.)..... 50	192,500	q'rterly.	Jan. '82 2½
Citizens' (Pbg.)..... 50	200,000	annual..	....'80 14½
Coney Island&Flshp100	500,000	semi-an.	Oct. '80 5
Continental (Phil.).. 50	580,000	semi-an.	July '82 6
D.Dock,E.B'way&Bat100	1,200,000	q'arterly	Aug.'82 4
Eighth Av. (N. Y.)....100	1,000,000	q'rterly.	Oct. '82 3
42d St. & G. St. Ferry100	747,000	semi-an.	May '82 6
Frankf.&Southw (Ph) 50	600,000	q'rterly.	Oct. '82 6
Germantown, (Ph.).. 50	572,800	q'rterly.	Oct. '82 2½
Girard College (Ph.) . 50	500,000	semi-an.	July '71 3
Grand St. & Newton....100	170,091	semi-an.	July '81 2½
Green&Coates St.(Ph) 50	150,000	q'rterly.	Oct. '82 3
Heston,Mantau&F'm 50	299,381	semi-an.	Jan. '75 4
Highland.....100	600,000	semi-an.	July '82 4
Lomb.&SouthSts(Ph) 25	195,000	semi-an.	Oct. '75 4
Lynn and Boston....100	200,000	semi-an.	May '82 4
Malden and Melrose.100	165,000	.....	.....
Metropolitan (Post.). 50	1,500,000	semi-an.	July '82 4
Middlesex (Boston)..100	650,000	semi-an.	May '82 3
N.Y.,Bay Ridge&Jam100	150,000	.....	Oct. '78 7
Ninth Av. (N. Y.)....100	707,320	.....	.....
Orange &Newark....100	282,555	.....	.....
People's (Phila.) pref. 25	124,744	.....	July '82 2
Philadelphia City.... 50	475,000	semi-an.	July '82 4
Phila. and Darby.... 20	200,000	semi-an.	July '81 3½
Phila.& Grey's Ferry. 50	308,000	semi-an.	Jan. '82 6
Phg.Alleg.&Manches. 50	200,000	q'rterly.	Oct. '81 3
Ridge Avenue (Ph.).. 50	420,000	semi-an.	Oct. '81 11
Second Avenue (N.Y.)100	1,100,500	semi-an.	July '82 4
Second&ThirdSt.(Ph) 50	771,076	q'rterly.	Jan. '82 4½
17th &19th sts (Ph.).. 50	250,000	semi-an.	July '81 3
Sixth Avenue (N. Y.)100	750,000	semi-an.	May '82 5
Somerville (Boston).100	173,000	semi-an.	May '82 3
South Boston..... . 50	600,000	semi-an.	July '82 4
Third Avenue, N. Y..100	2,000,000	q'rterly.	Aug '82 5
13th and 15th sts.,Ph 50	334,520	q'rterly.	Jan. '82 4
23d street, N. Y.....100	600,000	semi-an.	Aug.'82 4
Union, Boston.....100	374,300	semi-an.	Jan. '82 4
Union, Phila..... 50	1,005,000	semi-an.	Jan. '82 7
West Philadelphia... 50	750,000	semi-an.	July '77 10
CANALS.			
Chesapeake and Dela 50	2,078,038	semi-an.	June'75 2
Delaware Division... 50	1,633,350	semi-an.	Aug. '82 $1
Delawa. and Hudson100	20,000,000	q'rterly.	Sept. '82 1½
Delaware & Raritan*.100	5,847,400	q'rterly.	Oct. '82 2½
Lehigh Coal and Nav 50	11,204,250	semi-an.	June'82 2
Monongahela Nav... 50	1,004,500	semi-an.	July '82 3
Morris, consolidated.100	1,025,000	semi-an.	Aug. '82 2
" preferred....100	1,175,000	semi-an.	Aug.'82 5
Pennsylvania..... 50	4,501,200	.....	.....
Schuyl. Nav., com.*. 50	850,100	annual..	Oct.'82 50c.
" " pref... 50	3,200,000	annual..	Oct. '82 $1
MISCELLANEOUS.			
Adams Express.....100	12,000,000	q'rterly.	Sept.'82 2
American Express... 50	18,000,000	semi-an.	July '82 3
Amoskeag Manuf.Co.100	3,000,000	semi-an.	June'81 5
Calumet&HeclaMin'g 25	100,000	S. q'rterly.	Nov. '82 $5
Central Mining Co....100	.....	semi-an.	Feb.'82 2½
Consolidation Coal..100	10,250,000	semi-an.	Jan. '82 2
George's Creek C.&I.100	....	semi-an.	Jan. '82 3
Maryland Coal.....100	4,400,000	semi-an.	Feb. '76 1½
Mariposa L. &Mining100	10,000,000	..... .	.....
" pref100	5,000,000	..... .	.....
Missouri Val.LandCo100	200,000	semi-an.	July '82 12
National Tube Works100	1,000,000	q'rterly.	Oct. '82 3
Pac. Mail Steamship.100	20,000,000	q'rterly.	Sept.'69 3
Pennsylvania Coal. . 50	5,000,000	q'rterly.	Aug. '82 3
Pullman Palace Car..100	10,032,800	q'rterly.	Nov. '82 2
Quicksilver, com....100	5,708,700	..... .	May '82 0.4
" pref....100	4,291,300	..... .	May '82 6
Quincy Mining Co... 25	40,000 shs	semi-an.	Aug. '82 $5
Quincy R. R. Bridge.100	1,750,000	semi-an.	July '82 5
SiouxC.&I.F.L.&L.Co100	500,000	semi-an.	June '82 5
Spring Mt. Coal.....100	1,500,000	semi-an.	June '82 3½
Topeka Equip'nt Co.100	255,500	semi-an.	Oct. '82 5
United States Ex....100	7,000,000	q'rterly.	Aug. '82 1
Wells-Fargo & Co. Ex100	16,250,000	semi-an.	Jully '82 4
Western Union Tel..100	80,000,000	q'rterly.	Oct. '82 1½

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RAILROAD EARNINGS.—MONTHLY.

	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total.
BURL., CEDAR RAP. & NORTHERN:													
1880	184,316	165,170	188,325	141,652	149,504	153,378	143,432	160,160	179,804	204,991	189,330	193,419	2,053,484
1881	167,750	124,510	148,551	184,680	165,630	205,912	174,351	209,112	221,801	221,748	203,880	232,812	2,259,037
1882	252,823	225,631	224,107	178,304	199,278	211,257	198,276	224,921	261,439	.....	.....	.....	.....
CENTRAL PACIFIC:													
1880	1,200,615	1,070,487	1,373,438	1,356,716	1,778,488	1,724,930	1,840,067	1,973,438	1,994,997	1,120,229	2,199,466	1,905,221	20,508,113
1881	1,602,907	1,454,218	1,709,658	1,872,370	2,091,411	2,159,382	1,899,346	2,088,519	2,185,303	2,507,857	2,297,971	2,225,179	24,094,101
1882	1,839,469	1,720,675	1,969.737	2,054,687	2,342,298	2,229,105	2,020,000	2,277,000	2,474,000	.....	.....	.....	.....
CHESAPEAKE AND OHIO:													
1880	202,335	198,681	222,762	221,559	199,443	214,352	238,236	259,110	247,303	211,820	240,795	218,009	2,674,308
1881	162,540	184,389	228,479	227,343	252,235	241,135	225,096	262,858	247,144	237,303	235,585	203,562	2,702,762
1882	210,455	209,708	208,981	267,454	255,939	260,753	306,831	371,175	305,065	.....	.....	.....	.....
CHICAGO AND ALTON:													
1880	534,054	497 013	626,473	542,961	616,128	617,524	708,906	761,120	767,349	785,199	696,776	574,695	7,718,198
1881	487,890	461,641	529,915	558,190	548,556	635,860	676,205	769,751	774,790	750,359	680,133	635,307	7,553,988
1882	579,447	530,480	584,483	561,787	553,412	613,886	671,537	800,624	881,109	.....	.....	.....	.....
CHICAGO AND NORTHWESTERN:													
1880	1,154,632	1,131,683	1,361,725	1,294,573	1,875,608	1,671,177	1,699,686	1,767,938	2,020,245	2,105,217	1,855,622	1,477,902	19,416,007
1881	1,240,664	963,208	1,178,795	1,474,612	1,879,006	2,306,440	1,983,032	2,315,164	2,292,676	2,341,098	2,019,038	1,855,477	21,849,209
1882	1,644,935	1,474,176	1,672,931	1,668,741	2,110,947	2,022,700	2,025,736	2,099,755	2,497,053	.....	.....	.....	.....
CHICAGO, BURLINGTON AND QUINCY:													
1880	1,432,740	1,411,870	1,732,518	1,489,894	1,909,627	1,682,956	1,773,643	1,834,321	1,862,285	1,934,762	1,837,860	1,552,018	20,454,494
1881	1,307,948	1,034,821	1,418,149	1,574,371	1,679,455	2,083,803	1,888,358	2,173,945	2,262,981	2,031,001	1,816,133	1,905,490	21,324,150
1882	1,658,834	1,457,300	1,566,217	1,530,838	1,505,261	1,437,164	1,625,006	2,086,858	.....	.....	.....	.....	.....
CHICAGO, MILWAUKEE AND ST. PAUL:													
1880	764,298	738,749	900,675	871,041	1,134,745	1,037,958	1,026,708	991,297	1,257,677	1,493,620	1,472,037	1 397,308	13,086,119
1881	990,847	682,717	916.989	1,259,946	1,538,491	1,729,811	1,568,706	1,678,361	1,644,676	1,590,000	1,569,000	1,855,000	17,025,462
1882	1,435,000	1,377,000	1,561,000	1,518,000	1,629,000	1,620,000	1,465,000	1,545,000	1,950,000	.....	.....	.....	.....
CHICAGO, ST. PAUL, MINNEAPOLIS AND OMAHA:													
1880	193,827	173,078	259,783	259,208	232,146	218,093	236,995	251,013	300,833	342,052	342,894	312,173	3,122,097
1881	257,786	158,594	251,648	261,211	350,124	404,562	383,202	385,586	373,370	382,714	380,733	391,950	3,981,296
1882	307,498	315,100	405,779	356,558	406,420	363,109	331,480	394,555	482,997	.....	.....	.....	.....
CINCINNATI, INDIANAPOLIS, ST. LOUIS AND CHICAGO:													
1880	155,697	172,541	198,220	168,199	186,995	200,332	204,138	233,478	343,627	239,881	209,014	198,254	2,412,185
1881	182,523	171,511	191,005	183,710	191,056	192,299	177,161	229,858	228,653	212,606	194,805	192,623	2,296,916
1882	200,042	186,879	208,066	204,269	199,110	195,948	209,564	.....	259,379	.....	.....	.....	.....
DENVER AND RIO GRANDE:													
1880	124,759	126,922	160,883	164,882	193,925	295,455	373,132	400,133	406,583	473,318	408,562	349,196	3,478,007
1881	307,476	317,681	398,493	433,111	514,767	584,230	548,284	606,193	589,287	665,686	566,819	643,417	6,206,812
1882	491,914	412,987	535,055	559,917	614,298	537,462	495,797	574,040	595,306	.....	.....	.....	.....
HANNIBAL AND ST. JOSEPH:													
1880	176,079	166,965	216,061	206,735	191,317	179,396	224,312	238,081	233,448	242,214	207,147	279,635	2,561,366
1881	154,401	122,874	176,356	190,812	172,950	190,740	201,899	210,240	215,103	313,433	201,782	180,376	2,230,961
1882	138,284	154,717	168,798	148,913	154,917	155,030	184,347	258,628	239,196	.....	.....	.....	.....
ILLINOIS CENTRAL:													
1880	595,212	613,806	613,008	535,732	665,120	681,736	724,095	732,755	806,836	880,211	783,120	673.182	8,304,812
1881	631,281	524,499	557,789	662,493	673,259	803,887	720,004	868,407	828,847	815,238	737 218	763,475	8,586,397
1882	728,173	689,387	695,371	674,603	674,749	663,746	752,251	813,600	828,238	.....	.....	.....	.....
INDIANA, BLOOMINGTON AND WESTERN:													
1880	80,498	89,690	116,185	90,374	85,733	106,954	103,438	116,732	110,622	121,343	96,621	104,619	1,233,079
1881	90,283	83,261	192,085	203,677	200,064	199,846	199,125	272,114	247,932	181,674	160,826	156,697	.....
1882	195,824	175,755	206,235	205,934	182,554	186,133	206,072	278,814	273,100	.....	.....	.....	.....
LOUISVILLE AND NASHVILLE:													
1880	674,455	575,035	612,593	563,883	655,014	976,229	772,537	827,088	931,910	1,000,326	953,086	949,184	9,491,346
1881	816,960	805,124	947,959	850,862	828,726	1,227,885	817,135	876,192	951,566	1,002,950	1,065,223	1,122,285	11,326,859
1882	950,065	960,036	1,073,745	950,007	946,435	1,187,385	1,038,385	1,030,385	1,107,985	.....	.....	.....	.....
MOBILE AND OHIO:													
1880	250,116	204,094	168,301	140,091	129,249	121,855	131,621	140,593	184,246	264,714	251,368	287,373	2,373,621
1881	224,347	216,768	230,916	163,551	145,803	136,517	135,548	160,789	210,262	252,921	252,434	262,025	2,406,437
1882	161,433	158,154	152,651	145,272	137,645	132,572	136,398	140,443	160,030	.....	.....	.....	.....
NASHVILLE, CHATTANOOGA AND ST. LOUIS:													
1880	205,633	191,154	169,457	155,466	158,839	144,155	151,594	169,326	167,473	178,266	182,087	175966	2,049,484
1881	178,143	190,866	207,710	183,525	104,430	154,549	150,430	168,317	179,979	172,121	152,059	173,127	2,075,256
1882	156,994	159,961	161,005	154,155	137,645	119,074	160,991	1,03c,385	.....	.....	.....	.....	.....
NEW YORK AND NEW ENGLAND:													
1880	164,232	149,907	183,845	179,689	183,701	219,891	205,056	249,885	235,642	215,491	210,856	198 108	2,396,302
1881	189,749	173,614	212,019	216,913	217,185	231,518	246,821	280,524	299,573	261,199	242,412	237,729	2,809,255
1882	213,840	217,261	265,222	263,544	283,244	290,060	308,920	353,726	338,490	.....	.....	.....	.....
NEW YORK, LAKE ERIE AND WESTERN:													
1879	1,147,173	1,207,391	1,356,780	1,372,755	1,350,574	1,230,419	1,273,533	1,450,223	1,492,497	1,713,697	1,515,835	1,398,224	16,509,127
1880	1,296,381	1,252,218	1,644,958	1,643,151	1,592,544	1,661,812	1,580,976	1,606,874	1,786,417	1,899,910	1,799,338	1,726,788	19,149,361
1881	1,443,437	1,425,765	1,847,261	1,709,057	1,776,891	1,794,982	1,787,081	1,772,895	1,734,200	.....	.....	.....	.....
NORTHERN CENTRAL:													
1880	334,494	330,860	415,325	386,130	329,788	419,193	450,298	453,923	464,093	512,918	459,054	494,310	5,050,387
1881	386,157	382,657	452,906	487,273	465,588	487,287	440,811	498,008	429,565	449,664	487,160	476,622	5,443,697
1882	407,368	413,551	430,194	435,129	482,607	482,762	509,683	667,488	.....	.....	.....	.....	.....
NORTHERN PACIFIC:													
1880	81,390	77,259	119,357	185,700	217,613	253,105	241,277	223,500	330,300	358,456	300,822	220,993	2,629,710
1881	116,508	78,803	162,984	216,210	312,705	412,024	393,260	434,085	534,363	565,485	428,903	434,331	4,044,576
1882	239,800	269,000	384,000	438,000	568,332	631,342	679,240	727,377	789,700	.....	.....	.....	.....
PHILADELPHIA AND ERIE:													
1880	224,307	245,372	327,678	334,947	311,470	331,024	308,699	347,532	322,737	367,082	324,966	281,919	3,727,733
1881	224,303	225,501	285,573	293,323	343,792	350,585	291,669	303,849	276,522	292,392	284,078	282,772	3,454,309
1882	252,727	246,246	265,311	277,851	341,415	347,614	377,206	420,329	.....	.....	.....	.....	.....
ST. LOUIS AND SAN FRANCISCO:													
1880	198,091	195,948	193,146	176,164	167,664	173,607	213,297	259,995	280,873	328,194	290,329	226,063	2,698,371
1881	212,435	178,234	262,050	265,298	283,399	260,254	252,333	286,373	279,064	308,569	284,320	287,914	3,160,245
1882	256,784	244,654	274,959	242,806	253,419	240,177	318,613	381,637	336,805	.....	.....	.....	.....
ST. LOUIS, ALTON AND TERRE HAUTE:													
1880	153,139	163,737	168,994	155,462	147,928	150,207	191,077	216,759	204,295	221,863	188,773	184,503	2,146,741
1881	175,725	166,012	201,137	197,447	172,177	165,896	165,393	189,180	196 368	179,921	162,544	153,852	2,112,801
1882	168,987	149,619	178,145	157,450	162,842	142,742	192,017	236,137	217,659	.....	.....	.....	.....
ST. LOUIS, IRON MOUNTAIN AND SOUTHERN:													
1880	555,983	490,195	451,560	408,241	349,053	363,454	432,655	565,869	671,219	688,365	632,052	656,951	6,265,597
1881	570,957	560,791	704,002	548,300	479,075	474,302	533,512	644,386	708,325	719,239	687,280	709 498	7,319,744
1882	516,370	501,127	585,008	581,977	519,120	529,700	515,519	675,981	724,160	.....	.....	.....	.....
ST. PAUL, MINNEAPOLIS AND MANITOBA:													
1880	180,239	137,645	261,798	333,014	281,899	243,407	272,089	232,579	274,188	345,057	300,675	297,641	3,160,231
1881	254,187	159,482	320,962	425,685	382,642	405,322	387,488	414,954	485,736	605,708	508,530	528,262	4,878,960
1882	395,461	418 358	531,004	570,890	858,902	856,417	853,296	801,759	832,776	.....	.....	.....	.....
TEXAS AND PACIFIC:													
1880	245,785	219.165	215,070	174,177	141,083	153,066	195,711	226,073	266,570	303,666	312,184	301,858	2,754,408
1881	281,176	260,781	319,928	295,066	281,782	285,405	328,063	381,331	345,790	578,668	357.724	381,218	3,921,569
1882	310,785	255,644	332,911	359,543	409,228	384,713	367,215	439,918	470,613	.....	.....	.....	.....
UNION PACIFIC RAILWAY:													
1880	1,433.636	1,393,992	1,730,509	1,937,220	2,027,269	1,928,528	1,934,215	1,913.035	2,270,179	2,707,860	2,251.148	1,869,335	23,448,445
1881	1,339,799	1,374,740	1,674,860	1,766,894	2,319,238	2,884,774	2.528,826	2,638,659	2,844,357	3,289 350	2,773,608	2,267,004	27,451,831
1882	1,961,088	1,759,863	2,226,832	2,462,004	2,491,590	2,508,453	2,301,000	2,762,107	2,949,112	.....	.....	.....	.....
WABASH, ST. LOUIS AND PACIFIC:													
1880	776,790	759,451	978,629	892,024	948,773	953,468	1,966,742	1,189,478	1,178,950	1,501,203	1,131,787	1,050,816	12,428,112
1881	811,617	818,922	1,121,592	1,023,482	1,144,660	1,308,993	1,131,752	1,542,838	1,490,027	1,396,300	1,399,555	1,328,278	14,461,570
1882	1,220,965	1 124 768	1,315,776	1,378,194	1,204,864	1 149 682	1 418,837	1,772,544	1,682,382	.....	.....	.....	.....

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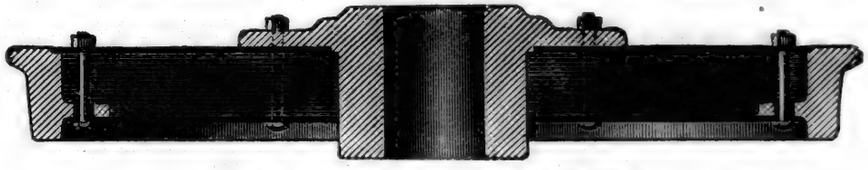
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Devices for Lighting the Steps of Cars or Carriages.

The accompanying plates, illustrating letters patent under dates of June 27, 1882, and September 5, 1882, show a recent improvement in railroad equipment, as a convenience and protection to both passengers and railroad companies, invented by George W. Hunt, of Philadelphia, Penn., being in the main, a device for lighting the steps of cars at night and so acting as a preventive against the numerous accidents which arise from the imperfect illumination of these parts as they now exist.

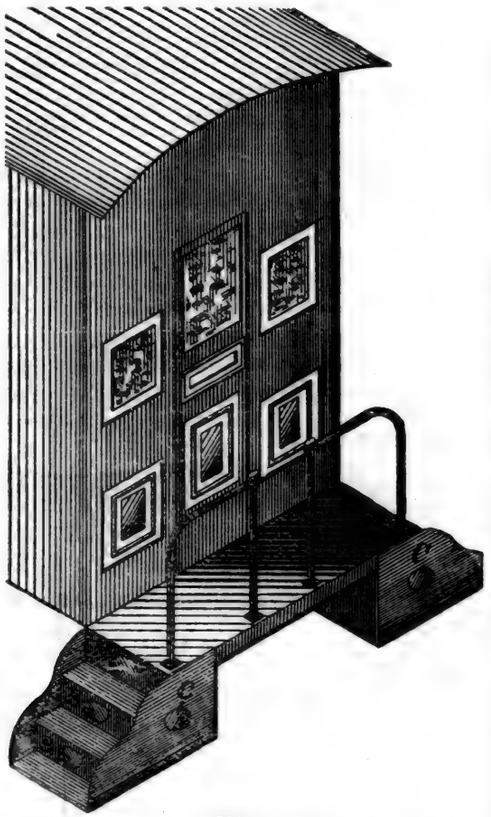


FIG. I.

Fig. 1, represents a perspective view of the end and platform of a car with the invention affixed, Fig. 2 an end view of one side of the platform with lamp attachment, and Fig. 3 a similar view showing the arrangement of a gas jet.

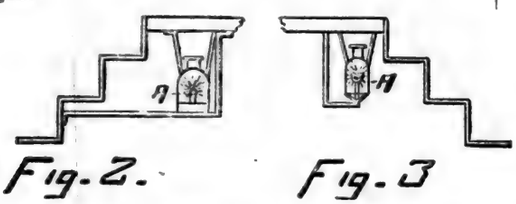


Fig. 2. Fig. 3

The light A, Figs. 2 and 3, is placed at some convenient point beneath the platform, and is suitably fastened and enclosed (as shown in Figs. 4, 5, 6 and 7) so as not to be upset or blown out by the jarring of the train or the action of draughts. In each step of the car is cut a hole B, (Fig. 1) and therein placed a suitable piece of colorless glass so that the rays from the lamps, gas jet or electric light will shine upon and illuminate the steps. In the after side of the steps a hole C, (Fig. 1) is cut, and a piece of suitably colored glass fastened in, through which the light shines and acts as a substitute for the ordinary danger signals usually placed upon the platform or railing of the rear car. Where there is no after side to the steps of the platform, a combination lantern would be used, which, being fixed so as to revolve in its frame, and by means of red or green glass so arranged as to produce the desired result, would show the appropriate light at the rear of the train.

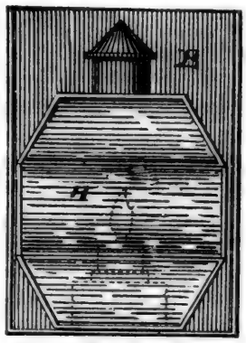


FIG. IV.

Figs. 4, 5, 6 and 7 show the best method of arranging the lamp and protecting it from dust and dirt. Fig. 4, is a front view and Fig. 5 a sectional elevation of the lamps, Fig. 6, a side and Fig. 7 a top view of the lantern case, and Fig. 8 a rear view of a car platform showing the device attached, together with the station platform and the way in which the light will shine upon it.

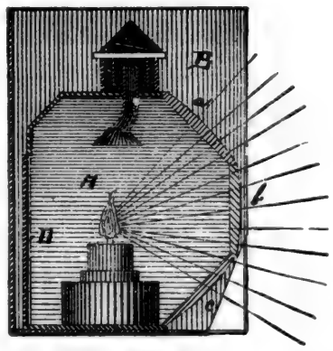


FIG. V.

The lantern A. Figs. 4 and 5, has its front side constructed wholly of glass and consists of the lenses, a, b, c, Fig. 5. The rest of the lantern is of metal or glass having the door D at its back, and is similar to the ordinary lantern generally in use save that care is to be had that the joints are right in order to exclude dust or dirt. The case B, in which the lantern is placed, is made of metal or other suitable material, so as to be sufficiently strong to resist indentation from the stones, etc. which fly from the road-bed during the passage of a rapidly moving train. The case is preferably a stationary fixture underneath the platform of the car, and, if necessary, may be built directly under and conforming to the shape of the steps.

The shape preferred, however, is shown in Figs. 6, 7 and 8. The case B is open at its front, side and top, and is provided with a door C, Fig. 6, at its back, through which the lantern may be removed or access had to its interior. The side of the case toward the rear of the car is furnished with an aperture E, covered with colored glass, through which the light shines and forms the danger signal. The bottom of the case does not extend completely across, but is cut off, as shown in Fig. 6, to allow the light to shine down upon the platforms of stations, etc., and the continuation of the case is formed of a stout wire screen F, Fig. 7, which will prevent injury to the lantern and at the same time allow the light to pass through. The top of the case may also be covered with a wire screen if necessary.

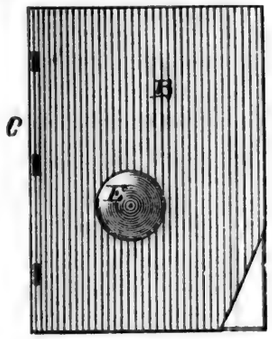


FIG. VI.

In the use of a gas jet, the pipe attachment is carried down from the car and bent up under the steps, as shown in Fig. 3. The lantern is then arranged with a metal rim some few inches in height, containing a small spring door through which the projection of the gas pipe can pass when the lantern is to be put in place or removed.

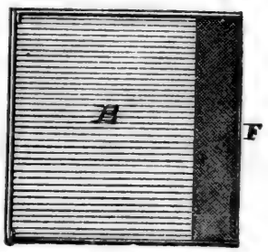


FIG. VII.

The advantages to be derived from the introduction of the above-described invention are obvious in themselves. The convenience to passengers alone is an item, but nothing as compared to the number of accidents that will be prevented, the risk to life that will be forestalled, and the consequent expense to railroad companies that will be saved by the proper illumination of the steps of the cars. It may be claimed that station lights answer every pur-

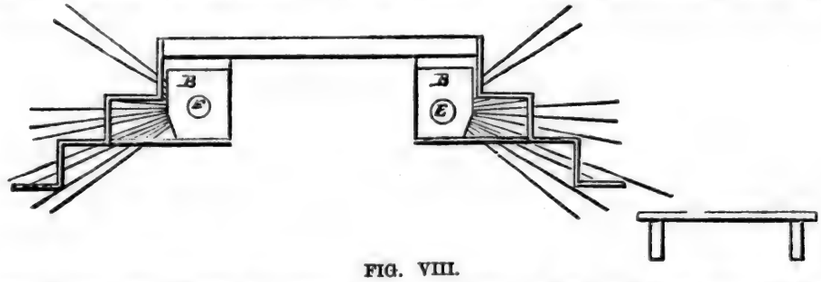


FIG. VIII.

(Continued on page 822).

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We are amply justified in reducing the price from its old time rate of $5.00 per year to $3.00, on account of the numerous indications we are receiving of late of the increased interest that is being taken in the JOURNAL, which warrants us in believing that the sacrifice we make in price will be much more than compensated for by the promised liberal increase in the number of subscribers, It is gratifying to us to know that the alterations made in the Journal during the past year are meeting with such general favor as is expressed in the frequent words of commendation and congratulation sent to us from old and new readers, and we feel called upon to try in every way to merit their approval and to spare no pains to place the paper before as many as possible of those who might derive benefit and profit from it. During its fifty years' experience the JOURNAL has been highly favored by an especially choice class of readers, counting among its subscribers some of the most noted banking houses, commercial bodies, financiers, and railroad men of this country and Europe. Its aim in the future will be to prove itself of more value and interest than ever to its patrons of many years standing, while by its new features it makes itself of service and interest to a broader field and to more varied departments of life and business. We desire to make the JOURNAL as useful and welcome as possible to our readers and advertising patrons, and to this end we hope to have our columns of correspondence, communications and general information full and diversified. The columns we have devoted to general communications have proved especially interesting and popular of late, and we are pleased to have our rraders favor this department with suitable contributions

We give on editorial page our new subscription rates, which are so changed in the belief that it will not only prove acceptable to many who desire to become regular readers of the paper, but that it will meet with the hearty approval of our advertising patrons, who are rapidly filling up the pages offered to them since the improvements in the JOURNAL have been started.

We will send you the "Journal" for three months for $1. Try it, and you will be glad to continue taking it.



SOLE MANUFACTURERS OF

IMPROVED VULCANIZED FIBRE TRACK-BOLT WASHERS,

which form non-metalic, permanently elastic compensating cushions, absorbing shocks and vibrations, and absolutely locking the nuts. These Washers have been adopted by a large number of railroads as the cheapest and best device in use. Flexible vulcanized-fibre dust guards and oil box packings, which are absolutely unaffected by oil and grease, are far more durable than leather and much cheaper.

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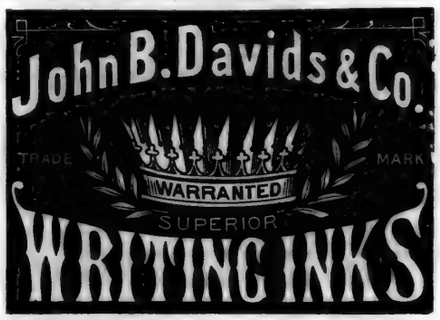
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JENKINS BROS.,

PROPRIETORS JENKINS PATENT VALVES, PACKING, &c.

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OFFICE CLOCK

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IS AN EXCELLENT TIME-KEEPER.

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For the preparing of estimates no charge is made, and the applicant is placed under no obligation to transact his advertising business through us unless it appears to him that by doing so he will best advance his own interests.

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When an advertiser does not know what he wants or what he ought to do, he can designate some sum of money within which he wishes to limit his expenditure; this will enable us to prepare for him such a list of papers as will be the best for his purpose, within the limits which he prescribes.

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RUBBER CLOTHING, LACE LEATHER, BELT HOOKS,

RAILROAD, MINING, AND MILL SUPPLIES.

No. 21 Park Place,

NEW YORK.

pose, but such is not the case upon even the best equipped railroad in the country. In fact, the existing condition of affairs has cost thousands of dollars to the companies because a passenger steps off in the dark, and a sprained ankle, a mashed foot, or a broken leg has been the result.

In many trains one set of platforms has no attendant. It therefore becomes a question of chance that the platform is clear when the train starts. A risk of this nature is obviated by the new device, as the conductor can tell when the platform is clear so soon as interference with the light, caused by the passengers body, ceases. If, in this case, the conductor takes the trouble to run the length of the car to satisfy himself that all is right, so much time is lost. At present it is a habit with brakemen to raise their lantern and show passenger's the steps. This action the engineer takes as a signal, starts his train, and thereby endangers the lives of both passengers and employés. As an incidental benefit to be derived from the use of the device, the long line of light shining *out* from the steps may prove a safeguard against collision from the rear.

The device is as simple in its construction as possible, and the cost so trifling when compared with other and less useful parts of the car, as well as to the annual losses sustained for damages from accidents, that it is hardly necessary to further urge upon the railroad companies the benefits to be derived from its introduction.

Device for Changing a Car Brake to a Momentum.

Letters patent have been granted by the authorities in Washington on a device invented by Messrs. Dawley & Spaulding, of Lake City, Wabasha county, Minn., and which may be briefly described as an attachment to change the ordinary car brake into a momentum.

It consists of momentum rods running longitudinally with and in the center of the car. The outer ends of these are enlarged to form buffers, extending a little beyond the drawheads, and are pushed to the center of the brake-bar and cross-piece of the truck by an angle plate or housing which carries the buffer rod and is provided with collar for adjusting the tension of the spring. The rod is held loosely in the housing, in order that it may have a longitudinal movement against the action of the spring. The outer end of the momentum rod is held loosely so as to have a longitudinal movement, in the lower end of a lever pivoted to the end or platform of the car, and a bent ratchet bar is provided with notches which the spring plate or pawl on the lever engages to hold the lever rigidly in any desired position.

The manner of applying the momentum mechanism is by placing the lever so that the heads of the buffer-rods are in a line in the center of the cars throughout the train, or on as many brakes as desired; and so that the buffer heads of the momentum rods will crowd together when the train is retarded by lessening the speed of the engine or forward car, and thus be forced forward and rearwards against the springs by the pressure of the momentum rods against each other, which is due to the momentum of the cars, and thus automatically apply the brakes.

It will be understood that there are no coupling brakes. The momentum rods are thrown in line to apply and out of line not to operate the brakes. Cars can be drawn in any direction without operating the brakes.

The patentees claim for this new attachment that its use gives the engineer the opportunity to apply the brakes immediately to the whole train, by reversing or applying them to the engine. By a forward movement he can, with equal readiness, take brakes off. The car wheels will not slip and flatten if proper tension is given the springs. By placing the attachment to operate a coupling, it will automatically apply brakes at the same moment the cars come in contact, slow the train and lessen the danger in coupling.

List of Recent Patents for Inventions Relating to Railway Interests.

265,561. Car-Truck: Irving Barker, Joliet, Ill. Filed May 26, 1862.

265,565. Car-Coupling: Antoine Benoit, Dunham, Quebec, Canada. Filed May 31, 1882.

265,569. Governor for Steam Engines: John F. Brown, Indianapolis, Ind. Filed Jan. 31, 1882.

265,671. Air-Brake for Cars of Cable Railroads: William W. Hanscom, San Francisco, Cal. Filed May 9, 1882.

265,707. Lamp and Locomotive Head-Light: Robert E. M. Schubert, Philadelphia, Pa., and Edwin T. Carswell, Wilmington, Del. Filed May 3, 1882.

265,724. Axle-Box: Francis W. Webb, Crewe, County of Chester, England. Filed July 29, 1882.

265,754. Safety Block and Signal System for Railways: John Chandler, Brooklyn, N. Y. Filed April 1, 1882.

265,756. Electric Signal for Railway trains: Jedediah P. Clark, Philadelphia, Pa. Filed Jan. 7, 1882.

265,760. Railroad-Tie: Mosses L. Cortright, Port Byron, N. Y., assignor of one-half to J. Herschel Wethey, same place. Filed March 22, 1882.

265,773. Car-Brake: Edward Ebi, Cedar Rapids, Iowa. Filed March 11, 1882.

265,794. Steam-Boile Furnace: Michael A. Foster, St. Louis, Mo. Filed June 29, 1882.

265,838. Grain-Car Door: Lenard Mancy, Sedalia, Mo. Filed Oct. 10, 1881. Renewed Sept. 5, 1882.

265,852. Car-Spring: George W. Morris, Chicago, Ill. and George W. Prescott, St. Louis, Mo. Filed Aug. 28, 1882.

265,865. Car-Coupling: Charles W. Rasmusen, Chicago, Ill. Filed July 14, 1882.

265,870 High and Low Steam and Water Alarm: Joseph Richter, Cincinnati, Ohio. Filed July 31, 1882.

265,879. Steam-Brake: Thomas J. Shellhorn, Hancock, Mich. Filed Feb. 18, 1882.

265,896. Railroad-Car: Garret Van Nostrand, Nyack, N. Y. Filed Feb. 13, 1882.

265,903. Car-Coupling: John A. Whittemore, Springfield, Mass. Filed July 8, 1882.

265,935. Car-Coupling: Albert S. Reeves, Port Elizabeth, N. J., assignor of two-thirds to Francis Lee, same place, and Benjamin F. Lee, Trenton, N. J. Filed July 18, 1882.

265,938. Car-Coupling: George W. Bedbury, Portland, Oreg., assignor, by direct and mesne assignments, to A. E. Borthwick, same place. Filed Feb. 25, 1882.

10,215. Dumping-Car: Sidney D. King, Pittston, assignor, by mesne assignments, to John B. Smith, Dunmore, and Antoinette L. King, West Pittston, Pa. Filed July 24, 1882. Original No. 221,577, dated Nov. 11, 1879.

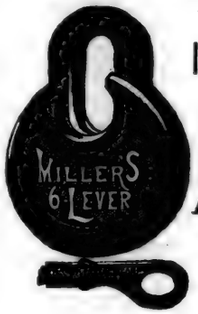
Bowers, Duré & Co., of Wilmington, Del., shipped ten passenger cars to the Manhattan Railway Company of this city, on the 11th inst.

Student, fresh from college, to conductor—"I wish to get on the penultimate car." Conductor—"We have no peanut car; you can take the smoker."

As an evidence of the business boom in Dakota, it is reported that over a mile of freight cars are daily standing on the side tracks in Pierre awaiting their turn to be unloaded.

We have received from Messrs. Robert Clarke & Co., 61, 63 and 65 West Fourth Street, Cincinnati, O., their Catalogue of American and Foreign Books relative to Applied Science. The Catalogue constitutes a thick pamphlet, with comprehensive and well-arranged matter brought down to the date of October, 1882. It embraces three parts: (1) Engineering and allied subjects; (2) Books on subjects relating to the numerous applications of water as a force; and (3) Shipbuilding, etc. This very useful work of reference is sent to any address on the receipt of a three-cent stamp.

The D. K. Miller Improved Padlock.



SUPERIOR TO EVERY OTHER

In Mechanical Construction, Security, and Durability.

MADE OF BRASS,

With Springs of the Celebrated Phosphor-Bronze,

And Warranted to Stand in Every Climate.



UNPICKABLE, NO RUSTING OR CORRODING.

Shown by general use to be the BEST Padlock in the Market for Railway Cars, Switches, Tool Boxes, and for all other purposes for which padlocks are used.

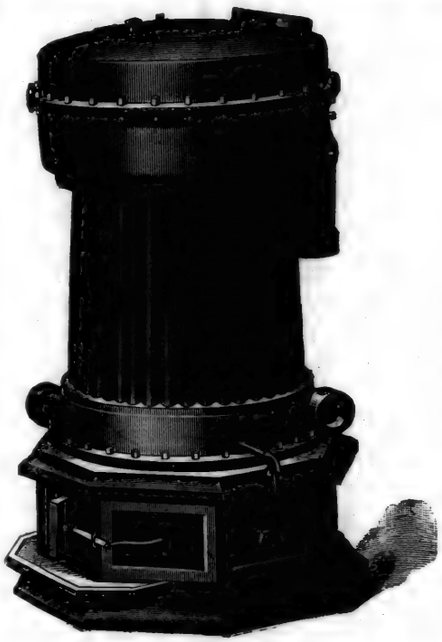
Every Padlock with a different Key and *Master Key* to unlock them all; or all Padlocks with same key if required.

Send for Circulars with Details and Prices.

FAIRBANKS & COMPANY, Agents,

Philadelphia, Baltimore, New Orleans, **NEW YORK.** Buffalo, Pittsburgh, Albany.

THE SALMON CAR HEATER



"36 per cent of coal saved and the car kept noticeably warmer!"
by using THE SALMON CAR HEATER.
It Insures Safety from Fire in case of Accident, Economy in Fuel and RAPID CIRCULATION. It heats quickly, is SELF-REGULATING, and can be used for either STEAM OR HOT WATER.

The Water Tubes do not come in contact with the Coals, but occupy the Smoke Flue in such a manner as to absorb the greatest amount of heat from Coal in a low state of combustion without danger of chilling the fire.

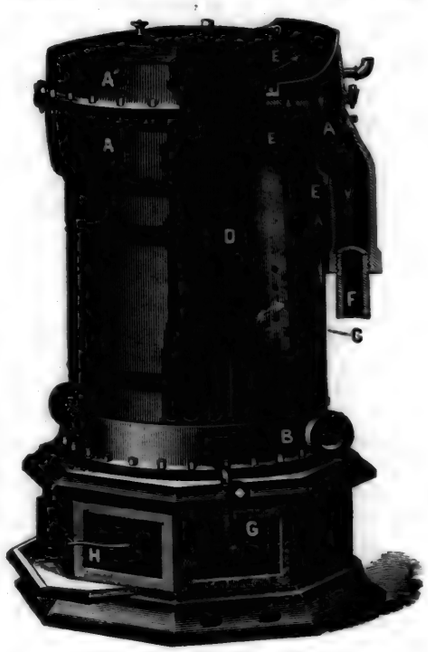
Once filled with coal the fire will last from 24 to 60 hours, according to weather, without replenishing, as proved by actual test.

At the last "Mechanics' Fair" it received the Silver Medal, being the highest award to heaters of any kind.

CORRESPONDENCE SOLICITED.

The Salmon Heater Co.

OFFICE, 35 CONGRESS STREET, BOSTON, MASS.



Established 1863

MOLLER & SCHUMANN

Manufacturers of Fine

COACH AND CAR VARNISHES.

BROOKLYN, N.Y. U.S.A.

STEEL CAR PUSHER

MADE ENTIRELY OF STEEL.
ONE MAN with it can easily move a loaded car.
Manufactured by E. P. DWIGHT,
DEALER IN RAILROAD SUPPLIES,
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ESTABLISHED IN 1836.

LOBDELL CAR WHEEL COMPANY,

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First-Class English

IRON AND STEEL RAILS

AT LONDON PRICES, F. O. B.

We also purchase all classes of Railroad Securities and negotiate loans for Railroad Companies.

Wm. A. Guest & Co.,
MECHANICS' BANK BUILDING,
Nos. 31 and 33 Wall Street, - New York.

SAFETY RAILROAD SWITCHES,
WITH MAIN TRACKS UNBROKEN.

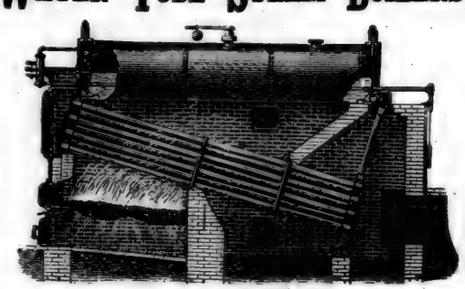
Railroad Crossings, Frogs, and other Railroad Supplies,

MANUFACTURED BY THE

WHARTON RAILROAD SWITCH CO.,
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Works: 23d and Washington Avenue.
Office: 28 South 3d Street.

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THE BABCOCK & WILCOX CO.,
30 Cortlandt St, New York.
116 James Street, Glasgow.

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Were Awarded Gold Medals
At the Melbourne International Exhibition, Australia, 1880, and at Adelaide, 1881.

PATENTED NOV. 7, 1876.



Suitable for any ticket in use.

No. 3 Punches adapted for limited and duplex tickets, also B C ¼ and L Punches, six styles; the most perfect and durable in use. Before purchasing, send for descriptive catalogue giving full list.

WARREN HILL, Manufacturer,
232 Friend Street, Boston, Mass.

A FREE GIFT.

Any of our readers who will enclose two 3 cen stamps in a letter to the **Columbus Buggy Co., Columbus O.,** will receive in return a beautifu engraving in colors, representing an **Australian scene,** and their manner of traveling in that country with **Ostriches** as a motor. They **give** this picture (the packing costing six cents) to **all** who may send for it, desiring in this manner to make themselves more widely known to the people.

[Mention this paper].

CORRESPONDENCE.

[We pay no attention to communications unless the name and address of the writer are given, though the same will not be published if so requested. We assume no responsibility for statements made by correspondents, and we do not necessarily endorse ideas advanced by them. Under these conditions we think it of value to our readers to devote a liberal space to the free discussion by others—whose opinions may be at variance with our own—of subjects pertinent to our department of journalism.]

The New Profession.

Editor American Railroad Journal:

During a recent trip in Europe I learned that young men and gentlemen were studying Electrical Engineering, which profession has not yet become overcrowded, and great fortunes have been made in its pursuit. If any of the younger readers of your valuable Journal are interested in this new field I will cheerfully give them any information in my power.

Yours Respectfully,

Henry Green.

Pataskala, Ohio, Oct. 15, 1882.

A Car Lighted by Electricity.

A car was run on the Pennsylvania Railroad from Jersey City to Newark on the 13th inst., for the purpose of experimenting with a system of electric lighting. Col. James Hosmer, secretary, and Mr. William Lachlan, engineer of the Light and Force Company, of New York, had charge of the work. Of the seven incandescent lamps in the car six are placed along the center of the car, the seventh being in the closet from whence the lighting of the lamps is controlled. The lamps are fed by thirty Faure accumulators arranged in two cases beneath the car formerly occupied by the tanks which contained the gas used in the old system of lighting. The cells were brought from England last May on the steamship Labrador by Col. Hosmer and Mr. Lachlan, and were not specially designed for the purpose to which they are now applied. A large number of new ones in which several improvements are introduced are at present in course of construction, which, as soon as completed, will be fitted in several of the Pennsylvania Company's cars. Each cell measures 11¾ inches in length, 5¼ inches in width and 11 inches in depth. The whole set of thirty cells is connected together in one series, the main circuit to the lamps leaving the battery at the extreme ends. A switch is placed in the closet, so that the car can be instantaneously lighted up or the light extinguished by the conductor of the train. Each lamp is provided with a switch socket, so that it can be turned out or lighted independently of the other lamps. The amount of storage of electricity carried under the car is capable of keeping all the lights burning for sixteen hours without recharging. Henceforth the car will remain in regular service, remaining only five hours each night at the Jersey City depot, for the purpose of charging whenever the cells are exhausted. This car is the first which has been lighted in this manner in the United States; but the system was introduced last December in the Pullman Express, running between London and Brighton, England. The charging of the accumulators is effected by means of an Edison dynamo-machine of one and a quarter horse-power. The lamps are of about twelve candle-power.

Commerce of New York.

The foreign imports at New York for the month of September were :—

	1880.	1881.	1882.
Ent. for cons.....	$17,495,330	$20,943,426	$22,994,410
Do. for warehousing	7,143,519	5,155,426	7,196,336
Free goods.....	10,162,197	10,625,657	10,489,579
Specie and bullion..	18,850,020	10,274,030	518,441
Total ent. at port....	$53,651,066	$46,998,539	$41,198,766
Withdrawn from warehouse.....	10,648,846	10,254,985	9,692,576

The foreign imports at New York for nine months from January 1, were :—

	1880.	1881.	1882.
Ent. for cons.....	$182,299,102	$169,506,853	$200,927,764
Do. warehouse....	93,292,898	66,828,705	79,616,163
Free goods.....	92,917,838	92,162,192	97,763,162
Specie and bullion.	33,510,382	45,946,589	3,101,137
Total ent. at port..	$402,020,220	$374,444,339	$381,408,227
Withdrawn from warehouse	68,428,532	74,859,701	73,052,071

The following is a classification of foreign imports at New York for nine months ending September 30:—

	1880.	1881.	1882.
Dry goods.....	$100,800,769	$87,840,285	$105,218,401
General mdse.....	267,709,069	240,657,465	273,088,689
Specie.....	33,510,382	45,946,589	3,101,137
Total imports.....	$402,020,220	$374,444,339	$381,408,227

Received for Customs at the Port of New York :—

	1880.	1881.	1882.
In Jan.....	$11,960,677 78	$10,572,559 15	$13,387,515 96
In Feb.....	12,254,602 24	11,217,766 87	13,585,053 25
In March....	14,469,557 65	13,122,964 03	13,999,138 76
In April.....	11,901,071 43	11,678,760 93	11,906,105 45
In May.....	9,752,873 54	11,055,935 39	11,981,893 c8
In June.....	10,699,840 52	10,993,452 70	11,428,930 11
In July.....	13,360,394 37	12,079,573 95	13,730,752 87
In August....	14,492,361 87	15,205,469 58	16,483,260 62
In Sept.....	12,856,636 10	14,104,647 51	14,690,362 47
Total 9 mos.	$111,747,915 50	$110,030,130 11	$121,193,012 57

The exports from New York to foreign ports for the month of September, were :—

	1880.	1881.	1882.
Dom. produce.....	$36,785,577	$32,637,408	$31,810,642
For. free goods.....	172,919	522,244	255,931
Do. dutiable.....	518,595	389,057	287,474
Specie and bullion.	244,765	973,492	1,001,661
Total exports.....	$37,721,856	$34,522,201	$33,355,708
Do. exclusive of specie.....	37,477,091	33,548,709	32,354,047

The exports from New York to foreign ports for nine months from January 1, were :—

	1880.	1881.	1882.
Dom. produce.....	$302,587,820	$275,727,505	$244,632,945
For. free goods....	1,947,027	6,342,504	4,162,490
Do. dutiable....	3,555,295	4,417,674	4,551,088
Specie and bullion	5,824,776	9,341,480	45,211,520
Total exports.....	$313,914,918	$295,829,163	$298,558,043
Do. exclusive of specie.....	308,090,142	286,487,683	253,346,523

The Coal Trade.

The leading coal-carrying companies make the following reports of their tonnage for the week ending Oct. 7, and for the year to the same date, compared with their respective amounts carried to the same time last year :—

	Week.	1882.	1881.
Reading Railroad.....	185,719	6,864,814	6,641,493
Schuylkill Canal	12,658	377,968	463,310
Lehigh Valley	134,139	5,178,992	4,770,468
Delaware, Lackawanna and Western	106,161	3,419,266	3,213,173
Shamokin	20,868	862,446	828,888
Central R. R. of New Jersey..	72,792	3,299,047	3,305,128
United R. R. of New Jersey...	43,897	1,287,031	1,178,138
Pennsylvania Coal..... ..	38,970	1,062,080	1 041,881
Delaware and Hudson Canal..	74,845	2,638,295	2,712,231
Huntingdon and Broad Top Mountain	12,141	352,069	405,855
Penn. and New York.....	31,362	1,229,608	1,252,490
Clearfield, Pa.....	54,699	2,181,712	1,819,888

The total tonnage of anthracite coal from all the regions for the week ending Oct. 7, as reported by the several carrying companies, amounted to 625,399 tons, against 643,231 tons in the corresponding week last year, a decrease of 17,832 tons. The total amount of anthracite mined for the year is 21,528,706 tons, against 20,862,396 tons for the same period last year, an increase of 666,310 tons. The quantity of bituminous coal sent to market for the week amounted to 97,132 tons, against 97,716 tons in the corresponding week last year, a decrease of 584 tons. The total amount of bituminous mined for the year is 3,264,173 tons, against 3,712,450 tons for the corresponding period last year, a decrease of 448,287 tons. The total tonnage of all kinds of coal for the week is 722,531 tons, against 740,947 tons in corresponding week last year, a decrease of 18,416 tons, and the total tonnage for the coal year is 24,792,879 tons, against 24,574,023 tons to same date last year, an increase of 218,023 tons. The quantity of coal and coke carried over the Pennsylvania Railroad for the week ending Oct. 7 was 210,472 tons, of which 166,005 tons were coal and 44,476 tons coke. The total tonnage for the year thus far has been 8,410,380 tons, of which 6,238,741 tons were coal and 2,171,639 tons coke. These figures embrace all the coal and coke carried over the road, east and west. The shipments of bituminous coal from the mines of the Cumberland coal region for the week ended Oct. 10 were 41,027 tons, and for the year to that date 909,077 tons, a decrease of 690,573 tons as compared with the corresponding period of last year. The shipments were: To the Baltimore and Ohio Railroad—For the week, 18,824 tons; year, 653,946 tons; decrease as compared with 1881, 373,042 tons. Chesapeake and Ohio Canal—Week, 18,502 tons; year, 128,554 tons; decrease as compared with 1881, 225,705 tons. Pennsylvania Railroad — Week, 6,289 tons, year, 121,094 tons, decrease from last year, 94,866 tons. The Reading Railroad shipment for last week, ending October 14, was about 203,500 tons, of which 47,000 tons were sent to and 50,000 tons shipped from Port Richmond, and 21,500 tons sent to and 19,600 tons shipped from Elizabethport.—*Philadelphia Ledger, Oct. 16.*

If you can arouse curiosity by an advertisement, it is a great point gained. The fair sex doesn't hold all the curiosity in the world.

Once on a time a Dutchman and a Frenchman were traveling in Pennsylvania, when their horse lost a shoe. They drove up to a blacksmith's shop, and no one being in, they proceeded to the house to inquire. The Frenchman rapped and called out, "Is de smitty wittin?" "Shtand back," says Hans, "let me shpeak. Ish der blacksmit's shop en der house?"

Several weeks ago a Philadelphia gentleman took his little son on a railway excursion. The little fellow was looking out the window when the father slipped the hat off the boy's head. The latter was much grieved at the supposed loss, when papa consoled him saying he would "whistle it back." A little later he whistled and the hat reappeared. Not long after the little lad flung his hat out of the window, shouting, "Now, papa, whistle it back again?" A roar of laughter in the car served to enhance the confusion of the perplexed papa.

The Family Educator.—"No family of children ought to be brought up without having ready access to this grand volume (Webster's Unabridged Dictionary). It is a library in itself. It will answer thousands of questions to the wide-awake child—not simply concerning the spelling and meaning of words, but also with reference to every branch of study with which the young mind must grapple at every stage in the course of securing an education. The book is an ever present and reliable schoolmaster to the whole family."—*Lutheran Sunday School Herald.*

BUSINESS CARDS.

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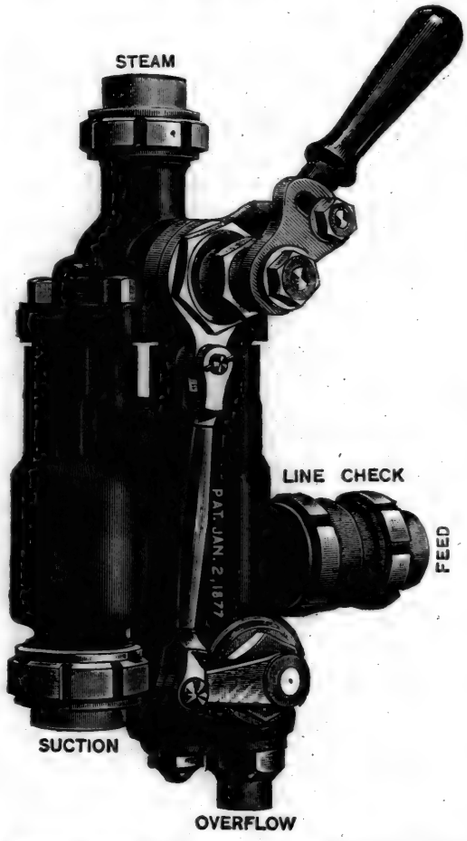
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Distances in Manitoba.

The following list of distances from central to other points in Manitoba and the Northwest will prove of interest to many:—

Winnipeg to Portage la Prairie, 65 miles; Portage la Prairie to Big Plains, 56 miles; Big Plains to Rapid City, 37 miles; Rapid City to Shoal Lake, 40 miles; Shoal Lake to Birtle, 25 miles; Portage la Prairie to Westbourne, 20 miles; Westbourne to Gladstone, 22 miles, Gladstone to Beautiful Plains, 12 miles; Beautiful Plains to Minnedoss, 36 miles; Rapid City to Grand Valley, 18 miles; Birtle to Fort Ellice, 12 miles.

Winnipeg to Fort Edmunton:—Winnipeg to Fort Ellice, 220 miles; Fort Ellice to Cyprus, 150 miles; Cyprus to Fort McLeod, 200 miles; Qu'Appelle to Wood Mountain, 180 miles; Wood Mountain to Cyprus, 180 miles; Touchwood Hills to Humbolt, 81 miles; Humbolt to Fort Carlton, 82 miles; Fort Carlton to Battleford, 110 miles; Battleford to Fort Pitt, 93 miles; Fort Pitt to Victoria, 129 miles; Victoria to Fort Edmonton, 74 miles; Carlton to Prince Alfred, 49 miles; Winnipeg to Emerson, 65 miles; Icelandic Settlement, 56 miles; Victoria, 24 miles; Rock Lake, 115 miles; Morris, 25 miles; Oak Point, 64 miles. The distances in Manitoba are only approximate, as in many cases the trail, rail, or road varies across the prairie land.

Emerson to Souris River and Pembina Mountain:—Emerson to Mountain City, 50 miles; Pembina River, 65 miles; Crystal City, 93 miles; Land Office (Souris), 168 miles; Souris River, west, 228 miles.

Names of Countries.

The Phœnicians, who were a great commercial people in the young days of the world, are thought to have given the present names of most of the countries around the Mediterranean Sea. The Phœnician language contained the words Europe, Asia, Africa, Italy, Spain, Gaul, Britain, Ætna, Sardinia and Siberia, as well as many others now used as the names of minor places. Europe, in Phœnician, meant "white complexion," and was applied to the country north of the Mediterranean because the natives were of a lighter complexion than those of Asia or Africa. Africa signified "the land of corn," and Asia meant "the middle land," being so named because it was between Europe and Africa. Italy was "the country of black pitch;" Spain was the "land of rabbits;" Gaul, of France, the "land of yellow hair;" Britain, "the country of tin;" Ætna, "the smoky furnace;" Sardinia, "a man's foot," and Siberia, "thirsty land," because it is so dry.

United States Steam Vessels.

From statistics prepared by the Inspector General of Steam Vessels at Washington, for his annual report, it appears that there were 5,117 steam vessels in service during the fiscal year ending June 30, 1882, with a total tonnage of 1,278,564.63, and with 20,467 licensed officers. During that period 338 vessels were placed in service, against 243 for the previous fiscal year. The increase of tonnage for the year ending June 30, 1882, was 7,456.53, against 82,195.05 for the year ending June 30, 1881, and the number of officers licensed was 2,669, an increase of 1,532 over the previous year. The figures indicate a considerable increase in the number of new vessels, but the decreased tonnage shows that they were mostly of small size. A noticeable circumstance is the small increase of traveling and miscellaneous expenses, which are but $200 in excess of the expenses for the year ending June 30, 1881, or a total of about $37,800. In 1874, with little more than one-half the number of vessels now in service, these expenses were $53,109.75. The receipts and expenditures of the last fiscal year were as follows: Receipts from inspection of steam vessels, $177,841.30; receipts from officers' licenses, $101,048; total, $278,889.30. Expenditures—salaries of inspectors and clerks, $189,744.17; traveling and incidental expenses, $37,871.46; total, $227,615.63. Excess of receipts over expenditures, $51,273.67.

Some experiments have been made at Salem, Mass., to ascertain the tractive force requisite to move street cars and vehicles on a macadamized road. The apparatus used consisted of an inclined plane, at the upper end of which was an iron wheel, over which passed a rope. A loaded box car, weighing, with its contents, 12,820 pounds, was drawn up the grade by a weight of 970 pounds suspended at the other end of the rope. A smaller car, weighing when empty 2,730 pounds, was occupied by fourteen persons and drawn up by 339 pounds, and when unoccupied by 176 pounds. An ordinary load of sand on a macadamized road was started by 514 pounds, and an empty hack, weighing 1,550 pounds, by 196 pounds; the same hack, with four passengers inside, required 230 pounds to move it. On a level road, the load of sand was started by 240 pounds, while the large box car yielded to 56 pounds.

Navvy.—"Navvy"—Navigator.—This word was most certainly invented about a century ago, when canals became extensively made in England. The canal was then generally called "the navigation," and the sturdy excavators who were brought together to do the work were called "navigators," or, in short, "navvies." Here in Birmingham are a number of public houses adjacent to the canals, known as "The Navigation" or "The Navigation Inn," and there is also a Navigation street, which obtained its name from the same reason. The word canal has now superseded the use of the term "navigation"; the navigation office has become the canal office, though long after the beginning of the present century "the navigation" was the term in general use. On the introduction of the railway system, the same class of men who had excavated the canals were engaged upon them, and though "excavator" was at first applied to them, the term soon gave place to the older one of "navvy," which is still retained.—*Notes and Queries.*

Among the various plans now resorted to by English builders for rendering wooden flooring resistive to the action of fire, is that of constructing solid timber floors, composed of ordinary joists placed close to each other, and spiked or screwed at intervals with bolts; the latter are fixed alternately, and, to form a key for the plastering, angular grooves are cut under each joist, these grooves forming a series of dove-tails. In a similar manner, stairs are formed by a series of joists screwed or spiked together. With regard to partitions, preference is given by many to the French plan of constructing them with quarterings, filled in with rough stone rubble, then lathed on each side with strong laths, and a coat of plaster applied and pressed through the vacuities from each side. In the construction of roofs, the laying of solid concrete flats on iron joists, or iron joists fixed to the inclination of the roof, and then filled in with concrete on the French system, covered with asphalt, is a method highly approved.

A new wood-preserving process has been invented in France by M. Jacques, and has been favored by the government.

The Marietta and Cincinnati reorganization matter will come up before the Ross County Court, at Chillicothe, Ohio, on the 23d of this month, on a final hearing in regard to a decree of sale as contemplated by the scheme.

A new through line of railroad has been established between Chicago and Omaha and business has already been taken over it. It consists of the Illinois Central Railroad to Sioux City and thence of the Chicago, St. Paul, Minneapolis and Omaha Railway to Omaha.

Work on the railroads and levees at New Orleans has drawn off so many laborers that the steamboats are now paying at the rate of $75 per month for deck hands, and have great difficulty in getting them at this price. Complaints are also made of the scarcity of labor on the river plantations.

The Mexican National Railroad's bridge across the Rio Grande, which was injured by the recent flood, has been fully repaired and completed. Trains are now running over it every few minutes, and the large amount of freight which had accumulated for the National and the International is fast being cleared away.

An exchange tells of a stout, aristocratic gentleman, who takes his meals seated upon a weighing chair; when it indicates that a certain amount of food has been received within, he retires from the table. If the landlord knows his business, he will bribe a waiter to put his foot on that chair early in the meal.

The case of the Cleveland, Columbus, Cincinnati and Indianapolis, the Lake Shore and Michigan Southern, the Pennsylvania, and the Pittsburg, Fort Wayne and Chicago railroad companies against the Indianapolis and St. Louis and the St. Louis, Alton and Terre Haute railroad companies, involving the lease and unpaid rental money of the last-named road, has been appealed to the United States Supreme Court, and a bond filed at Indianapolis for $600,000.

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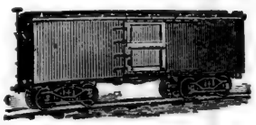
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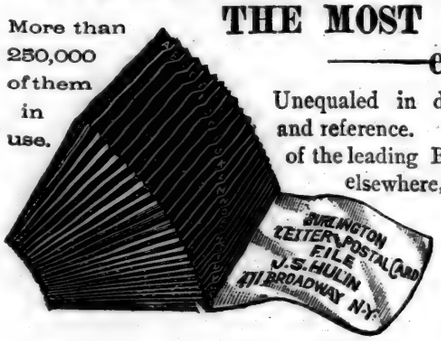
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Western Union Telegraph Co.

THE following is an abstract of the report of the Western Union Telegraph Company for the year ending June 30, 1882:—

CAPITAL STOCK.

The capital stock of the company is $80,000,000, of which $20,172.50 belongs to, and is in the treasury of, the company. A small portion of the capital stock is still represented by certificates of indebtedness in the hands of the Union Trust Company, in trust for the parties entitled thereto.

BONDED DEBT.

The bonded debt at the close of the year was as follows:—

Bonds due March 1, 1900, 6 per cent		$941,382 00
Bonds due May 1, 1900, 7 per cent		3,920,000 00
Bonds due May 1, 1902, 7 per cent		1,373,000 00
		$6,234,382 00
Less: balance of sinking funds appropriations, not yet used for redemption of bonds held by the Union Trust Co., trustees		225,101 24
		$6,009,190 76

During the year sterling bonds, due March 1, 1900, to the amount of £2,000 were redeemed by the trustees of the sinking fund.

BUSINESS OF THE YEAR.

Surplus July 1, 1881		$127,258 76
The revenues, expenses and profits of the year ending June 30, 1882, were as follows:—		
Revenues	$17,114,165 92	
Expenses, (including leased line rentals and taxes)	9,996,095 92	
Profits		7,118,070 00
		$7,245,328 76
From which there was applied:—		
For dividends	$4,798,473 41	
For interest on bonds	427,091 34	
For sinking fund appropriations	40,097 98	
		5,265,662 73
Leaving a balance of		$1,979,666 03
Represented as follows:—		
Surplus of net revenue for the year over dividends, interest and sinking fund appropriations	$1,852,407 27	
Surplus at commencement of year, as above	127,258 76	
	$1,979,666 03	

For new property there was appropriated during the first quarter of the year:—

For construction of new lines and erection of additional wires	$202,290 51	
For telegraph stocks and other properties	113,135 39	
		315,425 90
Deducting which, leaves surplus June 30, 1882		$1,664,240 13

The revenues for the year do not include the surplus funds in the treasury of the American Cable Co., which were taken over with the lease of that company, subject to certain unadjusted liabilities, which have not been fully ascertained.

The management has determined, as published in the quarterly statement of March 1882, that from October 1, 1881, all outlays for construction and investments in new property which go into the plant shall be provided for out of surplus assets in the treasury, other than the cash surplus of current earnings. As no sales of any part of such surplus assets have been made, there has been advanced as a loan to the account of construction and purchases, to meet the outlay for these objects during the remainder of the year, $835,676.08 from the cash surplus as above stated.

GENERAL STATEMENT.

The following exhibit shows the revenues and disbursements of the company for sixteen years, from July 1, 1866.

Surplus of income account, July 1, 1866		$275,357 24
Net revenues for sixteen years, from July 1, 1866, to June 30, 1882		58,108,951 70
Making an aggregate June 30, 1882, of		$58,384,308 94
During this period there was applied:—		
For cash dividends to stockholders (including dividend payable July 15, 1882)	$28,332,400 75	
For cost of 59,606¼ shares of Western Union Telegraph stock, purchased and owned by the company, which was distributed to stockholders in 1879	3,302,198 90	
For cost of 72,010 shares of Atlantic and Pacific Telegraph stock, purchased and owned by the company, the proceeds of which in Western Union stock were distributed to stockholders in 1881	1,806,250 00	
For interest paid on company's bonds	6,301,562 49	
For cost of 396 .04½ Shares of Western Union stock, purchased and owned by company, which were cancelled to make the capital stock, after the issue of the new stock in 1881, exactly $80,000,000	26,836 00	
For amount reserved for interest on bonds and for sinking funds, accrued to June 30, but then not yet due and payable	106,086 64	
		39,875,334 78
Leaving a surplus of		$18,508,974 16
Which is represented as follows:		
Construction of new lines, erection of additional wires, patents, etc	$9,294,683 77	
Purchase of telegraph lines, and of stocks of companies leased by the Western Union Co., upon which interest or dividends are paid as rental	2,440,296 06	
Gold and Stock Telegraph Co.'s stock (18,905 shares)	1,176,009 00	
International Ocean Telegraph Co.'s stock (15,170 shares)	961,606 42	
Brooks Underground Telegraph Co.'s stocks (1,000 shares)	95,000 00	
Southern Bell Telephone and Telegraph Co.'s stock (1,687 shares)	84,325 00	
Sundry other stocks and bonds	102,965 68	
Western Union bonds, redeemed and cancelled	1,359,607 69	
Sinking Funds (portion not yet used for redemption of bonds, exclusive of interest allowed by Trustees)	200,767 40	
Broadway and Dey St. Building, $2,340,639.52, less amount provided from the proceeds of bonds $1,802,202.00	538,437 52	
Real estate other than above	408,745 41	
Supplies and material on hand unissued	182,290 08	
Surplus June 30, 1882	1,664,240 13	
		18,508,974 16
On account of these assets, a stock distribution was declared in 1881, to the amount of		15,526,590 00
Deducting which, leaves a balance of		$2,982,384 16

The assets which have been purchased and paid for out of the net revenues, are stated in the foregoing schedule at their cost value.

The company has other large and valuable assets, which were not purchased and paid for at a fixed price, but which were taken over under contracts with the several companies absorbed by lease, or amalgamation; and which therefore had no specific cost value at which they could be entered into the general accounts of the company. A list of these assets is given, and their marketable value, as nearly as can be ascertained, is stated at $8,133,553.50.

The list does not embrace the large amount of stocks held by this company in telegraph companies whose lines have been leased by this company, and the greater part, and in most instances the entire stocks, subsequently purchased, and the telegraph properties substantially merged into the Western Union system. Among these may be enumerated $3,963,300 of the stock of the old American Co.; $643,500 of the Atlantic and Ohio; $2,381,600 of the California State; $125,000 of the Chicago and Mississippi; $629,000 of the Franklin; $100,350 of the Illinois and Mississippi; $1,457,500 of the Pacific and Atlantic; $390,475 of the Southern and Atlantic; $119,750 of the Vermont and Boston; $530,550 of the Washington and New Orleans; $1,000,000 of the South Western; $204,400 of the Missouri and Western; and miscellaneous stocks of sundry smaller companies, amounting to over $1,000,000, all having a marketable value, and amounting in the aggregate to over $12,550,000.

The stocks of the United States Co., $6,000,000; the Atlantic and Pacific, $14,000,000; and the American Union, $10,000,000, and $5,000,000 bonds of the latter company, which were directly capitalized into this company, by the issue of its stock in exchange therefor, are, of course, not marketable assets, and therefore not included in either list.

Over $3,000,000 of stock and $375,000 of bonds of the Mutual Union Telegraph Co., which are a marketable asset, are not included as such, because they were not finally paid for and taken into the accounts of the company until after the expiration of the year for which this report is made.

These together aggregate over sixty millions of stocks and bonds of other companies, including those that have been absorbed by this company since the beginning of 1866, besides over ten millions expended in the direct construction of new lines. Of the securities, over eight millions in value, as per foregoing table, are classed as saleable, and the proceeds thereof may be realized whenever they can be more profitably invested.

During the year, and dating from the first of January, 1882, the company has entered into contracts with the Gold and Stock Telegraph Co., and with the International Ocean Telegraph Co., to manage and operate the lines, property and business of those companies for a term of ninety-nine years, guaranteeing to the stockholders quarterly dividends at the rate of six per cent per annum, and being entitled to all the revenues.

These agreements are substantially, but not strictly, in the form of leases. They effect a great saving in the executive and other expenses of the two organizations; the business being now conducted under separate departments of this company. The experience of the first six months' operation indicates that these contracts will be a source of handsome profit to this company, not only from the economies mentioned, but also from the considerable growth of the business.

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SECOND QUARTO SERIES.—VOL. XXXVIII., No. 42.] NEW YORK, OCTOBER 28, 1882. [WHOLE No. 2,427.—VOL. L.

CONSTRUCTION.

THE Phœnixville and West Chester Railroad will be completed by January 1.

THE California Southern is completed to San Diego, 600 miles from San Francisco.

THE Wheeling and Lake Erie Railroad has been opened from Wheeling to Detroit.

THE through route of the Southern Pacific Railroad Company to New Orleans will be completed January 1, 1883.

THE last rail of the railroad extension from Goshen to Benton Harbor, on Lake Michigan, was laid on the 24th inst.

THE new track of the Fitchburg Railroad between Baldwinville and Royalston was used for the first time on the 25th inst.

THE track of the Chicago and Atlantic Railway has been completed between Lima and Decatur, Ind. The road is 269 miles in length.

THE City Council of Wilmington, Delaware, has granted the Baltimore and Ohio Railroad company the right of way through that city for its Philadelphia line.

THE Kingston and Pembroke Railway has been completed to within 15 miles of Renfrew; the terminus of the road will be finally completed in 12 months' time.

THE survey of the Pennsylvania company's Germantown and Chestnut Hill branch has been completed, and the company is preparing contracts for its construction.

J. L. Randolph, chief engineer of the Baltimore and Ohio Railroad, says that the extension through Delaware will be built by March, 1884, the time named in the charter.

THE double track line of the Lehigh Valley Railroad has been extended to Pittston, and the extension of new track between Wilkesbarre and that city was recently opened to traffic.

PLANS and specifications for the bridge of the Highland Junction Company across the Hudson River at Cornwall have been finished. The completion of this bridge will add the necessary link for an all-rail route from the coal fields of Pennsylvania to the East.

THE track of the Utah and Northern Railroad has reached Race Track Creek, eight miles from Deer Lodge. Work has been commenced on the bridge across Deer Lodge River within the city limits. The Oregon Short Line is completed to a point five miles west of Soda Springs, and track is being laid at the rate of one mile per day. The gap to be completed before connections is made with the line of the Utah and Northern is expected to be filled in ten days. Work is also being vigorously prosecuted west of the Utah and Northern Line, and rapid progress is being made toward Wood River.

WORK is progressing upon the Coshocton extension of the Connotton Valley Railroad, which will probably be ready for trains December 1. The question of building to Zanesville is now under consideration, and there is talk of extending the road into the Hocking Valley, some thirty miles beyond Zanesville, where the best coal fields of the State are located.

INCORPORATION.

ARTICLES of incorporation have been filed in Little Rock, Ark., for the Dardanelle and Waldron Railway Company, with $750,000 capital. The road will be seventy-five miles long.

ARTICLES of incorporation of the Galesburg and Northern Railroad, the narrow-guage road that is to run from Galesburgh to Geneseo, have been filed at the county seat of Henry county, Ill. The incorporators are Messrs. Grant, Carpenter and Wyman, of Galesburg; A. R. Mock, of Cambridge, and Joseph M. Allen, William Irwin and Levi Watterman, of Geneseo. A survey of the road will be immediately begun under the charge of Engineer Wyman, and the road will be completed to Geneseo early next season.

ARTICLES of incorporation have been filed at Albany, N. Y., of the following companies: The Olean and Salamanca Railroad Company; capital, $700,000; to begin at a point on a line of the Buffalo, Pittsburg and Western Railroad, in Salamanca, and run thence in an easterly direction through the towns of Great Valley, Carrollton, Allegheny, and Olean, to a point on the Buffalo, New York and Philadelphia Railroad. The Niagara Falls and Suspension Bridge Railroad Company; capital, $50,000; to run from the village of Niagara to Suspension Bridge. The Pennsylvania, Slatington and New England Railroad Company (New York Division); capital, $250,000; to run from a point on the boundary line between the States of New York and New Jersey, where the route of the Pennsylvania, Slatington and New England Railroad, in the State of New Jersey, intersects the same; thence running in a northeasterly direction, and terminating at Pine Island, in the County of Orange, State of New York; the length of the road is to be five miles. The News and Stock Telegraph Company of New York; capital, $600,000, with the privilege of increasing to $2,000,000. The line is to run through the United States, Canada and Mexico.

PERSONAL.

J. L. BUTMAN has been appointed superintendent of the Boston, Hoosac Tunnel and Western Railway, with jurisdiction over the entire line.

A. W. HILL has been appointed secretary and treasurer of the Atlanta and West Point Railroad Company, in place of D. W. Appler, resigned.

THE President has appointed Edward P. Ferry, of Utah, to be a Government Director of the Union Pacific Railroad, in place of Robert H. Baker, deceased.

ROBERT H. SAYER, chief engineer and general superintendent of the Lehigh Valley Railroad, has resigned that position, to take effect November 1, or as soon thereafter as practicable. He has been connected with the road for thirty years.

GENERAL E. P. ALEXANDER has resigned from the directory of the Georgia Railroad Company on account of his being president of the Central Railroad Company of Georgia, and State Treasurer Speer has been elected to fill the vacancy.

ON the 1st of January George C. Thomas and Edward T. Stotesburg, will be admitted into the firm of A. J. Drexel & Co., of Philadelphia. Mr. Godfrey, a partner in the firm, will take charge of the house of A. J. Drexel & Co., in this city.

THOMAS HASSARD, of the Railroad Office of the Interior Department, has been appointed Commissioner to examine and report upon the completed section of the New Orleans Pacific Railway, extending from New Orleans to Shreveport, La., where it connects with the main line of the Texas and Pacific Railway.

G. H. KIMBALL has been appointed superintendent of the Eastern Division of the New York, Chicago and St. Louis Railway, which extends from Buffalo to Bellevue, and E. E. Dwight, superintendent of the Western Division, which extends from Bellevue to Chicago. Mr. Kimball's headquarters will be in Cleveland, and Mr. Dwight's in Chicago.

Louisville and Nashville Railroad.

THE earnings of the Louisville and Nashville Railroad for the year ending June 30, 1882, were as follows:—

Main Stem	$2,946,424 64
Bardstown Branch	24,754 77
Lebanon-Knoxville Branch	385,141 14
Richmond Branch	45,790 54
Cecelian Branch	45,833 60
Memphis Division	1,042,008 59
Evansville, Henderson and Nashville Division	1,101,135 22
Southeast and St. Louis Railway	836,523 72
New Orleans and Mobile Railroad	909,860 29
Pontchartrian Railroad	14,396 08
Nashville and Decatur Railroad	1,101,668 99
South and North Alabama Railroad	1,311,253 53
Mobile and Montgomery Railway	987,354 39
Pensacola Division	180,834 33
Pensacola and Selma Division	60,998 01
Selma Division Western Railroad of Alabama	100,265 43
Cumberland and Ohio Railroad—Southern Division	42,978 72
Glasgow Branch Railroad	20,013 80
Cincinnati Division	574,320 96
Lexington Branch	227,769 45
Shelbyville Branch	30,977 15
Cumberland and Ohio Railroad—Northern Division	13,312 36
Louisville Railroad Transfer Co	74,981 99
Louisville, Harrod's Creek and Westport Railroad, Narrow Gauge	7,026 85
	$11,987,744 55

Operating expenses, viz.:

Main Stem	$1,278,432 26	
Bardstown Branch	19,010 16	
Lebanon-Knoxville Branch	206,190 22	
Richmond Branch	31,827 38	
Cecelian Branch	35,620 79	
Memphis Division	793,793 70	
Evansville, Henderson and Nashville Division	613,790 16	
Southeast and St. Louis Railway	617,731 21	
New Orleans and Mobile Railroad	534,146 62	
Pontchartrain Railroad	21,115 78	
Nashville and Decatur R. R.	656,679 75	
South and North Alabama R.R.	965,149 61	
Mobile and Montgomery Railway	693,257 27	
Pensacola Division	145,490 76	
Pensacola and Selma Division	88,941 85	
Selma Division Western Railroad of Alabama	81,895 08	
Cumberland and Ohio R. R. —Southern Division	25,183 51	
Glasgow Branch Railroad	13,583 26	
Cincinnati Division	437,004 86	
Lexington Branch	118,973 59	
Shelbyville Branch	32,197 53	
Cumberland and Ohio Railroad—Northern Division	19,591 65	
Louisville Railroad Transfer Co	39,607 33	
Louisville, Harrod's Creek and Westport Railroad, Narrow Gauge	14,156 02	
		7,429,370 35

Net earnings:

Main Stem	$1,667,992 38	
Bardstown Branch	5,744 61	
Lebanon-Knoxville Branch	178,950 92	
Richmond Branch	13,963 16	
Cecelian Branch	10,212 81	
Memphis Division	302,214 89	
Evansville, Henderson and Nashville Division	487,345 06	
Southeast and St. Louis Railway	220,792 51	
New Orleans and Mobile R. R.	375,713 67	
Pontchartrain Railroad—Loss	6,719 70	
Nashville and Decatur R. R.	344,929 24	
South and North Alabama R. R	346,103 92	
Mobile and Montgomery Railway	294,277 12	
Pensacola Division	35,343 57	
Pensacola and Selma Division —Loss	27,943 84	
Selma Division Western Railroad of Alabama	18,370 35	
Cumberland and Ohio Railroad—Southern Division	17,795 21	
Glasgow Branch Railroad	6,430 54	
Cincinnati Division	137,316 10	
Lexington Branch	108,795 86	
Shelbyville Branch—Loss	1,220 38	
Cumberland and Ohio Railroad—Northern Division—Loss	6,279 29	
Louisville Railroad Transfer Co	35,374 66	
Louisville, Harrod's Creek and Westport Railroad, Narrow Gauge—Loss	7,129 17	
		$4,558,374 20

The following statements will show the source from which the above earnings were derived, together with a comparison of the same with those of the preceding year:

	1880-'81.	1881-'82.
Freight	$7,407,402 78	$8,050,339 04
Passengers	2,599,353 20	3,007,464 74
Mails	254,886 60	280,806 71
Express	194,185 77	246,216 97
Train privileges	7,420 20	8,338 20
Rent of engines	118,913 06	134,164 30
Rent of passenger cars	59,438 11	41,462 11
Rent of sleeping-cars	4,709 92	.....
Rent of freight cars	205,187 66	153,298 79
Detention of cars, storage, etc.	568 45	1,587 02
Pig iron storage	1,354 17	3,516 50
Rents	32,056 13	32,478 63
Profits on Commissary Department	22,906 35	26,160 10
Wharfage and storage	2,767 19	1,909 44
Earnings of steamer Mobile	501 05	.....
Total gross earnings	$10,911,650 63	$11,987,744 55
Expenses, as above	6,713,132 31	7,429,370 35
Net earnings from traffic	$4,198,518 32	$4,558,374 20
Realized from investments	225,209 17	266,442 35
Total credited to Income account	$4,423,727 49	$4,824,816 55

The charges against income in 1881-'82 are:

Interest, rentals, taxes, etc.	$4,035,908 78	
Georgia Railroad lease deficit	110,000 00	
		4,145,908 78
Net income		$678,907 77
Dividend payable February 10, 1882, 3 per cent		543,900 00
Net surplus for the year,		$135,007 77

The net results of the year did not come up to the expectations based on the first six months, which justified a dividend of 3 per cent. The fixed charges of the last half year were larger by $260,000 than for the first half, consequent on the additions made to the property to increase its earning capacity. In the spring of 1881 much business had been lost for want of adequate equipment; and, in view of that fact, the equipment was largely increased, especially during the months of December, 1881, and January, February and March, 1882. The expenditure by this company of $110,000 for betterments of the Georgia Railroad in excess of the revenue derived from its one-half interest in the lease it was believed would increase the earning capacity of the road, and would return to this company the money so expended. The amount has been charged to income account, and when reimbursed will be placed to the credit of that account for the year in which it is refunded.

A further analysis of the report shows that the earnings of the main stem were from freight $1,962,950.38, passengers $529,297.83, mails $56,139.14, express $59,648.41, miscellaneous $338,388.88; of the Bardstown Branch—from freight $14,105.32, passengers $9,062.49, mail $768.42, express $656.46, miscellaneous $161.86; Knoxville Branch—from freight $271,322.97, passengers $98,608.83, mail $6,785.86, express $6,867.73, miscellaneous $1,555.75; Richmond Branch—from freight $27,396.79, passengers $15,448.74, mail $2,105.12, express $670.61, miscellaneous $169.28; Cecelian Branch—from freight $18,226.50, passengers $22,802.13 mail $2,245.53, express $2,484.44, miscel. $75; Memphis Line—from freight $605,696.35, passengers $348,543, mail $56.953.84, express $28,204.32, miscellaneous $2,610.73; Evansville, Henderson and Nashville Division—from freight $900,242.48, passengers $180,027.08, mail $10,123.69, express $9,495.09, miscellaneous $1,246.88; St. Louis Division—from freight $573,418.24, passengers $228,827.03, mail $15,336.60, express $18,097.96. miscellaneous $2,843.89; New Orleans and Mobile Railroad—from freight $1,437,94, passengers $359,983.30, mail $..., express $17,824.64, miscellaneous $1..., Pontchartrain Railroad—from freight $2,39..., passengers $11,902.10, miscellaneous $100.6; Nashville and Decatur Division—freight $771,184.84, passengers $194,467.84, mail$14, 270.24, express $14,779.76, miscellaneous $6,906.26; South and North Alabama Railroad—freight $998,641.45, passengers $254,114.91, mail $11,341.52, express $17,208,25, miscellaneous $29,947.40; Mobile and Montgomery Railroad—from freight $619,294.95, passengers $309,160.27, mail $33,970.01, express, $22,887.51, miscellaneous $2,221.65; Cumberland and Ohio, Southern Division—from freight $29,328.45, passengers $11,547.52, mail $1,368, express $720.25, miscellaneous $14.50; Glasgow Railroad—from freight $12,685.33, passengers $6,392.80, mail $518.52, express $356.15, miscellaneous $61; Pensacola Railroad—from freight $120,418.72, passengers $53,608.36, mail $1,922.03, express $2,800.78, miscellaneous $2,084.44; Pensacola and Selma Railroad—from freight $47,655.21, passengers $10,944.01, mail $1,746.24, express $516.28, miscellaneous $136.27; Selma Division—from freight $48,975.87, passengers $46,631.68, mails $3,235.71, express $1,299.17, miscellaneous $123; Cincinnati Division—from freight $319,483.76, passengers $199,005.02, mail $25,312.86, express $29,072.74, miscellaneous $1,446.58; Lexington Branch—from freight $122,315.19, passengers $90,192.43, mail $3,777.64, express $10,949.14, miscellaneous $535: Shelby Branch—from freight $17,011.38, passengers $12,281.05, mail $564.46, express $1,110.38, miscellaneous $9.88; Cumberland and Ohio, Northern Division—from freight $6,009.46, passengers $5,831.13, mail $902.87, express $566.90, miscellaneous $2; Railway Transfer—from freight $69,504.55, passengers $4,673.56, mail $803.88; Narrow-Gauge Railroad—from freight $2,649.25, passengers $4,111.27, mail $263.18, miscellaneous $3.15—total, as above, $11,987,744.55.

The aggregate length of the roads operated by this company June 30, 1881, was 1,872 miles. On the 1st of July 1881, the Owensboro and Nashville Railway (35 miles), which had previously been operated as a part of the Louisville and Nashville system, was turned over to and is now operated by the Owensboro and Nashville Railway Co. In July, 1881, the company purchased the capital stock of the Louisville, Cincinnati and Lexington Railway Co., and on the 1st of November, 1881, the road and property with its leased roads (in all 237 miles) was incorporated into the Louisville and Nashville system. On the 1st of January, 1882, the Cecelian Branch (from Louisville south, 46 miles), was leased to the Chesapeake, Ohio and Southwestern Railway Co. for 99 years, at an annual rent of $60,000, with the privilege to that company of purchasing at $1,000,000—making the length of road operated by this company June 30, 1882, as follows: owned in fee, or through the ownership of the entire capital stock, 1,577.95 miles; operated under lease, 261.17 miles; operated for the South and North Alabama Railroad Co., (being the owner of a majority of its

capital stock) the North and South Alabama Railroad, 188.88 miles—a total of 2,028 miles. It will be seen that for the first four months of the fiscal year the company operated 1,835 miles of road, for the next two months 2,074 miles, and for the last six months 2,028 miles, making the average operated for the year 1,971 miles. The gross earnings per mile were $5,930.24, the operating expenses $3,648.44, and the net earnings $2,281.80, The ratio of operating expenses was 61.97 against 61.52 for the preceding year. The report says:

LEBANON-KNOXVILLE BRANCH.

It is expected that the extension of this branch to the Tennessee State line will be completed, and open for traffic, during the month of December. The road has been built first-class in all respects, and is now in operation to London, 18 miles from Livingston, the former terminus. Almost the entire grading is done, and the iron bridge structures have been gotten out. But little of the masonry work remains to be done. The road will be opened to Williamsburg, at the crossing of the Cumberland River, 48 miles from Livingston, about the middle of October. The length of the extension, when completed, will be 62 miles.

HENDERSON BRIDGE.

But little work has been done on this bridge, the amount expended to June 30, 1882, being $60,161.19.

MADISONVILLE BRANCH.

The grading on this branch from Madisonville to Providence, sixteen miles, is completed, and ten miles of road finished and opened for business. Track-laying on the remaining six miles will be finished, and the branch opened for traffic the 1st of October.

PENSACOLA AND ATLANTIC RAILROAD.

The construction of the Pensacola and Atlantic Railroad has progressed rapidly. This road is to connect the Louisville and Nashville system of roads at Pensacola with the railroads of Florida and the South Atlantic coast. Over forty miles of the road are completed and ready for business. By the middle of October one hundred miles will be in operation, and the entire line is to be finished by the 1st of January, 1883.

GEORGIA RAILROAD.

The lease of the Georgia Railroad, in which this company is jointly interested with the Central Railroad Company of Georgia, has, as stated in the earlier part of this report, involved an outlay on the part of this company of $110,000 for the year. In this connection the following extracts from the report of the general manager of that road will be of interest:—

"While the result of operations has not been as satisfactory as was expected, there is nothing to excite distrust in the future. The Georgia Railroad derives about sixty per cent of its revenue from local sources. The country tributary to its line show signs of healthy growth, and the reflex can not be otherwise than happy. The expenses for the year just closed have been unusually heavy. The exhibit submitted shows that expenditures of every description, other than for account of the 'Athens Extension,' have been charged to operating expenses. The value of improvements, or rather betterments, made during the year amount to $207,370.67. This sum, plus the cash value of material on hand, increases the amount to $365,395.87. If the value of additions made and material on hand be considered proper assets, the result of operations for the year just closed will show a profit on the lease instead of an apparent loss."

CONSTRUCTION AND EQUIPMENT.

Besides the amounts expended in the purchase of the Louisville, Cincinnati and Lexington Railway and the construction of the Lebanon-Knoxville Branch extension and the Madisonville Branch, large expenditures have been made during the year for steel rails, locomotive-engines, freight cars, passenger coaches, depots, wharves, terminal facilities, etc.

In conclusion, it is gratifying to the Board of Directors to be able to state that all the roads in our system are materially improved in physical condition and well supplied with rolling-stock and all necessary appliances for the transaction of a large business in the future. The stockholders should, however, remember that when the large purchases of the railroads and capital stock of other companies were made in 1879, 1880 and 1881, this company had but little cash capital, and the purchases were hence made on credit, the roads purchased being at the time in bad condition; and that to pay for the property purchased and to put the roads in proper shape for active business necessarily required large outlays of money. But in view of the growing prosperity of the country at large, and especially of the rapid development of the vast resources, mineral and agricultural, of the country through which our lines and their connections immediately pass, we are confident of a successful future for our company; and for the profitable results of the fiscal year 1882-'83 we have abundant promise in the excellent crops, especially in the Southern country, where our interest chiefly lie.

In addition to the 2,028 miles of road operated by this company, it is also interested, as owner of a majority of the capital stock of the company operating, outside of its own system, in the Nashville, Chattanooga and St. Louis Railway, 521 miles, and the Owensboro and Nashville Railway, 43 miles; and as joint lessee with the Central Railroad Company of Georgia, of the Georgia Railroad and dependencies, 641 miles.

At the commencement of the year the company had 311 locomotives; during the year 69 were added, and 13 disposed of—leaving at the close of the year 367. The average number on all divisions during the year was 368, and the average mileage of each 28,051 miles. The total mileage over all divisions was 10,322,860, and the total cost of repairs $376,041.46, or an average of 3.643 cents, as against 4.799 cents for the preceding year.

The company also had at the close of the year 186 passenger, 3 parlor, 53 baggage, 20 express, 12 postal, 1 president's, 1 directors', 1 general manager's, 4 pay, and 11,034 freight, etc., cars; and on the Narrow-Gauge Railroad 3 passenger, 2 excursion, 1 combination, and 32 freight, etc., cars. The freight car mileage was 81,561,355, passenger car mileage 11,369,383, sleepers 1,017,681. Number of passengers carried one mile, 111,137,575; tons of freight carried one mile, 569,639,434.

The capital stock of the company June 30, 1881, was $18,130,913.17, and June 30, 1882, $18,133,513.17, the increase of $2,600 resulting from the exchange for stock in the Memphis and Ohio Railroad Co., and the stock is still liable to a further small increase from that source.

The mortgage debt of the company June 30, 1881, was $46,991,840. During the year $10,000,000 Trust bonds (of March 1, 1882), $3,208,000 Louisville, Cincinnati and Lexington Railway General mortgage bonds, and $1,000,000 New Orleans and Mobile Division second mortgage bonds were issued, and $2,900,000 first and $892,000 second mortgage bonds of the Louisville, Cincinnati and Lexington Railway assumed; in addition to which $2,000,000 car trust certificates of the Louisville and Nashville Railroad and $123,948 car liens of the Louisville, Cincinnati and Lexington Railway were created—a total addition to the bonded indebtedness of the company of $20,123,948. During the same time $10,000 mortgage on main office, $32,010 Memphis, Clarksville and Louisville bonds, and $3,000,000 New Orleans, Mobile and Texas debentures were redeemed, and $1,500,000 Lebanon-Knoxville branch bonds, $1,248,000 Pensacola and Selma Division bonds and $3,208,000 Louisville, Cincinnati and Lexington Railway bonds were pledged with trustees as security in part of the trust-bond issue of March 1, 1882—making a total of $8,998,010 bonds retired, and leaving the bonded debt of the company June 30, 1882, $58,117,778.

The $1,000,000 New Orleans and Mobile 6 per cent second mortgage bonds were issued in lieu of $3,000,000 debentures of the New Orleans, Mobile and Texas Railroad. The $2,000,000 car trust certificates, bearing date April 1, 1882, and maturing from 1883 to 1889 were executed and given in payment for a large amount of rolling stock lately purchased by the company. They are payable in equal amounts semi-annually.

COST, RESOURCES AND LIABILITIES

Cost of road to June 30, 1882		$61,593,923 16
Resources:		
Due from transportation department	$844,725 92	
Bills receivable	603,112 04	
Sundry railroads and persons	207,911 71	
Real estate, quarry and timber lands	763,637 78	
Sinking fund, Louisville, Cincinnati and Lexington Railway	50,000 00	
Bonds owned by the company	1,164,337 80	
Stocks owned by the company	1,110,797 46	
Lebanon-Knoxville Extension	1,114,040 91	
Nashville and Decatur Railroad Co	504,121 43	
South and North Alabama Railroad Co	1,276,040 96	
Mobile and Montgomery Railway Co	124,167 73	
Owensboro and Nashville Railroad Co	303,014 32	
Nashville and Florence Railroad Co	188,816 19	
Henderson Bridge Co	60,161 19	
		8,214,885 44
Shop, road and fuel supplies		1,419,278 55
Cash		185,480 72
Cash balance due for trust funds		1,054,036 73
Car trust funds		468,638 83
Stocks and bonds held in trust		9,527,877 74
Total		$82,464,121 23
Liabilities:		
Capital stock		$18,133,513 17
Mortgage debt		58,117,778 00
Due sundry railroads and persons	$827,242 15	
Pensacola and Atlantic Railroad Co	1,205,706 82	
Bills payable	592,728 52	
Back dividends	36,876 93	
Bills and pay-rolls unpaid	887,058 81	
Interest due July 1 and August 1	430,715 99	
		3,980,329 22
City of Louisville bonds	$850,000 00	
Debentures, recent acquisitions	605,000 00	
		1,455,000 00
Profit and loss		777,500 84
Total, as above		$82,464,121 23

President.—C. C. BALDWIN.

Vice-President.—MILTON H. SMITH.

Second Vice-President.—GEO. A. WASHINGTON.

Directors.—C. C. Baldwin, John U. Brookman, Geo. C. Clark, C. H. Clark, F. D. Carley, T. W. Evans, E. H. Green, John E. Green, W. C. Hall, J. S. Rogers, Geo. A. Washington, W. S. Williams, Jas. T. Woodward.

Secretary.—WILLIS RANNEY.

Ass't Pres. and Ass't Sec'y.—A. M. QUARRIER.

Gen'l Manager.—FRED. DE FUNIAK.

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WE invite railroad officers to send us notice of elections, transfers, appointments, resignations, etc.; and all our readers would oblige us by furnishing for our columns any items of personal information, that may come to their knowledge, adapted to this department. We aim to record all new railway enterprises in the United States and Canada, and to note the progress of construction on all new roads and extensions; and we request all concerned in railway building to give us early information regarding the above, that our report may be as complete as possible.

Subscribers are requested to report to our office any irregularity in receiving the JOURNAL.

Contributed articles relating to Railroad matters generally, Mining interests, Banking and Financial items, Agricultural development, and Manufacturing news, by those who are familiar with these subjects, are especially desired.

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New York, Saturday, October 28, 1882.

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MATERIAL AND SOCIAL PROGRESS OF THE NORTH AMERICANS.

THE reading public at large has always evinced a certain interest in the views and opinions of European travelers who have visited the United States. We have had critics of all kinds, from Mrs. Trollope, Dickens, De Toqueville and Lieber, down to the last actress, all of whose expressions have been received with more or less dissent. There is among us at the present time an observer of very different calibre from any of the foregoing. Mr. HERBERT SPENCER is a thinker par-excellence; and, as a student of sociology, biology, and the higher walks of philosophy, has perhaps no equal among living men and, without doubt, among the names of the past. Mr. SPENCER has been interviewed on the subject of the "Career of the American People." While he does not find everything rose-colored, he has forecast enough to discern the possibilities of great things for the population north of the Mexican line. The following is a summary of his conclusions:—

"The world has never before seen social phenomena at all comparable with those presented in the United States. A society spreading over enormous tracts, while still preserving its contiguity, is a new thing. This progressive incorporation of vast bodies of immigrants of various bloods has never occurred on such a scale before.

"Large empires composed of different peoples have on previous cases been formed by conquest and annexation. Then your immense system of railways and telegraphs tends to consolidate this vast aggregate of States in a way that no such aggregate has ever before been consolidated, and there are many minor co-operating causes, unlike those hitherto known. No one can say how it is all going to work out. That there will come hereafter troubles of various kinds, and very grave ones, seems highly probable; but all nations have had and will have troubles. Already you have triumphed over one great trouble, and may reasonably hope to triumph over others. It may, I think, be reasonably held that both because of its size and the heterogenity of its contents the American Nation will be a long time in evolving its ultimate form, but that its ultimate form will be high. One great result is, I think, tolerably clear. From biological truths it is to be inferred that the eventual mixture of allied varieties of the Aryan race forming the population will produce a more powerful type of man than has hitherto existed, and a type of man more plastic, more adaptable, more capable of undergoing the modifications needful for complete social life. I think that whatever difficulties they may have to surmount, and whatever tribulations they may have to pass through, the Americans may reasonably look forward to a time when they will have produced a civilization grander than any the world has known."

Mr. SPENCER notes the fact that our scheme of universal suffrage is not working as the ideal Constitution would seem to require. His disappointment in this respect seems to us founded on only a superficial acquaintance with the working of our institutions. There is, no doubt, a great and radical defect, at the present time, in the working of universal suffrage; but, like all other forms of government, it is an experiment which is being slowly worked out (evolved) to success, or failure. The letter and theory of our Constitution presuppose changes of this kind. It is open to amendments; and several have been incorporated into it within the first century, as fast as experience called for them. Doubtless the century upon which we have just entered will call for others, and so on to the end of time. In this sense our Constitution and our polity are more precisely a growth than the British Constitution with which he compares it. Monarchy is, by its very nature, based upon precedent, and is naturally averse to change. Not so with Republics; although it is historically true that the paper Constitution we started with was the work of idealists and reformers, it nevertheless had grasp enough upon the previous experience of mankind, and upon the wisdom which had descended from past ages, to be a practical working institution from the beginning, and is much more nearly adapted to the varying and changing wants of a complex population and a high culture than the English government, which takes on changes very slowly, and sometimes only at the brink of forcible revolution.

What Mr. SPENCER says of the amazing inventiveness and wonderful inheritance of our fertile soil and genial clime is something we ourselves are apt to overlook. He seems to be enthusiastic over the spread of our vast railroad system, the telegraph and telephone, and over our mechanical devices. These possessions, together with the innate invention and energy of the people, all contribute to a material prosperity the like of which has never been seen on the earth. In the long run we may expect to see the wealth and the exchanges of the world turning from western Europe to the American continent; and the opinion of an intelligent English critic is more valuable upon a matter of this kind, where the elements are visible and simple, than upon our party politics, only the surface of which is seen and read.

THE largest steel spring ever made has just been successfully rolled at Kloman's Steel Works, Pittsburgh, Pa., for the United States Car Motor Company, of Philadelphia. The spring is 310 feet long, 6 inches wide, and one-quarter of an inch thick. It will be tempered and coiled by the motor company at their works in Philadelphia.

Manhattan Elevated Railway.

THE corrected traffic figures of the Manhattan Railway Company for the twelve months ending Sep. 30 show that during the year 86,361,029 paying passengers were carried over the line. This gives a monthly average of 7,196,769 and a weekly average of 1,660,789. Divide the year's traffic by days, and we have 237,253, which, if all the lines were operated continuously, day and night, would give an hourly average throughout the year of 9,869. But the lines are not all operated continuously, two of the four being closed at night and on Sundays; and then, too, the Elevated roads have their dull seasons and their busy ones, just as surface roads have. This is well illustrated in the reports for May and July. In the former month 7,920,875 passengers were carried, while in the latter there were but 6,637,137, a falling off of 1,283,738. Again, although the daily average for the year was 237,253, the days' traffic taken separately differ as widely as that of the months. The heaviest travel of a single day within the year just closed was on April 11, when the report shows 319,138. On December 31, 304,183 passengers were carried. On May 30, 296,808, and on December 23, 296,560.

But the distribution of the travel throughout the twenty-four hours of the day is of course still more uneven. As we have said, two of the four lines are closed at night (from 8 P. M. to 5:30 A. M.), and the two that are kept open have but few passengers after midnight. There are three hours in the morning and three in the evening known as "commission hours," when the fare is but five cents, and in these six hours sixty-five per cent of the entire traffic is handled. Taking the daily average then, as a basis of calculation, and dividing it according to this percentage, we have 154,212 as the average per diem for the six commission hours of nearly 26,000 an hour, and if we had any means of ascertaining the exact traffic per hour the results would show an average per hour between 6:30 and 7:30 A. M. and 5:30 and 6:30 P. M., fully double this. We know that these figures must strike many of our own citizens even, as fabulous, but they are compiled from the daily traffic slips of the company, and these are made up from the actual number of tickets collected from the canceling boxes.

The year's travel, divided by the mileage of the entire system, shows an average number of passengers per mile of 2,698,782 for the twelve months, a monthly average travel per mile of 258,232, and a daily average of 8,608. This of course was as unequally distributed as the hourly travel, but we have no means of computing it further. The traffic of the roads for the preceding year, which closed Sept. 30, 1881, was 75,575,245, and for the twelve months ending on the corresponding date, 1880, 60,831,759. The travel of the year just closed exceeds that of its immediate predecessor by 10,785,784, and that of 1880 by 26,529,270. If the business of the roads maintains anything like this percentage of growth for the next five years, the proposition to tax them on their gross earnings instead of as real estate, will not seem so "monstrously unjust," as some of our neighbors of the press considered it last winter.—*Elevated Railway Journal.*

Report of the Quarter-Master General.

THE report of the Quarter-master General of the Army, for the fiscal year ended June 30, 1882, which has just been submitted to the Secretary of War, states that the amount available during the year was $13,628,681, the total disbursements were $12,446,442, and the balance on hand at the close of the year $1,182,239. The total cost of transportation during the year was $2,762,052. In addition to the sum of $1,187,401.70 for railroad transportation, it is estimated that there will be expended $125,000 in the payment of 50 per centum of the earnings of land grant railroads, and the accounts now on file in the Quarter-master General's office indicate that the earnings of the bonded Pacific railroads for military transportation will amount to $1,169,940.22, making the aggregate cost for railroad transportation during the year $2,482,341.92. The total earnings of the Pacific railroads on account of military transportation since their first opening to June 30, 1882, is stated as follows: Union Pacific, $7,357,402.40; Central Pacific, $1,745,176.80; Kansas Pacific, $2,386,222.61; Sioux City and Pacific, $47,906.77; total, $11,536,708.58. The $300,000 appropriated March 3, 1879, for payments to certain land grant railroads on account of military transportation has been expended. Further action of Congress is required to make the money appropriated under the Act of August 5, 1882, available for the payments of accounts for services rendered by land grant railroads during the fiscal year ending June 30, 1881. Transportation accounts to the amount of $1,511,629.40 are awaiting settlement. The amount due from certain Southern railroad companies for material purchased by them from the United States at the close of the war, not compromised or settled under special laws of Congress, and excluding sums declared due from two railroads declared insolvent, was, on July 12, 1881, $1,106,434.55, upon which interest and charges have since accrued to the amount of $42,461.96.

Railway Mail Service.

FROM the annual report of the General Superintendent of the Railway Mail Service we learn that on the 30th of June, 1882, there were in operation 769 railway post offices, conducted in 1,804 cars and apartments, and run over 87,865 miles of railroad, making 76,741,438 miles of annual service. There were in the service 3,670 postal clerks, with salaries aggregating $3,486,779, or an average annual salary to each of $976.68. This was an increase in number over those in the service at the close of the previous fiscal year of 393, or 12.37 per cent, and a decrease of $1.85 per annum in the average salary paid to each. These figures represent the condition of the service on the 30th of June, but the actual expense during the year was $3,235,853.12.

During the past year the railway postal clerks handled and distributed 2,155,213,880 letters and postal cards, and 1,278,176,600 pieces of other mail matter, or a total of all classes of ordinary mail matter of 3,433,390,480, besides 14,234,310 registered packages and 570,483 through registered pouches. This was an increase over 1881 of 351,230,160 letters or 19.49 per cent, and of other mail matter of 228,880,250 or 21.82 per cent, and a total increase of all classes of mail matter of 580,110,410 or 20.33 per cent. The increase of registered packages and pouches handled over the number reported last year is 2,776,028 or 23.9 per cent.

During the past fiscal year there were 83 casualties, in which 3 railway postal clerks lost their lives, 16 were seriously and 20 were slightly wounded. During the past eight years 269 casualties have been reported, in which 19 employés of this service have been killed, 84 have been seriously and 77 slightly wounded.

The estimates for the next year are as follows: For railway postal clerks, $3,977,120, an increase of 7.20 per cent over the appropriation for the present year; for post office cars, $1,626,000, an increase of $100,000 over this year, and for special facilities, $600,000, the same as for the present year.

Marietta and Cincinnati Railroad.

THE foreclosure case of the Marietta and Cincinnati Railroad Company was heard by a full bench in the Ross county Court of Common Pleas at Chillicothe, Ohio, on the 23d inst. The Reorganization Committee was represented by Judge Ranney, of Cleveland; E. R. Bacon and MacGrane Coxe, of New York; the Baltimore and Ohio Railroad Company by John K. Cowen, of Baltimore; the Marietta and Cincinnati Railroad Company by General E. M. Johnson, of Cincinnati; the several trustees by Judges Harrison and Olds, of Cleveland, McClintock and Smith and others; and the Hillsboro and Cincinnati Railroad Company by Samuel R. Mathews, of Cincinnati. The report of Special Master Cook was presented and confirmed, showing that over 95 per cent in interest of the creditors and stockholders had executed the reorganization agreement and deposited their securities with the Farmers' Loan and Trust Company in New York. After a full hearing of all parties the Court decided that the decree of foreclosure be entered. The road will speedily be sold under this decree and purchased by a purchasing committee for the benefit of the creditors and stockholders under the plan of reorganization.

"HERE'S Webster on a bridge," said Mrs. Partington, as she handed to Ike a new unabridged dictionary. "Study it contentively, and you will gain a great deal of inflammation."

OUR advertising columns make an announcement which is of great importance, especially as supplementing an illustrated descriptive article printed in the last issue of this JOURNAL. The interest excited by that production makes the present the opportune time for directing the attention of readers to the fact that rights under patents covering the devices invented by George W. Hunt, of Philadelphia, for lighting the steps of cars or carriages can be procured immediately. Because these devices are of great value to the comfort and convenience of the public, and such as wide-awake railroad managers are sure to adopt, an early communication with Mr. Hunt is advised. His address is No. 216½ Walnut street, Philadelphia, Pa.

OUR CANADIAN LETTER.

[From our Special Correspondent.]

THE MANITOBA SOUTHWESTERN—GRAND TRUNK RAILWAY TEMPERANCE CIRCULAR—THE MONTREAL AND SOREL RAILWAY—IMPORTANT RAILWAY SUITS, &C., &C.

THE MANITOBA SOUTHWESTERN RAILWAY.

It is said that the Order-in-Council granting 6,400 acres per mile to the Manitoba Southwestern Railway will be revoked at the next meeting of the Privy Council after Sir Charles Tupper returns. The difficulty between the Hammond or *American Board* and the Shultz or *Canadian Board* precludes the possibility of the company carrying out its obligations to the government, and the urgent demands of the settlers occupying lands heretofore reserved for railway purposes. The government can no longer, without great injustice, hold over such lands. The even sections have all been occupied for some three years, and the squatters on the odd sections, or railway lands, are urging for title.

The forbearance of the government is remarkable, when it is taken into consideration that it is their policy to develop and settle the Northwest as rapidly as possible.

The withholding of such a large tract (of 2,000,000 acres) has attracted the attention of the opposition journals, who criticise the government severely for holding these lands over for the benefit of parties connected and interested in the Manitoba Southwestern Railway Company.

A RAILWAY TEMPERANCE CIRCULAR.

A circular has been issued by General Superintendent W. J. Spicer, to the Grand Trunk Railway employés, which clearly defines the position of the company in regard to intoxicating liquors. The company justly consider that a man who drinks is unfitted for a proper discharge of his duties, and incapable of filling positions of trust or to have human life under his care.

The company are determined to stamp out the liquor evil under their jurisdiction, and in this good work they will have the co-operation of all. The company will have no drinking men in its service, and those continuing in the practice will be dismissed. Mr. Spicer is the only railway manager who has steadily pursued the policy embodied in his circular, and no one has had more painful experience. A kind, generous man, he has been compelled in the interest of the public to discharge men addicted to drink—good men otherwise, men of families, who have been repeatedly cautioned, but who would continue to relapse into their old habits. Mr. Spicer concludes his circular with the following good counsel:

"This kind of work won't do; the habit of drinking had better be given up at once and altogether, or it will inevitably result in dismissal and trouble for all concerned. Your only safety lies in total abstinence. I strongly advise you to practice and adhere to it, and to use all your influence with others in the same safe direction. Save your money, benefit your families, insure safe working, do not risk your own lives or the public safety by tolerating as fellow-employés men who occasionally get into a muddled or worse condition by indulging in drinking habits, which lead to carelessness, recklessness, accidents, and a sad list of troubles which we must all desire to prevent."

The wood supply along the Pembroke and Kingston Railway has given out owing to the scarcity of choppers, so the company have decided to use coal in their engines.

THE MONTREAL AND SOREL RAILWAY.

A gentleman connected with this railway informed me some weeks since that the Messrs. Armstrong had leased the Montreal and Sorel to the Grand Trunk, hence the announcement in these columns. It now seems that some disagreement arose just previous to concluding the final agreement, although the preliminaries had been signed. The announcement is now made that the Southeastern has leased the Montreal and Sorel for twenty-one years, the contract provides for the immediate continuation of the road from Sorel to Levis (opposite Quebec City) and from St. Lambert to Rouses Point and Dundee. This will give a connection with the Delaware and Hudson for New York at Rouses Point, and at St. Lambert with Boston and Portland via the Southeastern, at Levis with the Intercolonial, at Potsdam Junction via Dundee with the Western Railway System. The contract gives the Southeastern 40 per cent. of the gross earnings.

MARITIME PROVINCE NOTES.

Grand Southern Extension.—An engineering party have of late been surveying for the extension of this line from near the present terminus, up in the rear of St. Stephen, thence to the Union Mills and on to Milltown, where the road is to cross the St. Croix River into Maine and onward.

The potato crop of Prince Edward Island is estimated at 3,000,000 bushels, of which 2,000,000 bushels will be for sale. The farmers expect about twenty-five cents per bushel all around.

Halifax brewers have raised the price of beer.

Mr. Ketchum reports good progress in the Chignecto Marine Railway survey.

The herring fishing fleet from St. John's, N. B., and other maritime ports has been increased by new vessels. Most of the fishing heretofore has been carried on in open boats, but for better protection larger craft are being used. The bounty given by the Dominion Government last session has much to do with the present boom in building and buying vessels for the business.

IMPORTANT RAILWAY SUIT.

The Queen *vs.* Helliwell and others.—This is an appeal case from the Exchequer Court, and will be argued before the Supreme Court during the present session. The facts are: In the Fall of 1880 a train was thrown from the track on the Prince Edward Island Railway, owned by the Dominion Government, resulting in a number of passengers being seriously injured, some for life. It was alleged that the accident was owing to the bad state of the road, and several of the injured passengers took action against the Dominion Government, holding them responsible. Petitions of right were filed in each case and during last summer Justice William A. Henry proceeded to Prince Edward Island to hear the evidence in the case. Shortly after returning to the Capital he delivered judgment in favor of suppliants, awarding them a considerable sum in way of damages.

Thursday last at Toronto, on the application of the Ontario and Quebec Railway Company, the Chancellor granted an injunction till Tuesday next to restrain the Central Railway Company from crossing or interferring in any way with the tracks of the Ontario and Quebec road.

INDUSTRIAL NOTES.

The cheese factories at Belleville are contracting at 10½c for August, and 11c for the last three months.

The Woodstock cheese market last week offered at 10c and 10½c. The holders of September and October are holding over for an advance, especially as the American markets quote 12c as the ruling price.

St. Thomas, Ontario, is very actively engaged in the bonus question and establishing manufacturing industries. The City Council have passed resolutions to submit by-laws to the rate payers, granting $10,000 to the Cochrane Manufacturing Company, and a like sum to two other factories on certain conditions.

Ontario brewers have raised the price of ale.

Owing to the scarcity of hands, England is called upon for assistance. One hundred English navvies arrived here last week to work on the Canada Pacific Railway.

NORTH WESTERN NOTES.

Winnipeg has introduced electricity in lighting up her main street.

The municipality of St. Andrews have granted a bonus of $35,000 to the Canada Pacific for the Selkirk branch.

Goods arrived at Winnipeg from Toronto over Canadian Pacific Railway *via* Thunder Bay.

The Dominion Government will have under consideration the improvement of the Red River of Manitoba, by a short canal and the construction of several locks, etc.

The Superintendent of Government Telegraph, Mr. F. N. Gisborne, is preparing a new series of maps showing the government and other telegraph lines.

The goods lately seized at Montreal by the Customs Department, the property of the Nippon Mercantile Co., have been released. Five per cent was added to the valuation of the goods.

The Bank of Montreal Directors to-day (Oct. 24) declared a half-yearly dividend of five per cent.

The stock market was weaker and lower this morning.

Quebec Provincial Treasurer Wuertele has entered suit against the G. T. Railway, Canada Pacific, South Eastern and Montreal, Portland and Boston railway companies, to recover a provincial tax which these companies refuse to pay until a test case is tried. "W."

Ottawa, Oct. 24, 1882.

At a meeting of the stockholders of the Richmond and Danville Railroad held on the 20th inst., Robert Harris, J. A. Rutherford and M. Mayard Brown were elected direcors.

OUR BOSTON LETTER.

[From Our Special Correspondent.]

THE BOSTON, REVERE BEACH AND LYNN R. R.

THE present war between the Eastern Railroad and the Boston, Revere Beach and Lynn has excited considerable interest in the latter road, which led the JOURNAL man to think that a few facts about it would be attractive to your readers, as it is a local road that is comparatively unknown to a great many. It is now and always has been a well-managed corporation, and has been called by many the model narrow gauge. It runs from East Boston to Lynn, along the crest of Revere Beach just out of reach of the waves, and its length is 8.80 miles. It reaches Boston proper by means of ferry-boats, which it operates. The sail across the harbor on one of these is very pleasing, and they make close connection with all trains. The road is a 3ft. gauge and its newest passenger cars are 60 feet long and 9 feet wide, making them nearly as commodious as those of a standard gauge road. The great width gives a 3 foot overhang of the car outside the trucks on each side, which might be bad on a road where there were many curves, and trains were run at a high rate of speed, but here they do very well. This road covers a number of fine beaches, including the well-known Point of Pines, and during the summer does a large business, while in the winter it has a steady and well-paying traffic between Boston and Lynn. Competition between it and the Eastern has always been brisk, especially since the latter built a spur track to the Point of Pines, to which both roads take large numbers of people in the season. During the last fiscal year, ending September 30, 1882, the Boston-Revere Beach and Lynn carried 30,231 persons between Boston and Lynn, at 25 cents each. Its total number of passengers carried one mile for that year aggregate 6,581,104, from which revenues were obtained amounting to $159,-319.77, which with some other sources of in, come amounted to 164,388.52. Total operating expenses and taxes amounted to $117,033.40. After deducting this from the above we find a net income of $47,355.12, from which 6 per cent dividend was paid. They do no freight business excepting in hotel supplies, and their equipment consists 8 or 9 locomotives and about 40 passenger cars. The unfortunate war now prevailing between this road and its bigger rival, the Eastern, was caused by the narrow gauge under-selling its season tickets from Lynn to Boston. A pooling arrangement has heretofore kept them peaceable, but that expired this last summer by limitation, and feelings between the two, which had long been strained, have now burst into flame.

On October 2 the fare from Boston to Lynn was reduced to 5 cents each way by the Eastern, which was quickly followed by the narrow gauge, and from that time to the present that low price has prevailed, even the printing of ticket, being abolished by both roads to save expense. The Boston, Revere Beach and Lynn people said that if they could obtain patronage enough they would run 5-cent fares all winter; and for a few days it looked as if it could made to pay, 8,000 to 10,000 people being carried in a day and the first Sunday of low fares this road carried 24,000 people, and the Eastern about 15,000. The regular city terminus of the latter is on Causeway street, but the trains engaged in this fight run from their freight-yard at East Boston, the road being obliged, in order to keep up with its competitor, to present its patrons with a ferry ticket at a cost to them of one cent each, thus reducing their net fare to 4 cent for nearly a 9-mile ride, 12 trains per day being run. The total first week's passengers of the narrow gauge footed up to 80,-000. How long this state of affairs will last is a question. Even if the receipts do pay expenses, the wear and tear of such crowds on the rolling-stock and track is heavy. The good people of Lynn are much disturbed about it, as on the one hand it brings undesirable crowds, and on the other everybody goes to Boston to do their pnrchasing, and the storekeepers grumble. They have even gone so far as to petition the Railroad Commissioners to raise the fare; and as several conferences of the directors of the roads, making propositions, have been held, it is probable that the war will soon end. At all events, but a small proportion of the people get any benefit from it.

CINDERS.

Dudley's dynograph and track inspecting car was in the Eastern Railroad yard not long since, preparatory to making a trip over that road. It is a wonderful invention, and can, while running at 15 to 20 miles per hour, discover and mark all defects in the track so that a track-walker can find them. It also shows all irregularities of the rail, bad frogs, and other defects. It weighs 26 tons. One end of it is fitted up as a living apartment. Mr. Dudley had just come from an inspection trip over the Boston and Albany, which stands high in the list of well-laid roads.

The Massachusetts Central Railroad is still full of troubles, and is at present selling all superfluous rails and ties to raise money to meet pressing debts. Meanwhile many schemes for its salvation are afloat, but none of them appear to have any ready money in them.

The Eastern Railroad carried, during the year ending September 30, 1882, $312,066.88 more than during the previous fiscal year. This company has lately purchased three new freight and one new passenger locomotives. It cannot be said that the Railroad Commissioners of this State do not earn their money, as no sooner is one accident investigated than another occurs. At present they are working evenings.

The Boston and Albany Railroad has just turned two handsome and light parlor cars out of their Allston shops. They are for the New York express train.

The New York and Boston Inland Railroad, which has been "not dead but sleeping," has been heard from lately by a petition for a certificate of incorporation to the Railroad Commissioners. After another exhaustive hearing, they were again informed that $36,000 was not enough to build a million and a half dollar railroad with, and that until they had more "back-bone" *i. e.* money, they could not have a certificate, and the petitioners departed sadder but wiser.

A fire alarm occurring near the writer on the street, the other day, he soon found himself mixed up in a crowd. Presently he met a partially inebriated individual who was considerably jostled by hurrying people. As he passed, he was heard to mutter, "These fire engines-s-s-getting s-bad ze police, there's-s-s-many of 'um."

A Boston and Maine Railroad official told the JOURNAL man, the other day, that his road had done the largest passenger business for many years, during the last summer. This road has always been well managed. The Superintendent, Mr. J. T. Furber, makes it his boast that he can fill any man's place on the road, he having worked up through all departments. The road is now building 100 box freight cars and 100 flat cars; also a number of dump cars. A new freight locomotive and one new passenger engine have just been added, and another is to be built, shortly, of the double-end pattern.

Trains leaving from the Boston and Albany or the New York and New England railroad depots are started by an electric clock which can be set to strike at any hour of the day or night. By means of this, the conductor is prevented from holding the train a minute over to wait for his best girl to get on board.

Mr. Albert Fink has been in town, the past week, settling the price the Albany Railroad shall pay for the Woonsocket Division of the New York and New England Railroad. This acquisition will be used chiefly by the Newton Circuit Railroad, which was described in the JOURNAL last spring.

A west-bound train over the Fitchburg Railroad, one day last week, consisted of twenty-two passenger cars, and had to be run in two divisions. Two excursion parties and the St. Louis express made its great size.

"CURTIS."

BOSTON, October 26, 1882.

Northern Central Railway.

THE following is a comparative statement of the earnings, expenses, etc., of the Northern Central Railway for the months of September, 1881 and 1882:—

	1882.	1881.
Gross earnings	$592,435	$429,565
Operating expenses	299,816	279,011
Extraordinary expenses	23,002	100,148
Total expenses	$322,848	$379,159
Net earnings	$269,587	$50,406

For the nine months ending Sept. 30, 1881 and 1882, the earnings, expenses, etc., were:—

	1882.	1881.
Gross earnings	$4,421,277	$4,030,253
Operating expenses	2,459,633	2,467,632
Extraordinary expenses	220,820	314,155
Total expenses	$2,680,453	$2,781,787
Net earnings	$1,740,824	$1,248,646

A PATENT has just been taken out in Germany for an engine, the piston of which is driven backward and forward by small charges of gunpowder supplied at each end by an automatic arrangement. The ignition is effected by the motion of the piston, which draws in a flame of gas or spirit, the access being regulated by side valves, which also open outlets for the escape of the gases of combustion.

The Stock Exchanges and Money Market.

New York Stock Exchange.

Closing Prices for the week ending Oct. 25.

	Th.19.	F.20.	Sat.21.	M.23.	Tu.24.	W.25.
Adams Express	.....	140	.....	.....	140	....
Albany and Susq	.....	....	.....	.....	131½	.....
1st mortgage	.....	.....	...	.....	....	.....
2d mortgage	.....	.....	.....	.....	105	.....
American Express	95	.....	.....	.....	93⅛	90
Burl., C. R. & Nor	.....	..	.....	.....	79⅞	.....
1st mortgage 5s	101	101	.....	101⅛	101⅜	.....
Canada Southern	66¼	67⅛	67	66¼	67⅜	68⅞
1st mortgage guar	.....	.....	93⅛	93⅜	93⅜	.....
Central of N. Jersey	72⅜	73¼	73⅜	72½	72⅜	72⅛
1st mort. 1890	116½	....	.....	.....	116	.....
7s, consol. ass	.....	.....	.....	.....	.....	108⅞
7s, convertible ass	.....	.....	109¾	....	109	108⅞
7s, Income	.....	.....	.....	85	.....	83
Adjustment	.....	.....	.....	.....	.....	.....
Central Pacific	90½	90¾	90¾	90½	91	91
6s, gold	.....	114½	114⅜	114⅛	.....	114⅛
1st M. (San Joaq)	.....	.....	.....	.....	.....	.....
1st M. (Cal. & Or.)	.....	.....	.....	.....	....	105
Land grant 6s	103⅛	.....	104⅛	.....	103⅛	.....
Chesapeake & Ohio	25⅜	25¼	.....	.....	25¾	25⅛
1st pref	38½	37⅝	.....	.....	.....	37⅛
2d pref	27¾	....	.....	.....	.....	.....
1st mort., series B	90	89	89	89½	89¼	89⅛
Chicago and Alton	.....	140½	142	142⅜	.....	141½
Preferred	122	.....	.....	. ..	.....	.....
1st mortgage	.....	122	.....	.....	.....	.....
Sinking Fund	.....	.....	.....	116¼	.....	....
Chi., Bur. & Quincy	131¼	131¼	131¾	131¼	131½	131⅜
7s, Consol. 1903	127½	.....	.....	127¾	.....	.....
Chi., Mil. & St. Paul	109⅜	110	109⅞	109	110⅛	109¾
Preferred	125	124⅞	125¾	125½	125⅞	127
1st mortgage, 8s	.....	132½	.....	.....	.....	.....
2d mort., 7 3-10s	.....	.....	125	125¼	125	.....
7s, gold	.....	....	.....	.....	.....	....
1st M. (La. C. div)	.....	.....	125	125½	.....	.....
1st M. I. & M. div.)	.....	....	.....	125⅛	125¼	.....
1st M. (I. & D. ext.)	124⅛	....	.....	... .	124¾	.....
1st M. (H.&D. div.)	.....	.....	....	.....	.....	.....
1st M. (C. & M. div.)	.....	.....	125	.....	.....	....
Consolidated S. F.	124	....	125	... .	125	126
Chi. & Northwestern	144½	145	145¼	144½	145⅜	145¼
Preferred	161½	163¼	163	161½	163	163½
1st mortgage	106½	....	.....	.....	.....	.....
Sinking Fund 6s	110	109	109	.....	.....	110½
Consolidated 7s	... .	.....	.....	.....	.....	.....
Consol. Gold bo'ds	127½	126¾	.....	127½	127½	.....
Do. reg	126½	.....	.....	.....	.....	....
Chi., R. Isl. & Pac	134⅝	133	133¾	132⅛	133	132½
6s, 1917, c	.	.....	.....	.....	.....	.....
Clev., Col., Cin. & Ind.	83⅛	83	83⅛	83½	82¾	83
1st mortgage	.....	.....	...	.....	.....	....
Clev. & Pittsburg gr	.....	140	.....	.....	.....	.....
7s, Consolidated	....	.....	....	.....	.....	.....
4th mortgage	....	.....	.....	.....	.....	.....
Col., Chi., & Ind. Cent	9	9	.....	9	9⅛	9⅛
1st mortgage	.....	.....	.....	.....	.....	.....
2d mortgage	.....	.....	.....	.....	.....	.....
Del. & Hud Canal.	112⅛	112⅞	113⅛	113¼	113¾	114
Reg. 7s, 1891	.....	.....	.....	.....	.....	.....
Reg. 7s, 1884	.....	.....	.....	.....	.....	.....
7s, 1894	.....	.....	.....	.....	.....	.....
Del., Lack. & Western	135⅞	136⅞	137⅛	136½	137¾	137⅝
2d mortgage 7s	.....	.....	.....	.....	.....	.....
Consol. 1907	.....	.....	.....	.....	.....	.....
Erie Railway	...	.....	.....	.....	.....	.....
1st mortgage	.....	.....	.....	.....	.....	.....
2d mort. 5s, ext.	.....	.....	.....	.....	.....	.....
3d mortgage	.....	101	.....	.....	101¾	101½
4th mort. 5s, ext.	.....	.....	.....	.....	.....	...
5th mortgage	.....	.....	.....	.....	.....	.....
7s, Consol. gold	.....	.....	125	.....	.....	.....
Great West. 1st mort	.....	.....	.....	...	107	.....
2d mortgage	.....	.....	.....	.....	.....	.....
Hannibal & St. Jo	.....	.....	. ...	.....	.....	50
Preferred	80	.....	80	.....	.....	.....
8s, Convertible	105	.....	.....	.....	105	.....
Houston & Tex. Cen	.....	.....	82½	82	81	83
1st mortgage	.....	.....	.....	.....	110¾	110¼
2d mortgage	.....	.....	.....	.....	. .	.....
Illinois Central	147	147¼	148	148¾	148	148⅜
LakeShore&MichSo	112¾	112⅞	112	111¾	112¾	112¾
Consol. 7s	.....	.....	.....	.....	.....	.....
Consol. 7s, reg	.....	125	.....	.....	124½	.....
2d Consolidated	.....	.....	.....	.....	124	.....
Lah. & W. B. con.ass	.....	.....	.....	.....	103	103
Long Dock bonds	....	.....	.....	.....	.....	.....
Louisville & Nash.	55⅛	55⅞	56	55¼	55⅞	55½
7s, Consolidated	.....	.....	115	115⅛	115	.....
Manhattan	40	40½	.....	.....	46⅜	50
1st pref	.....	.....	.....	.....	87	.....
Met. Elevated	.....	.....	.....	.....	.....	.....
1st mortgage	99	97	96	.....	97⅛	99
Michigan Central	100⅜	101	101⅛	100⅜	102⅛	102⅜
7s, 1902	128⅛	.....	.....	.....	.....	.....
Morris & Essex	125	125	.....	125	.....	124⅛
1st mortgage	140	.....	.....	.....	.....	.....
2d mortgage	.....	.....	.....	115	.....	....
7s of 1871	.....	..	.....	.....	.....	.....
7s, Convertible	.....	.....	.....	.....	.....	.....
7s, Consolidated	125⅛	.....	.....	.....	... .	.....
N. Y. Cen. & Hud. R.	132⅝	132⅞	132⅝	132	133	133
6s, S. F. 1883	.. .	... .	.....	.....	.....	102⅞
6s, S. F., 1887	.....	.....	.....	.....	.....	....
1st mortgage	.....	.....	.....	.....	.....	.....
1st mortgage, reg	..	... .	.....	.....	.....	.....
N. Y. Elevated	.....	.....	.....	.....	.....	.....
1st mortgage	115⅛	115	115	.....	115	115⅝
N. Y. & Harlem	.....	.....	.....	.....	.....	.....
Preferred	.....	.....	.....	.....	.....	... .
1st mortgage	....	.....	.....	.....	.....	.....
1st mortgage, reg	..	.....	.....	.....	.....	.....
N. Y. Lake Erie & W	41⅞	41⅞	41⅞	41	42	41⅜
Preferred	86½	86	....	85	86¼	86
2d Consolidated	100	.....	99⅞	99¼	99¼	99⅜
New 2d 5s fund	....	.....	.....	.....	.....	.....
N.Y., N. Hav'n & Hart	.....	.....	183	.....	183½	184
North Mo. 1st mort	.....	.....	118¼	.....	.....	.....
Northern Pacific	44¾	44⅞	44¾	44⅛	44⅞	45⅜
Preferred	92⅜	93	92¾	92⅝	93½	92⅞
Ohio & Mississippi	39	38⅛	38	37⅝	37¾	37¾
Preferred	....	.....	.....	.....	.....	.....
2d mortgage	120⅞	.....	.....	.....	.....	.....
Consolidated 7s	.....	.....	.....	.....	.....	.....
Consol. S. Fund	.....	.....	.....	.....	.....	.....
Pacific Mail S. S. Co	39¼	39	39	....	.....	38⅛
Pacific R. R. of Mo.	.....	.....	.....	....	.....	.....
1st mortgage	.....	.....	.....	..	.....	.....
2d mortgage	....	.....	.....	.....	.....	.....
Panama	.....	.....	.....	.....	.....	.....
Phila. & Reading	61¼	61⅝	61¾	60¾	62	61⅝
Pitts, Ft. W. & Chi. gtd	138	.....	138	138	.....	138¼
1st mortgage	.....	.....	.....	.....	....	.....
2d mortgage	.	.....	.....	.....	.....	.....
3d mortgage	.....	.....	.....	.....	.....	.....
Pullman Palace Car	129¼	.....	129½	.....	128	128½
Quicksil'r Min'g Co	....	.....	.....	.....	.....	.....
Preferred	.....	.....	.....	.....	.....	.....
St. Louis & San Fran	.....	.....	.....	37½	38	.....
Preferred	.....	.....	57	.....	.....	....
1st Preferred	... .	.....	.....	95	.....	... .
St. L., Alt'n & T. H.	.....	.....	42	42	.....	.....
Preferred	82⅛	.....	81	80	83⅛	84
1st mortgage	.....	.....	.....	.....	... .	.....
2d mort. pref	.....	.....	.....	.....	.....	.....
Income bonds	... .	.....	.....	.....	99⅛	100
St. L., Iron Mt. & S	.....	.....	.....	.....	.....	.....
1st mortgage	.....	.....	.....	.....	.....	.....
2d mortgage	.....	108	108½	.....	.....	.....
Toledo and Wabash	....	.....	.....	.....	.....	.....
1st mortgage	.....	.....	.....	.....	.....	.....
2d mortgage	....	.....	.....	....	....	103
7s, Consolidated	110	.....	100	....	.....	.....
St. Louis Division	.....	.....	.....	.....	.....	.....
Union Pacific	106⅝	106⅛	106⅞	106¼	107½	107⅜
1st mortgage	115⅛	115⅜	.....	115⅛	115⅛	115⅛
Land Grant 7s	.....	110	.....	.....	.....	.....
Sinking Fund 8s	117⅛	.....	....	117⅛	.....	.....
United States Ex	70	68	.	.....	.....	.....
Wabash, St. L. & Pac	32	31⅜	32⅛	30⅛	32⅛	31⅞
Preferred	60⅜	60	59⅜	59⅜	57⅜	58⅛
New mort. 7s	.....	.....	.....	.....	.....	.....
Wells-Fargo Ex	131	.....	.....	.....	.....	....
Western Pacific b'ds	....	.....	.....	.....	.....	.....
Western Union Tel.	88⅛	87¾	87¾	86¾	88	87¾
7s., S.F conv., 1900	.....	....	.....	.....	.....	....
FEDERAL STOCKS :—						
U. S. 4s, 1907, reg	.....	.. ..	119¾	119⅝	.....	.....
U. S. 4s, 1907, coup	.....	119⅛	.....	.....	.....	.....
U. S. 4½s, 1891, reg	113	.....	.....	.....	.....	.....
U. S. 4½s, 1891, coup	....	....	.. .	.....	.....	113
U. S. 5s, cont'd at 3¾	.....	...	.....	.....	.....	.....
U. S. 3s, reg	.....	.....	.....	102¼	.....	.....
Dt. of Col. 3-65s, reg	.....	.....	.....	.....	.....	.....
Dt. of Col. 3-65s, coup	.....	.....	108	.....	.....	... .

Boston Stock Exchange.

Closing Prices for the Week Ending Oct. 25.

	Th.19.	F.20.	Sat.21.	M.23.	Tu. 24.	W.25.
Atch., Top. & San. Fe.	88	86¾	87¼	87	87⅛	87⅛
1st mortgage	.	...	.....	.....	120⅛	.....
Land Grant 7s	.....	.....	113	113¼	.....	.....
Boston & Albany	173⅞	173	173	173¼	174	174¼
Boston and Lowell	99¼	.....	.....	.....	99¼	99¼
Boston & Maine	155⅛	.....	.....	.....	155⅛	156
Boston & Providence	.....	.....	.....	.....	.....	.....
Bos'n, Hart. & Erie 7s	53⅛	.....	.	.....	....	.....
Burl. & Mo. R. L. G. 7s	.....	.....	.....	.....	.....	.....
Burl. & Mo. R. in Neb	.....	.....	.....	.....	.....	.....
6s, exempt	.....	.....	.....	.....	.....	.....
4s	...	83	....	.....	83	.....
Chi., Burl. & Quincy	132½	131⅛	132	132	131	132
Cin., Sand. & Clev ($50)	30⅛	30	30	.....	29	29
Concord ($50)	.....	....	.	.....	.....	.....
Connecticut River	.....	.....	.....	.....	.....	.....
Eastern	41	.....	.....	40	40	40
New 6s, Bonds	.....	109	109	109	109	109
Fitchburg	.....	130¼	.....	.....	.....	.....
N.Y. & New England	55⅛	52	.....	51⅞	52	52
7s	.....	.....	.....	116¾	116¾	....
Northern N. H	.....	.....	.....	.....	.....	.....
Norwich & Worcester	160	.....	.....	160	.....	.....
Ogden & Lake Cham	.....	.....	.....	.....	.....	.....
Old Colony	.....	136½	136	136¼	136¼	137
Ph., Wil. & Balt. ($50)	.....	.....	.....	.....	.....	.....
Portl'd, Saco & Ports	.....	.....	.....	.....	.....	.....
Pueblo & Ark Val 7s	....	114¼	.....	.....	114¼	.....
Pullman Palace Car	129½	129	.....	129¾	129¾	.....
Union Pacific	107⅜	106½	107	106⅛	106¾	107⅞
6s	.....	113	....	.....	.....	113⅜
Land Grant 7s	.....	.....	.....	.....	.....	.....
Sinking Fund 8s	....	....	.....	.....	...	.....
Vermont & Mass	.....	.....	.....	.....	132	.....
Worcester & Nashua	.....	.....	.....	.....	.....	....
Cambridge (Horse)	.....	....	.....	.....	.....	.....
Metropolitan (Horse)	....	.....	.....	.....	.....	.....
Middlesex (Horse)	.....	.....	.....	.....	.....	.....
Cal. & Hecla Min'g Co	248	248	249	248	.....	.....
Quincy	.....	68½	70	69¼	69¼	69¼

Philadelphia Stock Exchange.

Closing Prices for the Week Ending Oct. 24.

	W.18.	Th.19.	F.20.	Sat.21.	M.23.	Tu 24
Allegh'y Val. 7 3-10s	.....	.....	.....	.....	.....	.....
7s, Income	48	48	48	48	48	.....
Buff., Pitts & West.	20¼	20¼	20¼	20⅛	20⅛	.....
Camd'n & Am. 6s, '83	.....	.....	.....	.....	.....	.....
6s, 1889	.....	.....	.....	.....	.....	.....
Mort. 6s, 1889	115⅛	....	.....	....	.....	.....
Camden & Atlantic	.....	.....	.....	.....	.....	.....
Preferred	.....	.....	.....	..	.....	.....
1st mortgage	.....	.....	.....	.....	.....	.....
2d mortgage	.....	.....	.....	.....	.....	.....
Catawissa	.....	.....	.....	.....	.....	.....
Preferred	.....	.....	.....	.....	.....	.....
2d pref	.....	53⅛	....	53⅛	.....	53½
7s, new	.....	.....	.....	.....	.....	.....
Del. & Bound Brook	.....	.....	.....	.....	.....	.....
7s	.....	.....	.....	.....	125	.....
Elmira & Williamsp't	.....	.....	.....	.....	.....	.....
Preferred	.....	.....	.....	.....	.....	.....
Hunt. & B. Top Mt.	.....	18	18	.....	17⅞	.....
Preferred	34⅜	.	...	.....	.....	.....
2d mortgage	.....	.....	.....	.....	.....	.....
Lehigh Navigation	44⅜	43⅞	43⅜	44	43⅝	.....
6s, 1884	.....	.....	.....	.....	.....	.....
Gold Loan	113⅛	....	.....	.....	.....	.....
Railroad Loan	.....	.....	.....	.....	.....	.....
Conv. Gold Loan	... .	.....	.....	.....	.....	.....
Consol. Mort. 7s	117½	.....	117⅛	.....	.....	.....
Lehigh Valley	65⅛	66	65⅜	65¾	.....	.....
1st mort. 6s, coup	....	.....	.....	.....	.....	.....
1st mort. 6s, reg	.....	.....	.....	.....	.....	.....
2d mort. 7s	132⅜	132¾	.....	.....	.....	.....
Consol mort. 6s	.....	.....	.....	.....	.....	.....
Consol. mtg. 6s, reg	.....	.....	.....	.....	.....	.....
Little Schuylkill	57⅞	58	58	.....	.....	.....
Minehill & Sch. Hav'n	.....	62½	.....	62¾	.....	.....
North Pennsylvania	65½	65	65	65	...	.....
1st mortgage 6s	106	.....	.....	.....	. .	.....
2d mortgage 7s	.....	.....	.....	.....	.....	.....
Genl. mtg. 7s, coup	.....	.....	.....	.....	.....	.....
Genl. mtg. 7s, reg	.....	.....	.....	.....	.....	.....
Northern Central	57⅛	57¼	.....	57¼	.....	.....
5s	.....	.....	97⅝	.....	97⅝	.....
Northern Pacific	46¼	44⅞	44⅜	44⅞	44½	.....
Preferred	94⅜	92⅜	93	92⅜	92⅜	.....
Pennsylvania R. R.	64⅜	64	64¼	64	63⅞	.....
1st mortgage	.....	.....	.....	.....	.....	.....
Gen'l mort	.....	.....	.....	.....	.....	.....
Gen'l mort reg.	.....	.....	.....	.....	.....	.....
Consol. mort. 6s	.....	.....	.....	.....	.....	.....
Consol. mort. reg	121⅜	.....	.....	.....	.....	.....
Pa. State 5s, new	118½	.....	118	.....	.....	.....
do 4s, new	.....	.....	.....	.....	.....	.....
do 3½s, 1912	.....	.....	.....	.....	.....	.....
Phila. & Reading	31⅛	30⅝	30¾	30¾	30¾	..
1st mortgage 6s	.....	.....	.....	.....	.....	.....
7s of 1893	.....	.....	.....	.....	.....	.....
7s, new convert	73½	73½	.....	.....	.....	.....
Consol. mort. 7s	.....	.. .	126½	127	126	.....
Consol. mort. reg	.....	.....	.....	.....	.....	.....
Gen'l mort. 6s	95	....	94⅜	94⅝	.....	.....
Def. Income bonds	.....	.....	.....	.....	.....	.....
Philadelphia & Erie	.....	.....	20½	.....	.....	.....
1st mortgage 5s	.....	103	103	103	.....	.....
2d mortgage 7s	.....	.....	.....	.....	114½	.....
Pittsb., Cin. & St. L. 7s	.....	.....	121	.....	.....	.....
Pitts., Tit. & Buff. 7s	96	.....	.....	96	. ..	.....
Schuylkill Navi't'n	.	.. ..	..	.....	.....	.....
Preferred	....	13	.....	.....	.....	.....
6s, 1895	.....	.....	.....	.....	.....	.....
6s, 1907	.....	89	.....	.....	89	.....
United Co. of N. J.	190	190¼	190	.....	190¼	.....
Hestonville, (Horse)	.....	....	.....	.....	.....	.....
Chestnut & Walnut)	.....	.....	.....	.....	.....	.....

Baltimore Stock Exchange.

Closing Prices for the Week Ending Oct. 25.

	W. 18.	Th. 19.	F. 20.	Sat. 21.	M. 23.	Tu. 24.
Baltimore & Ohio			197			
6s, 1885						
Central Ohio ($50)						
1st mortgage		108⅛				108⅛
Marietta & Cincin'ti.						
1st mortgage, 7s						
2d mortgage, 7s				101		101⅛
3d mortgage, 8s						
Northern Cen. ($50)	57⅛	57⅛				
2d mort. 6s, 1885						
3d mort. 6s, 1900						
6s, 1900, gold					116	
6s, 1904, gold						
Pitts. & Connelsv. 7s						
Virginia 6s Consol			57	57⅛		56⅜
Consol. coupons						
10-40 bonds	42⅛					
Def'd Certificates						
New 3s						50
Western Maryland						16⅛
1st M., end. by Balt						
2d M., do.						
3d M., do.						
1st M., unendorsed						
2d M., end. Wash Co	116					
2d M., preferred						
City Passenger R. R.						

London Stock Exchange.

	Closing Prices Oct. 6.		Oct. 13.	
Baltimore and Ohio 5s, 1927	108	110	108	110
Central of N. J., $100 shares	80	85	80	85
Do. consol. mort	109	111	109	111
Do. Income Bonds	88	92	88	92
Central Pacific of Cal., $100 shs	93⅛	94⅛	93¾	94½
Do. 1st mort. 6s, 1895-'98	117	119	117	119
Det., G'd Haven & Mil. Equip bds.	115	117	115	117
Do. Con. M. 5p.c., till '83 after 6p.c.	113	115	113	115
Illinois Central $100 shares	142	144	148	150
Do. S. F. 5s, 1903	104	106	104	106
Lehigh Valley Cons. mort. 1923	115	119	115	119
Louisville and Nashville mort. 6s	92	94	93	93
Do. capital stock $100 shares	58	60	56	58
N. Y. Cen. & Hud. R. mort. bonds.	132	136	132	136
Do. $100 shares	136⅛	137½	136½	137⅛
Do. mort. bonds (stg.)	120	122	120	122
N. Y. Lake Erie & West. $100 shs.	43⅛	44	43½	44
Do. 6 p. c. pref. $100 shares	87	89	88	90
Do. 1st Con. Mort. bonds (Erie)	127	130	127	130
Do. do. Funded Coupon bonds	124	127	124	127
Do. 2d Consol. Mort. bonds	102	104	102	104
Do. do. Funded Coupon bonds	99	101	99	101
N. Y., Pa. & Ohio 1st mort. bonds	54⅛	55½	59⅛	60⅛
Do. Prior Lien bonds (sterling)	100	105	100	105
Pennsylvania $50 shares	65⅛	66	66¼	66¾
General Mortgage	121	123	121	123
Phil. & Erie Gen. mort. 6s, 1920	117	119	117	119
Philadelphia & Reading $50 shs.	32½	33	32¼	33¾
General Consol Mortgage	115	117	115	117
Do. Improvement Mortgage	102	104	102	104
Do. Gen. Mtg. '74, ex-def'd coup.	97	99	97	99
St. L. Bridge 1st mort. gold bond.	120	122	120	122
Do. 1st. pref. stock	97	100	97	100
S. P'fic of Cal., 1st mort 6s, 1905-6.	105	107	106	108
Union Pacific 1st mtg. 6s, 1896-9	118	120	118	120
Wabash, St. L. & P. $100 shares	37	38	35	37
Do. $100 pref shares	67⅛	68½	66	67
Do. gen. mort. bonds	87	83	86	88

AMERICAN RAILROAD JOURANL.

Financial and Commercial Review.

THURSDAY EVENING, October 26, 1882.

THE rate for call loans on stocks this morning was 5@6 per cent, and on United States bonds 4 per cent. In the afternoon the rate was 5 per cent, advanced in the last hour to 6 per cent., but closed at 3@4 per cent.

The posted rates for prime bankers' sterling were 4.82@4.86¼. The actual rates were 4.81⅛@¾ and 4.85¾@4.86, with cable transfers 4.86¾@4.87, and prime commercial bills 4.80@¼. The actual rates for Continental bills are as follows: Francs, 5.22½@5.23¼ and 5.19¾; Marks 94⅜@¼ and 95¼@⅜, and guilders, 39¾@40.

The following securities, aggregating $61,177,500, have been admitted to call at the New York Stock Exchange:

Chicago and Northwestern Railway Company.—$1,830,000 Sinking fund 5s of 1879, $1,000 each, maturing Oct. 1, 1929, Nos. 3,506 to 5,335 inclusive; $720,000 Escanaba and Lake Superior Railway first mortgage 6 per cent bonds, for $1,000 each, maturing in 1901, Nos. 1 to 720 inclusive; and $600,00 Des Moines and Minneapolis Railroad first mortgage 7 per cent bonds, for $1,000 each, maturing in 1907, No, 1 to 600 inclusive.

East Tennessee, Virginia and Georgia Railroad Company.—$3,500,000 First mortgage consolidated 5s for $1,000 each, Nos. 10,992 to 14,921 inclusive.

Denver and Rio Grande Railway Company.—$1,020,020 First consolidated 7 per cent mortgage bonds, for $1,000 each, dated January 1, 1880, with 30 years to run, Nos. 12,393 to 13,412 inclusive.

Northern Pacific Railroad Company.—$11,987,000 General first mortgage 6 per cent railroad and land grant sinking fund gold bonds dated January 1, 1881, payable January 1, 1921, for $1,000 each, Nos. 20,001 to 31,987 inclusive.

Mexican Central Railway Company, (Limited).—$16,704,000 First mortgage 7 per cent bonds, dated July 1, 1881, and to mature July 1, 1911, bearing interest at the rate of 7 per cent per annum, $1,000 each, Nos. 1 to 16,704 inclusive.

Columbus, Hocking Valley and Toledo Railway Company.—One hundred and three thousand one hundred and sixty-five shares of stock, of the par value of $100 per share; and $14,000,000 first consolidated mortgage 5 per cent bonds, dated September 1, 1881, and payable September 1, 1931, with interest at 5 per cent, $1,000 each, Nos. 1 to 14,500 inclusive.

The officers of the Bank of Ottawa, noticed in our last issue as having an authorized capital of $1,000,000, and a paid up capital of $600,000, are: manager, George Burn; who is also cashier; accountant, William J. Christie, teller, John Bangs. B. E. Walker and J. H. Goadby are the New York agents. Branches have recently been established in the towns of Arnprior and Pembroke, Ontario, and Winnipeg, Manitoba.

The chief of the Bureau of Statistics at Washington reports that the total values of the exports of petroleum and petroleum products during the month of August, 1882, were $3,599,440, and during August, 1881, $5,962,949. For the eight months ended August 31, 1882, $30,946,856, and for the corresponding period of the previous year $30,190,250.

The value of the exports of breadstuffs from the United States in September, 1882, was $21,506,067, and in September, 1881, $19,947,433. For three months ended 30th September, 1882, $69,656,538, and same time in 1881 $65,471,721. For nine months ended 30th September, 1882, $134,512,779, and same time in 1881, $177,452,638

The value of the exports from the United States of provisions, tallow and dairy products in September, 1882, was $7,453,784, and in September, 1881, $9,695,218. In the nine months ended 30th of September, 1882, $73,375,969, and in same period of the previous year, $102,803,054. The value of exports of dairy products in five months ended 30th of September, 1882, was $8,478,511, and in five months of the previous year $12,489,493.

A decision was rendered in the United States Supreme Court at Washington on the 23d inst., in the case of the Chicago, Danville and Vincennes Railroad Company et al., appellants, vs. Wm. R. Fosdick et al., appeal from the Ci cuit Court of the United States for the Northern District of Illinois. The court orders that the appeal from the decrees of April 12, 1877, and of April 16, 1877, respectively, be dismissed, upon the ground that those decrees were vacated by the reversal of the prior decrees of foreclosure and sale rendered Dec. 5, 1876, and that the decrees entered Nov. 19, 1877, in favor of Frederick W. Huldekoper, Thos. W. Shannon and John M. Denison, trustees, be reversed, and that the cause be remanded, with directions to proceed therein as may be just and equitable.

According to the report of the Commissioner of Patents, there were, during the fiscal year ending June 30, 1882, 30,062 applications for patents, registrations of trade marks, labels, and reissue of patents received. Of these 17,713 patents were granted and 10,790 trade marks registered. The total receipts of the office from all sources were $930,864.14 and the expenditures $651,719.50, leaving a surplus of $279,144.64.

Acting Secretary of the Treasury French on the 24th inst. decided that a Chinaman having a through ticket from New York to any place in the United States, having passed through Canada on the Grand Trunk Railway, is entitled to admission into the United States without further evidence of his right than such ticket.

The whole amount of real and personal estate in the District of Columbia subject to taxation this year is $92,533,665, against $90,308,495 last year. The total tax this year will be $1,500,797-57, of which about $1,200,000 will be collected.

A decison of the utmost importance to a large class of applicants for pensions has just been rendered by Acting-Secretary Joslyn of the Interior Department. He holds in effect that seven years absence may be taken as proof presumptive of a soldier's death and such proof shall warrant the issue of a pension to his family, if other requirements have been complied with. This decision is a direct reversal of the practice which has hitherto prevailed in the Pension Bureau. Positive proof of the soldier's death was required, which, in many cases, it was impossible to produce.

From the annual report of the Money Order Department of the United States Post Office, we learn that during the fiscal year ending June 30, 1882, the domestic operations of the 5,491 authorized money order offices (to which number 449 have been added since the close of the year, while one office has been discontinued), reached the sum of $113,400,118.21 in money orders, and of $113,388,301.90 in orders paid and repaid, a gain in each case of about eight per cent. The fees received from the public amounted to $1,053,710.55, an increase of nearly nine per cent. There were 377,443 international money orders issued of the value of $6,536,514.48 and 117,883 such orders paid, amounting to $2,453,462.79, while the total amount of fees paid by the public was $145,644.25, so that the domestic and international money orders issued during the year aggregated $119,936,632.69 and the orders paid with the repayments of over $115,000,000.

In the suit brought by the Union Pacific Railroad Company against the Credit Mobilier of America to recover $685,500.71, with interest from November, 1867, judgment for $1,299,365.81 was entered by default in the Supreme Court, in this city, in favor of the plaintiff. The plaintiff sued as assignee of Thomas C. Durant and others, trustees under what is known as the Oakes Ames contract with the Union Pacific Company for the construction of their road. Jay Gould appears in the judgment roll as President of the Credit Mobilier.

The net earnings of the Philadelphia & Reading Railroad and Coal and Iron Companies for September were $1,088,830.37—a decrease of $39,988.05 as compared with corresponding month last year. Total net earnings of both companies for fiscal year ending Sept. 30 were $8,380,052.28, an increase of $316,375.12 over those of the previous year.

The earnings of the Marietta and Cincinnati Railroad for August, 1882, were $203,078, against $153,818 in 1881, a gain of $49,260. The earnings for September reached $201,929, against $177,566, a gain of $24,363. The passenger earnings for September were the largest in the history of the road, being $65,878, against $60,996 in 1881, a gain of $4,882.

The interest on the bonds and stocks of this city will become due on the 1st of November. Comptroller Campbell will pay on that day the sum of $3,143,951.43. Of this sum $959,367.93 will go to the sinking fund.

The following quotations of sales of railway and other securities, for the week, are in addition to those given elsewhere in our columns.

New York.—Allegheny Central, 14¾; Boston and New York Air Line pref., 80; Buffalo and Erie 7s, new, 120; Chicago, St. Paul, Minneapolis and Omaha, 48⅞; do. pref., 107½; do. consol., 107⅝; Chicago, St. Louis and New Orleans, 80; Chesapeake and Ohio 1st, series A, 104; do. cur. 6s, 54⅜; Cleveland and Toledo S. F., 106; Chicago and Northwestern S. F. 5s, 99¼; Chicago, Milwaukee and St. Paul, Chicago and Pacific West div. 1st, 92½; do. Southern Minn. div. 1st, 109; do. Southwestern div. 1st, 109⅜; do. Iowa and Dakota div. 1st, 125½; Chicago, Burlington and Quincy, S. F. 5s, 102: do. 8s, 105½; do. Iowa div. 4s, 84¼; Denver, South Park and Pacific 1st, 102½; Dubuque and Sioux City, 91; Denver and Rio Grande, 51; do. consol., 95¼; East Tennessee, Virginia and Georgia, 9½; do. pref., 16; do. inc., 40; Evansville and Terre Haute, 81; do, 1st, 96; Elizabethtown, Lexington and Big Sandy 6s, 97; Fort Worth and Denver, 42⅛; do. 1st, 69; Indiana, Bloomington and Western, 41⅝; do. 1st, 89; do. inc., 47½; do. Eastern div. 6s, 94; International and Gt. Northern 1st, 106½; do. coup. 6s, 82; Kansas Pacific 6s, 110; do. consol., 103¾; do. 6s, Denver div. ass., 109; Keokuk and Des Moines 1st, 101½; Lake Shore div. bonds, 120; Lafayette, Bloomington and Muncie 1st, 103½; Lake Erie and Western, 34; do. inc., 50; Long Island, 60; do. consol. 5s, 98; Louisville, New Albany and Chicago, 73½; Louisville and Nashville, Cecelian Branch 1st, 105; do. Evansville, Henderson and Nashville 1st, 100; do. genl. mort. 6s, 90⅛;

do. N. O. and Mobile 1st, 90; Michigan Southern S. F. 108½; Michigan Central 5s, 97; Minneapolis and St. Louis, 31¼; do. pref., 72; Missouri, Kansas and Texas, 35⅝; do. 7s, consol., 106; do. 2d, 62½; do. genl. mort. 6s, 85; Missouri Pacific, 105¾; Memphis and Charleston, 52; Milwaukee, Lake Shore and Western 1st, 101; do. pref., 50¼; Manhattan Beach, 19; Manhattan Co., 40; Metropolitan Elevated 2d, 87; Mobile and Ohio, 22; do. 1st mort., 109; New York, Chicago and St. Louis, 16⅝; do. pref., 33¼; do. 1st, 90¾; Nashville, Chattanooga and St. Louis, 52; New York, Ontario and Western, 27; Norfolk and Western pref., 57½; do. genl. mort., 102; Northern Pacific 1st, 104; New Orleans Pacific 1st, 89½; Ohio Central, 16½; do. 1st, 94; do. inc., 40; Oregon Transcontinental, 86⅜; Ohio Southern, 15¼; do. inc., 29½; Oregon Railway and Nav., 156; do. 1st, 108; Oregon Short Line 6s, 99¾; Peoria, Decatur and Evansville, 28; do. 1st, 104½; do. Evansville div. 1st, 97¾; Rochester and Pittsburgh, 22¾; Richmond and Danville, 74⅜; do. 1st, 96; do. deben., 65¼; Richmond, Danville and West Point, 35½; Rome, Watertown and Ogdensburg extended 5s, 71; do. inc., 32; St. Paul and Duluth, 34¼; do. pref., 92¾; St. Paul, Minn. and Man., 156 do. 1st, 111; do. 2d, 109⅝; do. Dakota ext. 1st, 109; St. Louis and Iron Mt. Arkansas Branch 1st, 109; do. Cairo and Fulton 1st, 107¾; do. 5s, 76; do. pref. inc., 96½; Southern Pacific of Cal. 1st, 103¾; South Pacific of Mo. 1st, 103½; St. Louis, Alton and Terre Haute div. bonds, 45; St. Louis, Kansas City and Northern R. E. 7s, 104; do. Omaha div. 1st, 108; do. St. Charles Bridge 1st, 85; St. Paul and Sioux City 1st, 110; Texas and Pacific, 42; do. inc. L. G., 60⅞; do. Rio Grande div. 1st, 81¾; Toledo, Delphos and Burlington inc., 21; Winona and St. Peter 1st, 108; Wabash, St. Louis and Pacific gen'l mort. 6s, 81½; do. Iowa div. 1st, 90; do. Chicago div. 1st, 83; Arkansas 7s, Central R. R., 10; Louisiana consol., 69¾; Missouri 6s, 1886, 108; do. H. & St. J. issue, 1886, 109½; North Carolina 6s, S. T., 3d class, 6; South Carolina 6s, non-fund., 6; Tennessee 6s, old, 48; do. 6s, new, 47½; do. compromise, 56; American Cable, 72; Mutual Union Tel., 24; do. 6s, 76; Colorado Coal and Iron, 40; do. 6s, 87; Maryland Coal, 19; New Central Coal, 19; Homestake Mining, 17½; Standard, 5¼.

Boston.—Atlantic and Pacific Blocks, 105¼; do, 6s, 102; Boston Land, 6¾; Boston Water Power, 3¼; Boston, Revere Beach and Lynn, 115; Burlington and Missouri River in Nebraska 6s, non-exempt, 102¼; Connotton Valley, 5; do. pref., 11½; do. 6s, 59½; do. 5s, 55; Chicago and West Michigan, 67; Chicago, Burlington and Quincy 4s, old, 84¾; do. 4s, Denver ext., 84¾; Flint and Pere Marquette, 22; do. pref., 96½; Fort Scott Branch 7s, 107½; Iowa Falls and Sioux City, 90; Illinois Grand Trunk 8s, 113; Kansas City, Springfield and Memphis blocks, 100; Kansas City, St. Joseph and Council Bluff 7s, 113¾; Kansas City, Fort Scott and Gulf 1st, 110¼; Little Rock and Ft. Smith, 49; do. 7s, 107¾; Mexican Central, 22; do. 7s, 74½; do. blocks No. 3, 99¾; Massachusetts Central, 5½; do. 6s, 39; Michigan Central, 102; Marquette, Houghton and Ontonagon, 69; New Mexico and Southern Pacific 7s, 114¼; New York and New England 6s, 105¾; Oregon Short Line 6s, 98¾; Ogdensburg and Lake Champlain consol. 6s, 91; Old Colony 6s, 117; Portsmouth, Gt. Falls and Conway 6s, 88½; Rutland pref., 21; Sonora 7s, 104¾; Summit Branch, 10¼; Toledo, Delphos and Burlington Branch inc., 14¾; do. Southeast div. 6s, 60; Toledo, Cincinnati and St. Louis, 6⅜; do. 6s, 60; do. Branch inc., 15½; Wisconsin Valley 7s, 112½; Wisconsin Central, 17½; do. 7s, 1st Series, 80; Allonez Mining Co., 2½; Atlantic, 16½; Franklin, 16½; Huron, 2¼; Napa Quicksilver, 4½; Osceola, 35½; Pewabic, 9; Ridge, 1; Sullivan, 1¾.

Philadelphia.—Am. S. S. Co. 6s, 105; Allegheny Valley inc. scrip, 46; Central Transp., 34; Cambria Iron Co., 120; Cincinnati 7-30s, 131½; Huntingdon and Broad Top Mt., 18; Northern Pacific pref. scrip, 92; Norfolk and Western pref., 56¼; Philadelphia City 6s, 1887, 110; do. 6s, 1889, 112; do. 6s, 1894, 126; do. 6s, 1902, 133; Philadelphia, Germantown and Norristown, 109; Philadelphia, Wilmington and Baltimore 4s, 95; Philadelphia and Reading R. R. consol. gold 6s, 113½; do. scrip, 96; St. Paul and Duluth pref., 92; Sunbury and Erie 7s, 125; Texas and Pacific 1st, 6s, 104; do. consol. 6s, 94; West Jersey 1st, 6s, 116; Warren and Franklin 7s, 112. The latest quotations are: City 6s, 108@120; do. free of tax, 127@134; do. 4s, new, 106@114; Pennsylvania State 5s, new loan, 118⅛@118½; do. 4s, old, 111@114; do. 4s, new, 116@117; Philadelphia and Reading Railroad, 30⅞@31; do. consol. mort. 7s, reg., 126½@127; do. gen'l mort. 6s, coupon, 94@95; do. 7s, 1893, 118@120; do. new conv., 73@74; United New Jersey R. R. and Canal, 190@191; Buffalo, Pittsburg and Western, 20⅛@20¾; Pittsburgh, Titusville and Buffalo 7s, 96@96½; Camden and Amboy mort. 6s, 1889, 115@115½; Pennsylvania R. R., 64⅛@64¼; do. general mort. 6s, coupon, 123@127; do. reg., 125@—; do. consol. mort. 6s, reg., 121@122; Little Schuylkill R. R., 57½@58¼; Schuylkill Navigation pref., 12@14; do. 6s, 1882, 89@—; Elmira and Williamsport pref., 58@60; do. 5s, —@100; Lehigh Coal and Navigation, 43¾@44; do. 6s, 1884, 103@103¼; do. R. R. loan, 114¾@116; do. Gold Loan, 112½@113½; do. consol. 7s, reg., 117½@118; Northern Pacific, 45⅝@47⅞; do. pref., 93@93¼; North Pennsylvania, 64½@65¼; do. 6s, 106@106½; do. 7s, 122@123; do. 7s, General mort. reg., 124@125; Philadelphia and Erie, 21@—; do. 7s, 114@115; do. 5s, 102¾@103¼; Minehill, 62@63; Catawissa, 20@21; do. pref., 55½@—; do. new pref., 53@54; do. 7s, 1900, 117@120½; Lehigh Valley, 65½@66; do. 6s, coupon, 122@123; do. reg., 122@123; do. 7s, 134@133½; do. consol. mort., 122@122½; Fifth and Sixth streets (horse), 170@—; Second and Third, 114@120; Thirteenth and Fifteenth, 75@80; Spruce and Pine, 42@44; Green and Coates, 90@—; Chestnut and Walnut, 90@93; Germantown, 70@75; Union, 110@111; West Philadelphia, 112@120; People's, 12@13; Continental, 103@105.

Baltimore.—Atlanta and Charlotte, 68; do. 1st, 106½; do. inc., 80; Baltimore City 6s, 1890, 116; do. 5s, 1900, 118; do. 5s, 1916, 122½; Columbia and Greenville 1st, 101; do. 2d, 80; Canton Co., 58; Cincinnati 7.30s, J. & J., 131½; Charlotte, Columbia and Augusta, 42¼; Central Ohio pref., 52; Maryland Defense 6s, 105; Marietta and Cincinnati 1st Trust certificates, 125¼; do. 2d do., 101⅜; do. 3d do., 57⅜; Northern Central 5s, series A, 98; Ohio and Mississippi, Springfield div. 1st, 116½; Virginia and Tennessee 6s, 101⅞; Virginia Peelers, 35½; Virginia Midland 2d mort., 107½; do. 4th mort., 53; do. 5th mort., 94; do. inc., 56½; Wilmington, Columbia and Augusta, 107½. The latest quotations are: Atlanta and Charlotte 1st, 106¾@106⅝; Baltimore and Ohio, 192@195; do. 6s, 1885, 104½@—; Baltimore City 6s, 1890, 116@116; do. 6s, 1902, 129@130—; do. 5s, 1916, 122½@—; do. 4s, 1920, 111¾@—; Columbia and Greenville 1st, 100⅞@101; Canton Co. 6s, 103½@105; Marietta and Cincinnati 1st, 127½@—; do. 2d, 101⅝@101⅝; do. 3d, 57¼@57⅜; Northern Central, 57½@57½; do. 5s, Series A, 97¾@98; Ohio and Mississippi, Springfield div. 1st, 116@116½; Richmond and Danville 1915, 95¾@97½; Wilmington, Columbia and Augusta, 107@107¼; Virginia Midland 5th mort., 93@94; do. inc., 56@60; Virginia consols, 56¼@56½; do. 10-40s, 42@42½; do. new 3s, 50@—.

The Coal Trade.

THE leading coal-carrying companies make the following reports of their tonnage for the week ending Oct. 14, and for the year to the same date, compared with their respective amounts carried to the same time last year:—

	Week.	1882.	1881.
Reading Railroad	203,284	7,068,099	6,827,096
Schuylkill Canal	15,597	393,595	474,465
Lehigh Valley	156,650	5,335,642	4,919,016
Delaware, Lackawanna and Western	112,608	3,531,875	3,303,416
Shamokin	22,851	888,931	853,667
Central R. R. of New Jersey	104,690	3,403,887	3,400,621
United R. R. of New Jersey	40,839	1,327,870	1,213,128
Pennsylvania Coal	35,805	1,097,885	1 079,440
Delaware and Hudson Canal	80,428	2,718,723	2,783,039
Huntingdon and Broad Top Mountain	13,057	365,126	416,239
Penn. and New York	30,163	1,239,172	1,288,671
Clearfield, Pa.	50,594	2,232,306	1,861,416

The total tonnage of anthracite coal from all the regions for the week ending Oct. 14, as reported by the several carrying companies, amounted to 669,018 tons, against 636,842 tons in the corresponding week last year, an increase of 32,176 tons. The total amount of anthracite mined for the year is 22,201,340 tons, against 21,499,556 tons for the same period last year, an increase of 701,784 tons. The quantity of bituminous coal sent to market for the week amounted to 99,339 tons, against 99,041 tons in the corresponding week last year, an increase of 298 tons. The total amount of bituminous mined for the year is 3,363,511 tons, against 3,807,859 tons for the corresponding period last year, a decrease of 444,348 tons. The total tonnage of all kinds of coal for the week is 768,357 tons, against 735,883 tons in corresponding week last year, an increase of 32,474 tons, and the total tonnage for the coal year is 25,564,851 tons, against 25,307,415 tons to same date last year, an increase of 257,436 tons. The quantity of coal and coke carried over the Pennsylvania Railroad for the week ending Oct. 14 was 212,641 tons, of which 163,063 tons were coal and 49,604 tons coke. The total tonnage for the year thus far has been 8,623,021 tons, of which 6,401,778 tons were coal and 2,221,243 tons coke. These figures embrace all the coal and coke carried over the road, east and west. The shipments of bituminous coal from the mines of the Cumberland coal region for the week ended Oct. 14 were 46,274 tons, and for the year to that date 955,551 tons, a decrease of 699,487 tons as compared with the corresponding period of last year. The shipments were: To the Baltimore and Ohio Railroad—For the week, 25,912 tons; year, 679,858 tons; decrease as compared with 1881, 381,336 tons. Chesapeake and Ohio Canal—Week, 14,767 tons; year, 143,322 tons; decrease as compared with 1881, 218,352 tons. Pennsylvania Railroad — Week, 5,261 tons, year, 126,356 tons, decrease from last year, 95,099 tons. The Reading Railroad shipment for last week, ending October 21, was about 202,500 tons, of which 53,000 tons were sent to and 40,000 tons shipped from Port Richmond, and 11,500 tons sent to and 12,000 tons shipped from Elizabethport.—*Philadelphia Ledger, Oct.* 23.

LEAVING local traffic out of the calculation, it is said that more travelers use the railroad station in Kansas City than any other in America, a number of important lines coming together at that point. The keeper of the restaurant has to pay a rental of $20,000 a year.

ABOUT $12,000,000 of the Tennessee State debt has thus far been funded, out of the total of $27,000,000 outstanding. The officials who have been refunding it in this city have closed up their office, and will continue the work at Nashville.

THE French Sleeping-Car Company has concluded arrangements with the different Continental railway companies by which a through train will be run from Calais to Vienna, thence branching off to Russia and the East. The carriages will consist solely of sleeping-cars, a restaurant, and a saloon, communicating by means of passages and platform. The time occupied in going from Paris to Vienna will be 27 hours.

THE LAKE SHORE AND MICHIGAN SOUTHERN RAILWAY COMPANY.

TREASURER'S OFFICE, GRAND CENTRAL DEPOT,
NEW YORK, Sept. 27, 1882.

The Board of Directors of this company have this day declared a QUARTERLY DIVIDEND of TWO PER CENT upon its Capital Stock, payable on WEDNESDAY, the first day of NOVEMBER next, at this office. The TRANSFER books will be closed at 3 o'clock P. M., on MONDAY, the 2d day of October next, and will be reopened on the mording of Monday, the sixth day of November next.

E. D. WORCESTER,
Treasurer.

To Contractors.

OFFICE OF THE GEORGETOWN AND LANES RAILROAD COMPANY.
GEORGETOWN, S. C., Sept. 22, 1882.

PROPOSALS ARE INVITED UNTIL October 31, prox., for the construction of the road-bed of the GEORGETOWN AND LANES RAILROAD, as covered by survey and estimate of Major G. W. EARLE, Engineer. For specifications and all other information address the undersigned. The Company reserves the right to reject any or all bids.

P. R. LACHICOTTE,
President G. & L. R. R. Co.

FOR SALE.

Locomotives—Four Second-hand Narrow-Gauge Engines in good order.
One Second-hand "Tank" Narrow-Gauge Engine, 10 tons.
Several Second-hand Standard-Gauge Locomotives in good order, immediate delivery.
One new 3ft. Gauge Passenger Engine, 22 tons, prompt delivery.
Six new 4ft. 8½ Gauge Locomotives, cylinders 17x24, weight 35 tons. October and November delivery.
Two new 3ft. Gauge Locomotives, Cylinders 12x18, weight 20 tons. October and November delivery.
Cars—Passenger and Freight Cars of all descriptions for early delivery.
Rails—16lb., 20lb. 30lb. 35lb. and 56lb. Rails.
Car Wheels and Axles.
Narrow-Gauge Rolling-stock a specialty.

BARROWS & CO.,
64 Broadway
NEW YORK.

F. W. DEVOE & CO.

Manufacturers of Fine

RAILWAY VARNISHES,

COACH AND CAR COLORS

Ground in Oil and Japan.

ETC., ETC.

Fine Brushes adapted for Railroad use. All kinds of Artists' Materials. Colors for ready use, and all specialties for Railroad and Carriage purposes.

Railroad companies will save themselves great trouble in painting by allowing F. W. DEVOE & Co. to prepare their Passenger and Freight Car Colors. This will insure Durability, Uniformity and Economy. F. W. DEVOE & Co., manufacture from the crude materials, which are the component parts of any shade, and they understand better their chemical relationship, when in combination, than can be possible to those who simply buy their dry materials and then grind them.

SEND FOR SAMPLE CARD OF TINTS.

Cor. of Fulton and William Sts.
NEW YORK.

Continuous Automatic

FREIGHT BRAKES.

Requiring no other Connection between Cars than the ordinary Coupling-Link and Pin.

SIMPLE, DURABLE, AND EFFICIENT.

Brakes can be applied to every Car in the longest train, from the engine or caboose, or from any car in the train. It can be readily attached to any car, and adapted to ordinary brake beams, shoes, etc. There is no possibility of damaging wheels by "sliding."

PATENTED MAY 23, 1882.

☞ Railroad and manufacturing companies, or parties able to co-operate with patentee in their manufactur and introduction, are invited to correspond with

WM. C. SCHULTZE,
Surgeon C., R. I. and P. Ry.
MARENGO, Iowa Co., Iowa.

NO OTHER LINE IS SUPERIOR TO THE

FITCHBURG RAILROAD

HOOSAC TUNNEL ROUTE

WEST.

6.30 A.M. ACCOMMODATION.

Connecting at Syracuse, N. Y., at 7.15 P.M., with through sleeping cars for Cincinnati, Cleveland, Toledo, *DETROIT AND CHICAGO.*

3.00 P.M. CINCINNATI EXPRESS.

Pullman Sleeping Car attached, running through to Cincinnati without change. (Only Line running Pullman Cars from Boston.) This car runs *via* Erie Railway and N.Y., P. & O. R.R., making direct connection for Louisville, St. Louis, Kansas City, New Orleans, and all points in Texas and New Mexico.

3.00 P.M. ST. LOUIS EXPRESS.

THE ONLY LINE which runs a THROUGH SLEEPING-CAR from

BOSTON TO ST. LOUIS WITHOUT CHANGE!

ARRIVING AT 8.00 A.M. SECOND MORNING.

Through sleeping car for Buffalo, Toledo, Fort Wayne, Logansport, Lafayette, Danville Tolono, Decatur and St. Louis, making direct connection with through Express Trains for Kansas, Colorado, Texas, and all points in the

SOUTHWEST.

6.00 P.M. PACIFIC EXPRESS.

The only line running a through sleeping car *via* Buffalo and Detroit without change, arriving at Chicago at 8.00 A.M. second morning, making sure connections with through Express Trains for Iowa, Nebraska, Kansas, Colorado, the Pacific Coast, Wisconsin, Minnesota and all points in the

WEST AND NORTHWEST.

THE ABOVE TRAINS RUN DAILY, SUNDAYS EXCEPTED.

This Great Short Line passes through the most celebrated scenery in the country, including the famous HOOSAC TUNNEL, four and three-quarters miles long, being the longest Tunnel in America, and the third longest in the world.

Tickets, Drawing-Room and Sleeping-Car Accommodations may be secured in Advance by Applying to or Addressing

250 WASHINGTON STREET, BOSTON. 250

JOHN ADAMS, General Superintendent. F. O. HEALD, Acting Gen'l Passenger and Ticket Agent.

In effect January 9th, 1882, and subject to changes.

RAILROAD AND CANAL DIVIDEND STATEMENT.

Showing the amount of Stock Outstanding, the Dividend Periods and the date of last Dividend.

Marked thus(*)are leased roads.	Stock out-standing.	Divide'd Periods.	Last Dividend Payable.
Albany and Susq*...100	2,500,000	semi-an	July '82 2
Ashuelot.....100	210,000	q'arterly	Oct. '81 3½
Atch., Top. and S. Fe100	54,000,000	q'arterly	Nov. '82 1½
Atlanta and W. Point100	1,232 200	semi-an	Jan. '82 6
Atlantic and St. Law*100	5,840,000	semi-an	Mar. '82 3
Augusta and Savan'h100	1,022,900	semi-an	June'81 3½
Avon,Genesee&MtM*100	225,000	semi-an	July '81 3
Baltimore and Ohio.100	14,792,566	semi-an	Nov. '82 5
" " pref.100	5,000,000	semi-an	July '82 3
Washington Br....100	1,650,000	semi-an	Nov. '82 5
Berkshire*.....100	600,000	q'arterly	Apl. '82 1¾
Boston and Albany..100	20,000,000	q'arterly	Sept.'82 2
Bos.&N.Y.AirLine pf.100	2,795,227	q'arterly	June'82 1
Bos.,Cl.,F.&N.B.pref.100	1,750,100	semi-an	Oct. '82 3½
Bos.,Conc.&Mont.pf*100	800,000	semi-an	May '82 3
Boston and Lowell..500	3,940,000	semi-an	July '82 2
Boston and Maine...100	6,921,274	semi-an	Nov. '82 4
Boston & Providence100	4,000,000	semi-an	Nov. '82 4
Attleborough Br...100	131,700	semi-an	July '82 3½
Bos.,Revere B&Lynn100	419,400	semi-an	July '82 3½
Buffalo,N. Y. & Erie*.100	950,000	semi-an	June'82 3
Camden & Atlantic..50	377,400	q'arterly	Nov. '82 3
" " pref.50	880,650	q'arterly	Nov.'82 4
Camden & Burl. Co...100	381,925	semi-an	July '82 3
Canada Southern....100	15,000,000	.....	Feb. '81 2½
Cape May & Millville* 50	447,000	semi-an	June'81 3
Catawissa*..... 50	1,159,500	annual	Oct.'81 $1 ½
" pref..... 20	2,200,000	semi-an	May '82 3½
" new pref.. 50	1,000,000	semi-an	May '82 3½
Cayuga and Susq.*.. 50	589,110	semi-an	July '81 4½
Cedar Rapids&Mo.R*100	6,850,400	q'arterly	Nov. '82 1½
" " pref.100	769,600	semi-an	Aug .'82 3½
Central of Georgia...100	7,500,000	semi-an	June '82 4
Central of New Jersey100	18,563,200	q'arterly	July '76 2½
Central Ohio*..... 50	2,437,950	semi-an	July '82 3
" pref.. 50	411,550	semi-an	July '82 3
Central Pacific.....100	59,275,500	semi-an	Aug. '82 3
Chemung*.....100	380,000	q'arterly	July '81 1½
Cheshire preferred ..100	2,155,300	semi-an	July '82 1½
Chicago and Alton...100	11,181,741	semi-an	Sept. '82 4
" " pref 100	2,245,400	semi-an	Sept. '82 4
Chi., Burl. & Quincy.100	55,337,455	q'arterly	Sept. '82 2
Chi., Iowa & Nebras*.100	3,916,200	semi-an	July '82 4
Chi., Mil. & St. Paul.100	20,404,261	semi-an	Oct. '82 3½
" " pref 100	14,401,483	semi-an	Oct. '82 3½
Chi. & N. Western...100	14,988,257	semi-an	June'82 3½
" pref.100	21,525,353	q'arterly	Sept. '82 2
Chi., R. I. & Pacific..100	41,960,000	q'arterly	Nov. '82 1¾
Chi. and West Mich .100	6,151,000	semi-an	Feb. '82 2½
Chi. St.P.,M.&O.pref.100	10,390,000	q'arterly	Oct. '82 1¾
C., Ind., St. L. & Chi..100	6,000,000	q'arterly	July '82 1½
Cin., Sand. & Clev.pf. 50	429,037	semi-an	May '82 3
Clev. and Mahoning* 50	3,759,200	semi-an	Nov. '81 3½
Clev. and Pittsburg* 50	11,244,336	q'arterly	Sept. '82 1¾
Columbus & Xenia*. 50	1,786,200	q'arterly	Sept.'82 2
Colum.&HockingVal.100	2,500,200	semi-an	Aug.'81 208
Concord 50	1,500,000	semi-an	May '82 5
Concord and Ports.*.100	350,000	semi-an	July '82 3½
Conn.&Passump.Riv100	2,244,400	semi-an	Aug '82 3
Connecticut River ..100	2,100,000	semi-an	July '82 4
Cumberland Valley.. 50	1,292,050	q'arterly	Oct.' 82 2½
" 1st pref 50	241,900	semi-an	Apl. '82 4
" 2d pref. 50	243,000	semi-an	Apl. '82 4
Danbury & Norwalk. 50	600,000	.....	Oct. '82 2½
Dayton and Mich.*.. 50	2,402,573	semi-an	Apl. '82 1¾
" " pref. 50	1,211,250	q'arterly	July '82 2
Delaware*..... 25	1,468,940	semi-an	July '82 3
Del. & Bound Brook*100	1,652,000	q'arterly	Aug. '82 1¾
Del., Lack.& Western 50	26,200,000	q'arterly	Oct.. 82 2
Denver & Rio Grande.100	29,160,000	q'arterly	Jan '82 1½
Den.,South P. & Pac.100	3,500,000	.....	Aug.'80 4
Detroit, Lans. & Nor.100	1,825,600	semi-an	Aug.'80 2½
" " pref.100	2,503,380	semi-an	Aug. '82 3½
Dubuque&Sioux C'y*100	5,000,000	semi-an	Oct. '82 3
East Pennsylvania*., 50	1,709 550	semi-an	July '82 3
East Mahanoy*..... 50	392,950	semi-an	July '82 3
Eastern (N. H.)..... 100	492,500	semi-an	June'82 2¼
Eel River.....100	3,000,000	q'arterly	Sept. '82 $1
Elmira&Williamsp't* 50	500,000	semi-an	May '82 1½
" " pref. 50	500,000	semi-an	July '82 3½
Erie and Pitsburg*.. 50	1,998,400	q'arterly	June '82 1¾
Evansville & Terre H.100	100,000	semi-an	Nov.'81 2
Fitchburg.....100	4,500,000	semi-an	July '82 3
F. & P. Marquette pf.100	6,500,000	semi-an	July '82 3
Ft.W. & Jackson pref.100	2,000,000	.....	May '82 2
Georgia. 100	4,200,000	q'arterly	July '82 2½
Granite 100	1,250,000	semi-an	July '82 3
Han. & St. Jo. pref .100	5,083,024	semi-an	Aug. '82 3½
Harrisbg&Lancaster 50	1,182,500	semi-an	July '82 3½
H'ford &Conn. West'n.100	... .	.....	Nov. '82 1½
Housatonic pref. ...100	1,180,000	q'arterly	Oct. '82 2
Illinois Central.....100	39,000,000	semi-an	Sept. '82 3½
Ia.Falls & Sioux City*100	4,623,500	q'arterly	Sept. '82 1¾
Iowa R. Land Co....100	7,620,000	q'arterly	Nov. '82 1
Jeffersonv. Mad.&Ind100	2,000,000	q'arterly	May '82 1¾
Joliet and Chicago*..100	1,500,000	q'arterly	June'82 1¾
Kan.C.,Ft.S.&Gulf...100	4,000,000	.....	Feb. '82 2
" " pref..100	2,750,000	semi-an	Aug. '82 4
Kentucky Central...100	500,000	semi-an	June'81 1
" pref..100	5,583,500	semi-an	June'81 1
Lake Shore&Mich.So.100	49,466,500	q'arterly	Nov. '82 2
" (guar.)100	533,500	semi-an	Aug. '82 5
Lawrence*..... 50	450,000	q'arterly	July '82 2
Lehigh Valley..... 50	27,496,895	q'arterly	Oct. '82 2
" " pref. 50	106,300	q'arterly	Oct. '82 2

Marked thus(*)are leased roads.	Stock out-standing.	Divide'd Periods.	Last Dividend Payable.
Little Miami..... 50	4,637)300	q'arterly	Sept. '82 2
Little Rock & Ft. S..100	4,096,135	.....	July' 81 108
Little Schuylkill*.. . 50	2,646,100	semi-an.	July '82 3½
Long Island..... 50	10,000,000	q'arterly	Nov. '82 1
Louisville & Nashv..100	19,130,913	semi-an.	Feb. '82 3
Lowell & Andover...100	500,000	semi-an.	Jan. '82 3½
Lykens Valley.....100	600,000	q'rterly.	Oct.' 81 2½
Manchester & Law..100	1,000,000	semi-an.	May '82 5
Manhattan 100	13,000,000	.....	.....
" " 1st pref.100	6,500,000	q'rterly.	Oct. '82 1½
" " 2d pref.100	6,500,000	q'rterly.	Oct. '82 1½
Marietta& Cincinnati 50	1,386,350	.....	.....
" " 1st pref 50	8,105,600	semi-an.	Sep. '66 38
" " 2d pref 50	4,440,000	semi-an.	Sep. '66 38
Marq.Hout.&Ont.pf..100	2,259.026	.....	Aug. '82 4
Massawippi*..... 100	400,000	semi-an.	Aug. '82 3
Metropolitan 100	6,500,000	q'rterly-	Oct. '82 1½
Michigan Central....100	18,738,204	q'rterly.	Aug. '81 1
Middlesex Central...100	280,000	semi-an.	Aug. '82 3
Mill Creek&Minehill* 50	323,000	semi-an.	July '82 5
M.Hill& Schuyl.Hav* 50	4,022,500	semi-an.	July '82 3½
Missouri Pacific.....100	28,169,800	q'rterly.	Oct. '82 1¾
Mobile&Montgomery100	3,022,517	semi-an.	Feb. '80 2½
Morris and Essex.... 50	15,000,000	semi-an.	July '82 3½
Mt Carbon&PtCarbon 50	282,350	semi-an.	July '82 6
Nashua and Lowell..100	800,000	semi-an.	July '82 4
Nashua & Rochester.100	1,305,800	semi-an.	Oct. '82 1½
Nashv. & Decatur...100	1,827,000	semi-an.	June'81 3
Nash.,Chat.&StLouis 25	6,670,325	semi-an.	Apl. '82 1½
Naugatuck.....100	2,000,000	semi-an.	July '82 5
Nesquehoning Val'y* 50	1,300,000	semi-an.	Sept.'82 3
N.Castle&Beaver Val* 50	600,000	q'rterly.	Oct. '81 —
NewLondonNorth'n*100	1,500,000	q'rterly.	July '82 1½
N. Y. Cen. & Hud. R.100	89,428,330	q'rterly.	Oct. '82 2
N. Y. and Harlem....100	7,950,000	q'rterly.	July '82 4
" " pref.100	1,500,000	q'rterly.	July '82 4
" City Line.. —	....	annual	Apl. '82 3
N.Y.,LakeErie&West.100	77,083,000	.....	.....
" " pref.100	8,156,825	.....	Jan. '82 6
N. Y., N. H. & Hart..100	15,500,000	semi-an.	Jan. '82 5
N. Y., Prov. & Boston100	3,000,000	q'rterly.	Aug. '82 2
Niag.Bridg&Canand*100	1,000,000	semi-an.	July '81 3
North Carolina*.....100	3,000,000	semi-an.	Sep. '81 3
" " pref.100	1,000,000	semi-an.	Sep. '81 3
N. Eastern (S.C.) pref100	86,000	semi-an.	May '81 4
Norfolk & Western pref.	15,000,000	q'rterly.	Sept. '82 $1
North Pennsylvania. 50	4,527,150	q'rterly.	Aug. '82 1¾
Northern Central.... 50	6,142,000	semi-an.	July '82 3
Northern N. Hampsh100	3,068,400	semi-an.	June'82 3
Northern N. Jersey*.100	1,000,000	semi-an.	uly '80 2½
Norwich&Worcester*100	2,604,400	semi-an.	uly '82 5
Ohio and Miss. pref..100	4,030,000	semi-an.	M .'75 3½
Old Colony.....100	7,333,800	semi-an.	'82 3½
Oregon R'way&Nav..100	6,000,000	q'rterly.	Nov. '82 2
Oswego & Syracuse..100	1,320,400	semi-an.	Aug. '81 4½
Panama.....100	7,000,000	.....	July '82 6½
Paterson & Hudson*.100	630,000	semi-an.	July '82 4
Paterson & Ramapo.100	248,000	semi-an,	July '82 4
Pember.&Hightst'n*. 50	342,150	semi-an.	Jan. '82 3
Pennsylvania..... 50	77,672,750	semi-an.	May '82 4
Pennsylvania Co..... 50	20,000,000	semi-an.	June'81 2½
Peoria & Bureau Val*100	1,200,000	semi-an.	Feb. '82 4
Philadelphia & Erie*. 50	7,013,700	semi-an.	.....
" " pfd 50	2,400,000	semi-an.	Jan. '75 4
Phil,Ger.&Norrist'n* 50	2,231,900	q'rterly.	Sept.'82 3
Phil. and Reading... 50	32,726,375	q'rterly.	Jan. '76 2½
" " pref. 50	1,551,800	q'rterly.	July '76 3½
Phila. and Trenton..100	1,250,100	q'rterly.	Oct. '82 2½
Phila., Wil. and Balt. 50	11,585,750	semi-an.	July '82 4
Pittsb.,Ft. W. & Chi.*100	19,714,285	q'rterly.	Oct. '82 1¾
" Special Imp.100	6,770,900	q'rterly.	Oct. '82 1¾
Pittsfield&N.Adams..100	450,000	semi-an.	July '82 2½
Portl., Saco & Portsm100	1,500,000	semi-an.	July '82 3
Providence &Worces.100	2,000,000	semi-an.	July '82 3
Rensselaer&Saratog.*100	7,000,000	semi-an.	July '82 4
Rhode Island& Mass.100	100,000	.....	Jan. '81 3
Richmond& Danv...100	3,866,000	q'rterly.	Aug. '82 2
Richmond & Petersb100	1,009,300	semi-an.	Jan. '81 3
Roch.&Genesee Val.*100	555,200	semi-an.	July '82 3
Rutland preferred.. 100	4,000,000	semi-an.	Sept. '82 1
St.L.,Alt. & T.Haute.100	2,300,000	.....	.....
" " pref.100	2,468,406	.....	May '82 3
St.L.&S.Fran.1st pref100	4,500,000	.....	Aug. '82 3½
St.L.,I.Mt.&South'n.100	21,459,921	semi-an.	Feb. '74 3
St.L.,Jac'ville & Chic.100	1,293,ccc	.....	Aug. '82 4½
" " " pref.100	1,034,000	.....	Aug. '82 4½
St. P. & Duluth pref.100	4,705,000	q'rterly.	June'82 1¾
St. P., Minn. & Man..100	20,000,000	q'rterly.	Nov.'82 2
Schuylkill Valley*... 50	576,050	semi-an.	July '82 2½
Seaboard & Roanoke.100	1,229,600	semi-an.	May '82 5
Shamokin V.&Pottsv 50	669,450	semi-an.	Feb. '82 3
Shore Line*.....100	1,000,000	semi-an.	July '82 4
Sioux C.&Pacific pref100	160,000	semi-an.	Oct. '82 3½
South Br. (N. J.)*....100	438,300	semi-an.	Jan. '82 3
South Western (Ga.)*100	3,892,300	semi-an.	Dec. '81 3½
Stockbridge&Pitts.*..100	448,700	semi-an.	Oct. '81 1½
Syr.,Bingham&N.Y.*100	2,500,000	semi-an.	Feb. '81 2
Terre Haute & Ind...100	1,988,150	semi-an.	Aug. '82 4
Troy and Boston....100	1,609,000	semi-an,	Feb. '80 2
Union Pacific. 100	61,000,000	q rterly.	Oct. '82 1¾
United Cos of N. J.*.100	20,490,000	q'rterly.	Oct. '82 2½
Utica, Shenango&S V100	4,000,000	semi-an.	Nov.'81 3
Utica and Black Riv.100	1,772,000	semi-an.	Mar. '82 2
Vermont and Mass.. 100	3,050,000	semi-an.	Oct .'82 3
Wab. St.L.&Pac.pref.100	22,615,100	q'rterly.	Nov.'81 1½

Markedthus(*)are leased roads.	Stock out-standing.	Divide'd Periods.	Last Dividend Payable.
Ware River*.....100	750,000	semi-an.	July '82 3½
Warren (N. J.).....100	1,800,000	semi-an.	Apl. '82 3½
Warwick Valley.....100	340,000	semi-an.	July '82 2½
Westchest&Phil.pref100	821,300	semi-an.	July '80 2
West Jersey.....100	1,359,750	semi-an.	Sept. '82 3
Wilmingt'n&Weld'n.100	1,456,200	semi-an.	July '82 3
Wil., Col., & Aug 100	960,000	semi-an.	July '82 3
Winchester&Poto'c.*100	180,000	semi-an.	July '82 3
Winchester&Strasb.*100	74,700	semi-an.	July '82 3
Worcester & Nashua. 75	1,789,800	semi-an.	July '82 1½
HORSE-POWER R. R.			
Albany City.....100	200,000	annual	.....'80 5¼
Baltimore City..... 25	1,000,000	semi-an.	Oct. '82 3
Balt.,Cat.&El.Mills..100	....	semi-an.	July '82 2
BleeckerSt.&Ful.F'y.100	900,000	semi-an.	July '82 ¾
Boston&Chelsea pref. 50	110,000	semi-an.	Oct. '82 3
Broadway (Brooklyn)100	250,000	q'arterly	Oct. '82 6
B'way&7th Av,(N.Y.)100	2,100,000	q'arterly	Oct, '82 2
B'klyn&Hunter's Pt.100	400,000	semi-an.	Oct. '82 6
Brooklyn City.....100	2,000,000	q'arterly	Aug. '82 3½
Bushwick (Brooklyn)100	300,000	semi-an.	Oct. '82 6
Cambridge..... 100	908,000	q'arterly	Oct. '82 4½
Cen.Park,N.& E.Riv.100	1,800,000	q'rterly.	Oct. '82 6
Christoph'r&TenthSt100	650,000	semi-an.	Aug. '82 2½
Citizens' (Phil.)..... 50	192,500	q'rterly.	Jan. '82 2½
Citizens' (Pbg.)..... 50	200,000	annual..	....'80 14½
Coney Island&Fklyn100	500,000	semi-an.	Oct. '80 5
Continental (Phil.) .. 50	580,000	semi-an.	July '82 6
D.Dock,E.B'way&Bat100	1,200,000	q'arterly	Aug.'82 4
Eighth Av. (N. Y.)...100	1,000,000	q'rterly.	Oct. '82 3
42d St. & G. St. Ferry100	747,000	semi-an.	May '82 6
Frankf.&Southw (Ph) 50	600,000	q'rterly.	Oct. '82 6
Germantown, (Ph.).. 50	572,800	q'rterly.	Oct. '82 2½
Girard College (Ph.) . 50	500,000	semi-an.	July '71 3
Grand St. & Newton.100	170,091	semi-an.	July '81 2½
Green&Coates St.(Ph) 50	150,000	q'rterly.	Oct. '82 3
Heston,Mantau&F'm 50	299,381	semi-an.	Jan. '75 4
Highland.....100	600,000	semi-an.	July '82 4
Lomb.&SouthSts(Ph) 25	195,000	semi-an.	Oct. '75 4
Lynn and Boston....100	200,000	semi-an.	Nov.'82 4
Malden and Melrose.100	165,000	.....	.....
Metropolitan (Bost.). 50	1,500,000	semi-an.	July '82 4
Middlesex (Boston)..100	650,000	semi-an.	May '82 3½
N.Y.,Bay Ridge&Jam100	150,000	.....	Oct. '78 7
Ninth Av. (N. Y.)....100	797,320	.....	.....
Orange & Newark....100	282,555	.....	.....
People's (Phila.) pref. 25	124,744	.....	July '82 2
Philadelphia City... 50	475,000	semi-an.	July '82 4
Phila. and Darby.... 20	200,000	semi-an.	July '81 3½
Phila.&Grey's Ferry. 50	308,000	semi-an.	Jan. '82 6
Phg,Alleg.&Manches. 50	300,000	q'rterly.	Oct. '81 3
Ridge Avenue (Ph.).. 50	420,000	semi-an.	Oct. '81 11
Second Avenue (N.Y.)100	1,190,500	semi-an.	July '82 4
Second&ThirdSt.(Ph) 50	771,076	q'rterly.	Jan. '82 4½
17th &19th sts (Ph.).. 50	250,000	semi-an.	July '81 3
Sixth Avenue (N. Y.)100	750,000	semi-an.	May '82 5
Somerville (Boston).100	113,000	semi-an.	May '82 3
South Boston..... 50	600,000	semi-an.	July '82 4
Third Avenue, N. Y..100	2,000,000	q'rterly.	Aug '82 8
13th and 15th sts.,Ph 50	334,529	q'rterly.	Jan. '82 4
23d street, N. Y.....100	600,000	semi-an.	Aug.'82 4
Union, Boston.....100	374,300	semi-an.	Jan. '82 4
Union, Phila..... 50	1,005,000	semi-an.	Jan. '82 7
West Philadelphia... 50	750,000	semi-an.	July '77 10
CANALS.			
Chesapeake and Dela 50	2,078,038	semi-an.	June'75 2
Delaware Division... 50	1,633,350	semi-an.	Aug. '82 $1
Delawa. and Hudson100	20,000,000	q'rterly.	Sept. '82 1¾
Delaware & Raritan*.100	5,847,400	q'rterly.	Oct. '82 2½
Lehigh Coal and Nav 50	11,204,250	semi-an.	June'82 2
Monongahela Nav... 50	1,004,500	semi-an.	July '82$3
Morris, consolidated.100	1,025,000	semi-an.	Aug. '82 2
" preferred....100	1,175,000	semi-an.	Aug.'82 5
Pennsylvania..... 50	4,501,200	.....	.....
Schuyl. Nav., com.*. 50	859,100	annual..	Oct.'82 50c.
" " pref... 50	3,200,000	annual..	Oct. '82 $1
MISCELLANEOUS.			
Adams Express.....100	12,000,000	q'rterly.	Sept.'82 2
American Express... 50	18,000,000	semi-an.	July '82 3
Amoskeag Manuf.Co.100	3,000,000	semi-an.	June'81 5
Calumet&HeclaMin'g 25	100,000	S. q'rterly.	Nov. '82 $5
Central Mining Co...100	.....	semi-an.	Feb.'82 2½
Consolidation Coal..100	10,250,000	semi-an.	Jan. '82 2
George's Creek C.&I.100	.....	semi-an.	Jan. '82 3
Maryland Coal.....100	4,400,000	semi-an.	Feb. '76 1½
Mariposa L. &Mining100	10,000,000	.....	.....
" pref100	5,000,000	.....	.....
Missouri Val.LandCo100	200,000	semi-an.	July '82 12
National Tube Works100	1,000,000	q'rterly.	Oct. '82 3
Pac. Mail Steamship.100	20,000,000	q'rterly.	Sept.'69 3
Pennsylvania Coal... 50	5,000,000	q'rterly.	Aug. '82 3
Pullman Palace Car..100	10,032,800	q'rterly.	Nov.'82 2
Quicksilver, com....100	5,708,700	.....	May '82 0.4
" pref....100	4,291,300	.....	May '82 6
Quincy Mining Co... 25	40,000 shs	semi-an.	Aug. '82 $5
Quincy R. R. Bridge.100	1,750,000	semi-an.	July '82 5
SiouxC.&I.F.L.&L.Co100	500,000	semi-an.	June'82 5
Spring Mt. Coal.....100	1,500,000	semi-an.	June'82 3½
Topeka Equip'nt Co.100	255,500	semi-an.	Oct. '82 5
United States Ex....100	7,000,000	q'rterly.	Aug. '82 1
Wells-Fargo & Co. Ex100	6,250,000	semi-an.	Jully'82 4
Western Union Tel..100	80,000,000	q'rterly.	Oct. '82 1½

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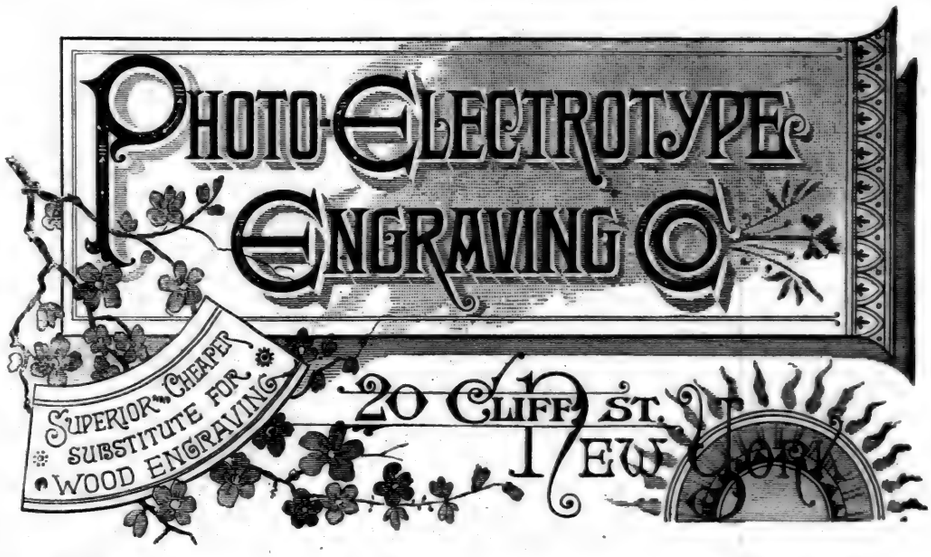
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CONTINENTAL CONSTRUCTION CO., Concord, N. H

Letters respecting the financial affairs of the Company should be addressed—

H. F. WORRALL, Treasurer, 8 Exchange Place, Boston, Mass.

RAILROAD EARNINGS.—MONTHLY.

	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total.
BURL., CEDAR RAP. & NORTHERN:													
1880	184,316	165,170	188,325	141,652	149,504	153,378	143,432	160,160	179,804	204,991	189,330	193,419	2,053,484
1881	167,750	124,510	148,551	184,680	165,630	205,912	174,351	209,112	221,801	221,748	203,880	232,812	2,259,937
1882	252,823	225,631	224,107	178,304	199,278	211,257	198,276	224,921	261,439	.....	.....	.....	.....
CENTRAL PACIFIC:													
1880	1,200,615	1,070,487	1,373,438	1,356,716	1,778,488	1,724,990	1,840,067	1,973,438	1,994,997	1,120,229	2,199,466	1,905,221	20,508,113
1881	1,602,907	1,454,218	1,709,638	1,872,370	2,091,411	2,159,382	1,899,346	2,088,519	2,185,303	2,507,857	2,297,971	2,225,179	24,094,101
1882	1,839,469	1,720,675	1,969.737	2,054,687	2,342,298	2,229,105	2,020,000	2,277,000	2,474,000	.....	.....	.....	.....
CHESAPEAKE AND OHIO:													
1880	202,335	198,681	222,762	221,559	199,443	214,352	238,236	259,110	247,303	211,820	240,795	218,009	2,674,308
1881	162,540	184,389	228,479	227,343	252,235	241,135	225,096	262,858	247,144	237,303	235,585	203,562	2,707,762
1882	210,455	209,708	208,981	267,454	255,939	260,753	306,831	371,175	305,065	.....	.....	.....	.....
CHICAGO AND ALTON:													
1880	534,054	497 013	626,473	542,961	616,128	617,524	708,906	761,120	767,349	785,199	696,776	574,695	7,718,198
1881	487,890	461,641	529,915	558,190	548,556	635,860	676,205	769,751	774.790	750,359	680,133	635,307	7,553,988
1882	579,447	530,480	584,483	561,787	553,412	613,886	671,537	800,624	881,109	.....	.....	.....	.....
CHICAGO AND NORTHWESTERN:													
1880	1,154,632	1,131,683	1,361,725	1,294,573	1,875,608	1,671,177	1,699,686	1,767,938	2,020,245	2,105,217	1,855,622	1,477,902	19,416,007
1881	1,240,664	963,202	1,178,795	1,474,612	1,879,006	2,306,440	1,983,032	2,315,164	2,292,676	2,341,098	2,019,038	1,855,477	21,849,209
1882	1,644,935	1,474,176	1,672,931	1,668,741	2,110,947	2,022,700	2,025,736	2,099,755	2,497,053	.....	.....	.....	.....
CHICAGO, BURLINGTON AND QUINCY:													
1880	1,432,740	1,411,870	1,732,518	1,489,894	1,909,627	1,682,956	1,773,643	1,834,321	1,862,285	1,934,762	1,837,860	1,552,018	20,454,494
1881	1,307,948	1,034,821	1,418,149	1,574,371	1,679,455	2,083,803	1,888,358	2,173,945	2,262,981	2,031,001	1,816,133	1,905,490	21,324,150
1882	1,658,834	1,457,300	1,566,217	1,530,838	1,505,261	1,437,164	1,625,006	2,086,858	.....	.....	.....	.....	.....
CHICAGO, MILWAUKEE AND ST. PAUL:													
1880	764,298	738,749	900,675	871,041	1,134,745	1,037,958	1,026,708	991,297	1,257,677	1,493,620	1,472,037	1 397,308	13,086,119
1881	990,847	682,717	916,989	1,259,946	1,538,491	1,729,811	1,568,706	1,678,361	1,644,675	1,590,000	1,569,000	1,855,000	17,025,462
1882	1,435,000	1,377,000	1,561,000	1,518,000	1,629,000	1,620,000	1,465,000	1,545,000	1,950,000	.....	.....	.....	.....
CHICAGO, ST. PAUL, MINNEAPOLIS AND OMAHA:													
1880	193,827	173,078	259,783	259,208	232,146	218,093	236,995	251,013	300,833	342,052	342,894	312,173	3,122,097
1881	257,786	158,594	251,648	261,211	350,124	404,562	383,202	385,586	373,370	382,714	380,733	391,950	3,981,296
1882	307,498	315,100	405,779	356,558	406,420	363,109	331,480	394,555	482,997	.....	.....	.....	.....
CINCINNATI, INDIANAPOLIS, ST. LOUIS AND CHICAGO:													
1880	155,697	172,541	198,220	168,199	186,995	200,332	204,138	233,478	343,627	239,881	209,014	198,254	2,412,185
1881	182,523	171,511	191,005	183,710	191,056	192,299	177,161	229,858	228,653	212,606	194,805	192,623	2,296,916
1882	200,042	186,879	208,066	204,269	199,110	195,948	209,564	.....	259,379	.....	.....	.....	.....
DENVER AND RIO GRANDE:													
1880	124,759	126,922	160,883	164,882	193,925	295,455	373,132	400,133	406,583	473,318	408,562	349,196	3,478,007
1881	307,476	317,681	398,493	433,111	514,767	584,230	548,284	606,193	589,287	665,686	566,819	643,417	6,206,812
1882	491,914	412,987	535,055	559,917	614,298	537,462	495,797	574,040	595,506	.....	.....	.....	.....
HANNIBAL AND ST. JOSEPH:													
1880	176,079	166,965	216,061	206,735	191,317	179,396	224,312	238,081	233,448	242,214	207,147	279,635	2,561,366
1881	154,401	122,874	176,356	190,812	172,950	190,740	201,899	210,240	215,103	313,433	201,782	180,376	2,230,961
1882	138,284	154,717	168,798	148,913	154,917	155,030	184,347	258,628	239,196	.....	.....	.....	.....
ILLINOIS CENTRAL:													
1880	595,212	613,806	613,008	535,732	665,120	681,736	724,095	732,755	806,836	880,211	783,120	673,182	8,304,812
1881	631,281	524,499	557,789	662,493	673,259	803,887	720,004	868,407	828,847	815,238	737 218	763,475	8,586,397
1882	728,173	689,387	695,371	674,603	674,749	663,746	752,251	813,600	828,238	.....	.....	.....	.....
INDIANA, BLOOMINGTON AND WESTERN:													
1880	80,498	89,690	116,185	90,374	85,733	106,954	103,438	116,732	110,622	121,343	95,621	104,619	1,233,079
1881	90,283	83,261	192,085	203,677	200,064	199,846	199,125	272,114	247,932	181,674	160,826	156,697	.....
1882	195,824	175,755	206,235	205,934	182,554	186,133	206,072	278,814	273,100	.....	.....	.....	.....
LOUISVILLE AND NASHVILLE:													
1880	674,455	575,035	612,593	563,883	655,014	976,229	772,538	827,089	931,911	1,000,327	953,087	949,185	9,491,346
1881	812,118	805,124	947,959	855,704	828,726	1,227,885	817,135	876,192	951,566	1,002,950	1,065,223	1,153,779	11,344,361
1882	964,527	960,315	1,068,836	953,603	958,130	1,215,490	1,038,385	1,030,385	1,107,985	.....	.....	.....	.....
MOBILE AND OHIO:													
1880	250,116	204,095	168,302	140,091	129,248	121,855	131,621	140,593	184,247	264,714	251,368	287,372	2,373,622
1881	224,347	216,768	230,916	163,551	145,803	136,517	135,549	160,789	210,262	256,924	262,986	258,812	2,403,224
1882	159,676	158,590	148,166	141,957	134,378	136,184	136,398	140,443	160,031	.....	.....	.....	.....
NASHVILLE, CHATTANOOGA AND ST. LOUIS:													
1880	205,633	191,154	169,457	155,466	158,839	144,155	151,594	169,326	167,473	178,266	182,087	175966	2,049,484
1881	178,143	190,866	207,710	183,525	104,430	154,549	150,430	168,317	179,979	172,121	152,059	173,127	2,075,256
1882	156,994	159,961	161,005	154,155	137,645	119,074	160,991	168,304	168,999	.....	.....	.....	.....
NEW YORK AND NEW ENGLAND:													
1880	164,232	149,907	183,845	179,689	183,701	219,891	205,056	249,885	235,642	215,491	210,856	198 108	2,396,302
1881	189,749	173,614	212,019	216,913	217,185	231,518	246,821	280,524	299,573	261,199	242,412	237,729	2,809,255
1882	213,840	217,261	265,222	263,544	283,244	290,060	308,920	353,726	338,490	.....	.....	.....	.....
NEW YORK, LAKE ERIE AND WESTERN:													
1879	1,147,173	1,207,391	1,356,780	1,372,755	1,350,574	1,230,419	1,273,533	1,450,223	1,492,497	1,713,697	1,515,835	1,398,224	16,509,127
1880	1,296,381	1,252,218	1,644,958	1,643,151	1,592,544	1,661,812	1,580,976	1,606,874	1,786,417	1,899,910	1,799,338	1,726,788	19,149,361
1881	1,443,437	1,425,765	1,847,261	1,709,057	1,776,891	1,794,982	1,787,081	1,772,895	1,734,200	.....	.....	.....	.....
NORTHERN CENTRAL:													
1880	334,494	330,860	415,325	386,130	329,788	419,193	450,298	453,923	464,093	512,918	459,054	494,310	5,050,387
1881	386,157	382,657	452,906	487,273	465,588	487,287	440,811	498,008	429,565	449,664	487,160	476,622	5,443,697
1882	407,368	413,551	430,194	435,129	482,607	482,752	509,683	667,488	592,435	.....	.....	.....	.....
NORTHERN PACIFIC:													
1880	81,390	77,259	119,357	185,700	217,613	253,105	241,277	223,500	330,300	358,456	300,822	220,993	2,629,710
1881	116,508	78,803	162,984	216,210	312,705	412,024	393,260	434,085	534,363	565,485	428,903	434,331	4,044,576
1882	239,800	269,000	384,000	438,000	568,332	631,342	679,240	727,377	789,700	.....	.....	.....	.....
PHILADELPHIA AND ERIE:													
1880	224,307	245,372	327,678	334,947	311,470	331,024	308,699	347,532	322,737	367,082	324,966	281,919	3,727,733
1881	224,303	225,501	285,573	293,323	343,792	350,585	291,669	303,849	276,522	292,392	284,078	282,772	3,454,309
1882	252,727	246,246	265,311	277,851	341,415	347,614	377,206	420,329	.....	.....	.....	.....	.....
ST. LOUIS AND SAN FRANCISCO:													
1880	198,091	195,948	193,146	176,164	167,664	173,607	213,297	259,995	280,873	328,194	290,329	226,063	2,698,371
1881	212,435	178,234	262,050	265,298	283,399	260,254	252,333	286,373	279,064	308,569	284,320	287,914	3,160,245
1882	256,784	244,654	274,959	242,806	253,419	240,177	318,613	381,637	336,805	.....	.....	.....	.....
ST. LOUIS, ALTON AND TERRE HAUTE:													
1880	153,139	163,737	168,994	155,462	147,928	150,207	191,077	216,759	204,295	221,863	188,773	184,503	2,146,741
1881	175,725	166,012	201,137	197,447	172,177	165,896	165,393	189,180	196 368	179,921	162,544	153,852	2,112,801
1882	168,987	149,619	178,145	157,450	162,842	142,742	192,017	236,137	217,659	.....	.....	.....	.....
ST. LOUIS, IRON MOUNTAIN AND SOUTHERN:													
1880	555,983	490,195	451,560	408,241	349,053	363,454	432,655	565,869	671,219	688,365	632,052	656,951	6,265,597
1881	570,957	560,791	704,002	548,300	479,075	474,302	533,512	644,386	708,325	719,239	687,280	709.498	7,319,744
1882	516,370	501,127	585,008	581,977	519,120	529,700	515,519	675,981	724,160	.....	.....	.....	.....
ST. PAUL, MINNEAPOLIS AND MANITOBA:													
1880	180,239	137,645	261,798	333,014	281,899	243,407	272,089	232,579	274,188	345,057	300,675	297,641	3,160,231
1881	254,187	159,482	320,962	425,685	382,642	405,322	387,488	414,954	485,736	605,708	508,530	528,262	4,878,960
1882	395,461	418 358	531,004	570,890	858,902	856,417	853,296	801,759	832,776	.....	.....	.....	.....
TEXAS AND PACIFIC:													
1880	245,785	219.165	215,070	174,177	141,083	153,066	195,711	226,073	266,570	303,666	312,184	301,858	2,754,408
1881	281,176	260,781	319,928	295,066	281,782	285,405	328,063	381,331	345,790	578,668	357,724	381,218	3,921,569
1882	310,785	255,644	332,911	359,543	409,228	384,713	367,215	439,918	470,613	.....	.....	.....	.....
UNION PACIFIC RAILWAY:													
1880	1,433,636	1,393,992	1,730,509	1,937,220	2,027,269	1,928,528	1,934,215	1,913,035	2,270,179	2,707,860	2,251.148	1,869,335	23,448,445
1881	1,339,799	1,374,740	1,674,860	1,766,894	2,319,238	2,884,774	2,528,826	2,638,659	2,844,357	3,289 350	2,773,608	2,267,004	27,451,831
1882	1,961,088	1,759,863	2,226,832	2,462,004	2,491,590	2,508,453	2,301,000	2,762,107	2,949,112	.....	.....	.....	.....
WABASH, ST. LOUIS AND PACIFIC:													
1880	776,790	759,451	978,629	892,024	948,773	953,468	1,966,742	1,189,478	1,178,950	1,501,203	1,131,787	1,050,816	12,428,112
1881	811,617	818,922	1,121,592	1,023,482	1,144,660	1,308,993	1,131,752	1,542,838	1,490,027	1,396,300	1,399,555	1,328,278	14,461,570
1882	1,220,965	1,134 768	1,315,776	1,378,194	1,204,864	11,49,632	1 418,837	1,772,544	1,682,382	.....	.....	.....	.....

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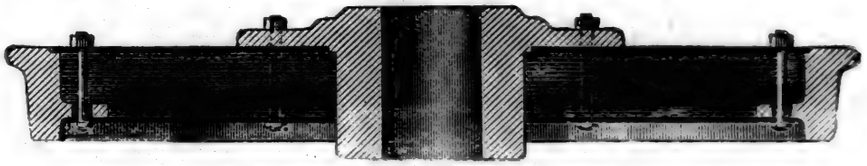
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This signal has been fully tested on the New York and New England Railroad at Dudley and Bird Streets, by practical operation, and has proved a complete success, to the entire satisfaction of the many prominent Railroad men and experts who have watched and examined it. It provides an Automatic Block, Crossing, Station, Switch, Bridge, Yard and Curve Signals, Gate and Revolving Lanterns. Being operated by the weight of trains passing over an incline bar, forcing common air through a tube, by means of a bellows, which is positive in its action, it is highly commended by all railroad officials who examined it.

The company can shortly fill orders to place it on any railroad, and invite communication from Railroad Officials from all parts.

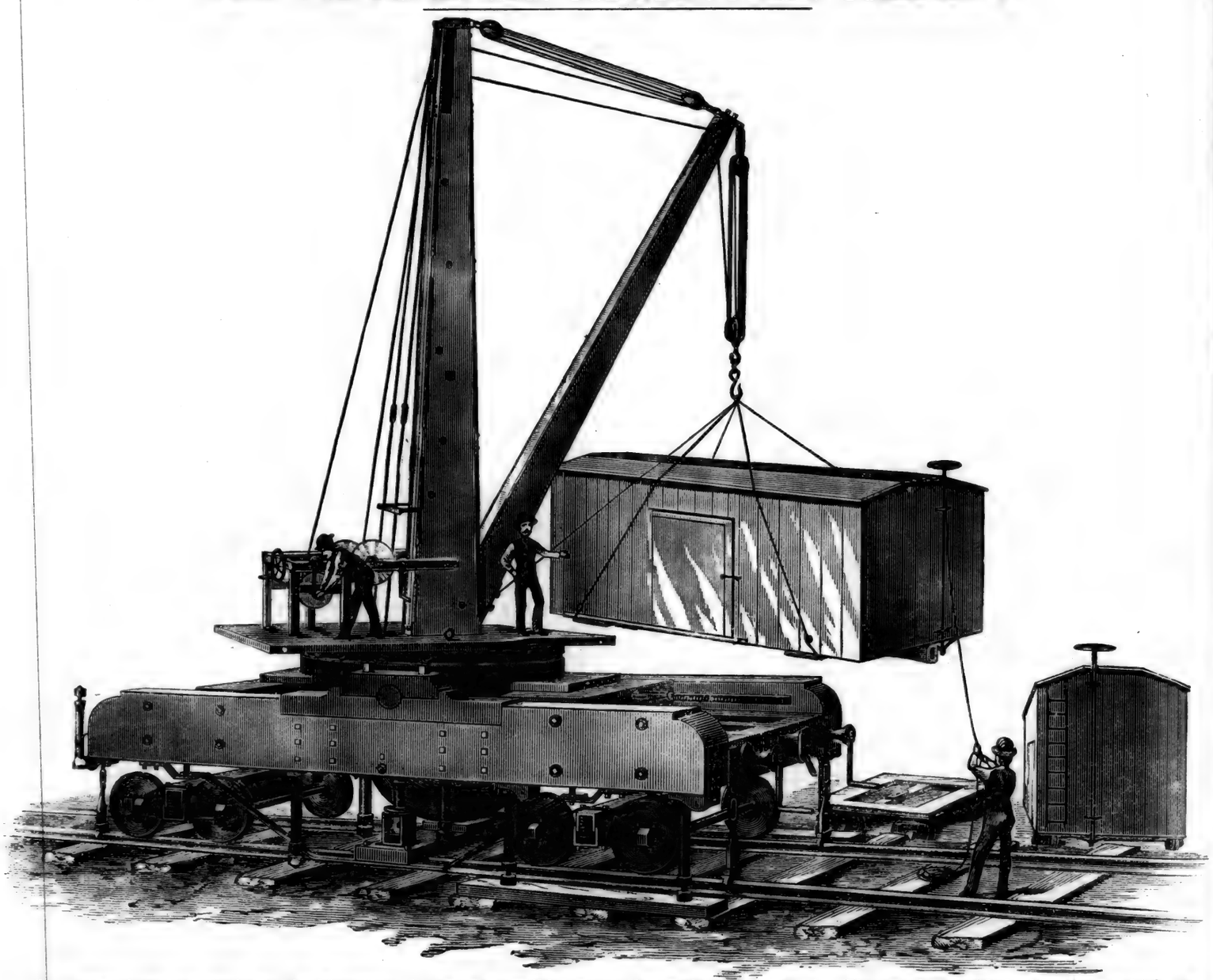
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New York Office with Col. Thos. R. Sharp, 115 Broadway

THE JEWETT WRECKING CAR.

THE CONTINENTAL CONSTRUCTION COMPANY.



In a recent letter in relation to the Manufacturers' and Mechanics' Institute Fair, now being held in Boston, our regular correspondent mentioned the model of the Jewett Wrecking Car, in the exhibit of the Continental Construction Company. We have since had an opportunity to examine the car and to talk with Mr. Jewett, its inventor, and feel that a fuller description of the car will be of interest to all of our readers. We publish a large cut, which will be readily understood. The car, which is heavily built, and in every way specially adapted for heavy work, is provided with a tipping counterbalanced mast and connected boom, which are mounted on a turn-table. The mast, which is 35 feet in length, and very strongly built and secured by bolts of iron, is so arranged that for transportation it can be lowered to an almost horizontal position, thus enabling it to pass under bridges; while owing to the counterbalance weight no power is needed to raise it to a perpendicular when the scene of operations is reached. The hoisting gear is very strong and simple, but so arranged as to secure the greatest possible return for outlay of power. The car is fitted with patent grips to secure it firmly to the track, and on each side are four jack-screws which are hinged to the car, and in transportation are simply lifted up and placed in "beckets." To secure a solid bed for the jack-screws four pieces of timber are carried, which are provided with clamps to secure them to the track. These rest upon the ends of the ties when in use. It will be readily seen that these jack-screws give the derrick an absolutely firm foundation, and prevent any tipping of the car when heavy weights are lifted. Under the turn-table is a platform which is adjustable so as to rest upon the tracks, thus giving increased stability and taking the weight from the car. In fact every possible precaution seems to have been taken to guard against any "give" in any part under any strain from any direction.

With the Wrecking Car is a tender or tool car, which provides ample stowage room for tools, and at the same time forms a receptacle for the head of the mast.

The car is provided with braces which can be set so as to take the strain when anything is to be pulled toward the car before lifting, as is frequently necessary when a train has gone over an embankment and the cars or freight have rolled to some little distance.

We certainly regard the Jewett Wrecking Car as an unusually perfect invention of its kind, and believe that railroad men will feel amply repaid for the time spent in examining it. It would seen as if it could not fail to at once come into general favor, both on account of its completeness in all details and the ease and rapidity with which it can be made ready and put into operation, either in case of a wreck or in ordinary construction work, where strength and an efficient portable derrick are required

The Continental Construction Company are also the sole manufacturers of Bean's Adjustable Swing Bed Planer, which has special points of interest to railroad men and bridge companies from the fact that it is adapted to planing timber of any thickness from *one-eighth*

(Continued on page 846).

AMERICAN Railroad Journal. ESTABLISHED 1832.

SUBSCRIPTION PRICE REDUCED

—FROM—

$5 to $3.

The American Railroad Journal,

WITH ITS VARIETY OF

New Departments,

AND ITS

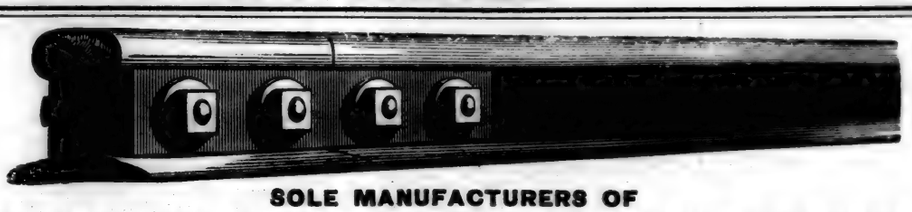
NEW DRESS,

HAS ASSUMED NEW PROPORTIONS.

We are amply justified in reducing the price from its old time rate of $5.00 per year to $3.00, on account of the numerous indications we are receiving of late of the increased interest that is being taken in the JOURNAL, which warrants us in believing that the sacrifice we make in price will be much more than compensated for by the promised liberal increase in the number of subscribers, It is gratifying to us to know that the alterations made in the Journal during the past year are meeting with such general favor as is expressed in the frequent words of commendation and congratulation sent to us from old and new readers, and we feel called upon to try in every way to merit their approval and to spare no pains to place the paper before as many as possible of those who might derive benefit and profit from it. During its fifty years' experience the JOURNAL has been highly favored by an especially choice class of readers, counting among its subscribers some of the most noted banking houses, commercial bodies, financiers, and railroad men of this country and Europe. Its aim in the future will be to prove itself of more value and interest than ever to its patrons of many years standing, while by its new features it makes itself of service and interest to a broader field and to more varied departments of life and business. We desire to make the JOURNAL as useful and welcome as possible to our readers and advertising patrons, and to this end we hope to have our columns of correspondence, communications and general information full and diversified. The columns we have devoted to general communications have proved especially interesting and popular of late, and we are pleased to have our rraders favor this department with suitable contributions

We give on editorial page our new subscription rates, which are so changed in the belief that it will not only prove acceptable to many who desire to become regular readers of the paper, but that it will meet with the hearty approval of our advertising patrons, who are rapidly filling up the pages offered to them since the improvements in the JOURNAL have been started.

We will send you the "Journal" for three months for $1. Try it, and you will be glad to continue taking it.

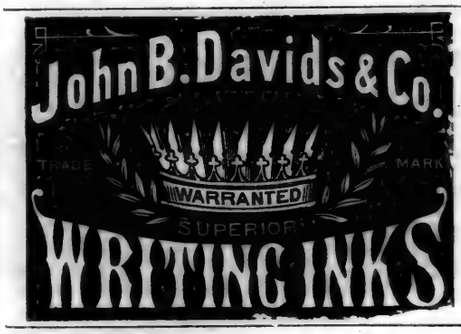


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IMPROVED VULCANIZED FIBRE TRACK-BOLT WASHERS,

which form non-metalic, permanently elastic compensating cushions, absorbing shocks and vibrations, and absolutely locking the nuts. These Washers have been adopted by a large number of railroads as the cheapest and best device in use. Flexible vulcanized-fibre dust guards and oil box packings, which are absolutely unaffected by oil and grease, are far more durable than leather and much cheaper.

Office and Factory, Wilmington. Del.





THE JENKINS STANDARD PACKING is acknowledged by users as the *Best* in the world. Unlike all other Packings, the **Jenkins Standard Packing** can be made any thickness desired in a joint by placing two or as many thicknesses together as desired, and following up joint it vulcanizes in place and becomes a metal of itself (it is frequently called Jenkins Metal), and will last for years, as it does not rot or burn out. Avoid all imitations, as a good article is always subject to cheap imitations. The **genuine** has stamped on every sheet, **"Jenkins Standard Packing,"** and is for sale by the Trade generally. Manufactured only by

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PROPRIETORS JENKINS PATENT VALVES, PACKING, &c.

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For any responsible advertiser, making application in good faith, we prepare and furnish a written estimate, showing the cost of any proposed advertising in the leading Newspapers of the United States and Dominion of Canada.

We prepare and exhibit printed proofs of any proposed advertisements.

For the preparing of estimates no charge is made, and the applicant is placed under no obligation to transact his advertising business through us unless it appears to him that by doing so he will best advance his own interests.

A copy of the advertisement, a list of the papers, the space the advertisement is to occupy and the time it is to appear, should all be given with the application for an estimate of the cost.

When an advertiser does not know what he wants or what he ought to do, he can designate some sum of money within which he wishes to limit his expenditure; this will enable us to prepare for him such a list of papers as will be the best for his purpose, within the limits which he prescribes.

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Newspaper Advertising Bureau,

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Rubber and Leather BELTING,

RUBBER HOSE PACKING, TUBING, SPRINGS, GASKETS, Etc.

RUBBER CLOTHING, LACE LEATHER, BELT HOOKS,

RAILROAD, MINING, AND MILL SUPPLIES.

No. 21 Park Place, NEW YORK.

of an inch to sixteen inches, and in width to thirty inches, and has a capacity of from 2,500 to 3,500 feet per hour. It is a well recognized fact that a bridge which is painted will long outlast an unpainted one, but the expense and difficulty of *thoroughly* painting unplaned timber have been great drawbacks. As a planer is now made capable of planing large timbers, much of the trouble is at once removed. This Company are in possession of many commendatory letters, and feel that BEAN'S ADJUSTABLE SWING BED PLANER supplies a long-felt want. They are now able to supply on demand the regular sizes, and will soon be in a position to fill all orders for the extra sizes. The CONTINENTAL CONSTRUCTION COMPANY'S works at Concord, N. H., include the buildings lately used as the Concord State Prison, to which they have largely added, so that they now have two shops 24x48 feet and two 64x31 feet, with blacksmith shop, etc., all fitted with the most approved machinery and all modern appliances. They do a large business, both in manufacturing for themselves and for other dealers, and their works are well worth a visit.

Automatic Car Coupler.

WE append a brief description of an invention by Mr. F. P. STEBBINS, of Collins, Mich., who has secured letters patent for its protection. He claims that his coupler is simpler in its mechanism, quicker in its action, cheaper in its construction and easier to adopt than any other. Coupling is practicable and easier by its use without the link and pin, when with like drawbars as itself; and only link and pin are necessary when coupling with other drawbars. While the engineer does all the coupling with his engine, by pushing the cars together, he is not annoyed by delays consequent upon miscouplings, nor obliged to wait for brakemen to run from five to thirty rods before a coupling can be made. He will be somewhat disappointed in breaking drawbars, because these can only be broken on a pull, and not by the usual method of slamming cars together. Being made in the arrow head form, having catch-shoulders above and below—it is immaterial which drawbar goes above or below—a coupling is insured. The catch-shoulders being laterally convex from side to side, a corner engagement and side-wise pull on bends or curves of the track are avoided. The shank is flattened, and on each side of it is a longitudinal horizontal flange of sufficient width to make the full breadth of the shank equal to or larger than the head. By means of these flanges the drawbar is held in proper position so that it will not strike the bumpers of the car-frame in its movements, and need not be of excessive weight. The rear portion of the drawbar is not fastened differently from those now in use, excepting that the guide plates and the cross-bar which hold up the head should be lowered several inches to allow the heads sufficient room to couple and uncouple easily.

The uncoupling attachment is a transverse shaft arranged horizontally in bearings on the car frame, and extends over the center of the drawbar. From the drawbar, directly underneath the shaft, is a piece of chain several inches in length which securely fastens the drawbar and shaft together. In uncoupling cars, the handles of the shaft are turned about one revolution, which winds the chain around the shaft elevating the upper drawbar sufficiently high to disconnect the catch-shoulders on each drawbar. When cars are very uneven in height the lower drawbar can be raised by said chain; and the ratchet wheel fastened to the shaft with a catch will hold said lower drawbar on an equal height with the upper drawbar, thus solving the problem of coupling cars of uneven height. Bumpers are used to keep the cars apart like those employed on the New York, Lake Erie and Western, and the Delaware, Lackawanna and Western railroads.

The "Little Giant" Jack.

MESSRS. I. & D. W. SHONDY, of Paw Paw, Ill., have been granted a patent on their "Little Giant" Jack, which is in considerable use, although on the market but a few months. The claim is made for it that it will raise the track in one-third of the time required by other jacks, and that it can raise from the thirtieth part of an inch to any height required. It is made in a single or double form. In the single form the jack consists of two standards, and it sets with one of these on each side of the rail. There are three pulleys at the top of the standard and a double pulley at the bottom. The pulley at the bottom is provided with a dog which grabs the rail. A chain is fastened at the top of the pulley block, which passes upwards and over the pulleys in the top of the standard, and back down through the pulley block. The chain then passes back again over the pulleys in the top of the standards, and finally to a winding shaft, which is turned by means of a double crank or lever. While strong and durable, the new jack is a light machine. The patentees announce their readiness to give any further information required, which is also supplied by Messrs. Minnigerode & Co., of New Orleans, La., and Mr. J. H. Langley, No. 8 Exchange place, Boston, Mass.

MAJOR R. W. PITRIKEN, chief engineer of the Mexican and Oriental Railway, was murdered by Indians, in the mountains near Chihuahua.

Anthracite Coal Tonnage.

THE following is an official statement of the anthracite coal tonnage for the month of September, 1882, compared with the same month in 1881:—

	1882.	1881.
Philadelphia and Reading Railroad	644,541	655,666
Lehigh Valley Railroad	492,360	504 739
Central Railroad of New Jersey	351,814	360,608
Delaware, Lackawanna and Western	400,313	380,013
Delaware and Hudson Co.	282,097	292,373
Pennsylvania Railroad	227,876	196,698
Pennsylvania Coal Co.	128,608	144,627
New York, Lake Erie and Western Railroad	30,830	43,293
Total	2,558,443	2,588,218

The following is the statement for the year 1882, compared with the year 1881 :—

	1882.	1881.
Reading Railroad	2,899,124	4,938,351
Lehigh Valley Railroad	4,237,307	4,025,782
Central Railroad of New Jersey	3,068,629	2,938,125
Delaware, Lackawanna and Western.	3,343,632	3,128,327
Delaware and Hudson Canal	2,240,983	2,300,055
Pennsylvania Railroad	1,747,105	1,637,284
Pennsylvania Coal	1,045,970	1,037,621
New York, Lake Erie and Western Railroad	195,493	355,816
Total	20,778,246	20,361,363

The stock of coal on hand at tide-water shipping points, September 30, 1882, was 513,934 tons; on August 31, 1882, 603,042 tons, decrease 89,108 tons.

There were exported from the United States last year 99 locomotives, 11,697 car wheels, and 2,164,648 pounds of iron rails.

THE German Government has adopted a new regulation on its lines of railway. In future the carriages will be painted of the same color as the tickets of the different classes—first, yellow; second, green; third, white.

AT the annual meeting of the Cincinnati Sandusky and Cleveland Railroad Co., at Sandusky, Ohio, on the 18th inst., George Wilshire, Cincinnati, John W. Russell, Sandusky, and Asa Bushnell, Springfield, were elected directors for three years. The directors elected the following officers : J. S. Farlow, Boston, president; N. W. Pierce, Boston, vice-presi, dent; J. L. Moore, Sandusky, secretary and treasurer; A. P. Simpson, Boston, assistant treasurer and transfer agent.

The D. K. Miller Improved Padlock.



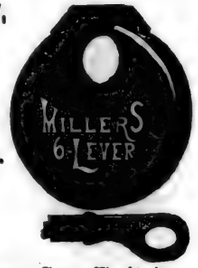
SUPERIOR TO EVERY OTHER

In Mechanical Construction, Security, and Durability.

MADE OF BRASS,

With Springs of the Celebrated Phosphor-Bronze,

And Warranted to Stand in Every Climate.



UNPICKABLE, NO RUSTING OR CORRODING.

Shown by general use to be the BEST Padlock in the Market for Railway Cars, Switches, Tool Boxes, and for all other purposes for which padlocks are used.

Every Padlock with a different Key and *Master Key* to unlock them all ; or all Padlocks with same key if required.

Send for Circulars with Details and Prices.

FAIRBANKS & COMPANY, Agents,

Philadelphia, Baltimore, New Orleans, **NEW YORK.** Buffalo, Pittsburgh, Albany.

THE SALMON CAR HEATER



"36 per cent of coal saved and the car kept noticeably warmer!"
by using THE SALMON CAR HEATER.
It Insures Safety from Fire in case of Accident, Economy in Fuel and RAPID CIRCULATION. It heats quickly, is SELF-REGULATING, and can be used for either STEAM OR HOT WATER.

The Water Tubes do not come in contact with the Coals, but occupy the Smoke Flue in such a manner as to absorb the greatest amount of heat from Coal in a low state of combustion without danger of chilling the fire.

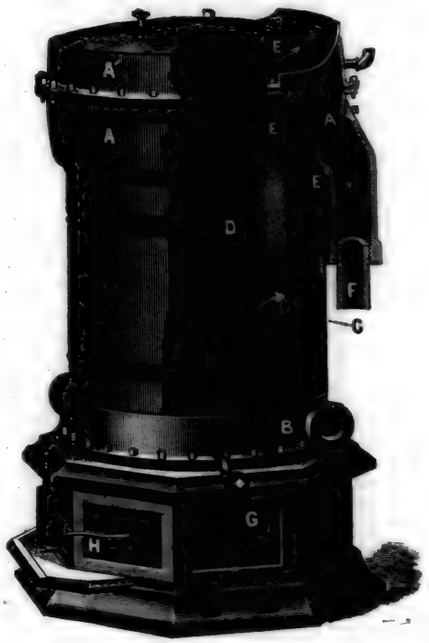
Once filled with coal the fire will last from 24 to 60 hours, according to weather, without replenishing, as proved by actual test.

At the last "Mechanics' Fair" it received the Silver Medal, being the highest award to heaters of any kind.

CORRESPONDENCE SOLICITED.

The Salmon Heater Co.

OFFICE, 35 CONGRESS STREET, BOSTON, MASS.



Established 1863.

MOLLER & SCHUMANN

Manufacturers of Fine

COACH AND CAR VARNISHES.

BROOKLYN, N.Y. U.S.A.

STEEL CAR PUSHER

MADE ENTIRELY OF STEEL. ONE MAN with it can easily move a loaded car.

Manufactured by E. P. DWIGHT,
DEALER IN RAILROAD SUPPLIES,
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ESTABLISHED IN 1836.

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Wilmington, Delaware.

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First-Class English

IRON AND STEEL RAILS

AT LONDON PRICES, F. O. B.

We also purchase all classes of Railroad Securities and negotiate loans for Railroad Companies.

Wm. A. Guest & Co.,
MECHANICS' BANK BUILDING,
Nos. 31 and 33 Wall Street, - New York.

SAFETY RAILROAD SWITCHES,

WITH MAIN TRACKS UNBROKEN.

Railroad Crossings, Frogs, and other Railroad Supplies,

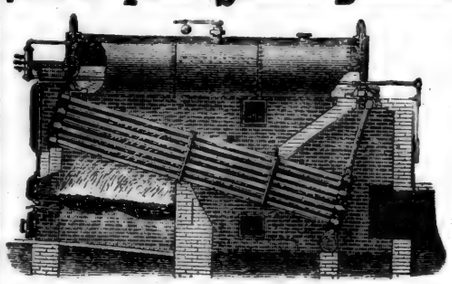
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WHARTON RAILROAD SWITCH CO.,

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Works: 23d and Washington Avenue.
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WATER TUBE STEAM BOILERS.



THE BABCOCK & WILCOX CO.,
30 Cortlandt St, New York.
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HILL'S IMPROVED TICKET PUNCHES

Were Awarded Gold Medals

At the Melbourne International Exhibition, Australia, 1880, and at Adelaide, 1881.

PATENTED NOV. 7, 1876.



Suitable for any ticket in use.

No. 3 Punches adapted for limited and duplex tickets, also B C ¼ and L Punches, six styles; the most perfect and durable in use. Before purchasing, send for descriptive catalogue giving full list.

WARREN HILL, Manufacturer,
232 Friend Street, Boston, Mass.

A FREE GIFT.

Any of our readers who will enclose two 3 cen stamps in a letter to the **Columbus Buggy Co., Columbus O.,** will receive in return a beautifu engraving in colors, representing an **Australian scene,** and their manner of traveling in that country with **Ostriches** as a motor. They **give** this picture (the packing costing six cents) to **all** who may send for it, desiring in this manner to make themselves more widely known to the people.

[Mention this paper].

CORRESPONDENCE.

[We pay no attention to communications unless the name and address of the writer are given, though the name will not be published if so requested. We assume no responsibility for statements made by correspondents, and we do not necessarily endorse ideas advanced by them. Under these conditions we think it of value to our readers to devote a liberal space to the free discussion by others—whose opinions may be at variance with our own—of subjects pertinent to our department of journalism.]

Editor American Railroad Journal:

Dear Sir:—I have noticed several articles in your Journal relating to improvements in car-couplings. While it is not my aim to write in favor of any patentee, it is my desire to write in the interest of my fellow-men, and if in your valuable paper I may drop a word or make a suggestion that will have a tendency to check this death rate of laborers on railroads, I will think that I have done more good than I can do by *dissecting* their limbs. The knife and saw have been used too long. Too many women and children have been driven to the frozen door of starvation. The people demand, in the interest of humanity, that railroad officials take some measures to prevent it. Perhaps a better arrangement for coupling cars can be secured by appointing a committee to examine the various improvements in car-couplings recently granted and recommend the best for adoption. Let a time be set, an invitation be given to the patentees to appear and exhibit their invention, in model form, and a free pass be given to all the inventors to and from the place of meeting. Should such steps be taken I venture the assertion that the day is not far distant when the present death traps will only be known as things *that were*. Yours truly,

J. R. Welch, M.D.

Spencerville, O., Oct. 19, 1882.

Hudson River Tunnel.

Work on the Hudson River Tunnel is being steadily pushed forward, and by Nov. 1 the large air compressor now building for the tunnel by the Clayton Steam Pump Works of Brooklyn, N. Y. (three of whose compressors have been used since the commencement of the tunnel), will be placed in position and working at the foot of Morton street, New York. This air compressor is of the Clayton Improved Duplex pattern, having two 22-in. diameter steam cylinders, two 24-in. diameter air cylinders and 30-in. stroke. It is 20 ft. in length, 10 ft. in width; weighs 25 tons; and its working capacity is 3,750,000 cubic feet of air per 24 hours.—*Engineering News.*

The bridge of the Mexican National Railway over the Rio Grande at Laredo is now rebuilt, and traffic fully resumed. The gross earnings for the first week from Corpus Christi to Monterey—333 miles—were $17,300. The running expenses about 56 per cent.

"Bedad, Pat, wud yes luk at 'em now?" said Mike, who was gazing intently at a procession honoring St. Patrick's Day in the march. "See, now, the fellows phat drinks the whuskey all on fut, and the fellows phat sells it all a' roidin'."

IMPORTANT ANNOUNCEMENT TO INVENTORS.

That department of the American Railroad Journal which contains descriptions of new inventions properly coming within its range of subjects, is regarded with great notice and favor, particularly by those directly interested in learning what the latest applications of mechanical ingenuity in railroading are, and by those who have produced inventions which they desire to make as widely known as possible. The large and widespread circulation of this paper, its prestige as the oldest railroad journal in the world, and the weight attached to its contents by the general consent of leading railroad men in all countries, give such value to its carefully prepared descriptions of new machinery and appliances as cannot be found outside of its columns. The interest manifested by inventors in supplying us with information of their doings, and the eagerness with which this is received, encourage us to give an increased attention to that department of this paper treating of new inventions. *We therefore repeat our invitation to all persons who have produced what they regard as improvements coming within the range of railroad operations, to communicate with us promptly regarding the same.* All matter sent us will be thoroughly examined and considered, and no inventions in our opinion likely to be practicable and useful will be passed over without receiving due attention from us.

List of Recent Patents for Inventions Relating to Railway Interests.

265,958. Safety Guard for Railways: Philonzo F. Given, Cedar Rapids, Iowa. Filed Nov. 15, 1881.

265,965. Car Wheel: Edward E. Josef, Buffalo, N. Y, Filed March 13, 1882,

265,977. Car-Coupling: John S. Owen and George H. Snider, North Indianapolis, Ind. Filed March 7, 1882.

265,987. Hand Car: George S. Sheffield, Three Rivers, Mich., assignor to the Sheffield Velocipede Car Company, same place. Filed July 17, 1882.

265,999. Railroad Track Gauge and Level: Francis A. Watson, Bainbridge, Ind. Filed June 30, 1882.

266,027. Magnetic Electric Railway Signal: Wesley W. Gary, Boston, Mass. Filed June 1, 1881.

266,061. Car Wheel: Frederick H. Smith, St, Denis, Md. Filed August 26, 1882.

266,097. Railroad Signal: Joseph A. I. Claudon, Titusville, Pa. Filed April 17, 1882.

266,103. Locomotive Driving Car: William Crippen, Cadillac, Mich. Filed August 12, 1882.

266,138. Car-Coupling: Nathan M. Hale: Grand View, Tex. Filed April 18, 1882.

266,163. Railroad Signal: J. Miller Kelly, Rochester, N. Y. Filed May 10, 1882.

266,165. Nut Lock: William C. Ladd, Kingsley, Fla. Filed July 18, 1882.

266,190. Stock-Car: George F. Oehrl, Belle Vernon, Pa. Filed March 9, 1882.

266,195. Track Lifter and Holder: Alexander C. Phillips, New Castle, Pa. Filed March 25, 1882.

266,202. Car-Coupling: Cyrus Roberts, Three Rivers, and H. Duane Brockway, Detroit, Mich. Filed May 9, 1882.

266,203. Car Reflector: Chas. Robinson, Cambridgeport, Mass. Filed April 1, 1880. Renewed May 9, 1882.

260,260. Car-Brake: Henry Barratt, York, Pa., assignor of one-third to Jacob D. Miller, same place. Filed Feb. 17, 1882.

10,217. Railroad Switch Signal: Augustus H. Baker, Hartford, assignor one-half to Henry L. Pinney, South Windsor, Conn. Filed April 20, 1882. Original No. 229,075, dated June 22, 1880.

266,272. Guide for Engine Cross-Heads: Francis W. Dean, Cambridge, Mass. Filed Aug. 8, 1882.

266,297. Railway Signal Apparatus: Joseph P. Livermore, Boston, Mass. Filed Feb. 13, 1882.

266,311. Fire Extinguisher for Railroad Cars: H. Purdy, Burlington, Iowa. Filed April 6, 1882.

266,322. Railway Car: Charles S. Smith, Bath-on-the-Hudson, N. Y. Filed April 13, 1882.

266,323. Adjustable Hood for Car Platforms: Charles S. Smith, Bath-on-the-Hudson, N. Y. Filed April 13, 1882.

266,392. Stock Car: Samuel W. Remer, Bridgeport, Conn., assignor to Child & Oliver, New York, N. Y. Filed June 12, 1882.

266,427. Spark Arrester: Joseph W. Budd, New York, N. Y. Filed Nov. 23, 1881.

266,464. Railroad Spike: Howard Greer, Chicago, Ill., assignor of one-half to George H. Christy, trustee, Sewickley, Pa. Filed Mar. 3, 1882.

266,472. Car-Coupling: William H. Heaverin, St. Louis, Mo., assignor of one-half to William H. Calvert, same place. Filed July 31, 1882.

266,512. Car-Coupling: John D. Perry, Naperville, Ill., assignor of one-half to Jasper L. Dille, same place. Filed July 31, 1882.

266,537. Car-Coupling: Lewis Seitz, Bloomville, Ohio. Filed Sept. 21, 1882.

266,551. Locomotive Boiler: George S. Strong, Philadelphia, Pa. Filed Aug. 28, 1882.

266,558. Car-Coupling: Arthur M. Trude and William Gray, Hartford, Conn., assignors of one-third to Chas. H. Cooley, same place. Filed July 28, 1882.

266,563. Car-Coupling: Gustave Wallenberg, Chicago, Ill. Filed Aug. 5, 1882

ORGANIZATION.

The officers of the Boston Mining and Stock Exchange, elected on the 19th inst., are: President, E. D. Goodrich; vice-president, W. J. Mann; treasurer, C. H. Smith; secretary, Paul Sutorius.

At the annual meeting of the stockholders of the Vermont and Canada Railroad Company, held at Bellows Falls, Vt., on the 19th inst., the following directors were chosen: Charles E. Billings, Francis A. Brooks, John D. Bryant, Albert Clarke, Thomas F. Clary, Alfred S. Hall and William H. Webb.

The directors of the American District Telegraph Co., elected on the 19th inst., are:—Thos. C. Platt, John F. Pattison, Thos. T. Eckert, C. M. Depew, A. B. Johnson, Jay Gould, D. H. Bates, Wm. F. Drake, F. B. Wallace, W. C. Humstone, D. N. Crouse, H. K. Sheldon, and C. A. Tinker. The Board organized by electing Thos. T. Eckert, president, and D. H. Bates and W. F. Drake, vice-presidents.

At the annual meeting of the stockholders of the Columbus, Springfield and Cincinnati Railroad Co., at Columbus, Ohio, on the 20th inst., the following directors were elected: J. S. Farlow, N. W. Pierce, and J. D. Farnsworth, of Boston; J. D. Chamberlain and J. L. Moore, of Sandusky; J. H. Thomas, of Springfield; and J. A. Jeffrey, of Columbus. The board elected as officers, J. S. Farlow, president; J. D. Farnsworth, vice-president; J. L. Moore, secretary and treasurer, and A. P. Simpson, assistant treasurer and transfer agent at Boston.

At the annual meeting of the stockholders of the Edison Electric Light Company on the 20th inst., the following board of directors was elected to serve for the ensuing year: Norvin Green, S. P. Eaton, G. P. Lowrey, Thomas A. Edison, E. P. Fabbri, Henry Villard, James H. Banker, Calvin Goddard, Edward D. Adams, Frederick W. Foote, Jose F. de Navarro, Edward H. Johnson, and William H. Meadowcraft. At a meeting of the directors held on the 25th inst., the following officers were chosen: President, S. B. Eaton; vice-president, Edward H. Johnson; treasurer, E. P. Fabbri; secretary, Calvin Goddard. Executive committee—E. P. Fabbri, Grosvenor P. Lowrey, Edward D. Adams, Henry Villard and S. B. Eaton.

BUSINESS CARDS.

ALLEN PAPER CAR WHEEL CO., 240 BROADWAY, New York.

BROWN BROTHERS & CO., BANKERS AND BROKERS, 59 Wall Street, N. Y.

BABCOCK & WILCOX CO., WATER TUBE STEAM Boilers, 30 Cortlandt Street, N. Y.

BROWN MANUFACTURING CO., ABSORBENT Wiper Cloths, Providence, R. I.

BEARDSLEY, D. N. & CO., MANUFACTURERS OF Superior Oak and Chestnut Lumber, and Railroad Ties, 9 Murray Street, N. Y.

CHESTER STEEL CASTING CO., MANUFACTURE Steel Castings, Cross-heads, Rocker-arms, Pistonheads, etc., for Locomotives, 407 Library St., Phila., Pa.

DAVIDS, JOHN B. & CO., WRITING INKS, 184 William Street, N. Y.

DAVIS, JOHN H. & CO., BANKERS AND BROKERS, 17 Wall Street, N, Y.

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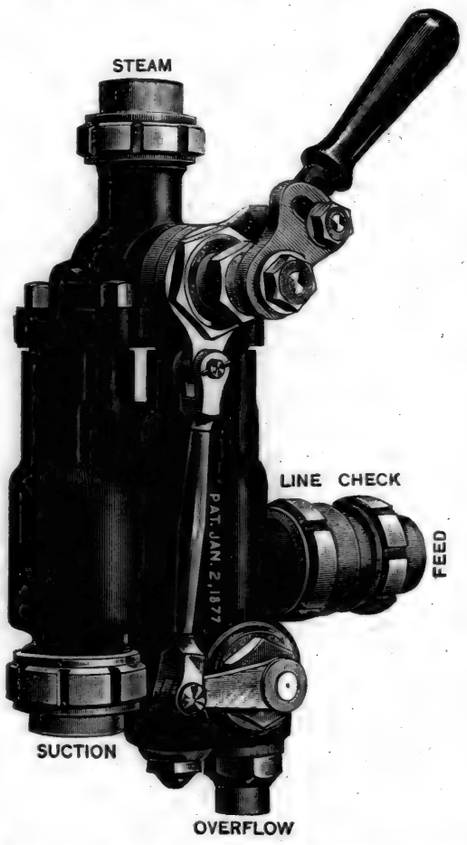
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[Written for the AMERICAN RAILROAD JOURNAL.]

The Transportation of Live-Stock from the West.

A MODEL RESTING PLACE.

BELLOWS FALLS, VT., Oct. 21, 1882.

HAVING some spare time in this place, and also having heard much about the stock-yards and feeding grounds on the line of the Cheshire Railroad at Cold River station one mile from this place, on the New Hampshire side of the Connecticut River the writer thought that a description of them would be of interest to the readers of the JOURNAL and the live-stock shippers who are unacquainted with their merits. A few remarks about the Cheshire Railroad, with which many are unfamiliar, will be of interest. This road, running from Bellows Falls in Vermont to Fitchburg, Mass., a distance of 65 miles, is an important short link in a long through line. It is fed by the Central Vermont and Grand Trunk roads, and is obliged to fight for its business against the line formed out of the first two roads with the Northern of New Hampshire and the Boston and Lowell. The Cheshire has for its Boston terminal the Fitchburg Railroad, who helps it in the struggle against its rival. This line has won a first-class reputation by the quick time it has made with stock trains, it having more than one record of bringing cattle from Chicago to Boston in four and a half days, and has sometimes made that time in the dead of winter, when the more southern routes were blocked with snow. It is proper to admit that this could not be done unless the executive ability was good which stood behind it; and the officers of the Cheshire alone have done no small part by their watchfulness and energy to contribute to the results quoted above. The road is managed by Mr. R. Stewart, who has aged with his charge, and who is assisted by J. W. Dodge, general freight agent, yet a young man, but who has been for many years in the road's employ, and whose eyes are open to the interests of his department. The offices of theabove gentlemen are at Keene, N. H.

A great many cattle and horses from Canada, as well as from the west, come down this way to the Boston market, and it is profitable as well as humane to rest and recruit them, in order that they may appear well at the time of sale; and the great need, viz., that of a resting place and feeding ground near enough to Boston to have the cattle within easy call both for the markets and the European steamers, has been supplied in these Cold River grounds, as a train can be run from here to Boston in ten to twelve hours any time, the distance being only one hundred and thirteen miles. As one leaves the cars at this station, the first object to attract his attention is a long row of pens for hogs, ten in number, roofed in and capable of holding four hundred. These are built on a level with the cars, and each one contains a trough for water, and lanterns for use at night, as it is sometimes necessary to load them. Back of these, and reached by an easy decline from the railroad, are twenty-one pens for cattle, some of which have sheds covering a portion of them, and in all is brought pure spring water in pipes from springs on Fall Mountain, at the base of which the yards lay. These springs are at the back or further side of the mountain, and the pipes bring the water one and a quarter miles—and such water! Many a city person pays a few cents per glass for spring water not half so good. The use of these yards may be judged from the fact that in times past, and before the dressed beef business had assumed its present proportions, one thousand one hundred cattle have been rested and fed here in a single week and 1,000 have been here at one time. Next to the cattle pens are the sheep-yards, and they are as near perfect as they well could be, comprising 7 fields of from 4 to 7 acres each, with a good growth of sweet grass and the same spring water spoken of before. These fields are well dressed and resown every year and yield a rich grass. Large numbers of sheep are fed here annually, there having been at certain seasons of the year as many as 2,700 at one time, and the total number in the twelve or thirteen years the yards have been opened must be enormous. The agent of the road, Mr. S. B. Green, a man well posted in his business, says that sheep fed in these succulent fields will gain five to six lbs. each in forty-eight hours. At times the capacity of the yards—and they occupy forty acres in all—are over-taxed and pasturage land has to be hired for the surplus. The yearly average shows that twelve to fifteen hundred head of sheep per week are rested here. If the dumb brutes who tarry at this place on their long journey were possessed of an eye for beauty, they could but be impressed with their surroundings. The yards are located at the confluence of the Cold and Connecticut rivers, which are on the richest farming lands of New Hampshire, and are surrounded by lofty hills and mountains, presenting to the eye a beautiful picture. There is a hotel at this station of which agent Green is "mine host," and at which the drovers who travel in charge of the cattle are put up for a low price. The house is owned by the railroad; attached to it are several barns for storing hay and grain, the former being sold for $1.35 per hundred lbs. In these barns are stalls for the horses which are rested here, and having accommodations for forty-two. Fifty cents per day is the charge for keeping them. One hundred tons of hay are often kept here at a time. The original cost of this property was $20,000, and considerable money has been spent upon it since in the way of improvements. Cold River has become a sort of trading center for this part of the country, and all who have live-stock to dispose of resort here, and one falls in with some queer specimens of humanity, as well as many honest and genial "tillers of the soil." It is not uncommon to here meet men who have run stock to Boston for twenty-five or thirty years. Farmers living as far away as St. Lawrence county, New York, make up what is known to the trade as "succotash cars," one of which happened to arrive while the writer was looking the ground over, being composed of thirteen head of cattle, seventy-seven sheep, twenty hogs, and some ducks, turkeys and chickens. With this, the owner had "set sail," so to speak, for Cold River and a market; which means that, if he could not sell out to advantage anywhere else he would go through to the Union markets at Watertown, near Boston. As one looks these feeding-yards over, he can but be impressed with their value as a refreshment place for stock in transit; and they are so well managed and the expense of stopping there is so little, that the writer thought that the many readers of the JOURNAL would be interested to peruse a description of them. Knowing that all matters pertaining to the transportation of live-stock are of interest to railroad men, the foregoing is submitted by—

"Curtis."

The Philadelphia and Reading Railroad Company's shops are turning out freight cars at the rate of ten a day.

The Southeastern Railway Company have leased the Montreal and Sorel Railway for twenty-one years, giving the latter company 40 per cent. of the gross earnings.

Of the $474,916,368.50 of cotton goods manufactured in Great Britain last year, $384,866,118.50 was exported, of which $257,245,440 represents the value of piece goods.

THE Georgia Pacific Railroad has been provided with steel rails for sixty miles between Atlanta and Anniston. Within eighteen months the projectors expect to run trains from Atlanta to Columbus.

The Committee on Securities of the New York Stock Exchange has ruled that in addition to the present call of Louisiana consolidated bonds carrying all unpaid coupons, they shall also be called exclusive of all matured coupons.

THE Pittsburgh *Post* says that the Pittsburgh and Youghiogheny Railroad Co. have purchased the West Yough Branch of the Baltimore and Ohio Railroad Co. for which said company gets $300,000, or 4½ times its original cost. The road is about five miles long.

THE Philadelphia and Reading Railroad Company have received 24 of the 30 coal-dirt burning locomotives lately ordered of the Baldwin Locomotive Works. The other six will be finished next month. Six hundred tons of coal-dirt per day is being utilized by the company as fuel.

The relative cost of producing a pound of print cloth, which includes wages, sundry expenses, rent, interest and depreciation of machinery, as figured out by a British spinner in 1876, was as follows: In Lowell, 13.72 cents; Fall River, 14.13; Rhode Island, 11.99; Pennsylvania, 15.59. England, 12.16.

THERE are $52,000,000 invested in mining operations on the Menominee and Marquette iron ranges, Michigan, and about fourteen thousand miners are employed. Take this industry with the lumber interests and the upper peninsula will show nearly if not quite as big a business record as the lower section of the State south of Mackinac Straits.

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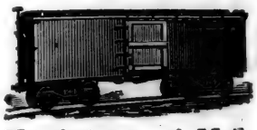
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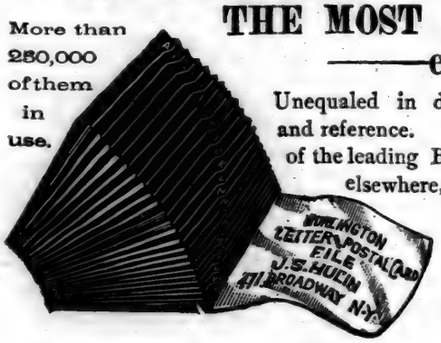
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Leavitt's Patent Elevated Cable Street Railway.

The object of this invention is to at once dispense with the track on the pavement; also the use of horses, or any kind of Dummy or Locomotive in the street. Any or all of which are not very desirable in important business streets or thoroughfares. *By this Patent the desired objects are accomplished.*

For the Lower Route or Local Travel the trucks are run on an elevated track, and the cars are suspended under the truck, the bottom of the passenger cars coming within about one foot of the pavement. The cars can be stopped or started at any time by the brakeman. They will turn curves at any angle desired. The cars pass down one track and up the other by means of an endless steel wire cable and stationary steam-engine, located in the station-house at the center or end of the route.

Any number of cars may be run either way at the same time. The cars and trucks will be much lighter than ordinary street cars to carry the same number of passengers, as the trucks will be run on light steel rails.

The second or upper line will be constructed on top of the lower line, and operated in the same way, with the exception that the cars will be run above the upper track.

The upper line will be for quick transit and through travel, and cars can be run at any speed desirable, with *perfect safety*, as both the upper and lower lines will be built with a substantial channel bar of wrought iron, riveted firmly to the truss-work immediately over the wheels, which will prevent the possibility of the wheels jumping the track under any circumstances.

When either line is to be built, the truss-work can be constructed so as to admit of the second with comparatively small expense, without the least additional obstruction to the street.

The above Railway line can be built with truss-work extending from curb to curb, sufficiently high to be out of the way of all ordinary business in the street, so when the cars have passed a given point the street will be perfectly free from all obstructions, and people residing on the line of this Railway will not be disturbed by the noise of horses, locomotive, dummy, or any long train of cars, as the cars will always be run single and will make but very little noise, excepting a small alarm bell, which will always ring whenever the cars are in motion.

This Railway may be built single or double, according to the business requirements of the street. Either or both lines will be operated, independent of each other, under said *Leavitt's Patent*, dated December 17th, 1878, and September 19th, 1882,

Some of the advantages gained by the use of this Railway:

In the first place you dispense with the large horse stables at the station house, a thing that is always very disagreeable to the vicinity, and only tolerated when unavoidable.

By substituting the Cable Railway in place of horse cars, you will have no stables at all, and in place of the ordinary car house you can have an elegant four-story business house; the first story for the use of the Company's Main Office and Waiting Rooms in front, in the center a arge room for storing cars, with engine and machinery in the rear, one or two hundred feet from the street, all of which can be kept in perfect order. The three upper stories will be desirable property for rent.

The property owners along the line of this Railway will have, instead of the clumsy rumbling horse cars, an elegant Street Railway, that will be at once an ornament to the street and a pleasure to all who wish to travel on the street, either by cars or otherwise. The horse car tracks can all be removed from the street, and the pavement left as smooth and clear as it was before any street cars were ever used. This Cable Railway will be elevated about eighteen feet above the pavement, completely out of the way of all ordinary street traffic. It will be light, airy and elegant when properly built and painted as it should be.

A person walking on either sidewalk can see all the buildings on the opposite side of the street. In fact, the truss-work will be so open that you can see everything on the street just as well as you could if there were no railway. The columns will set inside the curb stones, all excepting the center line, which will be exactly in the center of the street, leaving the street entirely free to the public on both sides of the center after the cars have passed any given point. The columns in the center will be thirty feet apart, or more if desirable, so that teams or carriages can pass from one side to the other of the street without the least obstruction. Not so with horse car tracks in the street. With them it is very difficult to pass from one side of the street to the other with a loaded team, or even with any light carriage, as there are and always will be large ruts on each side of the rails, which are very liable to spring the axles or wheels, and extremely dangerous to pass over.

The Cable Railway, besides being ornamental to the street, will be found very useful in many respects, independent of being one of the most delightful and safe ways of traveling that was ever invented. The cars will run so still that a person could write a letter when the car is under full headway. There will be no rumbling noise like horse cars, as there are no wheels under the cars or anything else to make any noise at all. People going to or from their business, or those riding for pleasure, can converse as pleasantly as they could in their office or parlor at home. When you get into this car you only have one step from the ground.

The roof and windows will be somewhat higher than ordinary horse cars, which will give better light and ventilation. There are also many other advantages of great value to the citizens of the street where this railway is to be used. The day of telephone and electric light is at hand. By using this Cable Railway you can dispense with not only the horse cars and their inconveniences, but do away with the unsightly and irregular string of lamp posts, hitching posts and telegraph poles which are strung along over streets without regard to order or beauty, and have in their place elegant wrought iron columns every thirty feet, perfectly on a straight line, thus forming a beautiful colonnade the whole length of the street on both sides.

As often as hitching posts are needed you can drill into any of the columns and attach a ring for hitching places. Instead of ordinary lamp posts, the gas pipes may be taken to the center of the Railway Truss Work and light the street from the center, thereby reflecting the light both ways from the center of the street, which will light the street much better than from the sides, as they are now compelled to do. The time is close at hand when about every family on all principal avenues will want a telephone. With this Railway all can be accommodated, as there will be an abundance of room on the top of the truss work to carry five hundred wires, and each family can have a wire from any place to their home, and from there to office, and have a safe place for their wires with very little cost compared with setting any kind of posts.

Instead of having the street lighted with gas, it should be lighted by electricity, the wires being placed on the center of the railway truss and dropping below the top like a chandelier in a parlor. The whole street as well as the station-house should be lighted with electricity, and the effect would be grand.

Any person wishing further information can address Charles Leavitt, 18 Diamond [illegible] Cleveland, O.

[The Daily Citizen, Ottawa, Oct. 4.]

Appointment.—Mr. James J. White has been appointed to the charge of the Canadian department of the American Railroad Journal, of New York, the oldest-established journal of the kind in the world. Mr. White is a gentleman of well-known ability, and in securing his services our American cousins have acted wisely.

The world is full of advertising; yet every one wants to see what is new.

The car on the New York division of the Pennsylvania Railroad into which the electric light was recently introduced with success has been put into regular service. Arrangements are being made to light other cars in the same way.

The following is the process for water-proofing canvas, and woven fabrics generally: The fabric is taken successively through baths of sulphate of alumina, and soap and water. The common sulphate of alumina of commerce (called concentrated alum cake) answers very well for the first bath. It readily dissolves in cold water, to the extent of 1 part in 10 parts of water. The three baths of alumina, salt, soap and water should be arranged side by side, so that the canvas may be passed from one to the other. The soap bath should be kept hot, and some arrangement should be devised to keep the stuff down in the bath while being passed through. The fabric should be thoroughly soaked in alumina bath. The theory of the operation depends on the formation of an insoluble alumina soap which adheres to the fiber of the fabric, and which is water-repellant. The goods so treated are left quite pervious to air, but will resist water.—*Painters' Magazine.*

AMERICAN Railroad Journal.

ESTABLISHED 1831.

Steam Navigation, Commerce, Finance, Banking, Machinery, Mining, Manufactures.

SECOND QUARTO SERIES.—VOL. XXXVIII., No. 43.] NEW YORK, NOVEMBER 4, 1882. [WHOLE No. 2,428.—VOL. LV.

THE editor of the RAILROAD JOURNAL is pleased to receive information of railroad enterprises already entered upon or projected, items regarding the business done on the roads, such as relate to persons employed in the railroad and kindred interests; in short, about all matters which the readers of such a paper as this are gratified to find within its columns.

PERSONAL.

W. F. MCKENZIE of the Central Vermont Railroad has accepted the position of Master of Transportation on the Mexican Central Railroad.

AT a meeting of the directors of the Southwestern Railroad Company held at Macon, Ga., on the 30th ult., John E. Jones was elected to the presidency to fill the unexpired term of the late Gen. W. S. Holt. Vice-president Raoule was elected to fill the place on the board made vacant by the death of William M. Wadley. J. J. Gresham was elected to the place in the board made vacant by the promotion of Mr. Jones.

WALTER H. BARNES has been appointed General Superintendent of the Boston and Albany Railroad in place of Charles O. Russell resigned. He will enter upon the duties of his office December 1, 1882, with headquarters at Boston. Edward Gallup has been appointed Assistant General Superintendent, with headquarters at Springfield. He will enter upon the duties of his office December 1, 1882. Mr. G. will also have general charge of the passenger traffic.

ORGANIZATION.

A preliminary organization was effected on the 26th ult., at Williamsport, Pa., for the construction of the Binghamton and Williamsport Railroad. The capital stock is fixed at $3,000,000. The length of the line is 100 miles. The surveys are to be commenced at once.

AT a meeting of the stockholders of the Toledo and Milwaukee Railroad Co., on the 27th ult., C. R. Cummings, of Chicago; C. S. Brice, of Lima, O.; General S. Thomas, of Columbus, O.; J. A. Latcha, of Cleveland, O., and James E. Neale, of Hamilton, O., were elected directors.

The directors of the Lowell Horse Railroad Company, recently elected are: W. E. Livingston, J. A. Goodwin, and J. A. Chase, of Lowell, Mass.; and G. F. Comstock and G. E. Kennedy, of Syracuse, N. Y. The officers are: President, W. E. Livingston; vice-president, J. A. Goodwin; clerk, treasurer and superintendent, J. A. Chase.

At a recent meeting of the stockholders of the Cincinnati, Wabash and Michigan Railway Company, the following directors were elected: J. H. Wade, H. B. Payne, W. Bingham, C. P. Leland, R. E. Mix, W. S. Jones, C. E. Cowgill, J. A. Defrees, Norman Beckley, F. M. Gray and H. W. Williams. The officers are: President, J. H. Wade; vice-president, W. Bingham; secretary and treasurer, W. S. Jones, and Norman Beckley, general manager.

At the annual general meeting of the Credit Valley Railway, held at Toronto, Ca., on the 26th ult., the following gentlemen were elected directors for the ensuing year: G. Laidlaw, E. B. Osler, R. Hay, M. P., J. L. Morrison, Wm. Arthurs, John Burns, P. D. Conger, W. J. Baines and Chas. D. Rose (London, Eng.) At a meeting of the directors held subsequently, George Laidlaw, was appointed president, and E. B. Osler vice-president for the ensuing year. John Burns was appointed to act as chairman in the absence of the president and vice-president.

CONSTRUCTION.

A STREET railway for Petersburg, Va., is projected.

WORK is progressing on the Chatteroi Railway in Kentucky.

THE general manager of the Tehauntepec Railroad, who is an American, has left the City of Mexico for the Isthmus, and the work of construction will commence at once on the Pacific side.

THE North Shore Railway Company has commenced to lay out a new line, which, by crossing the River St. Charles, will enable trains to run wholly around the outskirts of St. Rochs until they enter the station at the Palais.

A SURVEY is being made for an extension of the Canada Southern Railway to Niagara Falls from Welland, twenty-three miles west to Buffalo, which will shorten the line to the Falls twelve miles and lengthen that to Buffalo four miles.

THE entire length of the railway from Esquimalt Harbor to Johnston's Straits in British Columbia will be about 150 miles, running nearly the whole distance through exceedingly fertile lands. The section from Esquimalt harbor to Nanaime must be completed, according to the terms of the contract, by July 1, 1886; the other section, from Nanaime to Seymour, on Johnston's Straits, must be in working order by July 1, 1890.

WORK has been commenced on the East Brownsville Branch extension, which is to run from the Redstone Branch along the east shore of the Monongahela River into Brownsville. The work is to be completed by the first of next year.

THE last rail was laid on the extension of the Cincinnati, Wabash and Michigan Railroad, from Goshen, Ind., through Elkhart to Benton Harbor, Mich., on the 25th ult. The road is now complete from Anderson, Ind., to Lake Michigan.

THE Pittsburgh, McKeesport and Youghiogheny Railroad is fast approaching completion. The stone work and almost all the grading are finished between Pittsburgh and Monongahela City, and the iron work on the McKeesport bridge is being put up.

THE latest action on the part of the South Eastern Railway Company has been to purchase a controlling interest in the St. Johns and Chambly Railway, and it is stated that the work will be begun within three weeks and the road be in operation by June 15, 1883. From the terminus, behind the Merchants' Bank at St. Johns, the line will run along the wharf to the locks, then through St. Paul street and away down the Richelieu River to Chambly. It is expected to be continued thence to Varennes, where it will connect with the Montreal and Sorel Railway; and a road from St. Johns to Rouses Point, to compete with the Grand Trunk Railway, is also spoken of.

MAJOR A. J. TWIGGS, of Augusta, Ga., has made a contract with the directors of the Georgetown and Lanes Railroad Company for the building and equipment of a railroad from Georgetown to Lane's depot, on the Northeastern Railroad in South Carolina. The length of the line is 38 miles, and the construction of the road will give Georgetown her only railway connection and open up a fine country. The work is to be completed by Nov. 1, 1883. The contractor is to receive a private cash subscription of $25,000 made by the municipality of Georgetown, and first mortgage bonds of the railroad company sufficient to cover any additional cost of construction that may be incurred.

Among the subjects that will be brought to the notice of the directors of the Hannibal and St. Joseph Railroad Company at their next meeting, will be the proposed extension of the road from Quincy to Chicago, a distance of 257 miles. The engineer estimates that it will cost $20,000 a mile to build, and that one year will be occupied in its construction. The preliminary survey has been made. The Chicago, Hannibal and St. Joseph Railroad Company was organized two years ago to build the road, with a capital placed at $6,000,000. If constructed, the road will be built in the interest of the Hannibal and St. Joseph, and Missouri, Kansas and Texas, to form a link for through business.

INCORPORATION.

The Miller Car and Cattle Company, of Oxford, N. Y., with a capital of $225,000, has filed a preliminary certificate of incorporation with the Secretary of State at Albany.

The San Andreas Mining and Smelting Company of New Mexico filed its incorporation certificate at Washington, D. C., on the 30th ult. Saul Strong, J. B. Archer and others are the corporators. Four million dollars is put down as capital.

Articles of incorporation were filed last week with the circuit clerk at Metropolis, Illinois of the Chicago and Paducah, and the Paducah, Metropolis and Chicago railroad companies. The latter road will connect Metropolis with Wetaug on the Illinois Central Railroad. The incorporators are W. R. Brown, E. P. Curtis, R. W. McCartney, J. W. Thrift, W. H. Green, J. C. Willis and A. D. Davis. Capital stock, $500,000.

The San Francisco and San Rafael Railroad Company has been incorporated to construct and operate a railroad from the junction with the San Francisco and North Pacific Railroad, on Tamalpais avenue in San Rafael, by the most practicable route to a point on or near Tiburon Point on Raccoon straits, a distance of about nine miles; thence by a ferry to San Francisco, a distance of about six miles. Capital stock $500,000, divided into 5,000 shares of a par value of $100 each. The directors are: Peter Donahue, James M. Donahue, Arthur Hughes, T. I. Bergin, and Thomas Donahue.

Articles of incorporation of the Chicago, Indiana and Ohio River Railroad Company were filed in the office of the Secretary of State of Indiana on the 26th ult. The proposed line commences at Hammond, Lake county, where connection is made with belt lines for Chicago, running southeast through Lake county, crossing Kankakee River four miles east of the State line, thence due south through Newton county, through to Lake Village, Morocco and Kentland. Thence due south through Benton and Warren, forming connection in Vermillion and Fountain, for the Fountain county coal fields and for Terre Haute and Ohio River. The first board of directors are William Foster, Andrew Hall, William Darroch, James DeWolf, Joseph Law, John Peacock and Greenbury W. McCray. The parties interested in the project state that they propose to be a part of a Chicago line through a connection with the Indiana, Bloomington and Western road.

New York, Susquehanna and Western Railroad.

The formal opening of the New York, Susquehanna and Western Railroad took place on the 27th ult., when an excursion party comprising about 400 persons passed over the road in ten new cars from the Pennsylvania depot to Stroudsburg, Penn., via Two Bridges, N. J., as the guests of the new company.

The New York, Susquehanna and Western Railroad Company was organized under the General Laws of the States of New Jersey and Pennsylvania by the consolidation of the following companies on the 25th of May, 1881: The Midland Railway Company, of New Jersey, the Midland Connecting Railway Company, the North Jersey Railroad Company, the Water Gap Railroad Company and the Pennsylvania Midland Railway Company.

The following are the lengths of the lines of road owned and operated by the New York, Susquehanna and Western Railroad Company:

	Miles.
From West End, Jersey City to Unionville, N. Y.	71.6
From Two Bridges, N. J., to Stroudsburg, Pa.	42.0
From Columbia, N. J., to Delaware Station	3.0
The Paterson City spur	1.0
The line from Blakely to the Delaware, Lackawanna and Western, near Scranton	12.0
From Unionville to Middletown, N. Y., leased	13.9
Total mileage opened and operated, exclusive of sidings	141.5
Sidings	21.0

The gauge of the road is 4 feet 9 inches, the road being laid with 60-pound steel rails for 87 miles, from West End, N. J., to Stroudsburg, Pa., and 54½ miles with iron rail. Five hundred new twenty-ton coal cars are in course of construction, giving an extra capacity of 10,000 tons a week in rolling-stock. Extensive coal properties located in the Lackawanna Valley are under the control of the company, insuring it a tonnage of more than one and a half million tons per annum. The following are the particulars:

	Tons.
Pennsylvania Anthracite Coal Company, about four hundred acres of coal property, in fee and under lease	300,000
From the new shafts of John Jermyn	200,000
Lackawanna Coal Company (limited)	200,000
Filer and Livey	100,000
Winton and Dolph	300,000
Total	1,100,000

The directors of the new company have expressed their intention of marketing their coal through the usual trade channels, and will favor no monopoly of the supplies coming from the mines under their control. The transit of the coal will be from the terminus at Stroudsburg to the neighborhood of Scranton, thence over the Delaware, Lackawanna and Western Company's line to the docks at Hoboken. This transit will be effected under an equitable agreement between the two corporations, to which no limit of time has been prescribed, and is based on the selling price of coal at tide-water.

The capital stock of the company is divided into $8,000,000 preferred and $13,000,000 common, with $2,500,000 first mortgage bonds and $600,000 debenture bonds on the property of the company. A controlling interest in the Pennsylvania and Anthracite Coal Company and other valuable franchises is owned by the company.

A junction of the new line to Sparta, connecting it with the Lehigh and Hudson River Railroad, in the opinion of the engineering and mineralogical experts who accompanied the excursion, will in the near future develop an enormous coal trade and prove a great source of wealth to the new company.

The following are the directors of the New York, Susquehanna and Western Railroad Co.: F. A. Potts, Simon Borg, G. A. Hobart, Charles Menzesher, Henry Marks, R. T. McCabe, W. S. Dunn, of H. B. Claflin & Co., J. S. Rogers, of Rogers Locomotive Works, Charles Siedler, of Lorillard & Co., R. K. Dow, J. L. Farwell, R. S. Chapel, W. A. Tower, of Tower, Geddney & Co., Boston.

The officers of the company are: President, F. A. Potts; vice-president, W. S. Dunn; treasurer, R. S. Chapel; Secretary, J. P. Rafferty.

Iron ship building is increasing at Cleveland.

A patent has been issued to Mr. Francis J. Carney, of Brooklyn, N. Y., on an improved steam valve, which consists of an externally threaded plug, with openings on the sides, and internally threaded valve-box of such size as to allow the plug to screw tightly into it. Suitable provision is made for packing the valve stems. In this steam valve the plug is never wholly removed, and no dust can therefore enter the valve.

It is announced that the New York, Chicago and St. Louis Railroad Co. has completed arrangements by which its trains will run from Buffalo, over the New York, Lake Erie and Western Railroad, to Elmira, and thence over the Lehigh Valley Railroad to this city; and when the latter road is completed to Buffalo, trains will run direct over its track from the terminus of the New York, Chicago and St. Louis Railroad.

The Gilbert Car Works, in East Buffalo, N.Y., are employing 400 men on full time. Two United States mail cars, sixty feet in length, for use on the Buffalo, New York and Philadelphia Railroad, have just been turned out, and 200 new freight cars are being made for the New York, Lake Erie and Western. The Mexican Central has ordered 420 iron trucks, and the Maine Central line, which has just leased the European and North American railroad, running from Bangor to the Nova Scotia coast, and expected to have its southern termination at Boston before long, has ordered 200 cars.

The Passenger Agents of the Chicago, Milwaukee and St. Paul Railway are said to be very proud of the six new palace dining-cars recently introduced on the line of that road. They pronounce them the "handsomest dining-cars ever built." They are now running between Chicago and St. Paul and between Chicago and Council Bluffs. They were constructed by the Harlan & Hollingsworth Company, of Wilmington, Del., and no expense has been spared to make them attractive and luxurious. The cars are under the management of the Pullman Company, and represent in all their departments the last and best results of mechanical and artistic efforts for the safety and comfort of the traveling public.

Mobile and Ohio Railroad.

THE earnings of the Mobile and Ohio Railroad Company for the years ending June 30, 1881 and 1882, were as follows:—

	1881.	1882.
From freight	$1,791,502 66	$1,617,932 23
" passengers	416,126 95	401,701 51
" mails	36,555 08	31,038 80
" express	46,780 00	46,950 00
" miscellaneous	86,852 35	66,651 84
	$2,377,817 04	$2,164,274 38
Expenses:		
Transportation	$575,815 80	$596,237 93
Equipment	303,263 03	293,584 15
Roadway	476,307 56	487,956 68
General	207,099 77	224,366 93
	$1,562,486 16	$1,602,145 69
Net earnings	$815,330 88	$562,128 69

Compared with the previous year the earnings of 1881-'82 show a decrease of $213,542.66, with an increase in expenses of $39,659.53, making a decrease in the net earnings of $253,-202.19.

The total number of miles of road owned and operated during the last fiscal year was 527, viz: Main Line (including the Cairo Extension, which, however, has only been in reliable operation since May 1,) 493; Columbus Branch, 14; Starkville Branch, 11; and Aberdeen Branch, 9. There are also 49 miles of side track, making the total number of miles of track to be maintained 576. The 493 miles of main track are located by States as follows; in Alabama, 61; in Mississippi, 272; in Tennessee, 119; and in Kentucky, 41. The 34 miles of branches are all in Mississippi.

Of the 493 miles of Main Line, 280 are laid with steel rails (including the Cairo Extension), leaving 213 miles of Main Line, 34 miles of branches, and 49 miles of sidings laid with iron rails in good and safe condition. During the past year 288,774 new cross ties have been laid, and 31.13 miles of steel rails have been substituted for iron.

The equipment of the road, which has been maintained in good condition, consists of 75 engines, 28 passenger, 2 special, 10 baggage and mail, 6 express, 1,227 freight and 80 construction and caboose cars; of these 3 passenger and 67 freight cars have been added through the operation of a car trust. It is the purpose of the company to make additions thereto from time to time by means of the car trust system.

The present indebtedness on account of the equipment thus far added by means of the car trust is $50,405.47, which, with the interest thereon, will be met by monthly payments of $854.33, charged as paid in operating expenses. There will be added during the current year 8 mogul engines, contracted for with the Baldwin Locomotive Works, at an aggregate cost delivered of $100,000, to be paid for by 60 monthly payments of $1,650 each, to be charged in like manner as paid in operating expenses.

The number of miles of road operated at the close of the year was 527, against 506 at the close of the preceding year. Mileage of passenger trains, 418,704; freight trains, 737,015; construction trains, 220,774; switch, etc., 116,-809—total, 1,493,302, against 1,531,441 in 1880-'81. Number of through passengers carried, 21,400; local do., 282,552—total, 303,952. Number of passengers carried one mile, 12,409,125, against 11,312,655 in 1880-'81. Average miles per passenger, 40.8. Tons of freight carried north, 138,907.9; do. south, 206,846.8—total, 345,754.7. Number of tons carried one mile, 75,184,535, against 86,956,914 in 1880-'81. Average miles per ton, 217.4. Earnings per mile of road, $4,106.78; expenses, $3,040.12; net, $1,-066.65. Percentage of expenses to earnings 74.03, against 65.71 in 1880-'81—an increase of 8.32, which is attributed to higher cost of fuel and materials generally, forced irregularities and suspensions of service, and diminution of local business. The number of bales of cotton transported was 232,230, exceeding the number carried in the preceding year by 1,281, but the amount from local stations was materially reduced, while the through north bound from competing points was correspondingly increased. These facts amply explain the increase of expenditure as compared with earnings, from this exceptionally important source of revenue. The transportation of materials used in the completion of the Cairo Extension was free, thus further increasing the ratio of expenses to receipts. But notwithstanding all these disadvantages the revenue has largely exceeded the fixed charges, and the company has reason consequently, with increased facilities, to enter hopefully upon the new and unburdened year.

The receipts from sales of lands amounted to $52,005.25, against $49,336.13 last year.

The income of the company (including $2,-796.69 from the previous year) was $2,167,071.-07; from which deduct operating expenses, $1,-602,145.69, and interest on first mortgage and Cairo extension bonds, $456,000, leaving a balance of $108,925.38; of which $53,000 was appropriated to the payment of 1 per cent on $5,-300,000 1st preferred income and sinking fund bonds, September 1, 1882, and a like amount February 1, 1883, leaving a surplus of $2,925.-38 to credit of earnings for 1882-'83.

The capital stock of the company authorized by its charter is $10,000,000, of which there has been issued $5,320,600.

The funded debt June 30, 1882, stood as follows: $7,000,000 1st mortgage 6 per cent bonds of 1879, due 1927, secured by a first lien upon the main line from Mobile, Ala., to Columbus, Ky., 472 miles; $600,000 6 per cent bonds of 1880, due 1892, secured by a first lien upon the Kentucky and Tennessee Railroad (Cairo extension), 22 miles, and by a sinking fund of its gross earnings; $8,650,000 7 per cent preferred income and sinking fund debentures, in four series, viz: $5,300,000 first, $1,850,000 second, $600,000 third, and $900,000 fourth—secured by a first lien upon, and sinking fund of, the proceeds of 1,143,342 acres of land and other real estate belonging to the company, and not necessary for the operations of the road, the same being held in trust by the Farmers' Loan and Trust Co., Trustees. The interest in multiples of 1 per cent, but not exceeding 7 per cent per annum, is payable out of the net earnings of each year remaining after the payment of operating expenses and the fixed interest charges, and is paid on or before the first day of February next preceding the termination of each fiscal year, but only if earned, and is not cumulative.

During the past year there has been added to the sinking fund $68,500 of the 1st preferred debentures, at a cost of $65,031.87, realized from the sales of lands, etc., making the total amount of the sinking fund June 30, 1882, $200,500.

The company has no floating debt beyond the current expenses of the month, which are paid on or before the 15th of the next month. It has, however, guaranteed an advance of $100,000 on account of the Cairo Extension over the amount realized from the sale of the bonds issued for its construction, but said amount is covered by securities specifically held in trust. This excess of expenditure is explained as follows: interest during construction, $36,000; transfer steamer, equipment, etc., $50,929.01; incline locomotive, $8,825; sundries, $4,255.99—making the cost in cash of the extension, with the before-mentioned terminal additions, $640,000.

CONDENSED BALANCE SHEET, JUNE 30, 1882.

Cost of road and equipment	$20,812,281 40
Land department	617,153 79
Sinking fund—1st pref. deben	200,500 00
Cash in treasury	40,428 32
Current accounts	71,032 40
Funds on special deposit for matured coupons and debenture dividends	43,124 50
Materials on hand	325,831 12
Stocks and bonds in Treasury	9,680 00
Car Trust, Series A	50,405 47
Total	$22,170,437 00
Capital stock	$5,320,600 00
Funded debt	16,250,000 00
Bills and pay-rolls, June	99,777 18
Foreign Railroad balances	3,212 52
Interest due and accrued	78,124 50
Trustees car trust	50,405 47
Profit and loss	368,317 33
Total, as above	$22,170,437 00

President.—W. BUTLER DUNCAN.

Directors.—W. Butler Duncan, Cornelius H. Clark, Adrian Iselin, Jr., Jacob Hays, Jas. H. Fay, W. H. Hays, A. L. Rives, Moses Waring, Henry Hall, W. H. Pratt, A. S. Gaines, E. L. Russell, J. P. McMahon.

Vice-Pres't and Gen'l Manager.—A. L. RIVES.

Secretary and Treasurer.—HENRY TACON.

Ass't Sec'y and Transfer Agent.—CHAS. WALSH.

THREE hundred dollars a year gives a spacious and elegant residence in the Azores. Servant wages are $2 to $5 a month; one cent a pound buys the finest grapes; meat and chickens cost about fifty per cent less than here; fish is excellent and abundant, and vegetables are plenty and cheap.

THE bridge which is to be built across Brandywine Creek by the Baltimore and Ohio Railroad Company will be of iron with stone piers, and will be 1,300 feet long. Arrangements are now being made to quarry the stone on both sides of the creek. The masonry will be done by the day and not by contract, and the iron work will be done at the company's mill in Baltimore.

WE acknowledge hereby the receipt of a pamphlet of twenty-four pages giving an exhaustive account of W. H. Cory's Artificial Fuel and press for use in its manufacture. The pamphlet is a reprint of a paper read before the Engineer's Club, of Philadelphia, October 7, 1882. It is a useful production, and all interested should procure a copy. The author is a resident of Philadelphia.

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WE invite railroad officers to send us notice of elections, transfers, appointments, resignations, etc.; and all our readers would oblige us by furnishing for our columns any items of personal information, which may come to their knowledge, and are adapted to this department. We aim to record all new railway enterprises in the United States and Canada, and to note the progress of construction on all new roads and extensions; and we request all concerned in railway building to give us early information regarding the above, that our reports may be as complete as possible.

Subscribers are requested to report to our office any irregularity in receiving the JOURNAL.

Contributed articles relating to Railroad matters generally, Mining interests, Banking and Financial items, Agricultural development, and Manufacturing news, by those who are familiar with these subjects, are especially desired.

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New York, Saturday, November 4, 1882.

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WHO BOUGHT THE "SENEY" ROAD?

THE event of the week is the reported transfer of a controlling interest in the New York, Chicago and St. Louis Railway, otherwise known as the "Nickel Plate." There seems to be no doubt that prominent members of the syndicate have parted with a sufficient amount of the common and preferred stocks to surrender the control. The purchasers are said to be J. H. DEVEREAUX, President of the Cleveland, Columbus, Cincinnati and Indianapolis Railway, and STEPHENSON BURKE, Vice-President of the Columbus, Hocking Valley and Toledo Railway. Both of these last mentioned roads have intimate relations with the New York Central and Hudson River Railroad, and it is not surprising that the public takes it for granted that the purchase is virtually made in Mr. VANDERBILT's interest, if not directly by him—although even this is left in some doubt.

If true, this is the most conspicuous instance in this country, or in the world, of a railroad being built on speculation—that is to say, being built with the intention of selling it to a rival; and it is creditable to the foresight of the projectors that they so laid their plans and located their line that it was deemed wiser by Mr. VANDERBILT to buy it up than to allow it to compete with his roads. It raises the question, however, as to how far this process may go on. What is to prevent this same syndicate, or some other, from starting another road parallel to one of Mr. VANDERBILT's with the same expectation? Is it not an inducement for some one to parallel the Pennsylvania Railroad, or any of the other great trunk lines which are not already paralleled? It introduces a new feature into the railroad and financial problem of the country. Mr. VANDERBILT now finds himself with three roads all the way from Buffalo to Chicago. One would suffice if it were double-tracked; and the supposition naturally is that Mr. VANDERBILT will now be willing to let go the Canada Southern if he can do so without loss.

Who is to take it? There are the Grand Trunk, a rival line; and the New York, Lake Erie and Western, and the Delaware, Lackawanna and Western, to either of which it would serve as a feeder. The most likely purchaser, however, would be the Wabash, St. Louis and Pacific, which is reported to have made an offer for the "Nickel Plate." If the Canada Southern could be had by the Wabash, it would complete its line to Buffalo; and the Delaware, Lackawanna and Western, under substantially the same owners, would make up a line all the way to New York City. The checker board presents an interesting study, and new moves may be expected before long.

A later rumor credits the Lehigh Valley with being interested in the purchase of the "Nickel Plate." This company has lately made an arrangement with the New York, Lake Erie and Western for trackage from Elmira to Buffalo for through coal, freight and passenger trains; but it is improbable that it can have secured the line west of Buffalo. By an alliance with the Central of New Jersey (not now a difficult matter, and desirable on many grounds) the Lehigh Valley might at an early day make up a fifth competitor for the business between New York and the Niagara River.

SOUTHWARD TRANSFER OF MATERIAL AND POLITICAL POWER.

AN article entitled "The Railway Invasion of Mexico" in *Harper's Weekly Magazine* of October, by Hon. JOHN BIGELOW, has attracted deserved attention, not merely on account of the eminence of the writer, but also from the remarkable statements it contains as to the financial and political relations of this country with our sister Republic. The paper was evidently written with a purpose, and there has been much ingenious speculation wasted in attempting to divine what that purpose was. Nobody credits Mr. BIGELOW, or the parties whom he may represent, with the benevolent intention of trying to save the American public from any loss which it may incur from the building of railroads in Mexico. Mr. BIGELOW's antecedents, and his familiars, do not justify such disinterested motives. Two objects are quite plain throughout the article; one of which is a purpose (this is the most pertinent) to create such distrust in the minds of capitalists about securities based on the Mexican railroads as will prevent investments in that direction, and thus break down the credit of the present promoters; and, second, to arouse a spirit of jealousy in the minds of Mexicans as to the effect the railroads will have upon them. Not being a capitalist himself, the suspicion arises that there are capitalists behind him who desire to take advantage of this distrust so created. It may be that it is a sort of preliminary bearish attack upon some of the Mexican properties, so that they may be the more easily acquired.

The particular property which meets the force of Mr. BIGELOW's attack is the Mexican National Railway, or, as it is commonly called, the "Palmer-Sullivan Concession." Gen. PALMER is understood to be a large borrower of money for carrying on his works, both in London, New York and Mexico; and it may be that

Mr. BIGELOW's effort is only one of a concerted system of attacks to break down that gentleman, both in Mexico and in Colorado. Thus far, however, its success in that direction is not remarkable.

Ex-minister ROMERO and others have taken upon themselves the task of correcting the misstatements and mis-inferences of Mr. BIGELOW's article, for which there was abundant opportunity. In the first place it is shown that the older railroad between Vera Cruz and the city of Mexico, instead of being a bankrupt or non-paying enterprise, has lately become very profitable, and that its securities are quoted in London at a considerable premium. The great truth stands out that Mexico in a state of peace and industry is a very different place from Mexico distracted by foreign and internecine wars, and by the inaction which the presence of war is sure to produce. If the Mexicans themselves exhibit no jealousy at Americans building their railroads for them, surely it is hardly necessary for one of our own number to incite them to it.

But there is another class of commentators upon the Bigelow article. Certain journals in the West and South, and noticeably the Galveston and New Orleans papers, persuade themselves that the course of railroad development having pushed as far as it can in a westerly direction, has now taken up its march toward the southwest, and that in the race for new business the extension of the great trunk lines must cross into Mexico and keep on until they reach the Central American Isthmus. It is contended that the center of commerce and production has already passed by Chicago and St. Louis, and is now sweeping on southwestwardly toward the Mexican line; and that hereafter the great material development will be in the territory which formerly was New Spain, and which is now Texas and Mexico. There is a small foundation of truth in this remark, for it is evident that Texas is a veritable empire in itself, and that Mexico possesses in its soil, climate, streams and mines all the elements which have contributed to build up so rapidly the population, wealth and trade of our western territories, and especially of California. With scarcely an exception, the American construction forces that are penetrating Mexico are being met with kindly reception. The jubilation attending the opening of every new stretch of road is but the beginning of a further interchange of ideas and of products with our Latin neighbors. We must not forget that a large proportion of the entire Mexican population is a mixed or Indian blood, although the descendants of Spaniards continue to hold places of power and influence. The effects of universal suffrage and general education are beginning to be felt among the native races, and in a few generations they will be the bone and sinew of the laborers, and the Spanish influence will relatively decline.

Mexico is fast taking on the symbols and character of the more advanced nations. Besides her railroad system, she has recently provided for the establishment of banks, trust companies, stock exchanges, safe deposit companies, telephones, electric lights, and a variety of other American appliances.

When the two railroads shall have reached Mexico that are now well under way, the intercourse will be much closer and, commercially and financilly speaking, the Republic of Mexico will have been annexed to our system. It is to be hoped that by that time the Government of Mexico will feel itself strong enough to make some compromise with the holders of its bonds, some of which are held in this country, but the greater part in Europe. It should be among the first duties of the Republics of the world to see that their credit is maintained at least as well as the credit of monarchies under similar circumstances. No doubt the Mexicans themselves would rather see their securities, national and corporate, dealt in at the New York Stock Exchange than at London or Paris. If the disparities in the two tariff systems could be simplified, there is no doubt that the United States would have the preference in Mexico instead of the British and Germans who now contest it with them.

Southern Pacific Railroad.

IT has perhaps occurred to many of our readers that the Southern Pacific's own line via San Antonio is being delayed longer than was anticipated. The reason is not merely heavy rock cutting, but heavy bridging. The bridge across the Pecos River is likely to require some time yet, but false work is to be erected, about 300 feet long, which need not delay the tracklayers from this direction more than three weeks. A tunnel is, we believe, yet incomplete, but we do not suppose there is any reason to cause delay much beyond the middle of November. The San Antonio *Express* reports the conclusion of the labors of S. B. Mosby, Division Engineer, and his assistants, leaving only two parties of engineers in the field. The ends of the track are only fifteen miles apart. This end is completed to the Pecos River, 799 miles west of New Orleans, and the west end is finished to a point which can scarcely be less than 440 miles east of El Paso. Lozier, the last station which we have seen named, is 358 miles east, and track-laying has been continued more than two months since that point was reached. Strobridge took off his three thousand Chinese workmen, the drilled force with which he has built the Southern Pacific thus far, and went back with them to California to rush forward the construction of the line from Mohave Junction to The Needles, on the Colorado River, about 250 miles, where he is to meet the Atlantic and Pacific track coming from Isleta in New Mexico. We don't know what force is left on this end, near Eagle's Nest, but presume it is quite small, as the rock work and bridging would cause such delay that track-laying could not be utilized. The rock cutting must have been heavy all the way from Del Rio, 747 miles west of New Orleans. Workmen have been blasting off overhanging rocks along the road thence to Devil's River, 14 miles further west. They had blocked the movement of trains by falling on several occasions, and the expense of removing them was considerable, to say nothing of the danger of their falling on passing trains. The trip between Devil's River and Eagle's Nest, a distance of 56 miles, will always be a great pleasure to travelers, because the extraordinary curves and bends will both necessitate slow movement and exhibit the splendid scenery to the greatest advantage. The *Express* says that from Seminole to River Bend, fifteen miles, the track hugs the river at an elevation of 200 feet above water. The altitude above sea level is about 1,500 feet, and the air is delightful. We suppose the Seminole referred to is about ten miles this side of the Pecos. On the other side of the Pecos the bridging is heavy.

Seven hundred and ten miles west of New Orleans the road to Eagle Pass diverges. Tracklaying began at the junction August 25, and as the distance is scarcely 35 miles, it ought to have been completed, and no doubt will be in a few days. At Eagle Pass connection will be made with the Rio Grande and Pecos Railroad, coming up the river from Laredo and already finished as far as Gov. Hunt's great coal mines. The Mexican National will lay a third rail on this road, and use it between Laredo and Eagle Pass, at which latter place it expects to meet the Texas and St. Louis narrow gauge, if we are not mistaken. The destination of this latter road must have been changed, as it was formerly said to be going to Laredo. The Southern Pacific, on arriving at Eagle Pass, will doubtless cross the river at once and prosecute its important Mexican undertaking, under the Frisbie and Huntington concession, which will give it a road to the city of Mexico by way of the rich Laguna and Nazas country, through the finest wheat-raising section of Coahuila. The distance from New Orleans to the crossing of the Rio Grande at Eagle Pass is about 745 miles. The distance from New Orleans to Eagle's Nest is about 817 miles. The Southern Pacific we suppose to be three or four miles this side of Eagle's Nest.—*New Orleans Picayune.*

THE "attitude" we take towards our critical friend who issues the result of his lucubrations from St. Louis, is one of cordial good-will. He will pardon us, we hope, for reminding him of the huge English navvy whose shrewish little wife was accustomed to "baste her lord and master most confoundedly." When a friend expressed to him his surprise that he should permit the little woman this injury to his marital dignity, the navvy replied: "It amuses her, and don't hurt me." This is exactly our "attitude" towards that paragraphist of the *Western Insurance Review* who undertakes the censorship of our use of the English language.

OUR CANADIAN LETTER.

[From our Special Correspondent.]

CANADA ATLANTIC.—CABLE UNDER LAKE SUPERIOR.—CANADIAN WINTER PORT.—RAILROAD AND OTHER NOTES.

CANADA ATLANTIC.

The Canada Atlantic and Grand Trunk railways entertained the Montreal and Ottawa Press at the Russell House, Monday, Oct. 30. A very pleasant time was passed, speeches and toasts given. At 4.30 P. M. the Montreal gentlemen left Ottawa on a special train escorted by the Ottawaites, who returned to the Capital this morning by same train.

The Canada Atlantic will run three trains daily each way between Ottawa and Coteau Landing.

This railway-bed, equipment, etc. is pronounced first-class in every respect. The station and grounds are lighted by electricity.

Eleven miles from the Vermont frontier are graded; 45,000 ties made and on the ground, and nearly all the steel rails have arrived.

There are five through bridges, constructed of iron and steel girders, and about six half-deck bridges between Coteau Landing and Ottawa.

The governing grade eastward is 30 ft. to the mile. Westward it is 40 ft. to the mile.

The new Dominion four-dollar notes just put in circulation were engraved by the British North American Bank Note Company of Montreal, and are a credit to that company; the paper is excellent. The words "Dominion" and "of Canada" being the water-marks in the paper, running diagonally, while the maple leaf, thistle, clover and rose are placed at the angles. The note face is in red, black and green, vignette of Marquis of Lorne in center. The word "Four" is plentifully scattered around the edge, forming a border, and they are signed by J. M. Courtney for the Receiver-General. These bills are redeemable at any of the Government depositories, and not as heretofore at one particular point.

MANITOBA AND NORTHWEST NOTES.

At a meeting in Emerson held last Monday against the disallowance of the Manitoba Railway charter, it was said that (while speaking of the Emerson and Northwestern Railway charter) Mr. Norquay, Premier of Manitoba, said that if it were disallowed by the Dominion Government, the local legislature would be convened at once and the charter re-enacted.

The case of General Rosser *vs.* Canada Pacific Railway is going on at Winnipeg. The damages for arrest claimed are $50,000.

Sir Charles Tupper, minister of railways and canals, who returned last week from a trip over the Canada Pacific, states that the country, generally speaking, looked extremely well; that Winnipeg is growing great very rapidly and will be the Chicago of the northwest. Sir Charles says the C. P. R. is being constructed with great rapidity and in a substantial manner.

It is probable that government will grant the city of Ottawa further water privileges to encourage the establishing of manufactories.

The stockholders of the North Shore and Salisbury Junction Railroad hold a meeting Nov. 9th to elect directors and organize.

Mr. Charles Winter, well known in Canadian business circles, takes charge of the Moncton, N. B., Knitting Factory Works.

RAILROAD NOTES.

Mr. Taylor, treasurer of the Canada Southern Railway, in reply to a delegation, stated that the C. S. R. would build a branch from Essex Center to Leamington if a bonus of $50,000 was given. He also advanced $40 toward expense of a preliminary survey.

Trains are expected to be running on the Essex Center cut off by December 1st.

Travelers, and the public generally, who have been induced to take the trip over the Canada Southern to Toronto *via* Credit Valley, are very indignant against the latter company, who, after advertising that a train would connect with the C. S. R., leaving St. Thomas at 5.10 A. M., have discontinued the train, and parties have to lay over or go a round-about-way at considerable expense.

The Canada Pacific have received three splendid locomotives from the Rogers Locomotive Works of Paterson, N. J.

The government arbitrators in the case of Peters, Moore & Wright, contractors of Harbor Works, Montreal, who claimed $124,000, award them $118,000.

CABLE UNDER LAKE SUPERIOR.

An important question will be brought up at the next meeting of the Great Northwestern Telegraph Company. It will be that of laying a cable under Lake Superior, thus giving direct communication with Manitoba, instead of via Chicago. The proposed line will probably start from Parry Sound across the Georgian Bay to Manitoulin Island; thence to Sault Ste. Marie, thence under Lake Superior to Thunder Bay, and thence to Winnipeg. In connection with this the Government are considering the laying of a cable under the lake, the western terminus being Prince Arthur's Landing, thus giving another connection with the far west by the Canadian Pacific Railway and Government system; and at the eastern end the Government telegraph line would be so built as to give a direct line to the Maritime Provinces. The proposed cable under Lake Superior will be 600 miles long, and cost $400,000.

The traffic report of the Midland Railway, of Canada, for the week ending October 21, was: passengers and mails, $6,666.15; freight, $21,613.86; total, $28,280.01, as compared with $25,355.47 for corresponding week last year, being an increase of $2,924.54, and the aggregate traffic to October 21 is $860,384.83—an increase of $171,319.08 over 1881.

The Napanee, Tamworth and Quebec Railway, owing to the absconding of the contractor last year, etc., has been at a standstill, but it is expected that the work of construction will shortly go on.

The Dominion Bridge Company has declared a dividend of five per cent.

It is reported that the Grand Trunk Railway will apply for a *mandamus*, to prevent the Southeastern from building a line from St. Lamberts to Dundee.

On Saturday there was a general depression in Toronto bank stocks. The conditions for raising values of this kind of securities have not changed yet, and the consequence was a weak market.

CROPS.

Generally speaking the wheat crop throughout Canada is good. There has been a very large crop of oats and their quality is good. Of rye and peas the crop is an average one.

CHEAP GAS.

Montreal is again agitated over the price of gas, and the citizens are urging for cheap gas with some prospect success, as an offer has been made by some party who is prepared to contract to supply the city—to supply twenty-one-candle gas at this price. The City Council have been petitioned to make inquiry into the cost of gas production, and everybody and his wife signing it. If gas can be supplied at $1 per thousand, it will be a saving of $160,000 to the people of Montreal.

In reference to the duck and canvas seizures made of M. McKenzie & Co., ship-chandlers, Montreal, who have been importing these goods under a duty of five per cent—the correct amount, provided the goods were used as sails, but it seems they were used for other purposes and now M. McKenzie & Co. will have to pay the difference of duty between five per cent and twenty or forty per cent, on all these goods they have imported during the past three years. A penalty is also imposed upon them.

Labor is scarce in Montreal. Laboring men are receiving $1.50 to $1.75 per day, domestic servants from $8 to $12 per month, and cooks $16 per month.

The Toronto and Ottawa Railroad are laying rails at Madoc.

Thursday last the townships of Elgin and Godmanchester and Huntington County Village voted bonuses to the Montreal and Chambly Junction Railway.

The Montreal Abattoir Company will lease their property, as it is conceded that it can be worked more profitably in that way.

The Southeastern Railroad has purchased the charter of the St. Johns and Chambly Railroad, and will have the line in running order about next June.

CANADIAN WINTER PORT.

It is admitted that St. John and New Brunswick will be the winter port of the Dominion, with a splendid harbor where vessels can always procure a return cargo. It is the entrepot of a great lumbering country, and when the International, which will be the shortest and most direct route from Montreal, is completed it will be without a rival as a Canadian winter port.

"W."

Ottawa, November 2, 1882.

The Tanite Company, Stroudsburg, Pa., has just added another new building to its extensive emery-wheel works, 24x40 feet, two stories and an attic. Within the last sixteen months, by the erection of one building after another, as necessity required, the company has doubled its capacity. The goods manufactured by this firm are meeting with a constantly increasing demand.

"A Red flag is a danger-signal," said old Uncle Zadkins; "I know it is, for I found it out by waving a red flag at a bull."

Cost of Carrying Coal on English Railways.

It is stated in the *Engineer* that a coal train of 300 tons, to run 100 miles, may be estimated for cost of running by the following method: The train would consist of thirty trucks, a brake van, and the engine and tender. The value of the rolling-stock is thus made up: Engine and tender, £2,300; thirty trucks, at £70, £2,100; brake van, £120; total, £4,520. Interest and wear and tear are taken at 20 per cent—say, in round numbers, £900 a year. The average year's running would be 15,000 miles. It might be much more, and probably would seldom be less; but this is taken as a fair mean, though somewhat underestimated, so as to be on the safe side. The cost for interest on capital and wear and tear for running such a train 100 miles will be £6. The engine would burn about 50 pounds of coal per mile, representing a cost of something like 16s. per 100 miles for fuel. Wages of stoker, driver, and guard for the trip would come to about as much. The total cost of haulage of the 300 tons of coal per 100 miles is thus shown—with an addition of 8s. for grease, oil, water, and sundries—to amount to the round figure of £8, or 6s. 4d. per ton per 100 miles. To this must be added the charges relating to permanent way, working expenses at stations, rent, rates, and taxes, and other miscellaneous charges. The *Engineer* does not believe that these expenses will amount to three times the haulage; but even if they do, it is evident that the railway companies ought to be able to carry coal profitably for about 2s. per ton per 100 miles. It is equally certain that the railway charges for coal carriage are much more than this average, since the Great Western Railway rate from Wales to Paddington is 8s. 5d. per ton in fully loaded trucks; and the rate from the Barnsley district to London, by the Midland and Great Northern railways, is 8s. 3d. per ton.

The cable between Callao and Molendo being repaired, communication by telegraph is now open direct between Valparaiso and points in the United States and all intermediate stations on the west coast of South America. The opening of these lines, connecting with the Central and South American Telegraph Company's system at Lima, will be a saving of some fifteen hours in time between Valparaiso, the United States and Europe, as compared with the old route via Pernambuco and Lisbon.

The iron bridge over the Savannah River was completed on the 30th ult., and the connections finished. Trains bound north on the Charleston and Savannah line passed over safely and the bridge will now be generally used. The bridge is a magnificent structure. It is substantial, and is considered the finest iron bridge in the South. It cost $100,000.

A peculiarity of the Wilmington, Wrightsville, and Onslow Coast Railroad Company in North Carolina is that it is owned by colored men, and will be operated exclusively by them. E. F. Martin, an enterprising colored man of Wilmington, is the manager.

Toledo, Cincinnati and St. Louis Railway.

R. M. Pomeroy, president of the Toledo, Cincinnati and St. Louis Railway Co., having been interviewed, is reported to have said that the company has secured something like 113 acres of land on the river's edge at East St. Louis, and depots, warehouses, etc. will be immediately erected. The president settled the question of the road coming across the river by saying that the expense incurred by laying tracks on the bridge would never allow such a move; that the transfer of freight can be made much cheaper by ferry; and that such a plan has not been considered at all. The probability is that in time the company's shops will be built over the river, and the proper arrangements for transfer of freight and passengers made. The president is of the opinion that narrow-gauge railroads are growing in favor, and will continue to do so. His reason therefor being threefold; in the first place, the cost of building and equipping a narrow gauge is but a moiety of that incurred in building a standard gauge, the running expenses are much lighter, and the result gained is almost as great. A narrow gauge car has capacity of fifteen tons, their thirty-ton engine will haul as many cars as desirable, etc. The narrow gauge for trunk line business will never gain favor, neither is it probable that standard gauges will ever be changed to narrow gauge, but for local business, such as the Toledo, Cincinnati and St. Louis is now seeking, principally, the advantages are all immensely in favor of narrow gauge. The company now owns about 850 miles of railroad, and has secured terminal facilities in three very important through points, Cincinnati, Toledo and St. Louis. Its lines tap the most fertile coal and iron fields of Ohio, and in that point are almost invulnerable to damaging competition. An able auxiliary to the narrow-gauge trunk line will be the Toledo, Texas and Rio Grande Railway, which connects with the Toledo, Cincinnati and St. Louis at a point in Edgar county, Illinois, thence running to Cairo and connecting with the Paramore system of Texas and the Palmer-Sullivan line at Eagle Pass for the City of Mexico.

Marietta and Cincinnati Railroad.

In view of the recent settlement of the foreclosure case of the Marietta and Cincinnati Railroad Company by the Ross County Court of Common Pleas at Chillicothe, Ohio, the following synopsis of the plan of reorganization prepared by John A. Hambleton & Co., of Baltimore, Md., will be read with interest. The plan of reorganization provides for the consolidation of the Marietta and Cincinnati, Cincinnati and Baltimore and Baltimore Short Line, the reorganized company assuming the bonds of the two last named, amounting to $1,250,000. The bonds of the new or consolidated company will consist of—

First—First mortgage bonds, having fifty years to run, from November 1, 1881, with interest at the rate of 4½ per cent per annum, payable semi-annually, on the first days of May and November in each year—the coupon for the first six months shall be payable on September 1, 1882:

For the principal of the first mortgage bonds of the M. and C. RR. Company	$3,500,000
For the face of the coupons thereon to the 1st of November, 1881, and scrip	1,046,000
For the stock of the Baltimore Short-Line Railway Company at par, together with past due rentals thereon, prior to July 1, 1877, $139,000	1,389,000
The payment of the principal and interest of the above bonds will be guaranteed by the Baltimore and Ohio Railroad Company.	
For the stock of the Cincinnati and Baltimore Railway Company at par the bonds issued therefor will bear interest at 6 per cent per annum, payable semi-annually, from the same dates as the other bonds issued under this mortgage	1,250,000
Total first mortgage bonds	$7,185,000

Second—Second mortgage bonds having fifty years to run, from November 1, 1881, with interest therefrom at the rate of 5 per cent per annum, payable semi-annually, on the first days of January and July in each year—the first coupon will cover interest from November 1, 1881, to July 1, 1882, and will be payable on October 1, 1882:

For the principal of the second mortgage bonds of the M. and C. RR. Co	$2,500,000
For two-thirds of the face of the coupons on same to November 1, 1881, amounting to	540,000
Total second mortgage bonds	$3,040,000

Third—Third mortgage bonds, having fifty years to run, from November 1, 1881, with interest at the rate of 3 per cent per annum for the first ten years and 4 per cent per annum thereafter to the maturity thereof, payable semi-annually, on the first days of February and August in each year—the first coupon will cover interest from Novembr 1, 1881, to August 1, 1882, and will be payable on November 1, 1882:

For one-third of the face of the coupons on the second mortgage bonds of the M. and C. RR. Co. to November 1, 1881, amounting to	$270,000
For two-thirds of the principal of the third mortgage bonds of the M. and C. RR. Co	2,000,000
Total third mortgage bonds	$2,270,000

Fourth—First income mortgage bonds, having fifty years to run, from November 1, 1881, with interest thereon, at a rate not exceeding 5 per cent per annum; non-cumulative; payable, if earned, from its net earnings realized after paying the expenses incurred in maintaining and operating its railway and equipment and the prior fixed charges thereon:

For one-third of the principal of the third mortgage bonds of the M. and C. RR. Co	$1,000,000
For the face of the coupons thereon to November 1, 1881	1,910,000
For amount of assessment to be paid on the capital stock of the M. and C. RR. Co., estimated at	500,000
Total first income mortgage bonds	$3,410,000

Fifth—Second income mortgage bonds, having fifty years to run, from November 1, 1881, with interest thereon, at a rate not exceeding 5 per cent per annum; non-cumulative; payable, if earned, from its net earnings realized after paying the expenses incurred in maintaining and operating its railway and equipment and the prior fixed charges thereon:

For the principal of the fourth mortgage bonds of the M. and C. RR. Co	$4,000,000
Total second income mortgage bonds	$4,000,000

An important change in time has been made lately on the Burlington and Missouri River Railroad. The train from Kansas City and Atchison to Denver, now leaves in the morning instead of in the evening as heretofore, and from Denver to Atchison and Kansas City, in the afternoon, instead of the morning, as heretofore.

The Stock Exchanges and Money Market.

New York Stock Exchange.

Closing Prices for the week ending Nov. 1.

	Th.26.	F.27.	Sat.28.	M.30.	Tu. 31.	W. 1.
Adams Express	.....	140½	.....	.....	139½	....
Albany and Susq.	.....	....	.....	.....	.....	.....
1st mortgage	.....	.....	...	.....	....	.....
2d mortgage	104½	104½	.....	.....	.....	.....
American Express	92½	92½	93¾	93	93½	92½
Burl., C. R. & Nor.	.....	.. .	.....	.....	79¾	.....
1st mortgage 5s	.....	101½	.....	.....	101	101¼
Canada Southern	70½	70¾	70½	69½	69¾	69¾
1st mortgage guar	94	95	.....	... .	94	94¾
Central of N. Jersey	73¾	73	71½	71½	71½	71¾
1st mort. 1890	.....	.....	116½	.....	.....	.....
7s, consol. ass	109	.....	.....	.....	.....	.....
7s, convertible ass.	.....	109	.....	.....	113¼	109
7s, Income	.....	85	.....	85	.....	.....
Adjustment	.....	.....	....	108	.....	.....
Central Pacific	91	91½	90½	90¾	90¼	90⅜
6s, gold	114¼	.....	.....	.....	.....	.....
1st M. (San Joaq)	.....	.....	.....	.....	.....	.....
1st M. (Cal. & Or.)	.....	.....	.....	.....	....	.....
Land grant 6s	.....	.....	.....	104¼	.....	.....
Chesapeake & Ohio.	25⅜	.....	25¼	24¾	25¾	25⅞
1st pref	38	.....	37¾	.....	36¾	37½
2d pref	.....	26½	...	25¾	.....	27½
1st mort., series B	89¾	90	90	89¾	89¾	.....
Chicago and Alton	.....	.....	141½	141	.....	142
Preferred	.....	.....	.....	. ..	.....	.....
1st mortgage	.....	.....	.....	.....	.....	.....
Sinking Fund	.....	.....	116¼	.....	.....	....
Chi., Bur. & Quincy	133¼	132½	132½	131½	132	132½
7s, Consol. 1903	.....	.....	128	.....	.....	.....
Chi., Mil. & St. Paul	110¼	110	109⅞	109¾	109⅝	109⅛
Preferred	128½	126¾	126½	126¾	127½	.....
1st mortgage, 8s	.....	.....	.....	.....	.....	135
2d mort., 7 3-10s	.....	125	.....	.....	.....	.....
7s, gold	.....	.....	....	.....	.....	127½
1st M. (La. C. div)	.....	.....	.....	.....	.....	.....
1st M. I. & M. div.)	.....	.....	.....	.....	126	.....
1st M. (I. & D. ext.)	.....	....	.....	... .	.....	.....
1st M. (H.&D. div.)	.....	.....	.....	.....	.....	.....
1st M.(C. & M.div.)	.....	.....	.....	.....	.....	....
Consolidated S. F.	...	....	.....	.....	.....	.....
Chi. & Northwestern	146⅜	145⅜	144⅜	144¼	144⅜	144⅜
Preferred	164¼	163½	163	162	163¼	161¾
1st mortgage	107⅜	.....	.....	.....	106¾	.....
Sinking Fund 6s	.....	.....	.....	.....	.....	.....
Consolidated 7s	... .	134½	.....	.....	.....	.....
Consol. Gold bo'ds	127½	128¾	.....	.....	127	.....
Do. reg	.....	.....	.....	.....	.....	.....
Chi., R. Isl. & Pac.	133	132	131¼	131½	131½	131¼
6s, 1917, c	..	.....	129	.....	.....	.....
Clev., Col., Cin. & Ind.	.....	86	84¼	85	.....	....
1st mortgage	120¼	.....	....	.....	.....	120¼
Clev. & Pittsburg gr.	.....	.....	.....	.....	.....	139½
7s, Consolidated	....	.....	....	.....	.....	.....
4th mortgage	.....	.....	.....	.....	.....	.....
Col., Chi., & Ind. Cent	9¼	9¾	.....	9¾	.....	.....
1st mortgage	.....	.....	.....	.....	...	.....
2d mortgage	.....	.....	.....	.....	.....	.....
Del. & Hud Canal.	114	113⅜	113⅜	113¼	113⅞	113⅜
Reg. 7s, 1891	.....	.....	.....	.....	.....	.....
Reg. 7s, 1884	.....	.....	.....	105⅛	.....	.....
7s, 1894	.....	.....	.....	.....	.....	.....
Del., Lack. & Western	138¼	137¼	136½	135¾	136	136
2d mortgage 7s	.....	.....	.....	.....	.....	.....
Consol. 1907	.....	.....	.....	.....	....	.....
Erie Railway	...	.....	.....	.....	.....	.....
1st mortgage	.....	.....	.....	.....	.....	.....
2d mort. 5s, ext.	....	.....	.....	108½	.....	.....
3d mortgage	101⅜	.....	.....	101¼	.....	. ..
4th mort. 5s, ext.	.....	.....	.....	.....	.....	.....
5th mortgage	.....	.....	.....	.....	.....	.....
7s, Consol. gold	.....	.....	.....	.....	.....	126
Great West. 1st mort	.....	.....	.....	.....	.....	.....
2d mortgage	.....	.....	.....	102½	.....	.....
Hannibal & St. Jo.	.....	.....	. ...	.....	.....	.....
Preferred	....	82	.....	.....	.....	.....
8s, Convertible	.....	.....	.....	.....	.....	.....
Houston & Tex. Cen	.....	82	81	.....	.....	.....
1st mortgage	.....	110¾	110¼	.....	.....	.....
2d mortgage	.....	.....	.....	.....	. ..	.....
Illinois Central	148⅛	148	147	147¼	148¾	148¾
LakeShore&MichSo	113¼	115⅝	115⅜	115⅜	115¼	115
Consol. 7s	.....	.....	.....	.....	.....	.....
Consol. 7s, reg	.....	.....	.....	.....	.....	.....
2d Consolidated	124	.....	123½	.....	.....	.....
Leh. & W. B. con. ass	.....	.....	.....	.....	.....	.....
Long Dock bonds	....	.....	.....	.....	.....	.....
Louisville & Nash.	55¾	54¾	50⅞	51¼	51¾	51
7s, Consolidated	115⅛	115⅜	.....	.....	115⅛	.....
Manhattan	48	48	45	.....	.....	47
1st pref	.....	.....	88	.....	.....	.....
Met. Elevated	.....	.....	.....	.....	.....	.....
1st mortgage	.....	99	98⅛	.....	98⅛	98⅛
Michigan Central	108⅜	103	102½	101⅝	101¼	101⅜
7s, 1902	.....	127⅛	127½	.....	.....	.....
Morris & Essex	124⅛	.....	125	.....	125	.....
1st mortgage	.....	.....	.....	.....	.....	.....
2d mortgage	.....	.....	.....	.....	.....	.....
7s of 1871	.....	121	.....	.....	.....	.....
7s, Convertible	...	.....	.....	.....	.....	.....
7s, Consolidated	.....	.....	.....	.....	...	.....
N.Y. Cen. & Hud. R.	133⅛	134½	134	133	132⅜	131⅜
6s, S. F. 1883	....	...	.....	102⅝	.....	102⅞ 100x
6s, S. F., 1887	.....	109	.....	.....	.....	.....
1st mortgage	.....	.....	.....	133	.....	.....
1st mortgage, reg.	....	.....	.....	.....	.....	133
N. Y. Elevated	.....	.....	.....	.....	.....	.....
1st mortgage	115⅛	115⅛	.....	.....	.....	.....
N. Y. & Harlem	.....	.....	.....	.....	.....	.....
Preferred	.....	.....	.....	.....	.....	... .
1st mortgage	.....	.....	.....	.....	.....	.....
mortgage, reg	....	.....	.....	.....	.....	.....
N. Y. Lake Erie & W	42	41¾	40⅞	40⅝	40⅝	40⅜
Preferred	86⅛	86¾	85½	85	85	84⅝
2d Consolidated	99¾	100	98⅞	99¾	99¼	99¼
New 2d 5s fund	.....	.....	.....	.....	.....	.....
N.Y., N.Hav'n & Hart	....	184	184	.....	.....	.....
North Mo. 1st mort	.....	.....	...	.....	.....	.....
Northern Pacific	46⅜	46⅜	45⅞	45½	45¼	45⅜
Preferred	93¾	93⅜	92⅜	92⅝	92⅝	92⅝
Ohio & Mississippi.	38¾	37½	36½	36⅜	35¾	35⅜
Preferred	....	.....	.....	.....	.....	.....
2d mortgage	.....	.....	.....	.....	120⅜	.....
Consolidated 7s	.....	.....	.....	.....	.....	.....
Consol. S. Fund	.....	.....	.....	116¾	.....	.....
Pacific Mail S. S. Co	39⅜	39⅛	39¼	39¼	39⅛	.....
Pacific R. R. of Mo.	.....	.....	.....	....	.....	.....
1st mortgage	.....	106	.....	106	.....	105
2d mortgage	.....	.....	.....	.....	.....	.....
Panama	.....	.....	.....	.....	...	.....
Phila. & Reading	61⅞	61⅞	61⅜	60¾	60¾	59
Pitts, Ft. W. & Chi. gtd	.....	.....	.....	138	.....	.....
1st mortgage	.....	.....	.....	.....	.....	.....
2d mortgage	.....	.....	.....	136½	.....	.....
3d mortgage	.....	.....	.....	.....	.....	.....
Pullman Palace Car	128¼	129⅜	128¼	128¼	128⅝	.....
Quicksil'r Min'g Co	.....	.....	.....	.....	10	.....
Preferred	41⅛	.....	.....	.....	.....	.....
St. Louis & San Fran	.....	.....	38	.. .	.....	37⅛
Preferred	.....	58	57	.....	.....	.....
1st Preferred	... .	.....	98	.....	.....	.....
St. L., Alt'n & T. H.	.....	46	44¾	.....	.....	.....
Preferred	.....	86	85½	....	83	.....
1st mortgage	.....	.....	.....	.....	... .	....
2d mort. pref	.....	.....	.....	.....	.....	.....
Income bonds	.....	.....	.....	.....	.....	.....
St. L., Iron Mt. & S.	.....	.....	.....	.....	.....	.....
1st mortgage	.....	.....	.....	.....	.....	115
2d mortgage	.....	.....	.....	.....	.....	105¾x
Toledo and Wabash.	....	.....	.....	.....	.....	.....
1st mortgage	.....	.....	.....	.....	.....	.....
2d mortgage	.....	.....	.....	.....	.....	.....
7s, Consolidated	.....	.....	.....	....	.....	.....
St. Louis Division	102½	.....	.....	.....	101	.....
Union Pacific	107⅞	107¾	106⅞	106⅜	107	106⅞
1st mortgage	.....	115⅞	115⅛	.....	.....	116
Land Grant 7s	.....	.....	.....	.....	.....	.....
Sinking Fund 8s	.....	117⅛	....	117⅛	.....	.....
United States Ex	.....	68	68	69	69	.....
Wabash, St. L. & Pac	33	32¾	32	31⅝	32	31¾
Preferred	59½	58¾	57¾	57⅞	57¾	57⅞
New mort. 7s	.....	.....	.....	.....	.....	.....
Wells-Fargo Ex	.....	130½	....	.....	130⅜	....
Western Pacific b'ds	....	.....	113	.....	.....	.....
Western Union Tel.	88⅛	88	87¾	86⅞	86¾	86⅜
7s., S.F conv., 1900	.....	....	.....	.....	.....	.....
FEDERAL STOCKS:—						
U. S. 4s, 1907, reg	.....	.. ..			119⅝	119⅜
U. S. 4s, 1907, coup.	.....	.....	.....	.....	.....	119⅛
U. S. 4½s, 1891, reg.	.....	.....	.....	.....	....	112⅜
U. S. 4½s, 1891, coup	....	113⅛	... .	.....	.....	.....
U. S. 5s, cont'd at 3½	.....	... .	.....	.....	.....	.....
U. S. 3s, reg	.....	.....	.....	.....	.....	.....
Dt. of Col. 3-65s, reg	.....	.....	.....	.....	.....	108
Dt. of Col. 3-65s, coup	.....	.....	.....	.....	.....	... .

Boston Stock Exchange.

Closing Prices for the Week Ending Nov. 1.

	Th.26.	F.27.	Sat.28.	M.30.	Tu. 31.	W. 1.
Atch., Top. & San. Fe.	87¼	87¾	87¼	87⅛	87⅜	86⅜
1st mortgage	119¾	.....	.....	.....	120	119¾
Land Grant 7s	113⅛	.....	.....	.....	.....	.....
Boston & Albany	174¾	174¼	175	175	175	175¼
Boston and Lowell	.....	.....	.....	.....	99¾	99¾
Boston & Maine	.....	153x	153	153	....	154
Boston & Providence	158	.....	.....	160	.....	.....
Bos'n, Hart. & Erie 7s	.....	.....	...	.....	52¾	.....
Burl. & Mo. R. L. G. 7s	.....	.....	.....	.....	.....	.....
Burl. & Mo. R. in Neb	.....	.....	.....	.....	.....	.....
6s, exempt	.....	.....	.....	.....	112⅜	.....
4s	.....	. ..	....	.....	.....	82
Chi., Burl. & Quincy	132½	133	132⅛	132¾	132⅛	132
Cin., Sand. & Clev ($50)	.....	.....	29	.....	.....	.....
Concord ($50)	....	.....	.....	.....	.....	.....
Connecticut River	.....	.....	.....	.....	.....	.....
Eastern	40	.....	38⅛	.....	.....	.....
New 6s, Bonds	.....	.....	110	.....	109⅛	109¾
Fitchburg	131	.....	.....	.....	.....	.....
N.Y. & New England	.....	.....	52⅛	52¼	52¼	52
7s	.....	.....	116⅝	116¾	116¾	116¼
Northern N. H.	.....	.....	.....	.....	.....	.....
Norwich & Worcester	.....	.....	.....	.....	.....	.....
Ogden & Lake Cham	.....	.....	.....	.....	.....	.....
Old Colony	137	136	135⅛	135¾	.....	136¼
Ph., Wil. & Balt. ($50)	.....	.....	.....	.....	.....	.....
Portl'd, Saco & Ports	112¾	.....	.....	.....	.....	.....
Pueblo & Ark Val 7s	114	.....	.....	114¼	114	114
Pullman Palace Car	.....	129⅞	.....	130	.....	.....
Union Pacific	108½	108	107¾	107	107⅜	107¼
6s	113⅞	.....	.....	.....	.....	.....
Land Grant 7s	.....	.....	.....	.....	.....	.....
Sinking Fund 8s	.....	.....	.....	.....	.....	116
Vermont & Mass	.....	.....	.....	.....	.....	.....
Worcester & Nashua	.....	.....	.....	.....	.....	....
Cambridge (Horse)	102	.....	.....	.....	.....	.....
Metropolitan (Horse)	....	.....	.....	74¾	.....	.....
Middlesex (Horse)	.....	.....	.....	.....	.....	.....
Cal. & Hecla Min'g Co	247	.....	246½	.....	.....	249
Quincy	69¼	69¾	69½	.....	68½	67¾

Philadelphia Stock Exchange.

Closing Prices for the Week Ending Oct. 31.

	W.25.	Th.26.	F.27.	Sat.28.	M.30.	Tu.31.
Allegh'y Val. 7 3-10s	.....	.....	.....	.....	.....	.....
7s, Income	.....	.....	.....	.....	48	.....
Buff., Pitts & West.	20¼	21¼	21⅞	21½	21¾	20⅝
Camd'n & Am. 6s, '83	.....	.....	.....	.....	101¼	.....
6s, 1889	.....	.....	.....	.....	.....	.....
Mort. 6s, 1889	115¼	.....	....	115¼	.....	.....
Camden & Atlantic	.....	.....	.....	.....	.....	.....
Preferred	....	.....	.....	.....	.....	.....
1st mortgage	.....	.....	.....	.....	.....	.....
2d mortgage	.....	.....	.....	.....	.....	.....
Catawissa	.....	.....	.....	.....	.....	.....
Preferred	.....	.....	.....	.....	.....	.....
2d pref	.....	.....	53⅝	.....	.....	.....
7s, new	.....	.....	.....	.....	.....	.....
Del. & Bound Brook	.....	.....	.....	.....	.....	.....
7s	.....	125	.....	....	.....	.....
Elmira & Williamsp't	.....	.....	.....	.....	.....	.....
Preferred	.....	.....	.....	.....	.....	.....
Hunt. & B. Top Mt.	18	.....	.....	.....	18	.....
Preferred	....	. ..	.....	.....	.....	.....
2d mortgage	.....	.....	.....	.....	.....	.....
Lehigh Navigation.	44	43⅞	43⅞	43⅞	43⅝	42⅝
6s, 1884	.....	.....	.....	.....	.....	.....
Gold Loan	.....	....	.....	.....	112¾	112¾
Railroad Loan	.....	.....	.....	.....	.....	.....
Conv. Gold Loan	.....	.....	.....	.....	. ..	.....
Consol. Mort, 7s	.....	.....	.....	.....	.....	.....
Lehigh Valley	65⅝	.....	66	66	65½	65⅛
1st mort. 6s, coup	....	.....	.....	.....	.....	.....
1st mort. 6s, reg	.....	.....	.....	.....	.....	.....
2d mort. 7s	.....	.....	.....	.....	.....	.....
Consol mort. 6s	.....	.....	.....	.....	122½	.....
Consol. mtg. 6s, reg	.....	122½	.....	122½	.....	.....
Little Schuylkill	.....	.....	.....	.....	.....	.....
Minehill & Sch. Hav'n	.....	.....	.....	.....	62¾	62¼
North Pennsylvania	.....	.....	.....	.....	...	.....
1st mortgage 6s	.....	.....	.....	106	...	.....
2d mortgage 7s	.....	.....	.....	.....	.....	.....
Genl. mtg. 7s, coup	.....	.....	.....	.....	.....	.....
Genl. mtg. 7s, reg	....	.....	.....	. ..	.....	.....
Northern Central	57⅜	57½	57⅛	57⅜	57⅜	57
5s	97⅝	97¾	.....	.....	98	.....
Northern Pacific	45¾	46½	46⅜	45⅜	45½	45⅜
Preferred	93	93¾	93⅜	92¾	92¾	92⅜
Pennsylvania R. R.	64¼	64¼	64¼	63¾	63⅜	63¼
1st mortgage	.....	.....	.....	.....	.....	.....
Gen'l mort	.....	.....	.....	.....	.....	.....
Gen'l mort reg	.....	.....	.....	.....	.....	...
Consol. mort. 6s	.....	.....	.....	.....	.....	.....
Consol. mort. reg	.....	.....	122	.....	.....	.....
Pa. State 5s, new	.....	.....	.....	.....	.....	.....
do 4s, new	.....	.....	.....	.....	.....	.....
do 3½s, 1912	.....	.....	.....	.....	.....	.....
Phila. & Reading	30⅞	30⅞	31	30⅜	30⅝	30¼
1st mortgage 6s	.....	.....	.....	.....	.....	.....
7s of 1893	.....	.....	.....	.....	119	119
7s, new convert	.....	.....	73¼	73⅛	73⅛	73
Consol. mort. 7s	.....	.....	.....	.....	.....	.....
Consol. mort. reg	.....	.....	.....	.....	.....	.....
Gen'l mort. 6s	94⅛	94⅝	.....	94⅛	94⅛	94¼
Def. Income bonds	.....	.....	.....	.....	.....	.....
Philadelphia & Erie	.....	.....	21½	.....	21	.....
1st mortgage 5s	.....	103	.....	.....	.....	.....
2d mortgage 7s	.....	.....	.....	.....	.....	.....
Pittsb., Cin. & St. L. 7s	.....	.....	.....	.....	.....	.....
Pitts., Tit. & Buff. 7s	.....	.....	.....	.....	...	.....
Schuylkill Navi't'n.	..	.. .. ..	.....	.....	.....	.....
Preferred	.....	.....	.....	.....	.....	.....
6s, 1895	.....	.....	.....	.....	.....	.....
6s, 1907	.....	.....	.....	.....	.....	88
United Co. of N. J.	190	.....	.....	190	.....	190
Hestonville, (Horse)	.....	.....	.....	.....	.....	.....
Cehstnut & Walnut)	.....	.....	.....	.....	.....	.....

Baltimore Stock Exchange.

Closing Prices for the Week Ending Oct. 31.

	W. 25.	Th. 26.	F. 27.	Sat. 28.	M. 30.	Tu. 31.
Baltimore & Ohio....	.....	.....	.....	.....	.....	193
6s, 1885.....	.....	.....	.....	104⅛	104⅛	.....
Central Ohio ($50)...	.....	.....	.....	.....	.....	.....
1st mortgage.....	.....	.....	.....	.....	108¼	.....
Marietta & Cincin'ti.	.....	.....	.....	.....	.....	.....
1st mortgage, 7s..	.....	.....	.....	.....	.....	.....
2d mortgage, 7s...	101⅛	101¾	101¾	.....	.....	101⅜
3d mortgage, 8s...	.....	.....	.....	.....	.....	.....
Northern Cen. ($50).	57⅛	57¼	57⅛	57⅛	57¼	.....
2d mort. 6s, 1885..	.....	.....	.....	.....	.....	.....
3d mort. 6s, 1900..	.....	.....	116	.....	.....	.....
6s, 1900, gold.....	.....	.....	.....	.....	.....	.....
6s, 1904, gold.....	.....	.....	.....	.....	.....	.....
Pitts. & Connelsv. 7s.	.....	.....	121½	.....	.....	.....
Virginia 6s Consol..	56¾	56	56¼	56¼	56½	59
Consol. coupons...	.....	.....	.....	.....	58	60
10-40 bonds.....	.....	.....	.....	42½	.....	42⅝
Def'd Certificates.	.....	.....	.....	.....	.....	.....
New 3s.....	.....	.....	50	.....	.....	.....
Western Maryland..	16⅛	16¾	16¾	.....	.. ..	16⅝
1st M., end. by Balt	.....	.....	.....	.....	109	.....
2d M., do.	.....	.....	.....	.....	.....	.. ..
3d M., do.	.....	.....	.....	.....	.....	.....
1st M., unendorsed	....	.....	.....	....	.....	.....
2d M., end. Wash Co	.....	.....	.....	.....	.....	.....
2d M., preferred...	.....	.....	.....	.....	.....	.....
City Passenger R. R.	.....	.....	.....	.....	.....	43

London Stock Exchange.

	Closing Prices—Oct. 20.		Oct. 13.	
Baltimore and Ohio 5s, 1927.....	108	110	108	110
Central of N. J., $100 shares.....	80	85	80	85
Do. consol. mort.....	109	111	109	111
Do. Income Bonds.....	87	90	88	92
Central Pacific of Cal., $100 shs..	93	94	93⅛	94⅛
Do. 1st mort. 6s, 1895-'98.....	117	119	117	119
Det., G'd Haven & Mil. Equip bds.	116	118	115	117
Do. Con. M. 5p.c., till '83 after 6p.c.	113	115	113	115
Illinois Central $100 shares.....	152⅛	153⅛	148	150
Do. S. F. 5s, 1903.....	104	106	104	106
Lehigh Valley Cons. mort. 1923...	115	119	115	119
Louisville and Nashville mort. 6s	93	95	93	95
Do. capital stock $100 shares...	56⅛	57⅛	55	58
N. Y. Cen. & Hud. R. mort. bonds.	132	136	132	136
Do. $100 shares.....	136	137	136⅛	137⅛
Do. mort. bonds (stg.).....	121	123	120	122
N. Y. Lake Erie & West. $100 shs.	43¼	43¾	43½	44
Do. 6 p. c, pref. $100 shares....	88	90	88	90
Do. 1st Con. Mort. bonds (Erie).	127	130	127	130
Do. do. Funded Coupon bonds.	124	127	124	127
Do. 2d Consol. Mort. bonds....	102	104	102	104
Do. do. Funded Coupon bonds.	99	101	99	101
N. Y., Pa. & Ohio 1st mort. bonds.	59	60	59⅛	60⅛
Do. Prior Lien bonds (sterling).	100	105	100	105
Pennsylvania $50 shares.....	65¾	66¼	66¼	66¾
General Mortgage.....	121	123	121	123
Phil. & Erie Gen. mort. 6s, 1920...	117	119	117	119
Philadelphia & Reading $50 shs..	31½	32	32¼	33¾
General Consol Mortgage.	116	118	115	117
Do. Improvement Mortgage....	102	104	102	104
Do. Gen. Mtg. '74, ex-def'd coup.	97	99	97	99
St. L. Bridge 1st mort. gold bond.	120	122	120	122
Do. 1st. pref. stock.....	94	96	97	100
S. P'fic of Cal., 1st mort 6s, 1905-6.	106	108	106	108
Union Pacific 1st mtg. 6s, 1896-9..	118	120	118	120
Wabash, St. L. & P. $100 shares..	33	35	35	37
Do. $100 pref shares...	62	64	66	67
Do. gen. mort. bonds.....	86	88	86	88

AMERICAN RAILROAD JOURNAL.

Financial and Commercial Review.

THURSDAY EVENING, November 2, 1882.

THE rate for call loans on stocks in the forenoon was 6@7 per cent, and on United States bonds 4@5 per cent. In the afternoon the quotation was 8 per cent, and during the last hour 7@8 per cent.

The posted rates for prime bankers' sterling were 4. 81½@4.85¼. The actual rates were 4.80¾@4.81 and 4. 84¾@4.85, with cables 4.85¾@4.86, and prime commercial bills 4.79¼@¾. The actual rates for Continental bills are as follows: Francs, 5.23¼ and 5.19⅜; Marks 94¾@¼ and 95¼@⅜; and Guilders, 39⅝@¾ a nd 39 15-16@40.

The public debt statement issued on the 1st inst. shows that the bonds at 6 per cent continued at 3½ per cent have all been retired, and that the bonds at 5 per cent continued at 3½ per cent have been reduced to $155,356,350; the bonds at 4½ per cent amount to $250,000,000, the bonds at 4 per cent to $738,929,600, and the bonds at 3 per cent to $259,370,500; the refunding certificates stand at $423,750, and the Navy Pension Fund at $14,000,000—making the total interest-bearing debt $1,418,080,200. The debt on which interest has ceased since maturity is $11,588,945.26, and the debt bearing no interest $463,679,731.77. The accrued interest to date on the above indebtedness amounts to $10,528,365.20—making the total debt, principal and interest, $1,903,877,242.23. The total cash in the Treasury is $275,386,199.65—leaving the debt, less cash in the Treasury, November 1, 1882, $1,628,491,042.58, against $1,644,120,223.13 on the 1st of October, a decrease in debt during the month of $15,629,180.55, and since June 30, 1882, of $60,423,418.14. The cash balance available, after providing for current liabilities, is $151,145,237.13. The old demand and legal tender notes outstanding amount to $346,740,396, certificates of deposit $9,945,000, gold and silver certificates $99,968,150, fractional currency $7,026,185.77. The payments made from the Treasury by warrants during the month of October, 1882, were as follows: On account of civil and miscellaneous, $5,647,490.11; war, $5,279,501.73; navy, $1,735,714.41; interior, Indians, $654,466.74; interior, pensions, $13,500.90; total, $12,330,673.89. The above does not include payment made on account of the interest or principal of the public debt of the United States,

The New York, Lake Erie and Western Railroad Company, in deference to a growing desire on the part of its local patrons for a lower rate of fare for those who have occasion to travel frequently for purposes of business, visiting or pleasure, has placed on sale at its principal stations, from November 1, 1882, "1,000-mile tickets," at a rate of two cents per mile—a very liberal reduction in favor of the public from its legal rates, which, according to the laws of New York, New Jersey and Pennsylvania, are from 3 to 3½ cents per mile. Ordinarily these tickets are only available for use by the individual to whom issued and whose name appears on the face of the ticket; but in the case of the head of a family purchasing a mileage book, the book may also be used by members of the family, so that if the wife and daughters want to "go shopping or visiting," they can use the book as a family pass, the conductors detaching coupons corresponding with the number of persons traveling together and the distance traveled. In similar manner, if a mileage book is purchased by a business house or firm, it may be used by any member or representative thereof traveling at its expense, but not by more than one at a time. They may be used by lawyers going to and from county seats and courts, by physicians, the clergy, by contractors, by all for summer pleasure, and in many ways they will enter into the economies, pleasures and business of our people. The Erie Company has also allowed a very liberal time within which purchasers of the mileage books may use them up—a whole year from date of purchase! The 1,000-mile ticket of the Erie would appear to be the embodiment of the idea of "cheap transportation" of passengers, and it would not be surprising if the public manifested its appreciation of the Erie Company's liberality in a prompt and tangible way. The members of every household and business establishment from end to end of the road will now be able to travel more and for less money than ever heretofore.

The following is an official statement of the interest-bearing debt of the Texas and Pacific Railway, reaching from New Orleans to El Paso: Eastern Division, 537 miles ($25,000 per mile on 524 miles, 13 miles not bonded), $13,100,000; Rio Grande Division, 521.3 miles, at $25,000 per mile, $13,028,000; New Orleans Division, 336 miles, at $20,000 per mile, $6,720,000—total mileage, 1,394.3—total cumulative interest debt, $32,848,000, upon which the interest charge per annum is $1,970,880, equal to $1,407 per mile. The income and Land Grant bonds amount to $8,784,000, the interest on which is paid by sales of land or in land scrip receivable for land. These bonds are a first mortgage on 4,600,000 acres of land lying along the road. The lands are now being bought up at the valuation of $2 to $5 per acre. At the present land valuations they will bring $15,000,000. The price will soon be advanced, and the net receipts to the company for these lands alone is estimated at upwards of $20,000,000. On the line from Fort Worth to El Paso there is due from the State over 5,000,000 acres of land which have not yet been selected.

The earnings of the Denver and Rio Grande Railway for the month of September, 1882, were $599,191.36, the operating expenses (53.19 per cent) $318,622.52, and the net earnings $280,568.84, against $208,531.65 for the month of September, 1881—an increase of $72,037.19, or 35 per cent. The increase in mileage was 23 per cent.

The gross earnings of the West Jersey Railroad for September were $105,582, an increase of $2,652 as compared with the same month of last year. The operating expenses were $69,979, an increase of $7,821. The net earnings were $35,603, a decrease of $10,473 as compared with September of last year. The net earnings over all expenses, including all bonded obligations, for the nine months ending September 30 were $177,454, an increase of $37,300 over the same period of 1881.

At a meeting of the board of directors of the Pennsylvania Railroad Company, held in Philadelphia on the 1st inst., the following resolution was adopted:

Resolved, That the president and board of directors do hereby declare a semi-annual dividend of 4½ per cent upon the capital stock of the company out of the profits, and payable, clear of State taxes, on and after Nov. 29, 1882, to the shareholders as they stood registered on the books of the company at 3 o'clock, P. M. Oct. 31, 1882, or to their legal representatives, of which amount 2½ per cent shall be paid in cash and 2 per cent in scrip redeemable in cash upon its delivery or convertible into the capital stock of the company if presented in sums of $50 previous to Feb. 1, 1883.

The exchange of 3 per cent bonds for 3½ per cents was resumed at the Treasury Department in Washington on the 1st inst. The amount of 3 per cent bonds previously issued in exchange for 3½ per cents was about $259,000,000, leaving $119,752,000 of uncalled 3½ per cents outstanding exchangeable into 3s at the option of the holder.

The September returns on the Toluca Division, Mexican National Railway—City of Mexico to Toluca—show an average of 655 passengers daily, and earnings at the rate of $5,125 per mile per year. September was the initial month for this division. The road was operated only 27 days—from 4th to 30th—and for passenger traffic only. It is not yet open for freight.

The United States Treasury Department at Washington has completed its statement of the amount appropriated at the last session of Congress in the general appropriation bill, The total is $251,428,117—to which should be added the Geneva award, about $10,000,000; Post Office expenditures, $42,000,000; indefinite permanent appropriations, including sinking fund, $126,000,000—total current liabilities during the fiscal year, $429,428,117. The Geneva award is appropriated as a specific fund, and will not all be used this year; nevertheless, it is a charge against the Treasury, is set apart as a special fund, and cannot properly be counted in the Treasury. There is not much probability that the expenditures under the head of indefinite appropriations will be less than the $126,000,000 estimated by the Treasury, so that the total current demand liabilities of the Government during the fiscal year 1883 subject to draft at any time by virtue of laws already passed is $429,428,117.57, or in round numbers $430,000,000. On the other side of the ledger is to be placed the $400,000,000 of revenue, which is the estimate of the Secretary of the Treasury, and which will not be exceeded by any considerable sum. No one in the Treasury thinks that the receipts can exceed $400,000,000, and of course the $42,000,000 of shortal receipts above the deficiencies are to be added to the revenue, so that the total revenue of the Government for the fiscal year, according to the estimate, will be $442,000,000. As the current demand liabilities are $430,000,000, the real actual net surplus revenue of the United States for the current fiscal year, after setting apart in the Treasury the money appropriated for specific purposes and making allowance for the interest on the public debt, is in point of fact about $12,000,000. A good many public men talk about a surplus revenue of $100,000,000 and $150,000,000, but when they do this they do not take into account the permanent indefinite appropriations, the sinking fund, or any of the special funds which have been appropriated from time to time and set apart, which are not properly to be counted as cash in the Treasury. It is the custom, however, to count all money expended for interest on public debt as surplus revenue.

The following quotations of sales of railway and other securities, for the week, are in addition to those given elsewhere in our columns.

New York.—Allegheny Central, 15; Atlantic and Pacific 1st, 97; Boston and New York Air Line pref., 79¼; Chicago and Eastern Illinois 1st, 100; Chicago, Burlington and Quincy 8s, 102½; Cedar Rapids, Iowa Falls and Northern 1st, 106; Chicago, St. Paul, Minn. and Omaha, 48⅞; do. pref., 107¼; do. consol., 107½; Columbus, Hocking Valley and Toledo, 67½; Cedar Falls and Minnesota, 17; Central Iowa, 33; Chesapeake and Ohio 1st, series A, 104½; do. cur. 6s, 55; Chicago, Milwaukee and St. Paul,

Southern Minn. div. 1st, 108¼; Chicago and West Pacific div. 1st, 92¼; Chicago and Northwestern S. F. 5s, 99½; Chicago, St. Louis and New O leans 5s, 105; Denver and Rio Grande, 51⅜; do. 1st, 113½; do. consol., 92¼; Danbury and Norwalk, 70; Denver, South Park and Pacific 1st, 102⅞; East Tennessee, Virginia and Georgia, 10⅝; do. pref., 18¾; do. inc., 43: do. 5s. 75; Evansville and Terre Haute, 81½; Elizabethtown, Lexington and Big Sandy 6s, 95; Fort Wayne and Denver, 37; do. 1st, 73; Green Bay, Winona and St. Paul, 8¼; Gulf, Colorado and Santa Fe, 1st, 107¾; International and Gt. Northern 1st, 106½; Indiana, Bloomington and Western, 39⅝; do. 1st, 90; do. inc., 50; do. Eastern div. 1st, 95; Indianapolis, Decatur and Springfield, 20; Kansas Pacific 1st consol., 104; do. 6s, 1895, 110; Keokuk and Des Moines 1st, 101¾; Lafayette, Bloomington and Muncie 1st, 104: Louisville, New Albany and Chicago, 1st, 104; do. N. O. and Mobile 1st, 90; do. Evansville, Henderson and Nashville 1st, 100; Lake Erie and Western, 33½; do. inc., 48; Louisville and Nashville, genl. mort. 6s, 87; do. Cecelian Branch 1st, 105; Mobile and Ohio 1st deben., 80; Manhattan Beach, 18½; Minneapolis and St. Louis, 30½; do. pref., 70¼; Missouri, Kansas and Texas, 34½; do. genl. mort. 6s, 85½; do. consol. 7s, 106; Missouri Pacific, 105¼ do. 1st consol,, 102⅛; do. 3d, 113; Memphis and Charleston, 53; Manhattan Co., 47; Michigan Southern S. F., 108; Metropolitan Elevated 2d, 87; Milwaukee, Lake Shore and Western pref., 49⅛; do. 1st, 102; Michigan Central 5s. 98; Michigan Southern S. F., 108½; Norfolk and Western, 16; do. pref., 92⅝; do. genl. mort., ex-int., 101; New York, Chicago and St. Louis, 15¾ do. pref., 35; do. 1st, 94; New York, Ontario and Western, 36¾; Nashville, Chattanooga and St. Louis, 50⅜; New Orleans Pacific 1st, 84; Northern Pacific 1st, 104; Nashville, Chattanooga and St. Louis 1st, 114½; Ohio Central, 16; do. inc., 40; do. 1st, 94; Ohio Southern, 15; do. 1st, 83¼; Oregon Railway and Nav., 152; Oregon Transcontinental, 86; Oregon Short Line, 33¾; do. 6s, 100; Pennsylvania Co. 4½s, 98; Peoria, Decatur and Evansville, 1st, 104⅞; do 1st, Evansville div., 98; Quincy and Toledo 1st, 103; Rochester and Pittsburgh, 22¾; do. 1st, 104; do. inc., 46; Rensselaer and Saratoga, 142: Richmond and Alleghany, 17½; do. 1st, 79; Richmond and Danville, 74; do. 1st 96½; do. deben., 65¼; do. 6s, 96; Richmond, Danville and West Point, 36¼; Rome, Watertown and Ogdensburg ext. 5s, 68; St. L. Alton and Terre Haute div. bonds, 50; St. Paul and Sioux City 1st, 109½; St. Paul, Minn and Man., 144⅝; do. 1st, 110; do. 2d, 109½; do. Dakotah Ext. 1st ex-int., 106¼; St. Paul and Duluth, 34⅞: do pref., 94; South Carolina 1st, 99; St. Louis and Iron Mt Arkansaw Branch 1st, 110; do. Cairo, Ark. and Texas 1st 107: do. 5s, 76; do. Cairo and Fulton 1st, 107¼; South Pacific of Mo. 1st, 103½; Southern Pacific of Cal. 1st 103¾; St. Louis, Kansas City and Northern R. E. 7s, 104½; do. Omaha div. 1st, 108; St. Louis and San Francisco, class C, 93; Toledo and Wabash Equip. bonds, 50: Texas and Pacific, 40; do. Rio Grande div. 1st, 80¾; do. inc. L. G., 58½; Toledo, Delphos and Burlington, 12; do. inc., 20; do 1st, 66; Utah Southern genl. mort. 7s, 107; Union Pacific col. trust, 109; Wabash, St. Louis and Pacific. genl. mort. 6s, 82; Havana div. 1st, 90; Georgia 7s, gold, 114; Louisiana consol., 69½; Tennessee 6s, old, 49; do. compromise, 58½; American Cable, 71; Mutual Union Tel., 25⅛; do. 6s, ex-int., 74; Colorado Coal and Iron, 40; do. 6s, 84; Maryland Coal, 20; Homestake Mining, 17¼; Ontario, 36; Standard, 4¾.

Boston.—Atlantic and Pacific,6s,95; do. blocks, 105; Atchison, Topeka and Santa Fe 5s, 87; Boston, Clinton, Fitchburg and New Bedford, 56; Boston Land, 6¾; Boston Water Power, 3¼; Burlington and Missouri River in Nebraska 6s, non-exempt, 102; Chicago and West Michigan, 67; Chicago, Burlington and Quincy 4s, old, 84½; do. 4s, plain, 78; do. 4s, 1921, 77; do. 4s, Denver ext., 83½; Chicago, Milwaukee and St. Paul, Dubuque div. 6s, 102; Connotton Valley, 4; do. pref., 6; do. 6s, 44; Central of Iowa, 82½; Cheshire R. R., 60½; Connecticut and Passumpsic Rivers pref., 93; Flint and Pere Marquette, 21; do. pref., 38; Iowa Falls and Sioux City, 90; Kansas City, St. Joseph and Council Bluffs 7s, 113⅞; Kansas City, Fort Scott and Gulf 7s, 111; Little Rock and Ft. Smith, 50; do. 7s, 107; Masssachusetts Central, 5½; do. 6s, 35; Marquette, Houghton and Ontonagon, 68; Mexican Central, 20; do. 7s, 73; do. blocks No. 3, 95; New Mexico and Southern Pacific 7s, 114; New York and New England 6s, 105½; Ogdensburg and Lake Champlain consol. 6s, 91¼; Oregon Short Line sub., 113; do. 6s, 99¼; Rutland pref., 21; South Boston Horse R. R., 72; Sonora 7s, 104⅞; Summit Branch, 9; Toledo, Cincinnati and St. Louis, 5⅜; do. 6s, 53; Toledo, Delphos and Burlington Branch inc., 12; do. Dayton div. 6s, 56; do. Southeast div. 6s, 53; Wisconsin Central, 16¾; do. 7s, 1st Series, 79: do. 2d Series, 43¼; Allouez Mining Co., 2; Brunswick Antimony, 9; Franklin, 14; Huron, 2¼; National, 1⅝; Napa Quicksilver, 4⅝; Osceola, ⅜; Pewabic, 8¼; Silver Islet, 11; Sullivan, 2.

Philadelphia.—Belvidere Delaware 1st, 121½; Central Transp., 34½; Cincinnati 7-30s, 131½; Camden County 6s, 1884, 102¾; Henstonville Pass. R. R. 6s, 108; Huntingdon and Broad Top Mt. consol. 5s, 89¾; Nesquehoning Valley, 54; Philadelphia and Reading Coal and Iron deben. 7s, 60; Philadelphia, Germantown and Norristown, 109; Pennsylvania and New York Canal 7s, 1906, 126½; Pennsylvania Co. 6s, 107; Philadelphia City 6s,1895, 128; do. 6s, 1903, 133¼; do. 4s, 1904, 113; Philanelphia and Reading R. R. deben. 6s, 60; do. consol. gold 6s, 114; do. scrip, 97; Pennsylvania R. R. consol. 5s, 107; Philadelphia, Wilmington and Baltimore 4s, 95; St. Paul and Duluth, 36; Texas and Pacific consol. mort. 6s, 93¾; do. 6s, Rio Grande div., 81¾; Union and Titusville 7s, 95; Warren and Franklin 7s, 112. The latest quotations are: City 6s, 108@120; do. free of tax, 127@134; do. 4s, new, 106@114; Pennsylvania State 5s, new loan, 118⅜@118½; do. 4s, old, 111@114; do. 4s, new, 116@117; Philadelphia and Reading Railroad, 29⅜@29½; do. consol. mort. 7s, reg., 126½@127; do. gen'l mort. 6s, coupon, 94@95; do. 7s, 1893, 118@120; do. 7s, new conv.,73@75; United New Jersey R. R. and Canal, 189¼@190½; Buffalo, Pittsburg and Western, 20⅛@20¾; Pittsburgh, Titusville and Buffalo 7s, 96@—; Camden and Amboy mort. 6s, 1889, 115@115¼; Pennsylvania R. R., 62@62½; do. general mort. 6s, coupon, 124@126; do. reg., 125@—; do. consol. mort. 6s, reg., 121½@122½; Little Schuylkill R. R., 58@58½; Schuylkill Navigation pref., 12@12¾; do. 6s, 1882, 89@90: Elmira and Williamsport pref., 58@60; do. 5s, —@100; Lehigh Coal and Navigation, 41⅝@41¾; do. 6s, 1884, 103@103½; do. R. R. loan, 114@116; do. Gold Loan, 112½@113; do. consol. 7s, reg., 117@118; Northern Pacific, 45@45¼; do. pref., 92⅜@92½; North Pennsylvania, 64½@65; do. 6s, 106@107; do. 7s, 119@—; do. 7s, General mort. reg., 124½@—; Philadelphia and Erie, —@22; do. 7s, 114@115; do. 5s, 102¾@103½; Minehill, 62½@63; Catawissa, 20@21; do. pref., 55@56; do. new pref., 53½@54; do. 7s, 1900, 118@120; Lehigh Valley, 63½@—; do. 6s, coupon, 122@124; do. reg., 122@124; do. 7s, 132@133; do. consol. mort., 122@123; Fifth and Sixth streets (horse), 190@—; Second and Third, 114@120; Thirteenth and Fifteenth, 76@80; Spruce and Pine, 42@44; Green and Coates, 90@—; Chestnut and Walnut, 90@93; Germantown, 70@75; Union, 110@111; West Philadelphia, 115@120; People's, 11½@12½; Continental, 103@105.

Baltimore.—Atlanta and Charlotte 1st, 107¼; Atlantic Coal, 1.10; Baltimore City 6s, 1902, 130; do. 6s, 1890, 115⅝; do. 6s, 1886, 108; do. 5s, 1894, 113½; do. 5s, 1916, 122½; Baltimore and Ohio 1st pref., 128; do. 2d pref., 123; Canton 6s, 104¼; Charlotte, Columbia and Augusta, 43⅜; George's Creek Coal, 93; Maryland Defense 6s, 104½; Marietta and Cincinnati 1st Trust certificates, 127¾; do. 2d do., 101⅔; do. 3d do., 57⅜: Northern Central 5s, series A, 98; North Carolina 4s, 75; Ohio and Mississippi, Springfield div. 1st, 116½; Parkersburg Branch, 8; St. Louis City 6s, ster., 114; Virginia Midland 2d mort., 108; do. 5th mort., 93⅞; Virginia and Tennessee 8s, 125; Virginia 10-40 coupons, 65; do. Peelers, 35¾; do. coupons, 39¼; Wilmington, Columbia and Augusta, 107⅝; Wilmington and Weldon, 110. The latest quotations are: Atlanta and Charlotte 1st, 107¼@107⅝; Baltimore and Ohio, 193@195; do. 6s, 1885, 103¾@104½; Canton 6s, 104@—; Columbia and Greenville 1st, 100⅝@101; Marietta and Cincinnati 1st, 127⅝@128; do. 2d, 101¼@101⅜ : do. 3d, 57¼@57½; Northern Central, 56@56⅝; do. 6s, 1900, gold, 116@116¼; do. 5s, Series A, 97¾@—; Norfolk Water 8s, 132@135; Ohio and Mississippi, Springfield div. 1st, 115@117; Richmond and Danville 1890, 106@—; do. 1915, —@97; Virginia Midland 5th mort., 93¾@94; do. inc., 56¼@60; Virginia consols, 59⅛@59⅝; do. 10-40s, 43⅛@43¾; Western Maryland 2d pref., 108¾@110.

THE LAKE SHORE AND MICHIGAN SOUTHERN RAILWAY COMPANY.

TREASURER'S OFFICE, GRAND CENTRAL DEPOT, NEW YORK, Sept. 27, 1882.

The Board of Directors of this company have this day declared a QUARTERLY DIVIDEND of TWO PER CENT upon its Capital Stock, payable on WEDNESDAY, the first day of NOVEMBER next, at this office. The TRANSFER-books will be closed at 3 o'clock P. M., on MONDAY, the 2d day of October next, and will be reopened on the morning of Monday, the sixth day of November next.

E. D. WORCESTER, Treasurer.

The Coal Trade.

THE leading coal-carrying companies make the following reports of their tonnage for the week ending Oct. 21, and for the year to the same date, compared with their respective amounts carried to the same time last year:—

	Week.	1882.	1881.
Reading Railroad	207,223	7,275,322	7,010,140
Schuylkill Canal	18,614	412.209	490,715
Lehigh Valley	137,986	5,473,629	5,039,230
Delaware, Lackawanna and Western	108,851	3,640,726	3,397,898
Shamokin	26,909	915,841	874,536
Central R. R. of New Jersey	105,872	3,509,762	3,503,331
United R. R. of New Jersey	42,070	1,370,541	1,245.775
Pennsylvania Coal	35,543	1,133,429	1 115,395
Delaware and Hudson Canal	89,929	2,808,653	2,858,980
Huntingdon and Broad Top Mountain	10,301	375,427	425,971
Penn. and New York	34,187	1,273,359	1,324,402
Clearfield, Pa.	55,496	2,287,802	1,910,553

The total tonnage of anthracite coal from all the regions for the week ending Oct. 21, as reported by the several carrying companies, amounted to 702,977 tons, against 631,688 tons in the corresponding week last year, an increase of 71,289 tons. The total amount of anthracite mined for the year is 22,904,317 tons, against 22,131,244 tons for the same period last year, an increase of 773,073 tons. The quantity of bituminous coal sent to market for the week amounted to 109,640 tons, against 108,409 tons in the corresponding week last year, an increase of 1,231 tons. The total amount of bituminous mined for the year is 3,473,182 tons, against 3,920,184 tons for the corresponding period last year, a decrease of 447,002 tons. The total tonnage of all kinds of coal for the week is 812,617 tons, against 740,097 tons in corresponding week last year, an increase of 72,520 tons, and the total tonnage for the coal year is 26,377,490 tons, against 26,051,428 tons to same date last year, an increase of 326,071 tons. The quantity of coal and coke carried over the Pennsylvania Railroad for the week ending Oct. 21 was 223,859 tons, of which 174,300 tons were coal and 49,559 tons coke. The total tonnage for the year thus far has been 8,846,880 tons, of which 6,507,078 tons were coal and 2,270,802 tons coke. These figures embrace all the coal and coke carried over the road, east and west. The shipments of bituminous coal from the mines of the Cumberland coal region for the week ended Oct. 21 were 52,643 tons, and for the year to that date 1,008,004 tons, a decrease of 702,227 tons as compared with the corresponding period of last year. The shipments were: To the Baltimore and Ohio Railroad—For the week, 26,948 tons; year, 706,807 tons; decrease as compared with 1881, 388,615 tons. Chesapeake and Ohio Canal—Week, 20,729 tons; year, 164,052 tons; decrease as compared with 1881, 222,809 tons. Pennsylvania Railroad — Week, 4,440 tons, year, 130,797 tons, decrease from last year, 95,313 tons. The Reading Railroad shipment for last week, ending October 28, was about 201,000 tons, of which 50,300 tons were sent to and 41,800 tons shipped from Port Richmond, and 15,000 tons sent to and 14,300 tons shipped from Elizabethport.—*Philadelphia Ledger, Oct.* 30.

THE Treasury Department has just decided that frogs' legs are not "fresh fish for immediate consumption." It appears that large quantities of frogs' legs are taken in Canada and shipped across the border for consumption in the United States. The treaty of Washington provided that fish should be taken across the line free of duty. The Treasury Department some time ago decided that frogs' legs were not fish, as provided for by this treaty, and the importers of the delicacy then sought to have the frogs' legs admitted free of duty under that line of the Tariff laws which places upon the free list "fresh fish for immediate consumption." Now the Department decides that frogs' legs are no more fish under the Tariff than they were under the Treaty.

THE formal inauguration of the work on the Trent Valley Canal took place at Fenelon Falls, Canada, on the 27th ult. In the evening a banquet was given to Mr. Hector Cameron, M.P., in recognition of his services in connection with the undertaking.

FOR SALE.

Locomotives—Four Second-hand Narrow-Gauge Engines in good order.
One Second-hand "Tank" Narrow-Gauge Engine, 10 tons.
Several Second-hand Standard-Gauge Locomotives in good order, immediate delivery.
One new 3ft. Gauge Passenger Engine, 22 tons, prompt delivery.
Six new 4ft. 8½ Gauge Locomotives, cylinders 17x24, weight 35 tons. October and November delivery.
Two new 3ft. Gauge Locomotives, Cylinders 12x18, weight 20 tons. October and November delivery.
Cars—Passenger and Freight Cars of all descriptions for early delivery.
Rails—16lb., 20lb. 30lb. 35lb. and 56lb. Rails.
Car Wheels and Axles.
Narrow-Gauge Rolling-stock a specialty.

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RAILWAY VARNISHES,

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Fine Brushes adapted for Railroad use. All kinds of Artists' Materials. Colors for ready use, and all specialties for Railroad and Carriage purposes.

Railroad companies will save themselves great trouble in painting by allowing F. W. DEVOE & Co. to prepare their Passenger and Freight Car Colors. This will insure Durability, Uniformity and Economy. F. W. DEVOE & Co., manufacture from the crude materials, which are the component parts of any shade, and they understand better their chemical relationship, when in combination, than can be possible to those who simply buy their dry materials and then grind them.

SEND FOR SAMPLE CARD OF TINTS.

Cor. of Fulton and William Sts.
NEW YORK.

Continuous Automatic

FREIGHT BRAKES.

Requiring no other Connection between Cars than the ordinary Coupling-Link and Pin.

SIMPLE, DURABLE, AND EFFICIENT.

Brakes can be applied to every Car in the longest train, from the engine or cabose, or from any car in the train. It can be readily attached to any car, and adapted to ordinary brake beams, shoes, etc. There is no possibility of damaging wheels by "sliding."

PATENTED MAY 23, 1882.

☞ Railroad and manufacturing companies, or partise able to co-operate with patentee in their manufactur and introduction, are invited to correspond with

WM. C. SCHULTZE,
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MARENGO, Iowa Co., Iowa.

NO OTHER LINE IS SUPERIOR TO THE

FITCHBURG RAILROAD

HOOSAC TUNNEL ROUTE

WEST.

6.30 A.M. ACCOMMODATION.

Connecting at Syracuse, N. Y., at 7.15 P.M., with through sleeping cars for Cincinnati, Cleveland, Toledo, *DETROIT AND CHICAGO.*

3.00 P.M. CINCINNATI EXPRESS.

Pullman Sleeping Car attached, running through to Cincinnati without change. (Only Line running Pullman Cars from Boston.) This car runs *via* Erie Railway and N.Y., P. & O. R.R., making direct connection for Louisville, St. Louis, Kansas City, New Orleans, and all points in Texas and New Mexico.

3.00 P.M. ST. LOUIS EXPRESS.

THE ONLY LINE which runs a THROUGH SLEEPING-CAR from

BOSTON TO ST. LOUIS WITHOUT CHANGE!

ARRIVING AT 8.00 A.M. SECOND MORNING.

Through sleeping car for Buffalo, Toledo, Fort Wayne, Logansport, Lafayette, Danville Tolono, Decatur and St. Louis, making direct connection with through Express Trains for Kansas, Colorado, Texas, and all points in the

SOUTHWEST.

6.00 P.M. PACIFIC EXPRESS.

The only line running a through sleeping car *via* Buffalo and Detroit without change, arriving at Chicago at 8.00 A.M. second morning, making sure connections with through Express Trains for Iowa, Nebraska, Kansas, Colorado, the Pacific Coast, Wisconsin, Minnesota and all points in the

WEST AND NORTHWEST.

THE ABOVE TRAINS RUN DAILY, SUNDAYS EXCEPTED.

This Great Short Line passes through the most celebrated scenery in the country, including the famous HOOSAC TUNNEL, four and three-quarters miles long, being the longest Tunnel in America, and the third longest in the world.

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250 WASHINGTON STREET, BOSTON. 250

JOHN ADAMS, General Superintendent. F. O. HEALD, Acting Gen'l Passenger and Ticket Agent.

In effect January 9th, 1883, and subject to change.

RAILROAD AND CANAL DIVIDEND STATEMENT.

Showing the amount of Stock Outstanding, the Dividend Periods and the date of last Dividend.

Marked thus(*)are leased roads.	Stock out-standing.	Divide'd Periods.	Last Dividend Payable.
Albany and Susq*...100	2,500,000	semi-an	July '82 2
Ashuelot.....100	210,000	q'arterly	Oct. '81 3½
Atch., Top. and S. Fe100	54,000,000	q'arterly	Nov. '82 1½
Atlanta and W. Point100	1,232 200	semi-an	Jan. '82 6
Atlantic and St. Law*100	5,840,000	semi-an	Mar. '82 3
Augusta and Savan'h100	1,082,900	semi-an	June'81 3½
Avon, Genesee&MtM*100	225,000	semi-an	July '81 3
Baltimore and Ohio.100	14,792,566	semi-an	Nov. '82 5
" " pref.100	5,000,000	semi-an	July '82 3
Washington Br....100	1,650,000	semi-an	Nov. '82 5
Berkshire*.....100	600,000	q'arterly	Apl. '82 1¾
Boston and Albany..100	20,000,000	q'arterly	Sept.'82 2
Bos.&N.Y.AirLine pf.100	2,795,227	q'arterly	June'82 1
Bos.,Cl.,F.&N.B.pref.100	1,750,100	semi-an	Oct. '82 3½
Bos.,Conc.&Mont.pf*100	800,000	semi-an	Nov. '82 3
Boston and Lowell..500	3,940,000	semi-an	July '82 2
Boston and Maine...100	6,921,274	semi-an	Nov. '82 4
Boston & Providence100	4,000,000	semi-an	Nov. '82 4
Attleborough Br...100	131,700	semi-an	July '82 3½
Bos.,Revere B&Lynn100	419,400	semi-an	July '82 3½
Buffalo,N. Y. & Erie*.100	950,000	semi-an	June'82 3
Camden & Atlantic.. 50	377,400	q'arterly	Nov. '82 3
" " pref. 50	880,650	q'arterly	Nov.'82 4
Camden & Burl. Co...100	381,925	semi-an	July '82 3
Canada Southern....100	15,000,000	.....	Feb. '81 2½
Cape May &Millville* 50	447,000	semi-an	June'81 3
Catawissa*..... 50	1,159,500	annual	Oct.'81 $2½
" pref..... 20	2,200,000	semi-an	Nov. '82 3½
" new pref.. 50	1,000,000	semi-an	Nov. '82 3½
Cayuga and Susq.*.. 50	589,110	semi-an	July '81 4½
Cedar Rapids&Mo.R*100	6,850,400	q'arterly	Nov. '82 1½
" " pref.100	769,600	semi-an	Aug .'82 3½
Central of Georgia...100	7,500,000	semi-an	June '82 4
Central of New Jersey100	18,563,200	q'arterly	July '76 2½
Central Ohio*..... 50	2,437,950	semi-an	July '82 3
" pref.... 50	411,550	semi-an	July '82 3
Central Pacific 100	59,275,500	semi-an	Aug. '82 3
Chemung*.....100	380,000	q'arterly	July '81 1½
Cheshire preferred ..100	2,155,300	semi-an	July '82 1½
Chicago and Alton...100	11,181,741	semi-an	Sept. '82 4
" " pref 100	2,245,400	semi-an	Sept. '82 4
Chi., Burl. & Quincy.100	55,337,455	q'arterly	Sept. '82 2
Chi., Iowa & Nebras*.100	3,916,200	semi-an	July '82 4
Chi., Mil. & St. Paul..100	20,404,261	semi-an	Oct. '82 3½
" " pref 100	14,401,483	semi-an	Oct. '82 3½
Chi. & N. Western...100	14,988,257	semi-an	June'82 3½
" pref.100	21,525,353	q'arterly	Sept. '82 2
Chi., R. I. & Pacific..100	41,960,000	q'arterly	Nov. '82 1¾
Chi. and West Mich .100	6,151,000	semi-an	Feb. '82 2½
Chi.,St.P.,M.&O.pref.100	10,390,000	q'arterly	Oct. '82 1¾
C., Ind., St. L. & Chi..100	6,000,000	q'arterly	July '82 1½
Cin., Sand. & Clev.pf. 50	429,037	semi-an	Nov. '82 3
Clev. and Mahoning* 50	3,759,200	semi-an	Nov. '81 3½
Clev. and Pittsburg* 50	11,244,336	q'arterly	Sept. '82 1¾
Columbus & Xenia*. 50	1,786,200	q'arterly	Sept,'82 2
Colum.&HockingVal.100	2,500,200	semi-an	Aug. '81 208
Concord 50	1,500,000	semi-an	Nov. '82 5
Concord and Ports.*.100	350,000	semi-an	July '82 3½
Conn.& Passump.Riv100	2,244,400	semi-an	Aug '82 3
Connecticut River ..100	2,100,000	semi-an	July '82 4
Cumberland Valley.. 50	1,292,950	q'arterly	Oct.' 82 2½
" 1st pref 50	241,900	semi-an	Apl. '82 4
" 2d pref. 50	243,000	semi-an	Apl. '82 4
Danbury & Norwalk. 50	600,000	.....	Oct. '82 2½
Dayton and Mich.*.. 50	2,402,573	semi-an	Apl. '82 1¾
" " pref. 50	1,211,250	q'arterly	July '82 2
Delaware*..... 25	1,468,940	semi-an	July '82 3
Del. & Bound Brook*100	1,652,000	q'arterly	Nov. '82 1¾
Del., Lack.& Western 50	26,200,000	q'arterly	Oct., 82 2
Denver & Rio Grande.100	29,160,000	q'arterly	Jan '82 1½
Den.,South P. & Pac.100	3,500,000	.....	Aug.'80 4
Detroit, Lans. & Nor.100	1,825,600	semi-an	Aug.'80 2½
" " pref.100	2,508,380	semi-an	Aug. '82 3½
Dubuque&Sioux C'y*100	5,000,000	semi-an	Oct. '82 3
East Pennsylvania*.. 50	1,709.550	semi-an	July '82 3
East Mahanoy*..... 50	392,950	semi-an	July '82 3
Eastern (N. H.).....100	492,500	semi-an	June'82 2½
Eel River.....100	3,000,000	q'arterly	Sept. '82 $1
Elmira&Williamsp't* 50	500,000	semi-an	Nov. '82 1¾
" " pref. 50	500,000	semi-an	July '82 3½
Erie and Pitsburg*.. 50	1,998,400	q'arterly	June '82 1¾
Evansville & Terre H.100	100,000	semi-an	Nov.'81 2
Fitchburg.....100	4,500,000	semi-an	July '82 3
F. & P. Marquette pf.100	6,500,000	semi-an	July '82 3
Ft.W. & Jackson pref.100	2,000,000	.....	May '82 2
Georgia. 100	4,200,000	q'arterly	July '82 2½
Granite 100	1,250,000	semi-an	July '82 3
Han. & St. Jo. pref .100	5,083,024	semi-an	Aug. '82 3½
Harrisbg&Lancaster 50	1,182,500	semi-an	July '82 3½
H'ford &Conn. West'n.	.....	.....	Nov. '82 1½
Housatonic pref. ...100	1,180,000	q'arterly	Oct. '82 2
Illinois Central.....100	39,000,000	semi-an	Sept. '82 3½
Ia.Falls & Sioux City*100	4,623,500	q'arterly	Sept. '82 1¾
Iowa R. Land Co....100	7,620,000	q'arterly	Nov. '82 1
Jeffersonv. Mad.&Ind.100	2,000,000	q'arterly	May '82 1¾
Joliet and Chicago*..100	1,500,000	q'arterly	June'82 1¾
Kan.C.,Ft.S.&Gulf...100	4,000,000	.....	Feb. '82 2
" " pref..100	2,750,000	semi-an	Aug. '82 4
Kentucky Central...100	500,000	semi-an	June'81 1
" " pref..100	5,583,500	semi-an	June'81 1
Lake Shore&Mich.So.100	49,466,500	q'arterly	Nov. '82 2
" (guar.)100	533,500	semi-an	Aug. '82 5
Lawrence*..... 50	450,000	q'arterly	July '82 2
Lehigh Valley..... 50	27,496,895	q'arterly	Oct. '82 2
" " pref. 50	106,300	q'arterly	Oct. '82 2

Marked thus(*)are leased roads.	Stock out-standing.	Divide'd Periods.	Last Dividend Payable.
Little Miami..... 50	4,637)300	q'arterly	Sept. '82 2
Little Rock & Ft. S..100	4,096,135	.....	July' 81 108
Little Schuylkill*.. . 50	2,646,100	semi-an.	July '82 3½
Long Island..... 50	10,000,000	q'arterly	Nov. '82 1
Louisville & Nashv..100	19,130,913	semi-an.	Feb. '82 3
Lowell & Andover...100	500,000	semi-an.	Jan. '82 3½
Lykens Valley.....100	600,000	q'rterly.	Oct.' 81 2½
Manchester & Law..100	1,000,000	semi-an.	Nov. '82 5
Manhattan 100	13,000,000	.....	.....
" " 1st pref.100	6,500,000	q'rterly.	Oct. '82 1½
" " 2d pref.100	6,500,000	q'rterly.	Oct. '82 1½
Marietta& Cincinnati 50	1,386,350	.....	.....
" " 1st pref 50	8,105,600	semi-an.	Sep. '66 38
" " 2d pref 50	4,440,000	semi-an.	Sep. '66 38
Marq.Hout.&Ont.pf..100	2,259.026	.....	Aug. '82 4
Massawippi*..... 100	400,000	semi-an.	Aug. '82 3
Metropolitan 100	6,500,000	q'rterly.	Oct. '82 1½
Michigan Central....100	18,738,204	q'rterly.	Aug. '81 1
Middlesex Central...100	280,000	semi-an.	Aug. '82 3
Mill Creek&Minehill* 50	323,000	semi-an.	July '82 5
M.Hill& Schuyl.Hav* 50	4,022,500	semi-an.	July '82 3½
Missouri Pacific.....100	28,169,800	q'rterly.	Oct. '82 1¾
Mobile&Montgomery100	3,022,517	semi-an.	Feb. '80 2½
Morris and Essex.... 50	15,000,000	semi-an.	July '82 3½
Mt Carbon&PtCarbon 50	282,350	semi-an.	July '82 6
Nashua and Lowell..100	800,000	semi-an.	Nov. '82 4
Nashua & Rochester.100	1,305,800	semi-an.	Oct. '82 1½
Nashv. & Decatur...100	1,827,000	semi-an.	June'81 3
Nash.,Chat.&StLouis 25	6,670,325	semi-an.	Apl. '82 1½
Naugatuck.....100	2,000,000	semi-an.	July '82 5
Nesquehoning Val'y* 50	1,300,000	semi-an.	Sept.'82 3
N.Castle&Beaver Val* 50	600,000	q'rterly.	Oct. '81 —
NewLondonNorth'n*100	1,500,000	q'rterly.	July '82 1½
N. Y. Cen. & Hud. R.100	89,428,330	q'rterly.	Oct. '82 2
N. Y. and Harlem....100	7,950,000	q'rterly.	July '82 4
" " pref.100	1,500,000	q'rterly.	July '82 4
" City Line.. —	.....	annual	Apl. '82 3
N.Y.,LakeErie&West.100	77,083,900	.....	.....
" " pref.100	8,156,825	.....	Jan. '82 6
N. Y., N. H. & Hart...100	15,500,000	semi-an.	Jan. '82 5
N.Y., Prov. & Boston100	3,000,000	q'rterly.	Nov. '82 2
Niag.Bridg&Canand*100	1,000,000	semi-an.	July '81 3
North Carolina*.....100	3,000,000	semi-an.	Sep. '81 3
" " pref.100	1,000,000	semi-an.	Sep. '81 3
N. Eastern (S.C.) pref100	86,000	semi-an.	May '81 4
Norfolk & Western pref.	15,000,000	q'rterly.	Sept. '82 $1
North Pennsylvania. 50	4,527,150	q'rterly.	Aug. '82 1¾
Northern Central.... 50	6,142,000	semi-an.	July '82 3
Northern N. Hampsh100	3,068,400	semi-an.	June'82 3
Northern N. Jersey*.100	1,000,000	semi-an.	July '80 2½
Norwich&Worcester*100	2,604,400	semi-an.	July '82 5
Ohio and Miss. pref..100	4,030,000	semi-an.	Mar. '75 3½
Old Colony.....100	7,333,800	semi-an.	uly '82 3½
Oregon R'way&Nav.100	6,000,000	q'rterly.	Nov. '82 2
Oswego & Syracuse..100	1,320,400	semi-an.	Aug. '81 4½
Panama..... 100	7,000,000	.....	July '82 6½
Paterson & Hudson*.100	630,000	semi-an.	July '82 4
Paterson & Ramapo.100	248,000	semi-an,	July '82 4
Pember.&Hightst'n*. 50	342,150	semi-an.	Jan. '82 3
Pennsylvania..... 50	83,786,570	semi-an.	Nov. '82 4½
Pennsylvania Co..... 50	20,000,000	semi-an.	June'81 2½
Peoria & Bureau Val*100	1,200,000	semi-an.	Feb. '82 4
Philadelphia & Erie*. 50	7,013,700	semi-an.	.....
" " pfd 50	2,400,000	semi-an.	Jan. '75 4
Phil,Ger.&Norrist'n* 50	2,231,900	q'rterly.	Sept.'82 3
Phil. and Reading... 50	32,726,375	q'rterly.	Jan. '76 2½
" " pref. 50	1,551,800	q'rterly.	July '76 3½
Phila. and Trenton..100	1,250,100	q'rterly.	Oct. '82 2½
Phila., Wil. and Balt. 50	11,585,750	semi-an.	July '82 4
Pittsb.,Ft. W. & Chi.*100	19,714,285	q'rterly.	Oct. '82 1¾
" Special Imp..100	6,770,900	q'rterly.	Oct. '82 1¾
Pittsfield&N.Adams..100	450,000	semi-an.	July '82 2½
Portl., Saco & Portsm100	1,500,000	semi-an.	July '82 3
Providence &Worces.100	2,000,000	semi-an.	July '82 3
Rensselaer&Saratog.*100	7,000,000	semi-an.	July '82 4
Rhode Island& Mass.100	100,000	.....	Jan. '81 3
Richmond& Danv...100	3,866,000	q'rterly.	Aug. '82 2
Richmond & Petersb100	1,009,300	semi-an.	Jan. '81 3
Roch.&Genesee Val.*100	555,200	semi-an.	July '82 3
Rutland preferred.. 100	4,000,000	semi-an.	Sept. '82 1
St.L.,Alt. & T.Haute.100	2,300,000	.....	.....
" " pref.100	2,468,406	.....	May '82 3
St.L.&S.Fran.1st pref100	4,500,000	.....	Aug. '82 3½
St.L.,I.Mt.&South'n.100	21,459,921	semi-an.	Feb. '74 3
St.L.,Jac'ville & Chic.100	1,293,000	.....	Aug. '82 4½
" " " pref.100	1,034,000	.....	Aug. '82 4½
St. P. & Duluth pref.100	4,705,000	q'rterly.	June'82 1¾
St. P., Minn. & Man..100	20,000,000	q'rterly.	Nov.'82 2
Schuylkill Valley*... 50	576,050	semi-an.	July '82 2½
Seaboard & Roanoke.100	1,229,600	semi-an.	May '82 5
Shamokin V.&Pottsv 50	669,450	semi-an.	Feb.'82 3
Shore Line*.....100	1,000,000	semi-an.	July '82 4
Sioux C.&Pacific pref100	169,000	semi-an.	Oct. '82 3½
South Br. (N. J.)*....100	438,300	semi-an.	Jan. '82 3
South Western (Ga.)*100	3,892,300	semi-an.	Dec. '81 3½
Stockbridge&Pitts.*.100	448,700	semi-an.	Oct. '81 1½
Syr.,Bingham&N.Y.*100	2,500,000	semi-an.	Feb. '81 2
Terre Haute & Ind...100	1,988,150	semi-an.	Aug. '82 4
Troy and Boston....100	1,609,000	semi-an,	Feb. '80 2
Union Pacific..... 100	61,000,000	q rterly.	Oct. '82 1¾
United Cos of N. J.*.100	20,490,000	q'rterly.	Oct. '82 2½
Utica, Shenango&S V100	4,000,000	semi-an.	Nov.'81 3
Utica and Black Riv.100	1,772,000	semi-an.	Mar. '82 2
Vermont and Mass..100	3,050,000	semi-an.	Oct .'82 3
Wab. St.L.&Pac.pref.100	22,615,100	q'rterly.	Nov.'81 1½

Markedthus(*)are leased roads.	Stock out-standing.	Divide'd Periods.	Last Dividend Payable.
Ware River*.....100	750,000	semi-an.	July '82 3½
Warren (N. J.).....100	1,800,000	semi-an.	Apl. '82 3½
Warwick Valley.....100	340,000	semi-an.	July '82 2½
Westchest&Phil.pref100	821,300	semi-an.	July '80 2
West Jersey.....100	1,359,750	semi-an.	Sept. '82 3
Wilmingt'n&Weld'n.100	1,456,200	semi-an.	July '82 3
Wil., Col., & Aug 100	960,000	semi-an.	July '82 3
Winchester&Poto'c.*100	180,000	semi-an.	July '82 3
Winchester&Strasb.*100	74,700	semi-an.	July '82 3
Worcester & Nashua. 75	1,789,800	semi-an.	July '82 1½
HORSE-POWER R. R.			
Albany City.....100	200,000	annual	.....'80 5½
Baltimore City..... 25	1,000,000	semi-an.	Oct. '82 3
Balt.,Cat.&El.Mills..100	....	semi-an.	July '82 2
BleeckerSt.&Ful.F'y.100	900,000	semi-an.	July '82 ¾
Boston&Chelsea pref. 50	110,000	semi-an.	Oct. '82 3
Broadway (Brooklyn)100	250,000	q'arterly	Oct. '82 6
B'way&7th Av,(N.Y.)100	2,100,000	q'arterly	Oct, '82 2
B'klyn&Hunter's Pt.100	400,000	semi-an.	Oct. '82 6
Brooklyn City.....100	2,000,000	q'arterly	Aug. '82 3½
Bushwick (Brooklyn)100	309,000	semi-an.	Oct. '82 6
Cambridge.....100	908,000	q'arterly	Oct. '82 4½
Cen.Park,N.& E.Riv.100	1,800,000	q'rterly.	Oct. '82 6
Christoph'r&TenthSt100	650,000	semi-an.	Aug. '82 2½
Citizens' (Phil.)..... 50	192,500	q'rterly.	Jan. '82 2½
Citizens' (Pbg.)..... 50	200,000	annual..	....'80 14½
Coney Island&Bklyn100	500,000	semi-an.	Oct. '80 5
Continental (Phil.) .. 50	580,000	semi-an.	July '82 6
D.Dock,E.B'way&Bat100	1,200,000	q'arterly	Aug. '82 4
Eighth Av. (N. Y.)....100	1,000,000	q'rterly.	Oct. '82 3
42d St. & G. St. Ferry100	747,000	semi-an.	May '82 6
Frankf.&Southw (Ph) 50	600,000	q'rterly.	Oct. '82 6
Germantown, (Ph.).. 50	572,800	q'rterly.	Oct. '82 2½
Girard College (Ph.) . 50	500,000	semi-an.	July '71 3
Grand St. & Newton..100	170,091	semi-an.	July '81 2½
Green&Coates St.(Ph) 50	150,000	q'rterly.	Oct. '82 3
Heston,Mantau&F'm 50	299,381	semi-an.	Jan. '75 4
Highland.....100	600,000	semi-an.	July '82 4
Lomb.&SouthSts(Ph) 25	195,000	semi-an.	Oct. '75 4
Lynn and Boston....100	200,000	semi-an.	Nov.'82 4
Malden and Melrose.100	165,000	....	.....
Metropolitan (Bost.). 50	1,500,000	semi-an.	July '82 4
Middlesex (Boston)..100	650,000	semi-an.	Nov. '82 3½
N.Y.,Bay Ridge&Jam100	150,000	..... .	Oct. '78 7
Ninth Av. (N. Y.)....100	797,320	....	.....
Orange &Newark....100	282,555	..... .	.....
People's (Phila.) pref. 25	124,744	..... .	July '82 2
Philadelphia City... 50	475,000	semi-an.	July '82 4
Phila. and Darby.... 20	200,000	semi-an.	July '81 3½
Phila.&Grey's Ferry. 50	308,000	semi-an.	Jan. '82 6
Pbg,Alleg.&Manches. 50	300,000	q'rterly.	Oct. '81 3
Ridge Avenue (Ph.).. 50	420,000	semi-an.	Oct. '81 11
Second Avenue (N.Y.)100	1,199,500	semi-an.	July '82 4
Second&ThirdSt.(Ph) 50	771,076	q'rterly.	Jan. '82 4½
17th &19th sts (Ph.).. 50	250,000	semi-an.	July '81 3
Sixth Avenue (N. Y.)100	750,000	semi-an.	May '82 5
Somerville (Boston).100	113,000	semi-an.	Nov. '82 3
South Boston..... 50	600,000	semi-an.	July '82 4
Third Avenue, N. Y..100	2,000,000	q'rterly.	Aug '82 5
13th and 15th sts.,Ph 50	334,529	q'rterly.	Jan. '82 4
23d street, N. Y.....100	600,000	semi-an.	Aug. '82 4
Union, Boston.....100	374,300	semi-an.	Jan. '82 4
Union, Phila..... 50	1,005,000	semi-an.	Jan. '82 7
West Philadelphia... 50	750,000	semi-an.	July '77 10
CANALS.			
Chesapeake and Dela 50	2,078,038	semi-an.	June'75 2
Delaware Division... 50	1,633,350	semi-an.	Aug. '82 $1
Delawa. and Hudson100	20,000,000	q'rterly.	Sept. '82 1½
Delaware & Raritan*.100	5,847,400	q'rterly.	Oct. '82 2½
Lehigh Coal and Nav 50	11,204,250	semi-an.	June'82 2
Monongahela Nav... 50	1,004,500	semi-an.	July '82 $3
Morris, consolidated.100	1,025,000	semi-an.	Aug. '82 2
" preferred....100	1,175,000	semi-an.	Aug. '82 5
Pennsylvania..... 50	4,501,200	.....	.....
Schuyl. Nav., com.*. 50	859,100	annual..	Oct.'82 50c.
" " pref... 50	3,200,000	annual..	Oct. '82 $1
MISCELLANEOUS.			
Adams Express.....100	12,000,000	q'rterly.	Sept.'82 2
American Express... 50	18,000,000	semi-an.	July '82 3
Amoskeag Manuf.Co.100	3,000,000	semi-an.	June'81 5
Calumet&HeclaMin'g 25	100,000 S.	q'rterly.	Nov. '82 $5
Central Mining Co...100	.....	semi-an.	Feb.'82 2½
Consolidation Coal..100	10,250,000	semi-an.	Jan. '82 2
George's Creek C.&I.100	....	semi-an.	Jan. '82 3
Maryland Coal.....100	4,400,000	semi-an.	Feb. '76 1½
Mariposa L. &Mining100	10,000,000	..... .	.....
" pref100	5,000,000	..... .	.....
Missouri Val.LandCo100	200,000	semi-an.	July '82 12
National Tube Works100	1,000,000	q'rterly.	Oct. '82 3
Pac. Mail Steamship.100	20,000,000	q'rterly.	Sept.'69 3
Pennsylvania Coal... 50	5,000,000	q'rterly.	Aug. '82 3
Pullman Palace Car..100	10,032,800	q'rterly.	Nov.'82 2
Quicksilver, com....100	5,708,700	..... .	May '82 0.4
" pref....100	4,291,300	..... .	May '82 6
Quincy Mining Co... 25	40,000 shs	semi-an.	Aug. '82 $5
Quincy R. R. Bridge.100	1,750,000	semi-an.	July '82 5
SiouxC.&I.F.L.&L.Co100	500,000	semi-an.	June'82 5
Spring Mt. Coal.....100	1,500,000	semi-an.	June'82 3½
Topeka Equip'nt Co.100	255,500	semi-an.	Oct. '82 5
United States Ex....100	7,000,000	q'rterly.	Aug. '82 1
Wells-Fargo & Co. Ex100	6,250,000	semi-an.	July '82 4
Western Union Tel..100	80,000,000	q'rterly.	Oct. '82 1½

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RAILROAD EARNINGS—MONTHLY.

	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total.
Burl., Cedar Rap. & Northern:													
1880	184,316	165,170	188,325	141,652	149,504	153,378	143,432	160,160	179,804	204,991	189,330	193,419	2,053,484
1881	167,750	124,510	148,551	184,680	165,630	205,912	174,351	209,112	221,801	221,748	203,880	232,812	2,259,037
1882	252,823	225,631	224,107	178,304	199,278	211,257	198,276	224,921	261,439	.....	.....	.....	.....
Central Pacific:													
1880	1,200,615	1,070,487	1,373,438	1,356,716	1,778,488	1,724,930	1,840,067	1,973,438	1,994,997	1,120,229	2,199,466	1,905,221	20,508,113
1881	1,602,907	1,454,218	1,709,658	1,872,370	2,091,411	2,159,382	1,899,346	2,088,519	2,185,303	2,507,857	2,297,971	2,225,179	24,094,101
1882	1,839,469	1,720,675	1,969,737	2,054,687	2,342,298	2,229,105	2,020,000	2,277,000	2,474,000	.....	.....	.....	.....
Chesapeake and Ohio:													
1880	202,335	198,681	222,762	221,559	199,443	214,352	238,236	259,110	247,303	211,820	240,795	218,009	2,674,308
1881	162,540	184,389	228,479	227,343	252,235	241,135	225,096	262,858	247,144	237,303	235,585	203,562	2,702,762
1882	210,455	209,708	208,981	267,454	255,939	260,753	306,831	371,175	305,065	.....	.....	.....	.....
Chicago and Alton:													
1880	534,054	497 013	626,473	542,961	616,128	617,524	708,906	761,120	767,349	785,199	696,776	574,695	7,718,198
1881	487,890	461,641	529,915	558,190	548,556	635,860	676,205	769,751	774,790	750,359	680,133	635,307	7,553,988
1882	579,447	530,480	584,483	561,787	553,412	613,886	671,537	800,624	881,109	.....	.....	.....	.....
Chicago and Northwestern:													
1880	1,154,632	1,131,683	1,361,725	1,294,573	1,875,608	1,671,177	1,699,686	1,767,938	2,020,245	2,105,217	1,855,622	1,477,902	19,416,007
1881	1,240,664	963,204	1,178,795	1,474,612	1,879,006	2,306,440	1,983,032	2,315,164	2,292,676	2,341,098	2,019,038	1,855,477	21,849,209
1882	1,644,935	1,474,176	1,672,931	1,668,741	2,110,947	2,022,700	2,025,736	2,099,755	2,497,053	.....	.....	.....	.....
Chicago, Burlington and Quincy:													
1880	1,432,740	1,411,870	1,732,518	1,489,894	1,909,627	1,682,956	1,773,643	1,834,321	1,862,285	1,934,762	1,837,860	1,552,018	20,454,494
1881	1,307,948	1,034,821	1,418,149	1,574,371	1,679,455	2,083,803	1,888,358	2,173,945	2,262,981	2,031,001	1,816,133	1,905,490	21,324,150
1882	1,658,834	1,457,300	1,566,217	1,530,838	1,505,261	1,437,164	1,625,006	2,086,858	.....	.....	.....	.....	.....
Chicago, Milwaukee and St. Paul:													
1880	764,298	738,749	900,675	871,041	1,134,745	1,037,958	1,026,708	991,297	1,257,677	1,493,620	1,472,037	1 397,308	13,086,119
1881	990,847	682,717	916,989	1,259,946	1,538,491	1,729,811	1,568,706	1,678,361	1,644,676	1,590,000	1,569,000	1,855,000	17,025,462
1882	1,435,000	1,377,000	1,561,000	1,518,000	1,629,000	1,620,000	1,465,000	1,545,000	1,950,000	.....	.....	.....	.....
Chicago, St. Paul, Minneapolis and Omaha:													
1880	193,827	173,078	259,783	259,208	232,146	218,093	236,995	251,013	300,833	342,052	342,894	312,173	3,122,097
1881	257,786	158,594	251,648	261,211	350,124	404,562	383,202	385,586	373,370	382,714	380,733	391,950	3,981,296
1882	307,498	315,100	405,779	356,558	406,420	363,109	331,480	394,555	482,997	.....	.....	.....	.....
Cincinnati, Indianapolis, St. Louis and Chicago:													
1880	155,697	172,541	198,220	168,199	186,995	200,332	204,138	233,478	343,627	239,881	209,014	198,254	2,412,185
1881	182,523	171,511	191,005	183,710	191,056	192,299	177,161	229,858	228,653	212,606	194,805	192,623	2,296,916
1882	200,042	186,879	208,066	204,269	199,110	195,948	209,564	.....	259,379	.....	.....	.....	.....
Denver and Rio Grande:													
1880	124,759	126,922	160,883	164,882	193,925	295,455	373,132	400,133	406,583	473,318	408,562	349,196	3,478,007
1881	307,476	317,681	398,493	433,111	514,767	584,230	548,284	606,193	589,287	665,686	566,819	643,417	6,206,812
1882	491,914	412,987	535,055	559,917	614,298	537,462	495,797	574,040	595,306	599,191	.....	.....	.....
Hannibal and St. Joseph:													
1880	176,079	166,965	216,061	206,735	191,317	179,396	224,312	238,081	233,448	242,214	207,147	279,635	2,561,366
1881	154,401	122,874	176,356	190,812	172,950	190,740	201,899	210,240	215,103	313,433	201,782	180,376	2,230,961
1882	138,284	154,717	168,798	148,913	154,917	155,030	184,347	258,628	239,196	.....	.....	.....	.....
Illinois Central:													
1880	595,212	613,806	613,008	535,732	665,120	681,736	724,095	732,755	806,836	880,211	783,120	673.182	8,304,812
1881	631,281	524,499	557,789	662,493	673,259	803,887	720,004	868,407	828,847	815,238	737 218	763,475	8,586,397
1882	728,173	689,387	695,371	674,603	674,749	663,746	752,251	813,600	828,238	.....	.....	.....	.....
Indiana, Bloomington and Western:													
1880	80,498	89,690	116,185	90,374	85,733	106,954	103,438	116,732	110,622	121,343	96,621	104,619	1,233,079
1881	90,283	83,261	192,085	203,677	200,064	199,846	199,125	272,114	247,932	181,674	160,826	156,697	.....
1882	195,824	175,755	206,235	205,934	182,554	186,133	206,072	278,814	273,100	.....	.....	.....	.....
Louisville and Nashville:													
1880	674,455	575,035	612,593	563,883	655,014	976,229	772,538	827,089	931,911	1,000,327	953,087	949,185	9,491,346
1881	812,118	805,124	947,959	855,704	828,726	1,227,885	817,135	876,192	951,566	1,002,950	1,065,223	1,153,779	11,344,361
1882	964,527	960,315	1,068,834	953,603	958,130	1,215,490	1,038,385	1,030,385	1,107,985	.....	.....	.....	.....
Mobile and Ohio:													
1880	250,116	204,095	168,302	140,091	129,248	121,855	131,621	140,593	184,247	264,714	251,368	287,372	2,273,622
1881	224,347	216,768	230,916	163,551	145,803	136,517	135,549	160,789	210,262	256,924	262,986	258,812	2,403,224
1882	159,676	158,590	148,166	141,957	134,378	136,184	136,398	140,443	160,031	265,201	.....	.....	.....
Nashville, Chattanooga and St. Louis:													
1880	205,633	191,154	169,457	155,466	158,839	144,155	151,594	169,326	167,473	178,266	182,087	175,966	2,049,484
1881	178,143	190,866	207,710	183,525	104,430	154,549	150,430	168,317	179,979	172,121	152,059	173,127	2,075,256
1882	156,994	159,961	161,005	154,155	137,645	119,074	160,991	168,304	168,999	.....	.....	.....	.....
New York and New England:													
1880	164,232	149,907	183,845	179,689	183,701	219,891	205,056	249,885	235,642	215,491	210,856	198 108	2,396,302
1881	189,749	173,614	212,019	216,913	217,185	231,518	246,821	280,524	299,573	261,199	249,412	237,729	2,809,255
1882	213,840	217,261	265,222	263,544	283,244	290,060	300,920	353,726	338,490	.....	.....	.....	.....
New York, Lake Erie and Western:													
1879	1,147,173	1,207,391	1,356,780	1,372,755	1,350,574	1,230,419	1,273,533	1,450,223	1,492,497	1,713,697	1,515,835	1,398,224	16,509,127
1880	1,296,381	1,252,218	1,644,958	1,643,151	1,592,544	1,661,812	1,580,976	1,606,874	1,786,417	1,899,910	1,799,338	1,726,788	19,149,361
1881	1,443,437	1,425,765	1,847,261	1,709,057	1,776,891	1,794,982	1,787,081	1,772,895	1,734,200	.....	.....	.....	.....
Northern Central:													
1880	334,494	330,860	415,325	386,130	329,788	419,193	450,298	453,923	464,093	512,918	459,054	494,310	5,050,387
1881	386,157	382,657	452,906	487,273	465,588	487,287	440,811	498,008	429,565	449,664	487,160	476,622	5,443,697
1882	407,368	413,551	430,194	435,129	482,607	482,762	509,683	667,488	592,435	.....	.....	.....	.....
Northern Pacific:													
1880	81,390	77,259	119,357	185,700	217,613	253,105	241,277	223,500	330,300	358,456	300,822	220,993	2,629,710
1881	116,508	78,803	162,984	216,210	312,705	412,024	393,260	434,085	534,363	565,485	428,903	434,331	4,044,576
1882	239,800	269,000	384,000	438,000	568,332	631,342	679,240	727,377	789,700	.....	.....	.....	.....
Philadelphia and Erie:													
1880	224,307	245,372	327,678	334,947	311,470	331,024	308,699	347,532	322,737	367,082	324,966	281,919	3,727,733
1881	224,303	225,501	285,573	293,323	343,792	350,585	291,669	303,849	276,522	292,392	284,078	282,772	3,454,309
1882	252,727	246,246	265,311	277,851	341,415	347,614	377,206	420,329	356,455	.....	.....	.....	.....
St. Louis and San Francisco:													
1880	198,091	195,948	193,146	176,164	167,664	173,607	213,297	259,995	280,873	328,194	290,329	226,063	2,698,371
1881	212,435	178,234	262,050	265,298	283,399	260,254	252,333	286,373	279,064	308,569	284,320	287,914	3,160,245
1882	256,784	244,654	274,959	242,806	253,419	240,177	318,613	381,637	336,805	.....	.....	.....	.....
St. Louis, Alton and Terre Haute:													
1880	153,139	163,737	168,994	155,462	147,928	150,207	191,077	216,759	204,295	221,863	188,773	184,503	2,146,741
1881	175,725	166,012	201,137	197,447	172,177	165,896	165,393	189,180	196,368	179,921	162,544	153,852	2,112,801
1882	168,987	149,619	178,145	157,450	162,842	142,742	192,017	236,137	217,659	.....	.....	.....	.....
St. Louis, Iron Mountain and Southern:													
1880	555,983	490,195	451,560	408,241	349,053	363,454	432,655	565,869	671,219	688,365	632,052	656,951	6,265,597
1881	570,957	560,791	704,002	548,300	479,075	474,302	533,512	644,386	708,325	719,239	687,280	709 498	7,319,744
1882	516,370	501,127	585,008	581,977	519,120	529,700	515,519	675,981	724,160	.....	.....	.....	.....
St. Paul, Minneapolis and Manitoba:													
1880	180,239	137,645	261,798	333,014	281,899	243,407	272,089	232,579	274,188	345,057	300,675	297,641	3,160,231
1881	254,187	159,482	320,962	425,685	382,642	405,322	387,488	414,954	485,736	605,708	508,530	528,262	4,878,960
1882	395,461	418 358	531,004	570,890	858,902	856,417	853,296	801,759	832,776	.....	.....	.....	.....
Texas and Pacific:													
1880	245,785	219.165	215,070	174,177	141,083	153,066	195,711	226,073	266,570	303,666	312,184	301,858	2,754,408
1881	281,176	260,781	319,928	295,066	281,782	285,405	328,063	381,331	345,790	578,668	357,724	381,218	3,921,569
1882	310,785	255,644	332,911	359,543	409,228	384,713	367,215	439,918	470,613	.....	.....	.....	.....
Union Pacific Railway:													
1880	1,433,636	1,393,992	1,730,509	1,937,220	2,027,269	1,928,528	1,934,215	1,913,035	2,270,179	2,707,860	2,251,148	1,869,335	23,448,445
1881	1,339,799	1,374,740	1,674,860	1,766,894	2,319,238	2,884,774	2,528,826	2,638,659	2,844,357	3,289,350	2,773,608	2,267,004	27,451,831
1882	1,961,088	1,759,863	2,226,832	2,462,004	2,491,590	2,508,453	2,301,000	2,762,107	2,949,112	.....	.....	.....	.....
Wabash, St. Louis and Pacific:													
1880	776,790	759,451	978,629	892,024	948,773	953,468	1,966,742	1,189,478	1,178,950	1,501,203	1,131,787	1,050,816	12,428,112
1881	811,617	818,922	1,121,592	1,023,482	1,144,660	1,308,993	1,131,752	1,542,838	1,490,027	1,396,300	1,399,555	1,328,278	14,461,570
1882	1,220,965	1,134,768	1,315,776	1,378,194	1,204,864	1,149,682	1,418,837	1,772,544	1,682,382	.....	.....	.....	.....

Northwestern Telegraph Co.

In consequence of the growing necessity for direct telegraphic communication between Ontario and Manitoba, the great Northwestern Telegraph Company propose laying a submarine cable in Lake Superior, under the charter of the company, to connect Fort William, Manitoba, with Ontario. The telegraphic system requires 600 miles of line, with a cable, and another link along the Canada Pacific Railway over the Rocky Mountains, together with the existing system in British Columbia. Telegraphic communication on Canadian soil and waters, from ocean to ocean, would thus be secured. The practicability of the scheme has been admitted by eminent engineers. The proposed line for the laying of the cable is from some point on the Indian Peninsula, northwest of Owen Sound, connecting with land lines along the Manitoulin islands and small cable links to Sault Ste Marie, thence by one cable through Lake Superior to Thunder Bay. The estimated cost of the cable is $400,000.

The Baltimore and Ohio Railroad authorities say it is a brother of the late Commodore Vanderbilt who is interested with them in telegraph and railroad enterprises on Staten Island, New York. Mr. Vanderbilt is president of a railroad in that section which is utilizing the flats and water front on the south side of the island. The telegraph line is to pass through the island with offices at Stapleton and Clifton.

The Mathews Cotton Mill, at Selma, Ala., is to have its capital stock increased to $300,000. The mill is in a very prosperous condition. It is the purpose of those in charge of affairs to build another mill in addition to the one already in operation, and to make more and greater variety of goods, such as checks and plaids.

WESTERN ELECTRIC CO.,

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Telegraph and Telephone Apparatus

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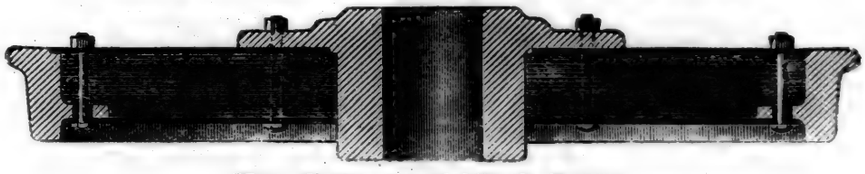
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Will prevent Railroad Accidents and Save Life.

"The McLeod Air Signal is an ingenious and inexpensive device by which the coming of a train is announced far in advance, both by visible and audible signals." [Mass. R. R. Com. Report.]

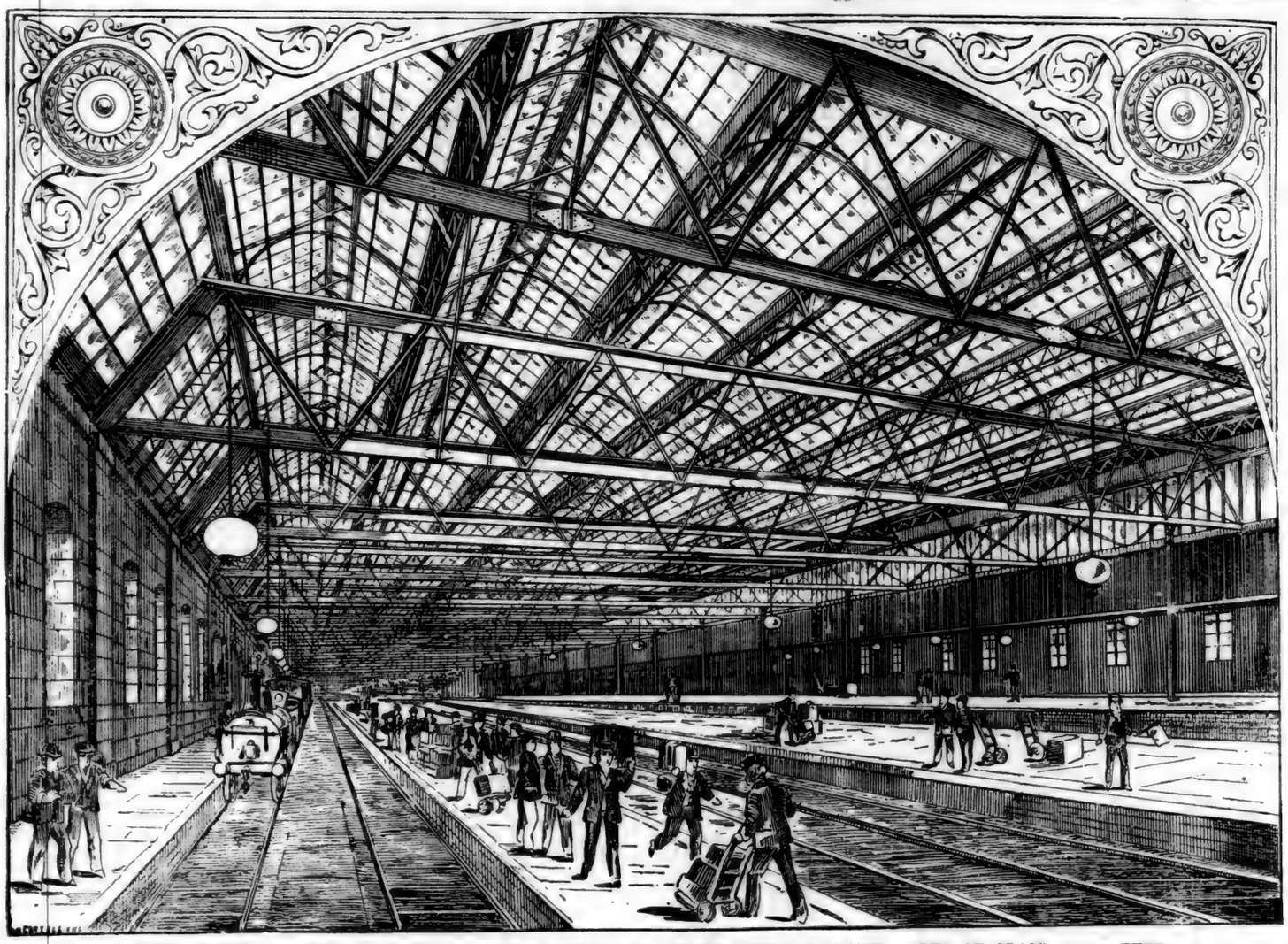
This signal has been fully tested on the New York and New England Railroad at Dudley and Bird Streets, by practical operation, and has proved a complete success, to the entire satisfaction of the many prominent Railroad men and experts who have watched and examined it. It provides an Automatic Block, Crossing, Station, Switch, Bridge, Yard and Curve Signals, Gate and Revolving Lanterns. Being operated by the weight of trains passing over an incline bar, forcing common air through a tube, by means of a bellows, which is positive in its action, it is highly commended by all railroad officials who examined it.

The company can shortly fill orders to place it on any railroad, and invite communication from Railroad Officials from all parts.

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BRIDGE STREET STATION, GLASGOW. GLAZED ON RENDLE'S SYSTEM WITHOUT PUTTY. AREA OF GLASS, 100,000 FEET.

Glazing Without Putty.

A. E. RENDLE, No. 7 Warren street, New York City, has introduced into this country a system of glazing without putty, which has found great favor in Great Britain and other European countries. The system has not been in use in this country very long, but wherever it has been adapted it has met with great favor, and carried off full honors at every exposition in which it has been shown.

The invention is very simple. Copper bars about half an inch wide are used on metal purlins, running in the direction of the slope of the roof; these have curvatures below on each side which take any water that may find its way into them, completely preventing any drip, the condensed moisture accummulating on one pane of glass passing on to the outside of the one immediately below it. The ingeniously contrived grooves admit of the glass being slipped in, where it is held with sufficient firmness, yet in case of breaking can be replaced by any one without the aid of a glazier. As no perishable substance is exposed to the weather, the cost of keeping such a roof in repair must be considerably lessened, and the elastic bed on which the glass rests prevents many fractures.

The entire roof of the Carlisle Citadel Station belonging to the Caledonian Railway Company of Great Britain, a huge structure covering nearly seven acres of ground, is of glass, glazed on Mr. Rendle's system. Three hundred and twenty-two thousand square feet of glass were used in this work. We present herewith a picture of the structure.

It is not necessary to give a list of the many buildings abroad and already in this country, in which Mr. Rendle's system of glazing without putty has been used. The following letter addressed to him by Willis P. Tharp, engineer and superintendent Union Depot, Cincinnati, of the Cincinnati, Indianapolis, St. Louis and Chicago Railroad, gives, as clearly as can be, the opinion of a competent judge, of the value of Mr. Rendle's invention:

"I made a personal and thorough examination of your system of glass roofing as used in the depots at Buffalo and Cleveland, and am pleased to say that the result has been very satisfactory to me, as I am convinced that your system of glass skylight or roof is the best of which I have knowledge. As a railroad engineer and depot architect, I take pleasure in recommending it for depot buildings, and as the result of thorough examination, would say that it has been adopted for use as roofing for our new passenger shed connected with the new Union Depot now building in Cincinnati, and you are hereby notified to proceed at once to finish the same as required." The letter bears date September 1, 1882.

ADVERTISE in the RAILROAD JOURNAL.

Pennsylvania Railroad.

THE statement of the business of all the lines of the Pennsylvania Railroad Company east of Pittsburgh and Erie, for September, 1882, as compared with the same month in 1881, shows:

An increase in gross earnings of	$682,596
An increase in expenses of	411,347
An increase in net earnings of	$271,249

The nine months of 1882, as compared with the same period in 1881, show:

An increase in gross earnings of	$3,009,540
An increase in expenses of	2,800,844
An increase in net earnings of	$208,696

All lines west of Pittsburgh and Erie for the nine months of 1882 show a surplus over all liabilities of $943,281, being a decrease as compared with the same period in 1881 of $1,325,502.

THE Light and Force Company, No. 234 Broadway, New York City, are distributing a pamphlet entitled "Faure's Electric Accumulator," which contains particulars of this invention and of its many and various uses in every day life. We notice that an account of the recent successful experiment in lighting a car on the Pennsylvania Railroad, by means of the Accumulator, finds place in this singularly interesting and, we may add, elegant production. With respect to its letter-press and mechanical merits generally, as well as its literary style and quality, this is a remarkably good specimen of the business pamphlet.

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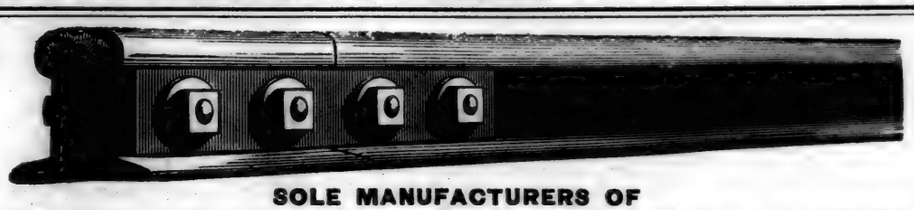
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We are amply justified in reducing the price from its old time rate of $5.00 per year to $3.00, on account of the numerous indications we are receiving of late of the increased interest that is being taken in the JOURNAL, which warrants us in believing that the sacrifice we make in price will be much more than compensated for by the promised liberal increase in the number of subscribers, It is gratifying to us to know that the alterations made in the Journal during the past year are meeting with such general favor as is expressed in the frequent words of commendation and congratulation sent to us from old and new readers, and we feel called upon to try in every way to merit their approval and to spare no pains to place the paper before as many as possible of those who might derive benefit and profit from it. During its fifty years' experience the JOURNAL has been highly favored by an especially choice class of readers, counting among its subscribers some of the most noted banking houses, commercial bodies, financiers, and railroad men of this country and Europe. Its aim in the future will be to prove itself of more value and interest than ever to its patrons of many years standing, while by its new features it makes itself of service and interest to a broader field and to more varied departments of life and business. We desire to make the JOURNAL as useful and welcome as possible to our readers and advertising patrons, and to this end we hope to have our columns of correspondence, communications and general information full and diversified. The columns we have devoted to general communications have proved especially interesting and popular of late, and we are pleased to have our rraders favor this department with suitable contributions

We give on editorial page our new subscription rates, which are so changed in the belief that it will not only prove acceptable to many who desire to become regular readers of the paper, but that it will meet with the hearty approval of our advertising patrons, who are rapidly filling up the pages offered to them since the improvements in the JOURNAL have been started.

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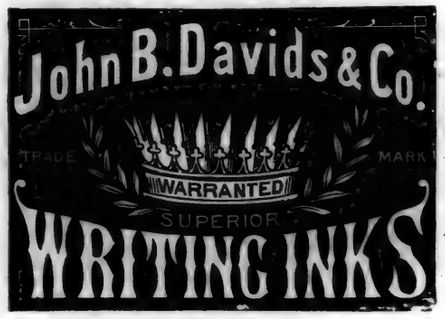
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Prints **Black**, Violet, or Red, from the original writing, Autograph Fac-simile Circulars, Prices Current, Music, Drawings, School Examination Papers, etc., in a common copying press, at the rate of **500** per hour. **The most rapid, simple, and economical process known 1000 to 5000** printed from a single writing. The Simmons Hardware Co., of St. Louis, says of it: "*Our Papyrograph, purchased some time since, gives entire satisfaction. Would not be without it for $1,000 a year.*" For specimens of work, price-list, etc., address, with stamp, THE PAPYROGRAPH CO., 41 to 45 SHETUCKET STREET, NORWICH, CONN. **Local Agents wanted.**





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Stopping the Engine by Electricity.

An ingenious method of instantly stopping machinery when in motion is said to be in operation at the Dominion Bolt Works, Toronto. A wire rope, coiled around the stem of the throttle valve of the engine, carries a weight which is held in place by a rest, and the whole arrangement is so placed that the passing of an electric current along a wire releases this rest and causes the weight to fall. The tension thus thrown upon the wire rope acts upon the throttle valve, cuts off the supply of steam, and consequently stops the machinery. Buttons, with wire connections, are placed in different parts of the works, and on pressing any one of these the passage of an electric current acts as above mentioned. In any factory these electric buttons can be placed in every room, or several of them in a large room, as may be required. Should any one happen to get caught by the machinery, the simple pressing of a button in the most distant part of the factory will stop the whole as quickly as could be done were the engineer standing ready to instantly obey a given signal. —*Scientific American.*

The Fontaine Engine.

An attempt at fast speed was made with the new Fontaine engine No. 2, on the Canada Southern, between St. Thomas and Amherstburg, on Tuesday of last week. The intention was to beat all previous records, either in this country or in Europe, but owing to hot boxes on the tender, the effort had to be abandoned, though some very good time was made. The Detroit *Free Press* thus describes the test:—

The first mile out of St. Thomas is slow. Beyond it is the lofty trestle bridge, which also limits speed, but after that is crossed every watch in the company is taken out—the mile posts are scanned—the seconds counted. A mile in fifty-seven, a mile in fifty-five, a mile in fifty-five! Let her go, the track is perfect! We care not how fast earth spins backward from our winged wheels. Sixty miles an hour will not satisfy, nor sixty-five, some say seventy, but the most hope for seventy-five. But it is not to be; the journals of the tender are again working badly—two of them are on fire. We stop at St. Clair Junction to cool them and repack. Superintendent Carroll announces that the engine is in perfect order and capable of indefinite speed, but the recurrence of hot boxes makes it unsafe to run very fast. The trial, therefore, is off. We will make the Detroit River in good time, but no unusual effort will be permitted. That settles the question for this trip. A halt of eighteen minutes, and a new start is taken, in which after running four miles at regular speed and everything proving all right, Deyell lets her out again and we make five miles between Sheldon and Iona in four minutes. Further signs of hot boxes cause a check, and we run past stations as follows: Six miles in seven minutes, seven miles in eight minutes, four miles in four minutes and a half, and four miles in four minutes, then slower again. More hot boxes and a stop at Charing Cross of twenty-five minutes to cool off. Again off with speed quite evenly regulated, showing the "Fontaine" in perfect control and with great reserve force, passing station after station just a trifle below the mile a minute rate. Boxes getting hot and hotter all the time, necessitated another stop at Essex Center of nine minutes. The particulars of the run are about the same as before, with a slow and measured rate during the last mile within the station yard. The arbitrary showing and the getting under way again after the several detentions made bad work of a time record." New axles with larger journals will be put under the tender, and as soon as they have worn smooth another effort at fast time will be made.

The Ashton Blow-Back Valve.

H. G. Ashton, general manager of the Ashton Valve Company, in a communication to the *World* dated October 24, contradicts the statement previously published in that paper that the late accident on the Pennsylvania Railroad was caused by "the irregular action of a contrivance recently introduced on all the engines of the road, called the Ashton blow-back." The cause of the accident was, he says, as stated in the first part of the article referred to, "the sudden shutting off of steam" to the cylinders, with a heavy fire of fresh coal, while the furnace door was open, and the smoke and gas in the fire-box being of too great volume to pass through the tubes and out of the smoke-stack; consequently it burst through the furnace-hole. He says the same is liable to occur to any locomotive, whether equipped with the "blow-back" attachment or not, as every engineer well knows.

The above statements, he adds, can be verified by applying to the officers of the Pennsylvania Railroad. The managers of that corporation have never been known to apply "contrivances," and this invention has been in use on the Pennsylvania Railroad the past four years.

"Do you buy your music by the roll?" inquired a young lady of the deacon's daughter. "Oh, no," she replied, "I always wait until Sunday, and then I get it by the choir."

Norfolk and Western Railroad.

The gross earnings, expenses and net earnings of the Norfolk and Western Railroad for the months of September, 1881 and 1882, were—

	1882.	1881.
Gross earnings	$232,774 12	$221,437 97
Expenses	112,605 64	97,529 65
Net earnings	$120,168 48	$123,908 32

For the nine months from January 1 to September 30, 1881 and 1882, the gross earnings, expenses and net earnings were—

	1882.	1881.
Gross earnings	$1,671,429 10	$1,586,065 65
Expenses	946,437 84	845,925 59
Net earnings	$724,991 26	$740,139 46

—showing an increase for the month in gross earnings of $11,336.15 and in expenses of $15,675.97, making the decrease in net earnings $3,739.84; and for the nine months an increase in the gross earnings of $85,364.05, with an increase in expenses of $100,512.25, making a decrease in the net earnings of $15,148.20.

Philadelphia and Erie Railroad.

The Philadelphia and Erie Railroad Company makes the following exhibit of business for the month of September, 1882:

Gross earnings	$386,454 86
Gross expenses	236,862 61
Net earnings	$149,592 25
Net earnings, 1881	63,260 10
Increase	$86,332 15
Net earnings four months of 1882	$1,070,501 25
Net earnings four months of 1881	802,102 39
Increase	$268,398 86

She won the wager: Fred. Flasher and Miss Florentia Flounce were discussing the mental power of controlling thought. Said Flasher: "I will give you a pair of gloves if you can think of positively nothing for five minutes and still be awake." "Done," she responded. Five minutes passed. "I've won the gloves," she exclaimed. "How did you manage to think of nothing for the whole five minutes?" he asked eagerly. "I fastened my mind firmly on your mustache and kept it there," she replied, triumphantly. The referee awarded her the gloves.—*Detroit Free Press.*

The D. K. Miller Improved Padlock.

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MADE OF BRASS,

With Springs of the Celebrated Phosphor-Bronze,

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Shown by general use to be the best Padlock in the Market for Railway Cars, Switches, Tool Boxes, and for all other purposes for which padlocks are used.

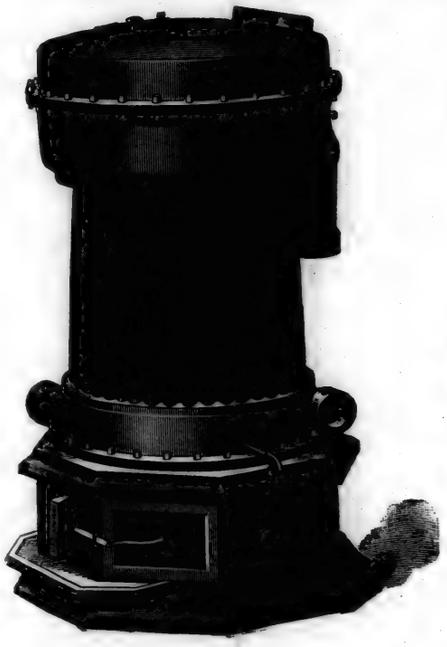
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It Insures Safety from Fire in case of Accident, Economy in Fuel and RAPID CIRCULATION. It heats quickly, is SELF-REGULATING, and can be used for either STEAM OR HOT WATER.

The Water Tubes do not come in contact with the Coals, but occupy the Smoke Flue in such a manner as to absorb the greatest amount of heat from Coal in a low state of combustion without danger of chilling the fire.

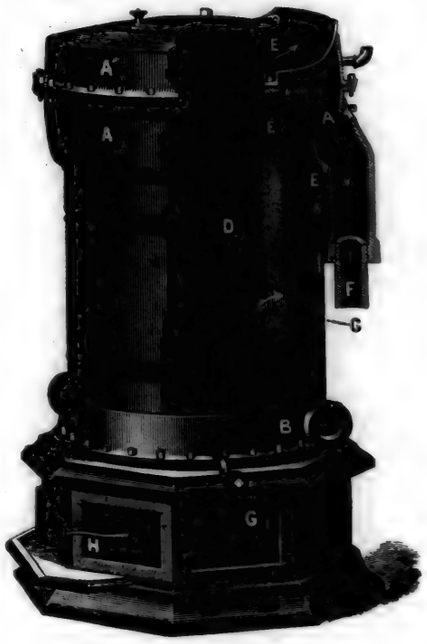
Once filled with coal the fire will last from 24 to 60 hours, according to weather, without replenishing, as proved by actual test.

At the last "Mechanics' Fair" it received the Silver Medal, being the highest award to heaters of any kind.

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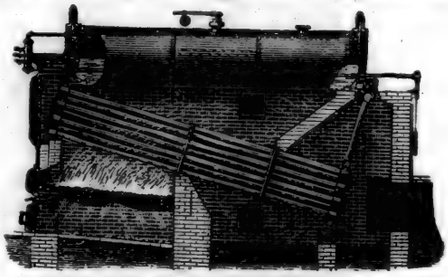
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IMPORTANT ANNOUNCEMENT TO INVENTORS.

THAT department of the AMERICAN RAILROAD JOURNAL which contains descriptions of new inventions properly coming within its range of subjects, is regarded with great notice and favor, particularly by those directly interested in learning what the latest applications of mechanical ingenuity in railroading are, and by those who have produced inventions which they desire to make as widely known as possible. The large and widespread circulation of this paper, its prestige as the oldest railroad journal in the world, and the weight attached to its contents by the general consent of leading railroad men in all countries, give such value to its carefully prepared descriptions of new machinery and appliances as cannot be found outside of its columns. The interest manifested by inventors in supplying us with information of their doings, and the eagerness with which this is received, encourage us to give an increased attention to that department of this paper treating of new inventions. *We therefore repeat our invitation to all persons who have produced what they regard as improvements coming within the range of railroad operations, to communicate with us promptly regarding the same.* All matter sent us will be thoroughly examined and considered, and no inventions in our opinion likely to be practicable and useful will be passed over without receiving due attention from us.

List of Recent Patents for Inventions Relating to Railway Interests.

BEARING DATE OF OCTOBER 31, 1882.

266,607. Running-Gear for Cars: Eleazer D. Carter, Terre Haute, Ind. Filed June 27, 1882.

266,610. Step Attachment for Railway Cars: Frank W. Coolbaugh, Hoboken, N. J. Filed Mar. 6, 1882.

266,621. Railroad Scraper and Leveler: Daniel L. Harris and Eleazer D. Carter, Terre Haute, Ind. Filed July 1, 1882.

266,626. Rail-Joint: George N. Hodgdon, Nashua, N. H. Filed May 25, 1882.

266,645. Traction Railway Apparatus: Charles W. Rasmusen, Chicago, Ill. Filed Feb. 7, 1882.

266,684. Automatic Air Brake for Railway Cars; Walter J. Ford, Concord, Tenn. Filed May 24, 1882.

266,685. Locomotive Engine: Matthias N. Forney, New York, N. Y. Filed Aug. 26, 1882.

266,692. Life-Guard and Track Clearer: Charles W. Held, Jr., Brooklyn, N. Y. Filed April 16, 1880. Renewed May 1, 1882.

266,719. Signal Lamp: Edward S. Piper, Toronto, Ontario, Canada. Filed April 27, 1882.

266,720. Car-Coupling: Leaney Recht, Platte City, Mo. Filed July 27, 1882.

266,742. Freight Car: Thomas L. Wilson, Port Hope, Ontario, assignor of one-half to Eugene Harman Davis, Toronto, Canada. Filed July 15, 1882.

266,749. Dumping Car: John E. Bemis, Waupun, Wis. Filed May 8, 1882.

266,768. Automatic Oiler for Locomotive Engines: A. Hamilton Campbell, Waynesborough, Pa. Filed Sept. 21. 1882.

266,776. Car Wheel: Alfredo Cottrau, Naples, Italy. Filed May 22, 1882.

266,780. Nut Lock: Levis H. Davis, West Chester, Pa. Filed Sept. 22, 1882.

266,786. Guard for Car Platforms: John B. Driscole, New York, N. Y. Filed June 23, 1882.

266,787. Railroad Car Chimney: Charles A. Dubey Brooklyn, N. Y. Filed Aug. 22, 1882.

266,802. Railway Tell-Tale: Matthias N. Forney, New York, N. Y. Filed Dec. 22, 1881.

266,806. Railroad Train Electric Signaling Apparatus: Ezra T. Gilliland, Indianapolis, Ind. Filed June 15, 1882.

266,822. Car Coupling: Lewis I. Hinkle, Piedmont, Mo. Filed Aug. 17, 1882.

266,823. Car-Coupling: George K. Hoff, Philadelphia, Pa. Filed Aug. 24, 1882.

266,839. Car Coupling: Daniel E. Kelley, Gaylord, Kans. Filed Aug. 26, 1882.

266,897. Draw-Bar for Railway Cars: Eben B. Sankey, Salem, Mo. Filed Aug. 28, 1882.

266,904. Electric Railway Signaling Apparatus: Charles A. Scott, Boston, Mass. Filed Nov. 23, 1881.

266,905. Petticoat-Pipe for Locomotive Engines: Albert J. Seaman, Stanford, Ky. Filed July 24, 1882.

266,931. Car Coupling: George W. Watts, Durham, N. C. Filed Sept. 6, 1882.

Municipal Bonds.

A DECISION was rendered in the Supreme Court of the United States at Washington, on the 30th ult., in case No. 694—the City of Ottawa, plaintiff in error, vs. W. H. Cary—in error to the Circuit Court for the Northern District of Illinois. The bonds upon which this suit is brought were issued by the city of Ottawa, a municipal corporation of the State of Illinois, and belong to the same issue as those involved in Hackett vs. Ottawa, 99, U. S. 86, and in Ottawa vs. First National Bank of Portsmouth, N. H., 105 U. S. In each of those cases the holders were protected against the defences interposed, mainly upon the ground that, being *bona fide* purchasers for value, the city was estopped by the recitals in the bonds from saying that they were not executed for proper or legitimate municipal purposes. In the present case, however, Cary was not a *bona fide* holder entitled to the benefit of the ruling announced in Hackett vs. Ottawa and Ottawa vs. First National Bank of Portsmouth. The judgment is reversed, with directions to give judgment upon the special finding of fact for the city. Opinion by Justice Harlan.

Taxing the Premiums on Government Bonds.

THE New York Court of Appeals has decided against the legality of taxing the premiums on Government bonds. The Court—Justice Earle delivering the opinion—dwells upon the fact that it is a mere accident that government bonds are above par. They may, in the market, be worth more or less than par, and they may fluctuate from week to week and month to month, depending upon the condition of trade, commerce, finance and other matters. The fact that they are above par may be due to the plethora and cheapness of money, and not to any actual increase in value as compared with a fixed standard. When, therefore, a government loan is put upon the market, it is plain to be seen that it might be materially affected if it were known that, whenever the bonds to be issued should in the market from any cause happen to be at a premium, when the assessors come to make their assessment, such premium could be assessed and taxed. Such a tax, the court holds, would affect the value of the bonds and embarrass the government in effecting a loan, in the same way, if not in the same degree, that a tax upon the bonds, *eo nomine*, would. His honor then goes on to say:

"It is clear, therefore, that if the premiums upon such bonds—over which the holder has no control, which can neither create or destroy, and which do not really indicate any enhanced value of the bonds—can be taxed, the policy of the law, as to the exemption of government securities from taxation, would be greatly violated. The premium is not something distinct from the bond and which cannot exist apart from the bond: it is inherent in it and goes with it. When the confidence of the public in it is destroyed, that is destroyed. When the bond is transferred, that goes along, and as the bond approaches maturity it vanishes. The premium is part of the entire value of the bond, and when that is taxed the bond is taxed, or what is equally condemned, the value or a part of the value of the bond is taxed. A conception of the premium upon the bond as a distinct entity for the purpose of taxation is too transcendental and metaphysical for common comprehension and judicial cognizance."

Artificial Fuel.

THE utilization of waste coal is a matter of great interest to the people of this and of all countries in which manufactures are a leading occupation. A problem of great difficulty has been solved by the invention of the Artificial Fuel manufactured by the Loiseau Fuel Company, of Philadelphia, Penn. This is made from the dust of anthracite coal by a process upon which letters patent have been granted by the United States authorities, to Mr. E. F. Loiseau, a resident of the Quaker City.

Great interest has been manifested in the recent use of this Artificial Fuel, exhibited at the American Institute Fair held in New York City. It was burned under the boilers of the huge building with complete success. The crowds of people who saw it in actual use were particularly impressed with the fact of its adaptation to domestic purposes as well as purposes of manufacture.

Mr. Loiseau's fuel is in lumps of an egg-shaped form, which can be made to vary in weight from two ounces to a pound. As at present manufactured, the first-named is the weight of the lump. From seventy-five tons to three hundred tons of the fuel can be produced every day, made of anthracite coal dust, bituminous coal dust, coke dust, brown coal or lignite dust. These are solidified so perfectly by the Loiseau process that the lumps will not crumble but will retain their shape in the fire until consumed. Different proportions of all kinds of coal dust can be mixed together and compressed into lumps to suit the requirements of modern industry.

The value of the process in the arts extends beyond the mere production of fuel. Rejected ores, such as the washings of hematite ore, the granulated ores and the black sand ores, can be solidified by its means; and ores of all kinds can be pulverized, mixed with coal dust in required proportions and then compressed, and the metals which these ores contain can thus be obtained, as is stated, at less cost and of more regular and better quality than by other processes. The ores can be pulverized either in their raw state or after being roasted and freed from most of the impurities by washing before being compressed. By the Loiseau process, wrought iron can be obtained direct from the ore.

The Loiseau Fuel Co., Port Richmond, Philadelphia, own the patent right for the States of New York, New Jersey, Pennsylvania, Ohio, Maryland, Virginia and West Virginia, and grant licenses in these States. Mr. E. F. Loiseau, No. 1,320 Girard Avenue, Philadelphia, grants licenses in all the other States of the Union, or for the sale of States-rights.

THE Railway Benevolent Association has decided to erect a railroad hospital at Miles City

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BROWN MANUFACTURING CO., ABSORBENT Wiper Cloths, Providence, R. I.

BEARDSLEY, D. N. & CO., MANUFACTURERS OF Superior Oak and Chestnut Lumber, and Railroad Ties, 9 Murray Street, N. Y.

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EAGLE TUBE CO., BOILER TUBES, 614 to 626 WEST Twenty-fourth Street, N. Y.

EAMES VACUUM BRAKE CO., RAILWAY TRAIN Brakes, 15 Gold Street, N. Y.

FAIRBANKS & CO., STANDARD SCALES, RAILROAD and Warehouse Trucks, and Copying-presses, 311 Broadway N. Y.

GORDON & DUGGAN, RAILWAY SWITCHES, 28 State Street, Boston, Mass.

GUEST, WM. A. & CO., IRON AND STEEL RAILS, 41 and 43 Pine Street, N. Y.

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NATIONAL RAILWAY PATENT WASTE COMPANY 240 Broadway, N. Y.

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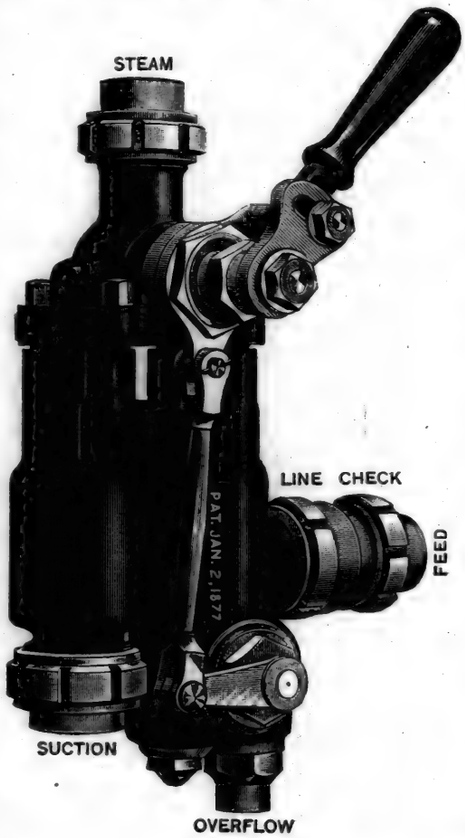
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The Monarch of the Baggage.

THOSE who have traveled overland from New York to San Francisco have a vivid recollection of the man who weighs the baggage at Council Bluffs, the eastern terminus of the Union Pacific Railroad. He is to all intents and purposes the monarch of the immense piles of baggage which he surveys. Travelers tremble in his presence, and find no escape from him. They can continue their journey westward over but one road—the Union Pacific, which becomes the Central Pacific at Ogden. There are no competing lines. It is, perhaps, true, beyond the infliction of a doubt, that in nine cases out of ten travelers find themselves compelled at Council Bluffs to pay for "extra" baggage, or are compelled to send as freight or express goods, articles which had been checked through from New York as baggage. Upon purchasing a first-class passage ticket at a railroad office in this city the traveler has his baggage checked through upon most liberal terms. In the serene and happy consciousness that the path to San Francisco is lined with baggage men and ticket agents as affable and generous as those he encountered in this city, the traveler steps aboard the train and starts on his journey. When he reaches Council Bluffs and discovers himself on the outskirts of civilization, he also discovers the monarch who asserts his right to collect extra money for baggage or who tosses aside articles which he declares can go no further except as freight or express goods. This monarch declares, in all truthfulness, that he merely obeys the laws made for him by the railroad officials of the Union and Central Pacific railroads.

One incident will serve to show how easily the traveler may find it difficult to proceed without paying an extra assessment at Council Bluffs. George L. Brander, the vice-president of the Nevada Bank of San Francisco—the financial institution of the Bonanza Kings, among whom are John W. Mackey, James C. Flood, and Senator James G. Fair—had some experience with the baggage monarch some time ago. Mr. Brander is a tall young Scotchman who was born and bred in the banking business. He is well known among financiers in this city and in San Francisco. He is plain in manner and speech, and assumes to be nothing but a matter-of-fact business man. When taking his wife and his child's nurse to San Francisco from this city he purchased three first-class passage tickets. In his baggage was a child's carriage, such as nurse girls roll through Central Park. It was small in size, light in weight, and was made much smaller by being taken apart, and not much heavier by being placed in a wooden frame. He had paid $26 for it, and the cheerful baggageman at this point promptly checked it through. When Mr. Brander reached Council Bluffs the wagon was pushed aside, and he was informed that it could continue on its way only as freight or express goods. Inquiry revealed the fact that if it should be sent as freight it might reach San Francisco three or four weeks after Mr. Brander's arrival in that city. If it should be sent by express the charges would be $26, the cost of the carriage. There was no appeal from the baggage monarch's decision. Mr. Brander protested in vain that the carriage had been checked through from New York. Finding that the conduct of the baggage-man here might not be considered as proper at Council Bluffs, Mr. Brander determined to abandon the carriage. He had endeavored to persuade the monarch that it was his duty to charge extra baggage if the carriage weighed more than the amount which he was entitled to carry to San Francisco, but the monarch was immovable. Then Mr. Brander turned to a Council Bluffian, presented the carriage to him, and went on to California, where he purchased another carriage for his child. Mr. Brander, on a recent visit to this city, said that the Council Bluffs baggage-man was, perhaps, not at fault, but that the blame should, very likely, rest upon those in this city who accepted the carriage as baggage and checked it through. Those who contemplate a railroad trip to San Francisco will do well to heed the experience gained by Mr. Brander.

Gold in the U. S. of Colombia.

THE Organos mines are situated in the U. S. of Colombia, and have for neighbors some worked by private owners, which have proved extremely rich. The Frontino and Bolivia mines, and the Tolima, are not far off, and they are worked at a considerable monthly profit. The circumstances connected with the Organos mines appear still more favorable when contrasted with those surrounding the numerous similar enterprises which have been started in the Wynaad and Mysore districts of India. The latter mines claim to possess lodes from which they can extract from two to three ounces of gold per ton. But the Organos directors speak of "two of the principal lodes assaying from one ounce to 500 ounces of fine gold per ton."

The margin is wide enough, but there are no metallic lodes of any other kind that vary so much as those producing gold. Hence it has been said that, according to the richness of a gold-bearing lode, the owners are either paupers or millionaires. The modified prospect of becoming the latter would appear to lie very distinctly before the fortunate possessors of Organos shares. A reference to our article on "Samples," published this week, will show how little importance we attach to the treatment of selected specimens of quartz; but when, as in the case of this company, twenty tons of quartz are passed through the stamps, under the supervision of a mining engineer of such eminence as Ezekiel Williamson, one cannot fail to be struck with the conclusive nature of the experiment. He believes the average value of the gold to be from two to two and one-half ounces. Now, here again comparison may be challenged, for the Indian gold mines, with a capital varying from £100,000, to £200,000, say they can pay on a yield of one ounce, and, therefore, it may be left to the reader to suppose what will be the return from the Organos mines from a lode averaging two ounces, and upon a capital stock of merely £15,000.

Mr. Williamson estimates the profits at £20,000, per annum, and should this rate not be exceeded it would be equal to a return of the entire share capital each year, and a handsome bonus of twenty-five per cent besides. Such a prospect is sufficiently tempting to the most cautious of investors, and the first return equal to this amount, or anything like it, will justify the opinion expressed by the numerous experts that this is one of the richest gold mines yet introduced to the public. It may be well, in a few words, to summarize the opinions of the experts referred to. E. S. Jones states of one of the principal lodes: "This is a six-foot-wide quartz lode, containing much massive visible gold. There is scarcely a piece of quartz belonging to this lode of the minerals left by the Spaniards that does not contain visible gold." The opinion expressed by J. G. Green of the Buenaventura level is that "the lode in the end is the finest and best developed I have seen in the mine, and bears out to the letter what Mr. Williamson has written of it." F. G. Mills says of the same level: "The quartz still continues good. Esperanza level: Very rich mineral was brought out, and every time mineral was extracted there was abundance of visible gold. Te Encontre. This lode is very fine. I washed a sample of it, and it yielded two ounces of gold per ton. I have no doubt this sample would have assayed more than two ounces."—*Mining Record.*

The Survival of the Fittest.

WHEN the Atlantic express over the Central road reached Niles the other day a Detroit commercial traveler boarded the train to find every seat taken. In the center of one coach one seat was occupied by two satchels, and another by an overcoat and hat, while the owner of the articles was in the smoking-car. The Detroiter gathered up all the baggage and placed it on the wood-box, and occupied the seats with his own, and he had just got comfortably settled when the late occupant returned from his smoke. He saw what had occurred, and was white with anger, when he began:

"Who moved my baggage?"

"I did," was the reply.

"Sir, I represent the wholesale crockery house of Blank & Blank, of New York, and I——"

"I knew it—saw your name on the baggage," interrupted the other. "Haven't you seen the papers to day?"

"No sir."

"I thought not. Well your house has failed for $288,000—can't pay twenty per cent on the dollar—bad bust—no time for you to swell over two seats—crowd in somewhere or stand by the stove, and when you get to Detroit I'll help you get a pass home. Sorry for you, and all that; but our house is rated A 1, and has a reserve of $75,000 in mortgages; and the survival of the fittest is a principle older than the hills."—*Detroit Free Press.*

THE Cleveland, Youngstown and Pittsburgh Railway Company has, by purchase and consolidation, acquired the rights and properties of the Atlantic and Lake Erie Railroad and the Steubenville, Canton and Cleveland Railroad, thus giving the Cleveland, Youngstown and Pittsburgh Railway a short line between Lake Erie and the Ohio River.

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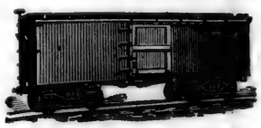
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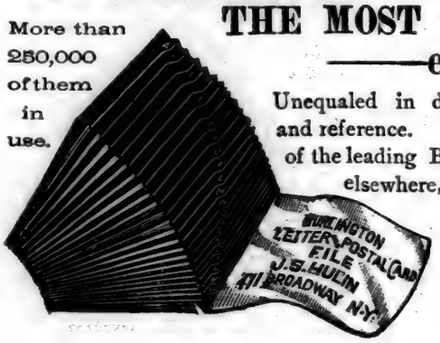
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Private Railroad Cars.

The construction of railroad cars for private use has become quite common. Within the past few years several have been built, and now any one who desires can own a car commensurate in value to his financial ability; for the railroad companies of the United States, if the usual rules as to method of construction are followed, will roll over their lines the car of any private owner. Many merchants and wealthy men have their private railroad coaches; they are also built for and owned by theatrical managers, traveling circus companies, and even some great stock dealers prefer to own their cars for transportation of live-stock. Breeders of fine horses have cars built especially for the carriage of their animals. Some of the wealthy actors and actresses have their own cars. The finest private cars, however, are those built by sleeping and palace car companies for rental, and by the officers of railway companies for their own use.

The private car of most convenience and elegance that has yet been turned out from the hands of American mechanics is that recently constructed at the works of the Central Pacific Railroad Company in Sacramento. It was built at the expense and to the order of Mrs. Leland Stanford. Its cost is stated to be between $20,000 and $25,000. It is undoubtedly the best example of car work ever presented, not only in finish, but in strength, convenience and the principles of construction. It was built under the immediate direction of Master Car Builder Ben. Welch, and the work is that of the men of his department, with such parts as were needed drawn from the department of Master Mechanic Stevens. The plans were adapted to the wishes of the owner and the suggestions of her husband, and were drawn by Fred Snauch. The cabinet work was done by the force of Victor Lenay, the painting and gilding by the force of W. C. Fitch, the plating by the force of Mr. Buchanan, the upholstery by the force of Isaac T. Crum, and the work was all personally supervised by Mr. Welch's general foreman, G. J. Turner.

As described by the Sacramento *Record-Union*, the car is 60 feet long, 70 over all, whereas the usual length of cars is 55 to 57½ feet. It is 12 feet in width inside, but the height is less than most Central Pacific Railroad cars, in order to insure its safe passage through eastern tunnels. It is what is known as a 12-wheeled car, there being six to each truck. The wheels are the Allen paper wheels, with 2½ inch steel tire, and have been tested with a pressure of 250 tons. Beneath the central section of the car are 16 feet of lockers for provision storage, and these may be reached either from the outside or through traps fitted in the floor. From the Baker heater, in one end of the car, pipes for heating and for hot water are conducted beneath the double floor for the warming of the car and for supplying each room with hot water. This idea of registers in the car floor is a new one, and in one sense experimental. The entire frame work is of Oregon pine, heavily ironed, there being especially strong corner irons, and its weight is between 33 and 35 tons. The car is in exterior finished in color and style according to the standard of the Central Pacific Railroad, but, unlike most cars, the sides are smooth and the broken joints covered by iron strap set in by a new system of rabbetting, by which the opening of a joint cannot possibly show outside of an actual breaking up of the structure. The truss work and bracing is so complete that the car, notwithstanding its great length, when supported on jacks at either end showed no deflection from a level.

To give some idea of the great strength of this car, it may be added that there run from the sides over the entire top, every six feet, heavy iron carlins, and set rigidly into the side framing. One in looking at the exterior cannot fail to notice the inequality of the panels. There are no two of equal size, and no two spaces between the windows are equal in area. This is purposeful, and though in violation of the conventional rule, the effect is decidedly good, and breaks the usual monotony where the panels are regular. The style of the car is modified from the Queen Anne in architecture, and while extremely rich in finish is not at all gaudy; on the contrary plainness may said to prevail. There are eight windows on either side, and the glass is 28 by 38 inches. All the frames arch slightly at the upper corners, this concession being made to give ease and grace. The scroll-work of the exterior is in gold and rich colors, but it is not florid, nor is there a great profusion of it. Probably the very best work of the painter's art is shown in the lettering of the word "Stanford" on either side, and the words beneath the eaves "Central Pacific." The inner blinds to each window are of solid walnut, with English holly slats, and instead of lifting, these frames slide to one side and into the hollow walls of the car. The ends of the car are fitted with four-foot Miller platforms and hooks, with folding steps, and the car is supplied with the Westinghouse automatic brake. Each platform has heavy iron railings, with nickel-plated standards and polished rails and nickel-plated rosettes. The roof is what is know as a clear roof, with ventilators and deadlights, as is used in sleepers.

Entering the car one passes, by a broad door set upon the left, the parlor, which is 8 feet 6 inches by 12. From this room there opens a door on the left into a hall a little over two feet in the clear and off of which to the right open bedrooms—one 6 feet 6 inches by 10 feet, and one 6 feet 6 inches by 8 feet, and a maid's room. At the other end the hall opens by a door into the dining-room, 8 feet 6 inches by 12 feet. Out of this room a second hall on the left opens and runs to the other end of the car. Off of this opens the porter's room, and next the kitchen, 6 feet 6 inches by 7 feet 6 inches. Then comes a niche for the Baker heater, and next a hall running along the end of the car, but the latter part of which is cut off for the water-closet. The inside finish is in the Queen Anne style. The parlor is finished throughout the entire interior, including the ceiling, in rosewood; the bedrooms, halls and dining-room in black-walnut and mahogany; the kitchen, porter's room, closets and heater-room, in "burl and curl" redwood. The finish is all in the very highest style of cabinetmaker's art, and is exceedingly rich. In part it has been decorated, but time falling short here, the decorative work will be completed at the East. The capability of this finish for rich decorative work from the pencil of the artist is of the highest character.

The furniture will consist of sofas and chairs in walnut and rosewood, and the usual bedroom furniture in like woods. Some of that put in here is but temporary, and will be supplanted at the East by furniture to be chosen. All the house hardware is nickel-plated, and the plating, all of which was done here, is of a character not surpassed by the best work done in any part of the world. The lighting is all by hurricane lamps, burning mineral seal oil. The lamps are of a style to compare with the style of the interior of the car. In the parlor and dining-room each are double hanging-lamps. In the first, also, is one and in the dining-room two side lights, and in each of the other rooms one side light. The dead-lights in the roof windows are especially beautiful. They are all protected on the outside by wire gauze. They are of what is known as tinted or stained glass, resembling the pearly translucence of the interior of a sea-shell, and are divided into scroll designs by lead lines, as in stained-glass windows. At the crossing of these curving seams are set large jewel stones of various hues. In the bedrooms, parlors and dining-room are set heavy plate mirrors, in moldings of walnut or rosewood, in the style of the interior finish. Electrical knobs in each room operate an electrical call in the porter's room and in the kitchen. In appropriate places are set standing basins, marble-topped and elegantly finished, and these are supplied by hidden pipes from a tank of large capacity. The upholstery is rich, and in keeping with the finish of the car; but only a part was put on here, considerable remaining to be supplied at the East. The carpets are the best Wilton, and match the finish of the interior. As a whole the car is one of chaste elegance, exceedingly rich and substantial finish, without any gaudy effects, and impresses one as having been constructed according to a refined taste, while it is testimony of the highest character to the ability and skill of mechanics of this city.

PICTORIAL ILLUSTRATIONS.—"The usefulness of pictures in a general way is seen by comparing the keenness of observation, the general intelligence, the accuracy of knowledge exhibited by children brought up in the midst of an abundance of wholesome illustrated literature, with the comparative dullness of vision and narrowness of information shown by those who have not been so privileged." The foregoing, which we take from the "Canada School Journal," truthfully applies to the 3,000 Illustrations in Webster's Unabridged Dictionary, in which more than 340 words and terms are illustrated and defined under the following twelve words: *Beef, Boiler, Castle, Column, Eye, Horse, Moldings, Phrenology, Ravelin, Ships, Steam-Engine, Timbers*, as may be seen by examining the Dictionary.

THE loftiest active volcano is Popocatepetl—"smoking mountain"—thirty-five miles southwest of Pueblo, Mexico. It is 17,784 feet above the sea level and has a crater three miles in circumference and 1,000 feet deep.

AMERICAN Railroad Journal.

ESTABLISHED 1831.

Steam Navigation, Commerce, Finance, Banking, Machinery, Mining, Manufactures.

SECOND QUARTO SERIES.—VOL. XXXVIII., No. 44.] NEW YORK, NOVEMBER 11, 1882. [WHOLE No. 2,428.—VOL. LV.

THE editor of the RAILROAD JOURNAL is pleased to receive information of railroad enterprises already entered upon or projected, items regarding the business done on the roads, such as relate to persons employed in the railroad and kindred interests; in short, about all matters which the readers of such a paper as this are gratified to find within its columns.

CONSTRUCTION.

THE work on the Kingston and Pembroke Railway was finished to within 15 miles of Renfrew on the 1st inst.

THE number of miles now operated by the Northern Pacific Railroad Company is 1419, against 972 this time last year, an increase of 447.

IT is expected that the Wadena extension of the Chicago, Milwaukee and St. Paul Railway will be completed through to West Union by the 15th inst.

THE Southeastern Railroad took formal possession of the Montreal and Sorel Railway on the 1st inst., under the terms of a lease for twenty-one years.

THE laying of the track for the Wisconsin Central Railroad between Neenah and Oshkosh has just been completed. The first passenger train was run on the 1st inst.

THE location survey for the extension of the Burlington and Lamoille Railroad from Cambridge Junction to Johnson has been completed, and its construction is now more probable than ever.

FROM Salina Cruz, Mexico, Nov. 3, we learn that the first sod for the Interoceanic Railway Company was turned on the 1st in the presence of the authorities of Tehuantepec. About 500 men then began the work.

THE grading of the Toledo and Indianapolis Railroad is entirely completed between Toledo and the New York, Chicago and St. Louis Railroad. It is thought that the cars will be running by the 15th of December.

CONTRACTS have been signed with Stearns, Norris & Co. for building the Columbus and Eastern Railway east from Columbus, Ohio, for 60 miles, to the Moxahala coal fields. The road is to be ready for use Aug. 1, 1883.

THE Baltimore and Ohio Railroad Company having secured the right of way through Wilmington, Del., will lay off the work of construction in sections and push it forward in time for the completion of the road in that State by next March.

THE first passenger train on the Mexican National Railway, having on board the general superintendent and party, arrived at Santa Catarina, 12 miles beyond Monterey, on the 3d inst. They were received with great enthusiasm all along the line.

THE work of grading the Yazoo and Mississippi Valley Railroad was begun on the 1st inst. A large force of men is employed. This road from Jackson to Yazoo City will be an important feeder of the Chicago, St. Louis and New Orleans Railroad.

A NEW railroad is being built from Hyat's Corner, near Ovid, to Williard's Asylum, on Seneca Lake, New York, a distance of about three miles. It will form a part of the Lehigh Valley Railroad system, and will open up the trade to and from Seneca Lake.

THE Panama Canal Company are said to have recently let a large number of contracts, two of the most important being for cuttings. Thirty-three of the company's eighty-two hospitals at Panama are completed and contracts for fifteen more have been signed.

HEAVY purchases have recently been made at Vicksburg, Miss., of railroad implements, which were shipped to Anthony's Ferry on the Yazoo River to be used on the Memphis and Vicksburg Railroad. It is the intention to push the work rapidly both north and south of the Yazoo River, and to have trains running to the northern line of Sharkey county by February next.

THE Binghamton and Williamsport Railroad Company, recently organized in this State with a capital of $3,000,000, will immediately commence the survey of its route from Williamsport, Penn., to Binghamton, N. Y., via Sullivan county, then along Sugar Run and its branches to Wyalusing, and up the Wyalusing Creek to Binghamton. The entire length of the road will be 100 miles.

THE line for the projected railroad from Cumberland, Md., on the Baltimore and Ohio Railroad, to Belvidere, N. J., has been surveyed to Selinsgrove, Pa. The line will reach Newburg N. Y., over the Lehigh and Hudson River Railroad. The object of the new line is understood to be to give the Baltimore and Ohio a line from Cincinnati to Boston and eastern points 100 miles shorter than any in existence, and to give the Philadelphia and Reading and Central of New Jersey an all-rail New England outlet for coal.

VIENNA is about to commence the construction of an electric railway, to run from Modling to Bruhl, in the suburbs of the city, for the construction of which the Ministry has granted a concession to the Southern Railway Company. It will be a single line, two miles in length, of one metre gauge, the maximum speed to be allowed upon it is twelve and one-half miles an hour, and it must be opened for traffic by July 15, 1883. The carriages are to contain eighteen seats and standing room for a few passengers.

THE City Council of Petersburg, Va., at an adjourned meeting held on the 3d inst., adopted an ordinance giving George Beadle and others of Syracuse, N. Y., the privilege of laying a street railway in Petersburg. It will require about two months to complete the track, and the cost of building the road, coupled with the cost of cars and other equipments, will be in the neighborhood of $35,000. The work is to be commenced within the next thirty days. The track will be about two miles long, and it will require about 200 tons of rail to lay it.

EIGHTY Frenchmen—engineers, guides, foremen and navvies—with six hundred Morocco navvies enlisted in Algeria, six hundred Senegal negroes and two hundred or three hundred Krotmen, are about to commence the construction of the railway to connect Senegal with the Niger. Their operations will be protected by a column under Colonel Desbordes, which will victual the posts, plant the French flag on the Niger, and erect two forts on that river. A second railway, from St. Louis to Dakar, is also about to be commenced, and a cable will shortly be laid between France and Senegal.

A MEETING of the representatives of the Pittsburgh and Western, the Pittsburgh, Cleveland and Toledo, and the Wheeling and Lake Erie railroad companies was held in Pittsburgh on the 31st ult. to complete arrangements for the building of a connecting link from New Castle, Pa., to Akron, O., and also for the purpose of bringing the management into shape. This link is 80 miles in length, and two-thirds of it is graded. After fixing the proportion of the cash each road is to pay the following directors were elected: C. H. Andrews, of Allegheny, president, James Callery, of Allegheny, John Humphreys, of Pittsburgh, and John W. Chalfant, of Pittsburgh, representing the Pittsburgh and Western; C. K. Garrison, of New York, John T. De Forrest, of New York, and A. Garrison, of Pittsburgh, representing the Wheeling and Lake Erie; Wallace Andrews, of Pittsburgh,

Wm. Bissell, of Pittsburgh, Wm. McCreery, of Pittsburgh, and Messrs. Hitchcock and Cochran, of Cleveland, representing the Pittsburgh, Cleveland and Toledo.

PERSONAL.

E. P. VINING has been appointed Freight Traffic Manager of all the lines and branches of the Union Pacific Railway Company, and P. P. Shelby, General Freight Agent of the company.

R. H. Taylor, President of the Tonawanda Valley and Cuba Railroad Company, and the Bradford, Eldred and Cuba Railroad Company, has appointed C. D. Williams Superintendent, J. N. D. Loomis General Freight and Passenger Agent, and J. P. Ransom, Auditor, with headquarters at Cuba, N. Y.

THE Postmaster-General at Washington has appointed Charles Roser, Jr., of Wisconsin, topographer to the Post Office Department, to succeed W. L. Nicholson, resigned, to take effect December 1. Mr. Roser has for years been in the General Land Office, and compiled all the maps of the United States issued by that office.

INCORPORATION.

A CHARTER was issued at the State Department, Harrisburg, Penn., on the 6th inst., to the Williamsport and State Line Railroad Company. The capital is $2,600,000. The road will be 80 miles in length.

THE Sodus Bay and Southern Railroad Company, of Rochester, filed a certificate of incorporation at Albany, N. Y., on the 6th inst. The capital is $500,000. This company has purchased the property and franchise of the Ontario Southern Railroad Company, and will operate the road under the new name.

PRESIDENT ACKERMAN, of the Illinois Central Railroad Company, having been interviewed at Chicago, is reported to have said that to it "is true that the Chicago, St. Louis and New Orleans Railroad is to be consolidated with the Illinois Central on Jan. 1, but the board of directors have as yet held no meeting to arrange the plan of reorganization."

ARTICLES of incorporation of the Lackawanna and Pittsburgh Railroad Company, capital $4,000,000, were filed at Albany, N. Y., on the 1st inst. The road is to begin at a point on the Genesee Valley Canal Railroad, at or near Rockville, running thence in a northeasterly direction by the most feasible route to a point on the New York, Lackawanna and Western Railroad, at or near the village of Perkinsville, with a branch beginning at a point on the line of the Lackawanna and Pittsburgh Railroad, at or near the intersection of the railroad with the boundary line between the counties of Allegany and Steuben, running thence in a southeasterly direction by the most direct route, via the village of Hornellsville, to a point near the village of Canisteo. The length of the branch is to be sixteen miles, and that of the main road forty-two miles.

ARTICLES of incorporation have been filed with the Secretary of State of Illinois by the Springfield and Southern Railroad Company, which proposes to construct a road from Springfield, in a southerly direction, to a point upon the east bank of the Mississippi River in Jackson county, with a branch line commencing at a point upon such main line in Montgomery or in Madison county and running thence to East St. Louis. The principal office of this corporation is to be located at Mattoon, with the privilege of removal to Springfield or any other point on the line. The capital stock is fixed at $500,000, with the privilege of increasing the same to $3,000,000, and the corporators and first board of directors are Duncan C. McIntyre, Ira James and Charles M. Dale, Mattoon; James C. Conkling and John M. Palmer, Springfield.

ORGANIZATION.

THE directors of the Hannibal and St. Joseph Railroad Company, elected on the 6th inst., are: F. L. Ames, John Bloodgood, Myron P. Bush, Sydney Dillon, William Dowd, Jay Gould, George J. Gould, Solon Humphrey and Russell Sage.

The officers of the Emerson and Northwestern Railway Company for the ensuing year are: President, Casper Killer; vice-president. Thos. Carney; secretary and treasurer, D. J. McInness; solicitor, F. E. Burnham; chief engineer, Mr. MacDougall.

THE directors of the Lombard and South streets (Philadelphia) Railroad Company, elected on the 8th inst., are: W. Rotch Wistar, Edward Samuel, Howard A. Stevenson, R. N. Carson, W. H. Shelmerdine. John B. Parsons was elected president and Francis Hazlehurst secretary.

AT the annual meeting of the City Passenger Railway Co., held in Montreal on the 2d inst., the following board of directors was re-elected: John Crawford, Dr. Hingston, Alex. Murray, Jesse Joseph and E. L. Beaufort. Mr. Crawford was subsequently re-elected president, and Dr. Hingston, vice-president.

The American Society of Mechanical Engineers, at their recent session in this city, elected the following officers: E. D. Leavitt, Jr., president; John Fritz, Henry Morton and William Metcalf, vice-presidents; Robert W. Hunt, Charles T. Porter and C. J. H. Woodbury, Managers; and Charles W. Copeland, Treasurer.

The directors of the Old Colony Railroad Company for the ensuing year are: Charles F. Choate, Frederic L. Ames, Thomas J. Borden, John S. Brayton, Samuel C. Cobb, Uriel Crocker, Samuel L. Crocker, Francis B. Hayes, George Marston, William J. Rotch, John J. Russell, Royal W. Turner, Elisha W. Willard.

At the annual meeting of the Boston, Winthrop and Point Shirley Railroad Company, held on the 1st inst., the following directors were elected to serve for the ensuing year: John H. Buttrick of Lowell, Hon. Samuel W. Hale and Francis French of Keene, N. H., Clarence A. Parks of Wakefield, and Nelson K. Baker, Alpheus P. Blake and David Loring of Boston.

The directors of the Cincinnati, Indianapolis, St. Louis and Chicago Railroad Company, recently elected, are: George Bliss, C. P. Huntington, New York city; Thomas A. Morris, Thomas H. Sharpe, Indianapolis; R. R. Cable, Chicago; M. E. Ingalls, George Hoadly, George Wilshire, S. J. Broadwell, C. W. West, B. F. Evans, Larz Anderson, Cincinnati; J. H. Devereux, Cleveland. The officers are: M. E. Ingalls, president; E. F. Osborn, treasurer; John Egan, general ticket agent; H. J. Page, general freight agent.

The stockholders of the Mexican National Exploring and Mining Company, at their annual meeting held in Philadelphia on the 2d inst., elected officers as follows: President, Henry J. Fox; treasurer, William D. Frishmuth, Jr.; secretary, Joseph R. Livezey; directors, Henry J. Fox, William D. Frishmuth, Jr., Henry H. Reed, Evan Morris, B. Frishmuth, Joseph R. Livezey and Casper S. Butcher. The treasurer stated that the cash dividends for the year amounted to $243,200.

The directors of the Binghamton and Williamsport Railroad Company, elected on the 26th ult., are: R. J. C. Walker, D. M. Peck, E. R. Payne and Fletcher Coleman, of Williamsport; R. H. Woolley, of Danville; John Bradshaw, John M. Heacock, D. T. Huckle, R. A. Ford, Cyrus Strong, Warren S. Weed, Charles Davis, Erastus Ross and John Evans, of Binghamton. Rodney A. Ford was chosen president, John Evans chief engineer, and R. J. C. Walker, attorney. The capital stock of the company will be $3,000,000. Everything connected with the enterprise looks encouraging, and if the right of way can be obtained as favorably as is expected, the surveys will commence immediately. The road will be 100 miles in length—80 miles from Williamsport to the State line, and 20 miles from there to Binghamton. It will be the link which is wanted to make a direct railway line from Boston, via Albany, to Pittsburgh.

Statistics of Immigration.

THE Chief of the Bureau of Statistics at Washington reports that in the month of September there arrived in the customs districts of Baltimore, Boston, Detroit, Huron, Minnesota, New Orleans, New York, Passamaquoddy, Philadelphia, and San Francisco, 65,750 passengers, of which 49,935 were immigrants, 11,340 citizens of the United States returned from abroad, and 4,475 aliens not intending to remain in the United States. Of this total number of immigrants there arrived from England and Wales 8,363, Ireland 4,016, Scotland 1,300, Austria 639, Belgium 220, Bohemia 380, Denmark 686, France 554, Germany 18,080, Hungary 508, Italy 1,094, Netherlands 439, Norway 1,931, Russia 875, Poland 78, Sweden 3,040, Switzerland 893, Dominion of Canada 6,482, and 357 from all other countries; 58,454 immigrants arrived in September, 1881. The total number of immigrants arrived in the foregoing customs districts and from the principal foreign countries in the three months ended September 30, 1882, was 158,021 against 71,805 for the corresponding period of the previous year.

ADVERTISING is the oil which tradesmen put in their lamps. They that are unwise put in no oil.

Atlanta and West Point Railroad.

THE earnings of the Atlanta and West Point Railroad for the years ending June 30, 1881 and 1882, were:

	1881.	1882.
From passengers	$114,227 55	$163,319 57
From freight	263,200 35	231,899 73
From express	9,476 34	7,729 18
From mail	19,213 08	19,187 61
From miscellaneous	11,937 02	7,673 42
	$418,054 34	$430,009 51

The operating expenses in 1881–'82, were:

Conducting transportation	$52,845 97
Maintenance of motive power	79,259 46
Maintenance of way	81,366 27
Maintenance of cars	19,119 51
General expenses	22,284 01
	254,515 22
Net earnings	$175,494 29

Out of this sum there has been paid for interest $75,234.15, and for dividends $80,093, leaving a surplus of $20,167.14. Compared with the previous year there was an increase in earnings from passengers of $49,092.02, with a decrease in earnings from freight, etc., of $37,-136.85, making the net increase in earnings $11,955.17. Of the former it is estimated that $36,000 were derived from travel to and from the Cotton Exposition. "This," the report says, "gives to the normal passenger business an increase of $13,092.02, which is shown to be from through passengers during the past six months. A portion of this increase we attribute to better connections beyond New Orleans; and we anticipate a further increase of through travel in ratio with the rapidly increasing population and wealth of southern Texas. The wonderful progress made within the past two years in extending railway lines into our sister Republic of Mexico, and the promise of their early completion, are reasonable grounds upon which to predict a large future business between that country and our principal marts of commerce, in which your road will participate. The decreased receipts from freight are mainly accounted for in the smaller tonnage of grain and fertilizers, the former showing a decrease of 5,450 tons, and the latter 5,823 tons. The abundant grain crops in the area tributary to our road, the reduced acreage in cotton, and the disposition of the planters to economize in the use of commercial fertilizers, indicate with certainty reduced tonnage and receipts from the transportation of these items for the ensuing year. While the revenues of the company will be temporarily reduced from these causes, it would seem to be a subject of congratulation with the stockholders rather than of despondency; for results which promote the general prosperity of the people must, in time, increase the business and enhance the value of your road.

"Since September last our outfit of motive power and rolling-stock has been maintained by, and worked in common with, that of the purchasers of the Western Railroad of Alabama, under rules and covenants which are thought to be equitable, and are believed to be of mutual economy in working the two roads. Our superintendent, holding the offices of president and general manager of the Western Railroad, has had a somewhat delicate duty to perform in adjusting the joint expenses equitably between the roads. The directors take pleasure in stating that this duty, and all others devolving on him, have been performed to their entire satisfaction. They recognize also, in the successful operations of the road, the fidelity and efficiency of all classes of employés."

The equipment of the road consists of 14 engines, 2 first-class and 7 second-class passenger, 3 baggage and express, 2 postal, 4 cab, 128 box, 23 stock, 61 platform, and 9 coal cars. The number of miles run by passenger engines was 128,528; freight, 95,924; construction, 31,-060, switching, 18,812—total, 274,324. Mileage of all cars, 2,297,718.

The number of through passengers carried was 34,763; way, 80,326—total, 115,089. Tons of freight transported in 1882, 128,407, against 124,273 in 1881, an increase of 4,134. Bales of cotton transported in 1882, 93,361, against 96,-514 in 1881, a decrease of 3,153.

BALANCE SHEET, July 1, 1882.

Road outfit and real estate	$1,188,300 00
Bills receivable	672 50
Preferred stock Vicksburg and Meridian Railroad Co	3,234 00
Dividends of July and January	86,254 00
Interest on Di. account, January, 1882	36,966 00
Interest account	1,302 15
Due by agents and connecting roads	45,207 12
Due by Central Railroad Bank	30,000 00
Due by Georgia Railroad Bank	6,653 52
Profit and loss	1,189,926 24
Road expenses for the year	254 515 22
Cash	61,049 23
Total	$2,904,080 60
Capital stock	$1,232,200 00
Debenture certificates	1,232,200 00
Dividends unpaid	110 00
Interest on debenture certificates unpaid	3 00
Due to agents and connecting roads	9,558 09
Road earnings for the year	430,009 51
Total, as above	$2,904,080 60

President.—L. P. GRANT.

Directors.—William M. Wadley, L. P. Grant, J. S. Rigby, L. M. Hill, C. H. Phinizy, D. N. Speer, W. B. Berry.

Superintendent.—CECIL GABBETT.

Secretary and Treasurer.—D. W. APPLER.

Nova Scotia Railways.

THE consolidation of the railways of Nova Scotia into one system has met with obstacles, and may not after all be carried out under the legislation for the purpose, which occupied nearly the whole of the last session of the Legislature. The Nova Scotia Railway Company, of which Mr. Plunkett, C. E., is the head, and Messrs. Baring Brothers, bankers, of London, England, the financial agents, and in connection with which the legislation was obtained, has, so far, failed to comply with the preliminary conditions of its contract. The Government has begun to act independently of the Company, with a view to fulfil some or all of the objects of the scheme in the event of the Co.'s ultimate withdrawal. The Halifax and Cape Breton Railway and Coal Company, of which Sir Hugh Allan is the principal shareholder, own the Eastern Extension Railway, about eighty miles long, a new line extending from New Glasgow, on the Picton Branch of the Intercolonial, to Port Mulgrave, on the Strait of Canso, including a ferry across that water to the near shore of Cape Breton Island. The property also includes a claim upon the possession of the Pictou Branch of the Intercolonial, fifty miles long, from Pictou to Truro, perhaps as profitable a fifty miles as there is of that road. According to many wise people when it was projected, Eastern Extension was not going to pay for axle-grease for a decade at least, but since its opening a year or two ago the line has developed a traffic that is now said to yield a respectable margin over expenses. Under an agreement made with the Company in 1879, the Local Government had the right to take over Eastern Extension at any time before the 4th of November, 1882, on payment of the actual outlay of the Company in excess of the Provincial subsidy, the amount to be determined, in case of disagreement, by arbitration; and by legislation of 1881 twenty-eight days' notice was to be given by the Government of intention so to assume possession of the road.

THE required notice was given, and the Company claimed one million two hundred thousand dollars as the amount of its outlay, to which the Government objected and appointed Mr. Carmichael, banker, as arbitrator on behalf of the Province. No arbitrator was named by the Company, but on Thursday last the Provincial Commissioner of Public Works and Mines, accompanied by the Provincial Engineer, went to New Glasgow, the Company's headquarters, and formally demanded of the Vice-President, Capt. T. D. Milburne (Sir Hugh Allan's son-in-law), delivery of the Eastern Extension Railway, with all its appurtenances. It had been previously intimated to the Government that the Company took exception to the validity of the legislation on this subject, and would refuse to give the Government possession of the road before payment of their outlay, which can only be made after the arbitrators have fixed the sum. Capt. Milburne did not refuse to deliver the road, but asked delay for a day to enable him to communicate with the directors at Montreal, which was granted. In view of the promising prospects of the Eastern Extension Railway and the assured value of the Pictou Branch, which must go as a subsidy to the other line upon satisfactory fulfilment of certain conditions, together with the circumstance that Sir Hugh Allan heads another corporation owning extensive coal mines connected with the Pictou Branch by their own railway, it will not be surprising if the Halifax and Cape Breton Company should hold on tenaciously to all its claimed rights and privileges in the dispute with the Local Government. Perhaps the best solution of the difficulties of the situation, if it be possible, would be for the Government to get the owners of the Eastern Extension to take the place of the Nova Scotia Railway Company—if, as appears, the latter should finally retire—and carry out the various projects of railway extension and consolidation contained in the original scheme.—*Montreal Witness, Nov. 7.*

Two young men recently arrived at a toll bridge in the neighborhood of New Haven in such a desperately moneyless condition that between them they could raise only enough to pay for the passage of one. They explained the situation, but the toll-keeper was obdurate. In an unguarded moment, however, he acknowledged that a person had a right to carry a bundle over for a single fare, whereupon one of the men picked up his companion and ran over the bridge with him before the keeper had time to expostulate.

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WE invite railroad officers to send us notice of elections, transfers, appointments, resignations, etc.; and all our readers would oblige us by furnishing for our columns any items of personal information, which may come to their knowledge, and are adapted to this department. We aim to record all new railway enterprises in the United States and Canada, and to note the progress of construction on all new roads and extensions; and we request all concerned in railway building to give us early information regarding the above, that our reports may be as complete as possible.

Subscribers are requested to report to our office any irregularity in receiving the JOURNAL.

Contributed articles relating to Railroad matters generally, Mining interests, Banking and Financial items, Agricultural development, and Manufacturing news, by those who are familiar with these subjects, are especially desired.

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New York, Saturday, November 11, 1882.

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ELEVATED STREET RAILROADS.

THE problem of how to transport the great mass of men, women and children who do business on the lower half of the island on which the bulk of New York stands, to their counting-rooms, stores, workshops, etc., and back to their homes in the upper part of the island, or on the adjoining peninsula, enclosed by the Hudson River and Long Island Sound, was one of long and doubtful solution. The old city of London had wrestled for a generation with a similar question, and had resorted, like Paris, to an immense system of cabs and omnibuses. The "cheap cab" of each city was supposed to be the *ne plus ultra* of commerce and economy. To say nothing of the impossibility of putting an army of working-men into separate cabs, the conditions in New York did not admit of so easy a solution.

The application of the tram-rail to the street grade came pretty nearly meeting the requirements for most places; and the "street car," or "horse car" as it is commonly called, has in most cities virtually driven out the hack-carriage or cab for general use. Montreal, an English or rather Scotch city on American soil, and New Orleans, a French one, still keep up the cab system, but the horse car is fast encroaching on it. In the former city there are not less than 1,200 licensed vehicles.

New York being stretched lengthwise along a narrow neck of land, constant travel is necessary and general. The horse car development was insufficient to accommodate the volume of passengers. Besides being tedious and uncomfortable at all seasons, it was not speedy, and was especially liable to blockades. It was a happy thought when the attention of engineers and capitalists was turned from the proposed underground to the elevated, or pillar road.

As a matter of history, New York may be said to have had a narrow escape from repeating the blunder of London in adopting underground roads instead of overhead ones. Whoever has tried the New York steam roads and contrasted them with the London burrows will admit the immense superiority of the former. The continuous trestle bridge is a nearly complete success. It admits of little or no improvement; it sprang into existence full-fledged and almost perfect at the start. Though expensive absolutely, it is less so than any of the rival plans. The only aggrieved persons are the abutting property owners. There was undoubtedly some legal chicanery in procuring a judgment of the highest State courts that the owner of property so damaged could not collect compensation of the railroad company; but it was an exceptional case where the rights of a few gave way for the convenience of the many. It was doubtless true that a contrary decision would have set back intra-mural transit for another generation. With the example of New York City before it, the effort of a Brooklyn company to construct an elevated railroad in that city has run upon this rock of litigation. The lower courts have given a contrary decision that the company is liable: and this means suspension for a long period.

Great as is the success from an engineering point of view, the New York City railroads are not quite what they should be in relation to the real needs of the city. It is a familiar story of course that they have been seized upon by speculators who have capitalized them far beyond their cost in money, in fact at a value based upon their productive power. It happens, however, that the legislature has a reserved right as to the power to collect tolls, and this it may, or should, exercise. About half of the fares are now on a five cent basis, but this is too high an average. Anything below 59th street should be done at all hours at the lower rate, and anything passing beyond that at the ten cent rate. The details of collection are within the range of human ingenuity. This would suffice to pay a six per cent dividend upon the debt and stock as now represented, which as everybody knows is from two-thirds to four-fifths diluted. Some arrangement should be made for putting the equivalent of express trains on the roads extending to the Harlem River and there connecting with roads in Westchester. The Ninth avenue line runs one such train each way to connect with the New York City and Northern Railroad, making the trip from the Rector street station to 155th street in 30 minutes. This ought to be done more frequently on this and on the other roads.

The State has appointed a commission to lay out and locate new city roads, an organ which, by the way, will have to be adopted by the entire State. Its only effect is at present to suppress all new elevated roads. This is not as it should be. New York city needs at least two other trunk lines; one, a belt-line along West street and substantially along the East River, with stations at the principal ferries and steamer landings; and this should be built so as to convey mails, baggage and express as well as passengers. There might easily be by incline plane or elevator some ready means of communication between the steamer landings and the elevated belt railroad overhead so as not to cross the street grade already overcrowded with heavy traffic. At the same time West street should be widened and straightened so as to be a grand, commodious avenue.

Another road that ought to be built at once

is partly overhead and partly in tunnel from the Grand Central Depot via Fourth avenue, Mulberry, Centre and Nassau streets to the South Ferry. This franchise might be granted to the Central, New Haven and Harlem companies in certain proportions; and it would be quite practicable to run occasional trains through from the Battery to the Grand Central Station and thence on or above the Viaduct twenty or twenty-five miles into Westchester. It will come to that eventually, so that there will be, as there need be, no change of cars between Yonkers, Tarrytown, White Plains, Stamford and New York down town.

Usefulness of Trade Journals.

THE encouragement of trade journals augurs well for the advancement of manufactures, No matter how skilled may be a workman, his fellow craftmen possess secrets of which he is ignorant, and which can, as a rule, only receive their proper dissemination by being published in the specialty or technical papers that are doing so much for the elevation of the American artisans and their numerous callings, in which the public is so intensely interested. Every mechanic who prides himself in his particular line ought to subscribe regularly to a trade journal—one representing most closely the branch of work in which he is engaged. This should be read closely and carefully, and the hints and suggestions thrown out must be noted with the view of giving them pratical tests. By pursuing this commendable course, a greater degree of technical skill is acquired at a trifling expense of time and a small outlay of money. Then, too, a knowledge is obtained as to the better class of new text-books appearing from time to time bearing on the exact sciences and applied mechanics. Besides all this, the general news of particular localities as to the progress thereof is an especial feature characterizing these papers, of which sight cannot be lost without detriment to the loser. To be well posted is as much stock in trade with a mechanic as it is to a merchant or professional man. The trade journal is fast becoming, under wise and faithful guidance, as much of a necessity as the daily paper.—*Western Industrial Journal.*

Schools and Railways.

RAILWAYS are of little account unless backed by a proportionate agricultural population. It is just as true to say that farmers do small good to themselves or their community without a railway or steamboat company to transport the products of their labor and farming intelligence. The Farmers' Congress, lately held in St. Louis, was somewhat too sarcastic in its notion to "divide the proceeds of the sale of public lands among the States in proportion to their population and illiteracy." A State which is too poor for much railway mileage is too poor for much vigorous population; also, its population will mainly be too trifling to care for many decent schools. An illiterate farmer, who had made his money off of advantages afforded by railways, told an instructress: "If my daughter has no capacity to learn and needs it, why, buy it for her and send me the bill." There it is! A population too foolish to know what is lacking, and foolish enough to think the benefits are all to be had by waiting for the teacher to come along and order proper capacity, is not likely to distinguish between railroads and rivers. Says the Farmers' Congress: Improve the Mississippi. Anything for that. Nothing for railroads. But a steamboat company is as much of a monopoly as a railroad company.

However, it happens to be correct history to present date that, in proportion to population and acreage of improved agricultural lands, there will be found the least illiteracy where there is the most railway investment. Railways and school houses grow up together. Often the locomotive precedes the school and the church.

We are not undertaking to declare that the time may not be at hand when a railway company ought not to be compelled to stand by itself without any more Governmental assistance than a frontier blacksmith's outfit obtains. That is not the question. A railway is as much an advance of intelligence, on the average, as a school. Where the railway runs there will be a line of schools. The converse proposition will seldom be true. Give discriminating aid to both schools and railways. There is no other righteous doctrine for the Government to follow, as regards its public lands.—*Western Insurance Review.*

A CONTEMPORARY, not published in the railroad interest, by the way, makes certain suggestions which are of great value and will bear repetition until they are no longer necessary. The first of these has reference to the present inadequacy of our system of warehousing and handling freight. Our terminal stations are fairly provided in these respects, but he would be a rash man who said the same thing of depots in country places, where facilities for handling and storing heavy freight are miserably poor, to the great loss of time and strength. In nothing, perhaps, is this deficiency more noticeable than in the absence of means to obviate the use of trucks on platforms. Again, why should not freight cars be so constructed as to be loadable and unloadable in sections instead of only in the middle? There may be more of mirth than of force in the complaint made that the brakeman on the passenger train habitually misleads by his mispronunciation of names; but an efficient means of making the traveler cognizant of his whereabouts without putting his vigilance and intelligence into such severe action as at present, would be a blessing to the public. If it be true that "hundreds of persons are killed or maimed every year by being caught in the 'boot-jack' portion of frogs and held fast and run down by cars or locomotives," the inventor of an appliance preventing this loss of life would lay claim very justly to being a philanthropist; and we are much mistaken if he would not reap besides a rich financial reward.

MR. W. C. TYLER, the Boston correspondent of the AMERICAN RAILROAD JOURNAL, took unto himself a wife on the 7th inst. Our most cordial good wishes attend Mr. and Mrs. Tyler.

THE most perplexing subject the Car-Builders' Association had to deal with in the revision of its constitution was that of patents. The more it was discussed the greater seemed to be the difficulty of agreeing upon any clear, well defined and satisfactory provision for future guidance in the matter of patented inventions. As it was imperative that something should be done in regard to the knotty problem, or else the new constitution would be incomplete, the subject was finally disposed of in a very brief clause, leaving the whole matter with the Executive Committee, by providing that no patented appliances shall be submitted to the association unless they shall have been submitted to the committee, and the committee can use its utmost discretion in all cases. It can determine not only in regard to the merits of the invention as a mechanical appliance, but can use such means as may be necessary to ascertain the validity of the patent and all collateral claims, as well as the terms by which the right to use may be acquired. This is probably the best arrangement that could be made. While it relieves the association of the heated and profitless discussions that invariably attend the consideration of patented improvements, it imposes a burden of no trifling weight on the committee. Every inventor or patentee in the land who has got a device he wishes to introduce upon railroads, will know what mill to take it to. It will have to be put into the hopper of the Executive Committee before any definite or final action can be taken upon it by the association; and the discretion of the committee is without any restriction. The new constitution does not prohibit the discussion or recommendation of patented inventions by the association, but they can be recommended only with the implied concurrence or approval of the committee.—*National Car Builder.*

[From the Daily Citizen, Ottawa.]

JOURNALISTIC.—Mr. James J. White, at present a resident of Ottawa, has been appointed manager of the Canadian department of the AMERICAN RAILROAD JOURNAL, of New York. This publication is the oldest railroad journal in the world, and is devoted to railroads, mining, machinery, steam navigation, finance, banking, commerce and manufacturing, and is largely read by railroad and financial men in Europe and America. Mr. White has been paying special attention to the immense mineral development of Ottawa county, and in his sphere of correspondent to a leading journal is, no doubt, rendering an important service to our local interests. We congratulate Mr. White on his appointment, and are satisfied that no better could be made.

DUBLIN once boasted a magistrate, one Justice O'Malley, whose eloquence and erudition made him the pride and delight of the city. "So, sorr," he thundered to an old offender who had often escaped what the judge always spoke of as the "butt-end of the law," "y'arre about to incurr the pinility of your malefactions. Justice, sorr, may purshue wid a leaden heel, but she smites"—here the quotation eluded him—"she smites"—triumphantly—"she smites wid a cast-oiron toe?"

ADVERTISE in the RAILROAD JOURNAL.

CANADIAN DEPARTMENT.

MR. JAMES J. WHITE, Ottawa, Canada, writer of "Our Canadian Letter," acts as agent for the AMERICAN RAILROAD JOURNAL COMPANY, in Canada. He is authorized to receive, in behalf of the company, subscriptions and advertisements for this journal; also news of the character which he can utilize in the preparation of his Letter, or send to us for use elsewhere within these columns. He respectfully invites information concerning Railroad matters generally, Mining, Banking, Finance and Manufactures.

OUR CANADIAN LETTER.

[From our Special Correspondent.]

THE Dominion Government have disallowed the Manitoba Tramway, and the Emerson and North Western Railway Co.'s Acts, and an Act to encourage the building of railways in Manitoba, all passed by the Manitoba Legislature. This has been done in accordance with clause 15 of the Canada Pacific Railway Act, which reads: "For 20 years from the date hereof, no line of railway shall be authorized by the Dominion Parliament to be constructed south of the Canadian Pacific Railway, from any point at or near the Canadian Pacific Railway except such line as shall run southwest, or to the westward of southwest: nor to within fifteen miles of latitude 49. And in the establishment of any new province in the northwest territories, provision shall be made for continuing such prohibition after such establishment until the expiration of the said period.

The case of Page & Newhall, dealers in railway supplies, Boston, Mass., vs. Proctor, of Hamilton, Ontario, from whom Page & Newhall ordered about $100,000 worth of rails without specifying any particular section, Proctor supplied and forwarded to plaintiffs, required rails of the Hamilton and Northwestern section; these the plaintiffs refused, saying they wanted the Sandburgh section. Proctor refused to take them back, so Page & Newhall sold them at, as they claim, a loss of $40,000, which they now claim for damages for breach of contract. The case was not concluded on Saturday.

A number of American gentlemen who were in Montreal last week, have, in connection with several Canadians, formed an Electric Light Co. with a capital of $100,000.

Mr. H. W. Hayden, the well known brass founder of Waterbury, thinks that $1,000,000 could be profitably invested in brass and metal working in Canada, and believes St. John, N. B., or Moncton, should be the Waterbury of Canada.

Some 250 weavers employed at the Merchants Cotton Mills, St. Henri, P. Q., are on a strike.

The unearthing of customs frauds still continues. A Montreal firm have been detected by the Canada Co-operative Supply Association in presenting to the customs one invoice undervaluing their goods, at the same time presenting an invoice of the same goods to the Association charged with from 10 to 20 per cent advance.

Mr. Louis Senecal sailed from France yesterday for New York. It is reported that he had ficated in Paris the $1,500,000 of the $3,000,000 Provincial Loan authorized at the last session of the Quebec Government.

CANADA PACIFIC RAILWAY NOTES.

The Canada Pacific Railway steamers to run between Algoma Mills and Thunder Bay, Lake Superior, will be placed in the spring.

The Canada Pacific Railway will be constructed to Algoma Mills by next May, thus having the line in operation between Algoma Mills and Quebec.

A special general meeting of the shareholders of the Canada Pacific Railway Company will be held at the head office in Montreal, on Tuesday, the twenty-eighth day of November next, at twelve o'clock noon, to consider and determine upon the increase of the capital stock of the company and to provide for restricting the issue of bonds and preference stock.

C. P. construction trains are now running over 130 miles west of Regina. The Canada Pacific have applied to the Government for authority to construct their line eastward from Prince Arthur's Landing to Current River.

"W."

OTTAWA, Nov. 8, 1882.

The Late Francis Shanly C. E.

FRANCIS SHANLY commenced his engineering career under General Charles B. Stuart, on the first surveys for the Great Western Railway in 1846. Shortly afterwards he became assistant to his brother Walter, then Resident Engineer on the Welland Canal.

In 1848 the two brothers, forseeing that a railway era was soon to open for Canada, went to the United States to seek practical experience in railway construction and management, and there at once obtained engagements on the Ogdensburg and Lake Champlain Railroad—at that time a new and important enterprise. On the completion of the Ogdensburg road in 1850, Francis Shanly was appointed Resident Engineer under James Worrall, Chief Engineer of the Lebanon Valley Canal, Pennsylvania, where he continued until 1852, making many friends in the part of the State where his work was carried on, and where his name is still held in affectionate remembrance.

In 1852 Walter Shanly being appointed Chief Engineer of the "Toronto and Guelph," soon to become part of the Grand Trunk Railway, he invited his brother Francis to join him, as his principal assistant on that work and on which he remained until its completion in 1856, when he was appointed engineer of the Welland Railway.

In the ten years succeeding 1858 he was actively engaged on many works in Canada, among others on the reconstruction of the "Northern (Toronto and Lake Huron) Railway." In 1868, the two brothers entered into contract with the State of Massachusetts to tunnel the Hoosac Mountain, a work of great magnitude and great difficulty, but which they successfully completed before the term of their contract had expired in 1874.

While the tunnel was still in progress, and after its completion, Francis Shanly embarked as contractor, single handed, in several railway undertakings in Ontario; completing all his engagements, though owing to the greatly depreciated value of railway securities in those years, often at great pecuniary sacrifice and loss.

In 1880 he was appointed by the Government of Canada Chief Engineer of the Intercolonial Railway, and at the time of his death was engaged in adjusting the very large claims of the contractors of that work against the Government.

He died suddenly in a sleeping-car of the Grand Trunk Railway between Kingston and Brockville on the morning of the 13th September, 1882, when on his way to Ottawa, where he had appointed to meet his brother on that day.

Of singularly strong and vigorous constitution and possessing a nervous, energetic temperament, he was never known to complain of illness. Some few weeks previous to his death he had lost his son, a young man of great promise, causing him to be greatly depressed and saddened, and there can be little doubt that his sudden death, the immediate cause of which was apoplexy, was in no small degree due to mental anguish.

THE Hudson Bay Company are building a steamboat at Fort Chipewyan, near the junction of the Peace River with the Athabasca River, to be used in transporting the Hudson Bay Company's goods for the Athabasca and Mackensie River districts. She will have a run of about 300 miles down the Athabasca and Great Slave rivers and about 200 up the Peace River. The rapids on the Great Slave River extend about 13 miles and from there a steamer of the largest size could go clear to the Arctic ocean. Were there a canal made around the chute on the Peace River the Athabasca boat could go to the foot of the Rocky Mountains, about 700 miles from Fort Chipewyan, having good navigation all the way.

THE Canada Southern Railway Company has given an order to the Harlan & Hollingsworth Company of Wilmington, Del., for the construction of two elegant dining-room cars, which will be as fine as any in the country. It has also contracted with the Jackson & Sharpe Company for ten first-class coaches, to be finished in mahogany, and of the most modern style. These are to be delivered by February next. It is understood that thirteen new locomotives are to be built for the road at Schenectady.

THE Montreal *Witness* suggests that the question of the classification of trogs should be left to that railway official to which an old lady's baggage was referred, "E say, mum, as cats is dogs and rabbits is dogs and so's parrots, but as for this 'ere turtus its a hinsect, and hinsects is free.

A MATHEMATICAL professor had been invited by a city friend to visit him at his residence in a certain square, and had promised to do so. Meeting him some time afterwards, the friend inquired of the professor why he did not come to see him. "I did come," said the mathematician, "but there was some mistake. You told me you lived in a square and I found myself in a parallelogram, so I went away again."

The Finest Dining Cars in the World.

THE Chicago, Milwaukee and St. Paul Railway Company has had built six dining cars, which are described as the finest and most elegant cars ever constructed. They have been placed by the railway company under the management of the Pullman Company, and will be run on the line of the Chicago, Milwaukee and St. Paul Railway, between Chicago and Council Bluffs.

The dimensions of these dining cars are 61 feet 6 inches length in frame by 10 feet 3 inches in width, by 10 feet in height from floor to ceiling. They are mounted upon first-class six-wheel trucks of the Chicago, Milwaukee and St. Paul Railway standard, and are fitted with 42-inch steel-tired Allen paper wheels, mounted on French's double-elliptic springs. The cars are fitted with Miller platforms and draw fixtures. The platforms have automatic gates, hung with spiral springs; also traps to platforms to cover steps. They are fitted with Westinghouse air-brake connections, as well as double acting hand-brakes.

The outside of the car body is arranged in fine long panels below the belt rail, with the words "Dining Car" in the center panel. Upon the frieze board is lettered the name of the road, "Chicago, Milwaukee and St. Paul," in gold. The cars have nine windows on each side, eight of which are of unusual size, having heavy plate glass 42 inches wide by 34 inches high, elliptical tops. There are four boxes under each car, two being for ice, and two for meats etc., and lined throughout with galvanized iron, leaving an air space between.

The cars have raised roofs with pivoted ventilator sash and brass wire screens over same. The exterior of the cars is elaborately ornamented in Eastlake designs, the body shade being a dark wine color. Along the bottom of the paneling is a handsome Japanese border in gold and lake.

The interiors of these cars rival the exteriors in beauty and delicacy of embellishment and richness of design, being finished in mahogany with trimmings of rosewood and marqueterie and hardwood ceilings. The arrangement of the cars is as follows: In one end is a compartment, one side of which is fitted with a refrigerator and wine locker combined; also a marble top wash-stand with a large mirror over same, with a drinking water tank and pump and fixtures complete. On the other side of this compartment is a linen locker and the Baker heater.

Leading from this end of the car into the dining saloon is a sliding door with handsomely embossed glass, and which, together with two beveled plate mirrors 22x48, one on each side, forms a solid bulkhead across the car. The entire middle section of the cars is devoted to the dining saloon. The floors throughout are laid in cherry and walnut.

The mirrors in this apartment form a notable feature of their design, and add greatly to the general beauty of the cars, there being four of beveled plate on each side and two in each end. The seats are of carved mahogany and of a new design, both as to the ends and the backs, which are curved. The seats are upholstered in maroon leather and have nickel-plated armrails. They are so arranged that they swing upon pivoted hinges, on the same principle as the chairs in modern theatres. The Baker heater pipes are led under each seat, and between the seats are fitted large tables, with springs on the same to hold the tablecloths, and which are to be used for dining purposes. At each table silver castors, containing various condiments, are fitted to the window sills, and are arranged so that they will not interfere with the space required for dining purposes. At the windows are hung roller curtains inside of sliding curtains, and lambrequins of rich material and of exquisite patterns. The lamps in the ceiling are of a very rich design and correspond with the general inside finish.

There is a handsome sideboard room between the pantry and the dining saloon, finished in mahogany. The solid mahogany sideboard itself is a gem of artistic taste and design, it having four swinging doors with beveled plate glass above, and a double row of drawers with silver-plated ring handles, the shelves between drawers and doors being ornamented with carved balustrades. Opposite the sideboard is a highly finished mahogany corner locker, extending from the floor to the ceiling. At the other end of the car is a wardrobe in one corner, and a refrigerator with two large lockers in the other corner. From this vestibule there is an entrance, by means of folding doors, to a spacious kitchen, which, for its completeness in design and details of appointment, would rival any private *cuisine*. It is 7 feet wide by 13 feet long in the clear, and is lined and floored throughout with galvanized iron. It is fitted with a six-foot Wilkes' range thoroughly furnished, which was manufactured in Chicago. The range connects with an ample boiler for hot and cold water, alongside of which is placed a large sink, the boiler being connected above to a cylindrical tank fastened under the roof. The kitchen space is made available for closets, shelving, racks, ice-chests, and every square foot is utilized to the best advantage. There is a commodious steam table, with warming closet underneath, the heat for which is supplied by a small stove adjoining same; a chest of meat drawers with glass bottoms, and lined with galvanized lining; ticket box and sash with counter-shelf fitted with drop sash and slide, opening into pantry.

There is a swinging door, with richly embossed glass, and hung on Union butts, in the passage-way leading from the kitchen to the pantry. In this latter compartment there are eight cupboards with sink and refrigerator for milk and cream. The sinks are lined throughout with copper. There is also a tank overhead, hidden from view, with a spigot leading to the ice box.

A CUBIC inch of gold is worth $210; a cubic foot, $362,380; a cubic yard, $9,797,762. This is valuing it at $18 an ounce. At the commencement of the Christian era there was then in the world $427,000,000 in gold. This had diminished to $57,000,000 at the time America was discovered. Then it began to increase. Now the amount of gold in use is estimated to be $6,000,000,000.

AN improved machine for manufacturing railroad springs has recently been constructed for the Lancashire and Yorkshire Railway Co., England. The machine combines all the processes of shearing, tapering, shaping, punching, shotting, etc. It is stated to be very durable and compact, and occupies a space of not more than nine feet six inches. It consists of an upright frame, carrying three slides which operate a couple of disks for pointing the spring ends and putting in the nib, and a punch for cutting the horizontal slot. A fourth slide works a circular punch for the center bolt hole, and above this a pair of shears for cutting the steel bars to the requisite length are carried at one end of the machine, the other end being provided with a pair of rolls. The bottom roll is grooved to prevent the spreading of the metal when subjected to pressure, and is eccentric for tapering the ends of the springs. The machine is driven by ordinary gearing and is operated by one man.

Two Tennesseeans have patented a new steam-engine which aims to economize steam and maintain a constant equal pressure on the driving-shaft. It is an improvement on those engines which have more than one movable piston working in the same cylinder, each separately connected by the crank. The new engine has three pistons in the cylinder, and the rod of the central one passes through the center of the inner piston. The rods of the outer piston also pass through the wires secured to it at equal distances from the rod of the center piston; these rods are not fastened to the center piston, though they pass through it. By this system the movements of the outer and inner pistons are steadied. The central and outer pistons are forced apart in opposite directions when the steam is let in between them through the port, until the exhaust port allows it to escape; and when it is admitted between the central and inner pistons, the former is moved back, going in one direction, while the end pistons move in the other; and, as the cranks of the central and end pistons are set opposite, the crank shaft is at the time pulled and pushed in opposite directions by the movement of the three pistons, and the strain upon it is equal in both.—*Artisan.*

THE *Wheeling Intelligencer* says that the Baltimore and Ohio Railroad Company has bought the narrow-gauge line between Pittsburgh and Washington, Pa., known as the Pittsburgh Southern, the purpose being to rebuild part of it, put down a track of standard gauge, and run their trains from Pittsburgh to the West via Wheeling.

THE Wharton Switch Company have begun operations at their shops, lately erected at Jenkintown, Penn., having expended $15,000 in the enterprise. They expect to give employment to 500 men. The building of fifty houses for the employés is going on, and more will be erected hereafter.

THE Fort Wayne and Jackson Railroad has been leased to the Lake Shore and Michigan Southern at 5½ per cent on the preferred stock, payable in New York.

The Stock Exchanges and Money Market.

New York Stock Exchange.

Closing Prices for the week ending Nov. 8.

	Th. 2.	F. 3.	Sat. 4.	M. 6.	Tu. 7.	W. 8.
Adams Express	.....	.....	.....	138	.....	....
Albany and Susq.	.....	....	.....	.....	.....	.....
1st mortgage	.....	.....	...	.....	.....	.....
2d mortgage	105¼	.....	.....	.....	.....	.....
American Express	92½	94	.....	92	.....	93
Burl., C. R. & Nor.	.....	.. .	....	81½	.....	80½
1st mortgage 5s	.....	....	102½	101¾	.....	102½
Canada Southern	70½	69½	70⅝	70½	.....	67½
1st mortgage guar	94	94	94	... .	.....	94½
Central of N. Jersey	72⅝	71⅞	72⅝	72	.....	70⅜
1st mort. 1890	.....	....	.....	116½	.....	.....
7s, consol. ass	.....	.....	.....	.....	.....	.....
7s, convertible ass.	.....	.....	.....	.....	.....	.....
7s, Income	.....	.....	.....	.....	.....	.....
Adjustment	105	.....	.....	.....	.....	105⅜
Central Pacific	90⅝	90⅞	90⅝	90⅛	.....	89⅛
6s, gold	.....	.....	.....	.....	.....	.....
1st M. (San Joaq)	.....	.....	.....	.....	.....	.....
1st M. (Cal. & Or.)	.....	.....	.....	.....	.....	.....
Land grant 6s	.....	.....	.....	.....	.....	.....
Chesapeake & Ohio.	25	25¾	25¾	25	.....	24
1st pref	.....	.....	37	.....	.....	35⅜
2d pref	.....	27	27¼	26½	.....	25⅜
1st mort., series B	87¾	.....	87⅞	87½	.....	87⅜
Chicago and Alton	142¼	142¼	142	141½	.....	141
Preferred	.....	.....	.....	. ..	.....	.....
1st mortgage	.....	.....	.....	.....	.....	.....
Sinking Fund	.....	.....	.....	.....	.....	....
Chi., Bur. & Quincy	132	132	132	131¾	.....	131
7s, Consol. 1903	.....	.....	... .	.....	.....	128½
Chi., Mil. & St. Paul	110½	109¾	110½	110¾	.....	109⅝
Preferred	126½	126¾	126½	126	.....	125⅝
1st mortgage, 8s	.....	.....	.....	.....	.....	.....
2d mort., 7 3-10s	.....	... .	.....	... .	.....	.....
7s, gold	.....	....	.....	.....	.....	....
1st M. (La. C. div)	.....	.....	.....	.....	.....	.....
1st M. I. & M. div.)	.....	....	.....	.....	.....	.....
1st M. (I. & D. ext.)	.....	....	.....	.....	.....	.....
1st M. (H. & D. div.)	.....	.....	.....	.....	.....	.....
1st M. (C. & M. div.)	.....	126½	.....	.....	.....	....
Consolidated S. F.	....	....	.....	.....	.....	.....
Chi. & Northwestern	144⅞	144¾	145	144½	.....	142
Preferred	162½	163½	163½	163¾	.....	163
1st mortgage	.....	.....	.....	.....	.....	106½
Sinking Fund 6s	.....	.....	.....	.....	.....	.....
Consolidated 7s	... .	133	.....	.....	.....	.....
Consol. Gold bo'ds	.....	.....	.....	.....	.....	127⅛
Do. reg.	.....	.....	.....	.....	.....	...
Chi., R. Isl. & Pac.	132	132	132¼	132¼	.....	131
6s, 1917, c	.....	.....	.....	.....	.....	.....
Clev., Col., Cin. & Ind.	83¾	85½	.....	.....	.....	83
1st mortgage	..	.....	....	.....	.....	....
Clev. & Pittsburg gr.	.....	.....	.....	.....	.....	.....
7s, Consolidated	....	.....	....	124½	.....	.....
4th mortgage	.....	.....	.....	.....	.....	.....
Col., Chi., & Ind. Cent	9	9¼	9	8⅞	.....	8¾
1st mortgage	.....	.....	.....	.....	.....	.....
2d mortgage	.....	.....	.....	.....	.....	.....
Del. & Hud Canal.	113⅝	112¾	113⅜	113⅜	.....	112⅛
Reg. 7s, 1891	.....	.....	.....	.....	.....	.....
Reg. 7s, 1884	.....	.....	.....	.....	.....	.....
7s, 1894	.....	.....	.....	.....	.....	.....
Del., Lack. & Western	136⅝	135¾	136⅞	135¾	.....	134⅜
2d mortgage 7s	.....	.....	.....	.....	.....	.....
Consol. 1907	.....	.....	.....	.....	.....	.....
Erie Railway	....	.....	.....	.....	.....	.....
1st mortgage	124½	.....	.....	.....	.....	125
2d mort. 5s, ext.	.....	.....	.....	.....	.....	.....
3d mortgage	....	.....	.....	.....	.....	.....
4th mort. 5s, ext.	.....	.....	.....	.....	.....	. ..
5th mortgage	.....	.....	.....	.....	.....	.....
7s, Consol. gold	126	126½	.....	.....	.....	.....
Great West. 1st mort	107	.....	.....	.....	.....	.....
2d mortgage	.....	.....	.....	.....	.....	.....
Hannibal & St. Jo.	.....	.....	... .	.....	.....	.....
Preferred	80	.....	.....	.....	.....	.....
8s, Convertible	.....	104¾	104¾	.....	.....	.....
Houston & Tex. Cen	.....	.....	79⅜	73½	.....	.....
1st mortgage	.....	110½	110½	110	.....	.....
2d mortgage	.....	120	.....	.....	.....	. ..
Illinois Central	149	149½	149½	148½	.....	147⅜
Lake Shore & Mich So	115⅝	115⅝	115⅝	115⅝	.....	115
Consol. 7s	.....	.....	.....	.....	.....	.....
Consol. 7s, reg	.....	.....	.....	.....	.....	.....
2d Consolidated	.....	.....	.....	124½	.....	.....
Leh. & W. B. con. ass	.....	.....	102	.....	.....	.....
Long Dock bonds	....	.....	.....	.....	.....	.....
Louisville & Nash.	52⅜	51⅜	52⅜	51⅛	.....	50⅛
7s, Consolidated	.....	114⅝	.....	114⅝	.....	.....
Manhattan	54	51	50	.....	.....	50
1st pref	87⅜	.....	.....	.....	.....	.....
Met. Elevated	.....	.....	.....	.....	.....	.....
1st mortgage	99	.....	100	.....	.....	.....
Michigan Central	102	101⅜	103	102⅜	.....	101
7s, 1902	.....	.....	.....	.....	.....	.....
Morris & Essex	.....	.....	125	.....	.....	.....
1st mortgage	.....	.....	.....	.....	.....	.....
2d mortgage	114¼	.....	.....	115¼	....	.....
7s of 1871	.....	121	.....	.....	.....	.....
7s, Convertible	...	.....	.....	.....	.....	.....
7s, Consolidated	124	.....	.....	.....	...	124
N. Y. Cen. & Hud. R.	132⅜	131¾	132⅜	131¾	.....	130⅜
6s, S. F. 1883	... .	100⅜	.....	.....	.....	.....
6s, S. F., 1887	....	.....	.....	.....	.....	.....
1st mortgage	.....	.....	.....	107	.....	.....
1st mortgage, reg.	....	.....	.....	.....	.....	.....
N. Y. Elevated	.....	....	.....	.....	.....	.....
1st mortgage	.....	115¼	115⅛	.....	.....	115⅛
N. Y. & Harlem	....	.....	.....	.....	.....	.....
Preferred	.....	.....	.....	.....	.....	... .
1st mortgage	....	.....	.....	.....	.....	129⅛
1st mortgage, reg	...	.....	.....	.....	.....	.....
N. Y. Lake Erie & W	40¾	40¾	39⅞	38⅞	.....	37⅝
Preferred	84½	85	85	83½	.....	82¼
2d Consolidated	99¾	99¼	99⅛	98¾	.....	98¼
New 2d 5s fund	96⅝	.....	96¼	.....	.....	.....
N. Y., N. Hav'n & Hart	.....	184	.....	.....	.....	.....
North Mo. 1st mort	.....	.....	.....	.....	.....	.....
Northern Pacific	45¾	45⅝	45⅛	45⅝	.....	43⅝
Preferred	93¼	93⅜	93¾	92⅜	.....	90⅜
Ohio & Mississippi.	37	36½	36⅞	35¼	.....	34⅛
Preferred	....	.....	.....	.....	.....	.....
2d mortgage	.....	.....	.....	.....	.....	120⅜
Consolidated 7s	.....	.....	118	.....	.....	.....
Consol. S. Fund	.....	.....	.....	.....	.....	.....
Pacific Mail S. S. Co	40¾	4c	39⅛	39⅞	.....	.....
Pacific R. R. of Mo.	.....	.....	.....	....	.....	.....
1st mortgage	105½	105	105¾	.....	.....	.....
2d mortgage	.....	.....	.....	111¾	.....	.....
Panama	.....	.....	.....	.....	...	.....
Phila. & Reading	60	59	59	58¾	.....	55⅝
Pitts, Ft. W. & Chi. gtd	.....	.....	.....	.....	.....	.....
1st mortgage	.....	.....	.....	.....	....	138
2d mortgage	.....	.....	.....	.....	.....	.....
3d mortgage	.....	.....	.....	.....	.....	.....
Pullman Palace Car	.....	126½	126	127	.....	.....
Quicksil'r Min'g Co	.....	.....	.....	.....	.....	.....
Preferred	.....	41½	41¼	.....	.....	41
St. Louis & San Fran	.....	.....	37⅜	37	.....	37
Preferred	.....	57	.....	57	.....	.....
1st Preferred	.....	.	98½	97¾	.....	.....
St. L., Alt'n & T. H.	42	.....	43¼	.....	.....	40
Preferred	.....	.....	.....	....	.....	84
1st mortgage	....	.....	.....	.....	...	.....
2d mort. pref.	.....	.....	.....	.....	.....	.....
Income bonds	.....	.....	.....	.....	.....	.....
St. L., Iron Mt. & S.	.....	.....	.....	.....	.....	.....
1st mortgage	.....	.....	.....	.....	.....	.....
2d mortgage	.....	.....	.....	104¾	.....	105⅓
Toledo and Wabash.	....	.....	.....	.....	.....	.....
1st mortgage	.....	.....	...	.....	.....	.....
2d mortgage	...	.....	101	101	....	.....
7s, Consolidated	.....	.....	.....	.....	.....	.....
St. Louis Division	.....	102	.....	.....	.. .	101
Union Pacific	107⅞	107	107⅞	107⅜	.....	105⅞
1st mortgage	.....	.....	115⅛	.....	.....	.....
Land Grant 7s	110¼	.....	.....	110	.....	.....
Sinking Fund 8s	.....	.....	....	118	.....	117⅛
United States Ex	.....	.....	.....	.....	.....	.....
Wabash, St. L. & Pac	32⅛	31⅛	33¾	33	.....	31⅛
Preferred	58¾	57⅛	60½	58⅞	.....	57¼
New mort. 7s	.....	.....	.....	.....	.....	.....
Wells-Fargo Ex	.....	130	....	.....	.....	...
Western Pacific b'ds	....	.....	.....	.....	.....	.....
Western Union Tel.	87	84⅜	85	82⅜	....	80
7s., S. F conv., 1900	.....	....	.....	.....	.....	.....
FEDERAL STOCKS :—						
U. S. 4s, 1907, reg	.....	.. ..	. ...	.. .	.....	.....
U. S. 4s, 1907, coup.	119⅜	.....	.....	.....	.....	.....
U. S. 4½s, 1891, reg.	.....	.....	.....	.....	.....	.....
U. S. 4½s, 1891, coup	....	... .	...	.....	.....	.....
U. S. 5s, cont'd at 3½	.....	.....	.....	.....	.....	... .
U. S. 3s, reg	.....	102⅜	.....	.....	.....	102⅜
Dt. of Col. 3-65s, reg	.....	.....	.....	.....	.....	.....
Dt. of Col. 3-65s, coup	.....	.....	.....	.....	.....	.....

Boston Stock Exchange.

Closing Prices for the Week Ending Nov. 8.

	Th. 2.	F. 3.	Sat. 4.	M. 6.	Tu. 7.	W. 8.
Atch., Top. & San. Fe.	86⅝	85¼	85¼	85¾	.....	85¼
1st mortgage	.....	.....	119¾	.....	.....	.....
Land Grant 7s	.....	.....	.....	.....	.....	.....
Boston & Albany	.....	175	175	175½	.....	175
Boston and Lowell.	100	100	.....	.....	.....	99½
Boston & Maine	.....	.....	153½	.....	....	153
Boston & Providence	161	.....	.....	.....	.....	.....
Bos'n, Hart. & Erie 7s	.....	.....	...	.....	.....	.....
Burl. & Mo. R. L. G. 7s	.....	.....	.....	.....	.....	.....
Burl. & Mo. R. in Neb	.....	.....	.....	.....	.....	.....
6s, exempt	.....	.....	.....	.....	.....	.....
4s	....	. ..	....	.....	.....	.....
Chi., Burl. & Quincy	132¼	132¼	131¾	131¾	.....	131¾
Cin., Sand. & Clev ($50)	.....	.....	29½	.....	.....	.....
Concord ($50)	....	.....	.....	.....	.....	.....
Connecticut River	.....	.....	.....	.....	.....	.....
Eastern	.....	.....	.....	38¾	.....	.....
New 6s, Bonds	109½	.....	.....	109¾	.....	109¾
Fitchburg	.....	.....	.....	135	.....	.....
N. Y. & New England	51⅜	51⅜	51⅜	.....	.....	51⅛
7s	116¾	116¾	.....	.....	.....	.....
Northern N. H.	.....	.....	.....	.....	.....	.....
Norwich & Worcester	.....	.....	.....	.....	.....	.....
Ogden & Lake Cham	.....	.....	.....	.....	.....	.....
Old Colony	136¾	.....	137	137	.....	.....
Ph., Wil. & Balt. ($50)	.....	.....	.....	.....	.....	.....
Portl'd, Saco & Ports	.....	.....	.....	.....	.....	112⅛
Pueblo & Ark Val 7s	.....	.....	.....	.....	.....	114
Pullman Palace Car	.....	.....	.....	.....	.....	127
Union Pacific	107¾	107½	.....	107⅜	.....	106⅛
6s	.....	.....	.....	.....	.....	.....
Land Grant 7s	.....	.....	.....	.....	...	.....
Sinking Fund 8s	....	.....	.....	.....	.....	.....
Vermont & Mass	.....	.....	.....	.....	.....	.....
Worcester & Nashua	.....	.....	.....	.....	.....	.....
Cambridge (Horse)	102	102	100¾	.....	.....	.....
Metropolitan (Horse)	....	.....	.....	.....	.....	.....
Middlesex (Horse)	.....	.....	.....	.....	.....	.....
Cal. & Hecla Min'g Co	249½	.....	.....	251	.....	251
Quincy	67¼	67½	69	68	.....	68¾

Philadelphia Stock Exchange.

Closing Prices for the Week Ending Nov. 7.

	W. 1.	Th. 2.	F. 3.	Sat. 4.	M. 6.	Tu. 7.
Allegh'y Val. 7 3-10s	.....	.....	.....	.....	.....	.....
7s, Income	48	47	48	.....	.....	.....
Buff., Pitts & West.	20½	20¾	20¾	20½	20	.....
Camd'n & Am. 6s, '83	.....	.....	.....	.....	.....	.....
6s, 1889	....	.....	.....	.....	.....	.....
Mort. 6s, 1889	.....	.....	112¼x	.....	.....	.....
Camden & Atlantic.	.....	.....	.....	.....	.....	.....
Preferred	....	.....	.....	.. .	.....	.....
1st mortgage	.....	.....	.....	.....	.....	.....
2d mortgage	.....	.....	.....	.....	.....	.....
Catawissa	.....	.....	.....	.....	20	.....
Preferred	....	.....	.....	.....	.....	.....
2d pref.	.....	.....	....	.....	53⅝	.....
7s, new	.....	.....	.....	.....	.....	.....
Del. & Bound Brook	.....	.....	.....	.....	.....	.....
7s	.....	.....	.....	.....	.....	.....
Elmira & Williamsp't	.....	.....	.....	.....	.....	.....
Preferred	.....	.....	.....	.....	.....	.....
Hunt. & B. Top Mt.	.....	.....	.....	.....	.....	.....
Preferred	.....	. ..	35	.....	.....	.....
2d mortgage	.....	.....	.....	.....	.....	.....
Lehigh Navigation.	41¼	42⅝	42⅝	42⅝	42⅛	.....
6s, 1884	.....	.....	.....	.....	.....	.....
Gold Loan	112⅜	....	.....	112⅜	.....	.....
Railroad Loan	.....	.....	.....	.....	.....	.....
Conv. Gold Loan	.....	.....	.....	.....	. ..	.....
Consol. Mort, 7s	.....	...	117½	.....	.....	.....
Lehigh Valley	64¼	65	65¼	65	64¾	.....
1st mort. 6s, coup	.....	.....	.....	.....	.....	.....
1st mort. 6s, reg	.....	.....	.....	.....	.....	.....
2d mort. 7s	.....	133	.....	.....	.....	.....
Consol mort. 6s	122½	.....	121	.....	122½	.....
Consol. mtg. 6s, reg	.....	.....	.....	.....	12½	.....
Little Schuylkill	.....	.....	58	.....	.....	.....
Minehill & Sch. Hav'n	62¾	.....	.....	.....	...	.....
North Pennsylvania	.....	65	.....	.....	65	.....
1st mortgage 6s	106½	.....	.....	.....	.. ..	.....
2d mortgage 7s	.....	.....	.....	.....	.....	.....
Genl. mtg. 7s, coup	.....	.....	125	.....	.....	.....
Genl. mtg. 7s, reg	.....	.....	.....	.....	.....	.....
Northern Central	.....	56¾	.....	56	.....	.....
5s	.....	98¾	.....	.....	.....	.....
Northern Pacific	45⅛	45⅝	45⅛	45⅝	45⅛	.....
Preferred	92½	93	93	93½	92⅞	.....
Pennsylvania R. R.	.....	61½x	60⅛	60	60	.....
1st mortgage	.....	.....	.....	.....	.....	.....
Gen'l mort	.....	.....	.....	.....	.....	.....
Gen'l mort reg	.....	.....	.....	.....	.....	...
Consol. mort. 6s	.....	.....	.....	.....	119½	.....
Consol. mort. reg	122	.....	122	.....	.....	.....
Pa. State 5s, new	.....	.....	.....	118	.....	.....
do 4s, new	.....	.....	.....	.....	.....	.....
do 3½s, 1912	.....	.....	.....	.....	.....	.....
Phila. & Reading	29⅛	30	29⅝	29¾	29⅜	.....
1st mortgage 6s	.....	.....	.....	.....	.....	.....
7s of 1893	.....	119	.....	.....	.....	.....
7s, new convert	.....	.....	72½	.....	72	.....
Consol. mort. 7s	126	125½	.....	.....	126¼	.....
Consol. mort. reg	.....	.....	.....	.....	.....	.....
Gen'l mort. 6s	94⅛	94⅜	.....	.....	95	.....
Def. Income bonds	.....	.....	.....	.....	.....	.....
Philadelphia & Erie	.....	21	21⅛	21	21⅜	.....
1st mortgage 5s	.....	103	103	103	.....	.....
2d mortgage 7s	.....	.....	.....	.....	.....	.....
Pittsb., Cin. & St. L. 7s	120	.....	120	.....	.....	.....
Pitts., Tit. & Buff. 7s,	96	96	.....	96	.....	.....
Schuylkill Navi't'n.	. ..	.. ..	.. ..	.....	.....	.....
Preferred	12	... .	12	12	.....	.....
6s, 1897	.....	106¾	106⅛	.....	.....	.....
6s, 1907	.....	.....	88	.....	.....	.....
United Co. of N. J.	190	190	.....	.....	.....	.....
Hestonville, (Horse)	.....	....	.....	.....	.....	.....
Chestnut & Walnut)	.....	.....	.....	.....	.....	.....

Baltimore Stock Exchange.

Closing Prices for the Week Ending Nov. 7.

	W. 1.	Th. 2.	F. 3.	Sat. 4.	M. 6.	Tu. 7.
Baltimore & Ohio....	193	.....	193	.....	.....	.....
6s, 1885.....	.....	.....	.....	104¼	.....	.....
Central Ohio ($50)...	.....	.....	.....	.....	.....	.....
1st mortgage.....	.....	.....	.....	.....	.....	.....
Marietta & Cincin'ti.	.....	.....	.....	.....	.....	.....
1st mortgage, 7s..	.....	.....	.....	.....	.....	.....
2d mortgage, 7s...	.....	101⅛	.....	.....	.....	.....
3d mortgage, 8s...	.....	.....	.....	.....	.....	.....
Northern Cen. ($50).	.....	.....	.....	56¼	56	.....
2d mort. 6s, 1885..	.....	.....	.....	.....	.....	.....
3d mort. 6s, 1900..	.....	117	116⅛	.....	.....	.....
6s, 1900, gold.....	.....	.....	.....	.....	.....	.....
6s, 1904, gold.....	114½	.....	114½	114¼	.....	.....
Pitts. & Connelsv. 7s.	.....	.....	.....	.....	.....	.....
Virginia 6s Consol..	59	58⅝	58¼	59¼	59¼	.....
Consol. coupons...	60	60	60	60¼	61	....
10-40 bonds.....	43¾	.....	.....	43⅝	43⅝	.....
Def'd Certificates	.....	.....	.....	.....	.....	.....
New 3s.....	.....	.....	.....	.....	.....	.....
Western Maryland..	.....	16⅛	.....	.....	.. ..	.....
1st M.,end.by Balt	.....	.....	.....	.....	.....	.....
2d M., do.	.....	.....	.....	.....	.....	.. ..
3d M., do.	.....	.....	.....	....	.....	.....
1st M., unendorsed	....	.....	.....	...	.....	.....
2d M.,end.Wash Co	.....	.....	.....	.....	.....	.....
2d M., preferred...	.....	.....	.....	.....	.....	.....
City Passenger R. R.	.....	.....	.....	.....	.....	.....

London Stock Exchange.

	Closing Prices Oct. 20.		Oct. 27.	
Baltimore and Ohio 5s, 1927.....108	110	108	110	
Central of N. J., $100 shares..... 80	85	80	85	
Do. consol. mort.....109	111	110	112	
Do. Income Bonds..... 87	90	88	92	
Central Pacific of Cal., $100 shs.. 93	94	93⅛	94⅛	
Do. 1st mort. 6s, 1895-'98.....117	119	117	119	
Det., G'd Haven & Mil.Equip bds.116	118	116	118	
Do.Con.M.5p.c.,till'83 after 6p.c.113	115	114	116	
Illinois Central $100 shares.....152½	153½	152	154	
Do. S. F. 5s, 1903.....104	106	104	106	
Lehigh Valley Cons. mort. 1923...115	119	115	119	
Louisville and Nashville mort. 6s 93	95	93	95	
Do. capital stock $100 shares... 56½	57⅛	57	59	
N. Y. Cen. & Hud. R. mort. bonds.132	136	132	136	
Do. $100 shares.....136	137	137	138	
Do. mort. bonds (stg.).....121	123	122	124	
N. Y. Lake Erie & West. $100 shs. 43¼	43¾	43	43¼	
Do. 6 p. c, pref. $100 shares.... 88	90	88	90	
Do. 1st Con. Mort. bonds (Erie).127	130	127	130	
Do. do. Funded Coupon bonds.124	127	124	127	
Do. 2d Consol. Mort. bonds....102	104	102	104	
Do. do. Funded Coupon bonds. 99	101	99	101	
N. Y., Pa. & Ohio 1st mort. bonds. 59	60	59	60	
Do. Prior Lien bonds (sterling). 100	105	100	105	
Pennsylvania $50 shares..... 65¾	66¼	65¾	66¼	
General Mortgage.....121	123	122	124	
Phil. & Erie Gen. mort. 6s, 1920...117	119	117	119	
Philadelphia & Reading $50 shs.. 31½	32	31⅝	32	
General Consol Mortgage. 116	118	116	118	
Do. Improvement Mortgage....102	104	102	104	
Do. Gen. Mtg.'74, ex-def'd coup. 97	99	97	99	
St. L. Bridge 1st mort. gold bond.120	122	121	123	
Do. 1st. pref. stock..... 94	96	94	98	
S. P'fic of Cal., 1st mort 6s, 1905-6. 106	108	106	108	
Union Pacific 1st mtg. 6s, 1896-9..118	120	117	119	
Wabash, St. L. & P. $100 shares.. 33	35	33	35	
Do. $100 pref shares... 62	64	60⅛	61⅛	
Do. gen. mort. bonds..... 86	88	85	87	

AMERICAN RAILROAD JOURNAL.

Financial and Commercial Review.

THURSDAY EVENING, November 9, 1882.

THE ruling rate for call loans on stocks this morning, and up to 1 o'clock, was 10 per cent. Between 1 and 2 o'clock loans were made at 20 per cent, but at 2 o'clock the rate was 10 per cent. In the last hour the rate fell to 5@6 per cent.

The posted rates for prime bankers' sterling were 4 81½@4.85½; the actual rates were 4.80½@4.80¾ and 4 84½@4.85, with cable transfers 4.85½@4.86, and prime commercial bills 4.79½@4¾. The actual rates for Continental bills are as follows: Francs, 5.23¾ and 5.19¾; Marks 94⅞@⅞ and 95¼@½; and Guilders, 39¾@40.

The Secretary of the Treasury has authorized the payment, without rebate of interest, of bonds embraced in any call to the amount of $5,000,000 in each week, until otherwise ordered. This is practically ordering the prepayment of the $15,000,000 of bonds called October 18, for payment January 18.

The Chief of the Bureau of Statistics at Washington in his third monthly report for the current fiscal year of the excess of imports and exports of the United States, says that the excess of imports of merchandise for the month of September, 1882, was $681,961, against $6,777,577 excess of exports for the month of September, 1881; the excess of imports for the three months ending September 30, 1882, was $14,872,614, against $23,171,938 excess of exports for the three months ending September 30, 1881; the excess of imports for the nine months ending September 30, 1882, was $54,309,644, against $121,171,904 excess of exports for the nine months ending September 30, 1881; the excess of imports for the twelve months ending September 30, 1882, was $12,141,869, against $240,249,230 excess of exports for the twelve months ending September 30, 1881.

The excess of imports of gold and silver coin and bullion for the month of September, 1882, was $230,525, against $10,199,565 excess of imports for the month of September, 1881; the excess of exports for the three months ending September 30, 1882 was $7,744,910, against $14,818,452 excess of imports for the three months ending September 30, 1881; the excess of exports for the nine months ending September 30, 1882, was $41,206,793, against $37,629,106 excess of imports for the nine months ending September 30, 1881; the excess of exports for the twelve months ending September 30, 1882, was $29,508,451, against $77,320,263 excess of imports for the twelve months ending September 30, 1881.

The values of the imports of merchandise into the United States during the twelve months ended September 30, 1882, were $749,633,347, and during the twelve months ended September 30, 1881, $645,733,706, showing an increase of $103,899,641.

The values of the exports of domestic and foreign merchandise from the United States during the twelve months ended September 30, were $737,491,478, and during the twelve months ended September 30, 1881, $885,982,936, showing a decrease of $148,491,458.

A decision was rendered in the United States Supreme Court at Washington on the 6th inst., in the case of John M. Bailey, Collector, against the New York Central and Hudson River Railroad Company—error to the Circuit Court of the United States for the northern district of New York. This was a suit to recover back the sum of $550,172.60 paid under protest by the railroad company as a tax under the Internal Revenue act of 1864, upon certain "interest certificates" issued by the company to its stockholders on the 19th of December, 1868. Upon trial of the case below, the Circuit Judge instructed the jury that these "interest certificates" were not "scrip dividends" within the meaning of the internal revenue law, and that the issue of them was not a transaction which subjected the company to a tax; that the tax was erroneously assessed, and that the collector must pay the amount realized by his proceedings. Under this instruction the jury rendered a verdict in favor of the company for the full amount claimed, and judgment was entered accordingly. Upon appeal to the United States Supreme Court this judgment was reversed and a new trial ordered upon the ground that the "interest certificates" did not constitute a scrip dividend and were properly liable to tax. The second trial in the Circuit Court resulted in a verdict and judgment in favor of the railroad company for $499,432.68, the Court instructing the jury that while the certificates constituted a scrip dividend which justified the assessment and constituted a complete prima facie defence to the action, nevertheless it was competent for the railroad company to show what amount of its "earnings" accruing between September 1, 1862, and December 19, 1868, were represented by and included in these certificates, and since this amount alone was subject to the tax, the railroad company was entitled to recover all in excess of it which had been exacted and paid. In reviewing the case a second time the Supreme Court sustains the instruction of the Circuit Judge to the jury as above set forth, and says that "the tendency and effect of the proof thus admitted were to exact from the company the full tax upon every dollar of its earnings which had not previously paid its proper assessment, and which in any form was subject to taxation, and to relieve it only to the extent to which otherwise it would have been subjected to the payment of a second tax upon the same fund. The result, and the process by which it was reached, seem, in the opinion of this Court, to strictly conform both to the letter and the spirit of the law governing the subject. The judgment of the Court below is therefore affirmed, with costs and interest."

The Dominion of Canada is issuing new notes of the denomination of $4, which bear in the centre a good likeness of the Governor General, the Marquis of Lorne On the left of the portrait is a figure 4 in engraved scroll work, printed in green, and above it, in black, the words, "Will pay to bearer four dollars." The right side of the face is occupied by the great seal of the Dominion in red, with the place and date in black lettering.

There were in the Treasury of the United States at Washington, on the 1st inst., 92,414,977 standard silver dollars, or $186,000 more than there were on the 1st of October. The increase in the number of standard silver dollars in the Treasury from January 1, 1882, to October 1, 1882, nine months, was more than $22,500,000, or an average of more than $2,500,000 a month. The small increase for the last month is owing mainly to the demand for such coin at this time of the year for moving crops, &c. There were 2,300,000 standard silver dollars coined in October out of a total coinage of gold and silver amounting to a little less than $6,000,000 in value. The total number of standard dollars coined to the present date is 128,327,880, so that only about $36,000,000, or less than two-sevenths, are in circulation. Of the 92,000,000 silver dollars in the Treasury, about $42,000,000 are in California and Nevada, $27,000,000 being in the vaults of the San Francisco mint, and $14,000,000 in the San Francisco sub-Treasury. Among the Treasurer's liabilities are $73,500,000 in silver certificates, an increase of about $2,000,000 for the month, and in his assets are nearly $8,000,000 of silver certificates, which is a little less than the amount found there a month ago. There are also among his liabilities $26,000,000 in gold certificates against only $5,000,000 in the same last month, and among his assets are nearly $15,000,000 in gold certificates where there were none last month. The new series of gold certificates appears this month for the first time in the Treasurer's statement. The amount of gold coin and gold bullion in the Treasury is nearly $160,000,000, or $7,000,000 more than on October 1, and $11,000,000 more than at the beginning of the fiscal year. The increase in gold coin since August 1, has been $21,000,000, while in the same period the amount of gold bullion has fallen off more than $6,000,000. There has been little change in the amount of fractional silver coin and silver bullion, which is now nearly $31,000,000.

The Directors of the Royal Exchange Shipping Company (limited), Monarch line, have declared a dividend of 4 per cent for the half year, payable November 10, making, with 3¼ per cent paid last May, 7¼ per cent for the year.

The Genesee Valley Railroad Company filed at Albany on the 2d inst., a certificate of consent to the extension of its construction bonds.

The Lehigh Valley Railroad Company will pay on the 1st of December next, at par $159,000 of its $5,000,000 six per cent gold bonds.

The estimated earnings of the Gulf, Colorado and Santa Fe Railway for the month of October 1882, were $227,595.56; mileage, 486; October 1881, $127,420.56; mileage, 323; total gain for October, 1882, $100,085; mileage, 163. For the ten months ending October 31, 1882, $1,142,868.85; for the ten months ending October 31, 1881, $768,693.24. Total gain for ten months ending October 31, 1882, $374,175.61.

The appraisement of the Marietta and Cincinnati Railroad, by order of the court, preparatory to the sale of the road, was completed on the 3d inst. The valuation is $6,554,825. The advertising, according to law, will be commenced immediately, and the sale will take place on Dec. 9, at the door of the Court house in Chillicothe, Ohio.

The January, 1882, coupons of the Missouri State 6s, issued to the Hannibal and St. Joseph Railroad Company, is being paid at the Bank of Commerce in this city with the money recovered by the State from the Railroad Company in the recent settlement. It is thought the funds for the coupon due last July will be provided by the Legislature of Missouri at its next meeting.

The stockholders of the Union Passenger Railway Company of Pittsburgh, Penn., have been assessed $10 per share, $5 payable November 15 and $5 December 15. With this paid, the amount of capital stock paid up will be $70,000, the nominal capital being $100,000. The bonded debt of the corporation is $75,000.

The earnings of the Lombard and South Streets Railway, of Philadelphia, for the year ending October 31, 1882, were $138,878.42—an increase of $33,096.33.

The gross earnings of the St. Paul and Duluth Railroad for the month of October were $146,615, an increase of $72,927 over the same month of 1881, and for the year to

October 31, $887,133, an increase of $308,333 over the same period of last year. The net increase from land and stampage sales for 1882 to September 30 was $208,515 additional.

The estimated gross earnings of the Little Rock and Fort Smith Railway Company for the month of October, 1882, were $61,592, against $60,151 for the month of October, 1881, an increase of $1,441. The land sales in 1882 were $34,570; in 1881, $14,238—an increase of $20,332. For November still larger gains are looked for, as the cotton crop is large, though a month behind in picking.

The receipts of the United States Patent Office last month were $79,917, an increase of $14,960 on the receipts for October, 1881. The receipts since the first of January last show an increase of $137,390.

The following quotations of sales of railway and other securities, for the week, are in addition to those given elsewhere in our columns.

New York.—Atchison, Colorado and Pacific 1st, 92; Am. Dock and Imp. 58, 91; Boston and New York Air Line pref., 79; Boston, Hartford and Erie 1st, 51; Buffalo, New York and Erie 1st, 1916, 132; Chicago and Northwestern S. F. 5s, 99½; Chicago, St. Paul, Minn. and Omaha, 48¼; do. pref., 106½; do. consol., 107; Cincinnati, Sandusky and Cleveland, 57: Central Iowa, 33¾; do. 1st, 108; Cedar Falls and Minn., 18; Chesapeake and Ohio 1st, series A, 104½; do. cur. 6s, 54; Chicago, Milwaukee and St. Paul, South West div. 1st, 108½; do. Chicago and Pacific West div. 1st, 92⅞; Chicago, Burlington and Quincy 8s, 102¾; do. Iowa div. 4s, 84¾; Chicago, St. Paul and Minn. 1st, 110; Cleveland, Painesville and Ashtabula 7s, 114; Denver and Rio Grande, 51½; do. 1st, 109½; do. consol., 94½; Danbury and Norwalk, 75; Desmoines and Minneapolis 1st, 121: East Tennessee, Virginia and Georgia, 10; do. pref., 17½; do. inc., 42: Evansville and Terre Haute 1st consol., 96; Elizabethtown, Lexington and Big Sandy 6s, 95; Escanaba and Lake Superior 1st, 111; Fort Worth and Denver, 36¾; do. 1st, 73; Galveston, Harrisburg and San Antonio 1st, 110; Green Bay, Winona and St. Paul, 8½; Georgia R. R., 150; Gulf, Colorado and Santa Fe, 1st, 107⅞; Houston and Texas Central 1st, Western div., 107; do. Waco and N. W. div. 1st, 111; Hudson River 2d S. F., 110; Indiana, Bloomington and Western, 38¼; do. 1st, 89¾; do. 1st pref., 119; International and Gt. Northern 1st, 104; do. coupon 6s, 82; Indianapolis, Decatur and Springfield 1st, 101; Joliet and Chicago, 140; Kansas Pacific 1st consol., 100½; do. 6s, Denver div. ass., 107¾; do. 6s, 1895, 111½; Keokuk and Des Moines 1st, 101¾; Louisville and Nashville, genl. mort. 6s, 88; Louisville, New Albany and Chicago, 74⅞; Long Island, 61; Lake Erie and Western, 31¾; do. 1st, 100; Lafayette, Bloomington and Muncie 1st, 100¼; Manhattan Beach, 18; Manhattan Co., 50; Metropolitan Elevated 2d, 87; Minneapolis and St. Louis, 30¾; do. pref., 69¾; do. 2d, 103; do. Iowa ext. 1st, 114; Missouri, Kansas and Texas, 33⅜; do. consol. 7s, 106½; do. 2d, 61½; do. genl. mort. 6s, 83¼; Missouri Pacific, 103½; do. 1st consol., 100; do. 3d, 109¼; Memphis and Charleston, 45; Milwaukee, Lake Shore and Western, 21; do. pref., 49½; do. 1st, 99½; Mobile and Ohio, 19; do. 1st deben., 79; do. 2d deben., 45; do. 3d deben., 38; Michigan Central 5s, 102; Michigan Southern S. F., 104¾; Northern Pacific 1st, 104; New Orleans Pacific 1st, 85⅝; New York, Chicago and St. Louis, 15⅝; do. pref., 31½; do. 1st, 95⅛; Nashville, Chattanooga and St. Louis, 52½; do. 1st, 114¾; New York, Ontario and Western, 27¾; Norfolk and Western, 17⅞; do. pref., 54¼; do. genl. mort., 101; Oregon Short Line, 34¾; do. 6s, 100; Oregon Railway and Nav., 148½; do. 1st, 108½; Oregon Transcontinental, 82½; Ohio Central, 15½; do. inc., 87; Ohio Southern, 15; Peoria, Decatur and Evansville, 27; do. 1st, 104½; Richmond and Alleghany, 17; do. 1st, 84¼; Rochester and Pittsburgh, 22¼; do. 1st, 104¼; Richmond and Danville, 67; do. 1st, 95; do. deben., 65; Richmond, Danville and West Point, 34¾; Rome, Watertown and Ogdensburg, 30; do. inc., 38; do. ext. 5s, 70; Rensselaer and Saratoga, 143¾; St. Paul, Minn. and Man., 149; do. 1st, 111; do. Dakotah Ext. 1st, 106½; St. Paul and Duluth, 36; South Carolina 1st, 105; South Pacific of Mo. 1st, 103¾; St. Paul and Sioux City 1st, 109½; Syracuse, Binghamton and New York 1st, 122; St. Louis and Iron Mt. 5s, 76¼; do. Cairo and Fulton 1st, 107½; St. Louis, Kansas City and Northern, Omaha div. 1st, 107½; St. Louis and San Francisco 2d, class B, 91; St. Louis, Alton and Terre Haute dividend bonds, 45; Texas and Pacific, 39½; do. inc. L. G., 57; do. Rio Grande div. 1st, 81¼; Toledo, Peoria and Western 1st, 108¾; Wabash, St. Louis and Pacific, genl. mort. 6s, 83½; Louisiana consol., 69½; Missouri 6s, 1886, 108; do. 1887, 108¼; North Carolina consol. 4s, 78; do. 6s, S. T. 3d class, 5; Tennessee 6s, 48¾; do. compromise, 58¼; Virginia 6s, def., 12¼; American Cable, 68; Mutual Union Tel., 24½; do. 6s, 72; Colorado Coal and Iron, 38⅝; do. 6s, 83½; Maryland Coal, 20½; New Central Coal, 19½; Deadwood, 4; Ontario, 37½.

Boston.—Atlantic and Pacific blocks, 105; do. 6s, 94; do. inc., 22½; Atchison, Topeka and Santa Fe guar., 112; Boston Land, 6¾; Boston Water Power, 3¼; Burlington and Missouri River in Nebraska 6s, non-exempt, 102; Chicago, Burlington and Quincy 5s, 102; do. 4s, old, 84½; do. Denver ext. 4s, 82¾; do. Southwest div. 4s, 78½; Connecticut and Passumpsic Rivers R. R., 92; Chicago, Milwaukee and St. Paul, Dubuque div. 6s, 102; Central Iowa, 84; Cincinnati, Sandusky and Cleveland 7s, 104¼: Connotton Valley, 4; Detroit, Lansing and Northern, 70; Flint and Pere Marquette, 22; do. pref., 98; Iowa Falls and Sioux City, 89¾; Kansas City, St. Joseph and Council Bluffs 7s, 114; Kansas City, Fort Scott and Gulf 7s, 110½; Mexican Central, 20; do. 7s, 73; do. blocks No. 3, 96; Massachusetts Central, 4; Marquette, Houghton and Ontonagon, 68½; do. 6s, 102; Oregon Short Line 6s, 99¼: Rutland pref., 21; do. 6s, 98½; Summit Branch, 9; Sonora 7s, 104; Toledo, Cincinnati and St. Louis, 5¼; do. 6s, 50½; Toledo, Delphos and Burlington, Dayton div. 6s, 54; do. Southeast div. 6s, 52; do. Branch inc., 11; Wisconsin Central 7s, 2d Series, 43½: Atlantic Mining Co., 16; Franklin, 14¾; Harshaw, 1¼; Huron, 2½; National, 1½; Osceola, 34; Pewabic, 7.

Philadelphia.—Central Transp., 34¼; Chesapeake and Delaware Canal 6s, 88¾; Huntingdon and Broad Top Mt. consol. 5s, 89½; Northern Pacific pref. scrip, 91; Philadelphia, Germantown and Norristown, 109; Philadelphia, Wilmington and Baltimore 4s, 94¾; Pennsylvania Canal 6s, 89; Philadelphia City 6s, 1900, 133½; do. 1905, 134; do. 4s, 1899, 113; Pennsylvania Co. 4½s, 96; Pennsylvania R. R. consol. 5s, 107; Texas and Pacific consol. mort. 6s, 94; Western Pennsylvania 6s, Pittsburgh Branch, 106; West Jersey 1st, 108. The latest quotations are: City 6s, 108@120; do. free of tax, 127@135½; do. 4s, new, 106@114; Pennsylvania State 5s, new loan, 118@119; do. 4s, old, 111@114; do. 4s, new, 116@117; Philadelphia and Reading Railroad, 27⅛@27¾; do. consol. mort. 7s, reg., 125⅛@127; do. gen'l mort. 6s, coupon, 94⅛@95; do. 7s, 1893, 118⅛@119½; do. 7s, new conv., 72@74; United New Jersey R. R. and Canal, 189@190; Buffalo, Pittsburg and Western, 19⅝@19¾; Pittsburgh, Titusville and Buffalo 7s, 96@—; Camden and Amboy mort. 6s, 1889, 115@115½; Pennsylvania R. R., 59⅜@59½; do. general mort. 6s, coupon, 124@126½; do. reg., 125@—; do. consol. mort. 6s, reg., 121½@122½; Little Schuylkill R. R., 58@59; Schuylkill Navigation pref., 12@12½; do. 6s, 1882, 89½@90: Elmira and Williamsport pref., 58@60; do. 5s, —@100; Lehigh Coal and Navigation, 41⅜@41½; do. 6s, 1884, 103@103½; do. R. R. loan, 114@116; do. Gold Loan, 112@113; do. consol. 7s, reg., 117@118; Northern Pacific, 43⅜@43¾; do. pref., 90@90½; North Pennsylvania, 64⅛@65; do. 6s, 106@107; do. 7s, 119@—; do. 7s, General mort. reg., 124⅛@—; Philadelphia and Erie, 21@21¾; do. 7s, 114@115; do. 5s, 102½@103; Minehill, 62@63; Catawissa, 20@21; do. pref., 56@—; do. new pref., 53@54; do. 7s, 1900, 118@120; Lehigh Valley, 64⅜@64¾; do. 6s, coupon, 120@124; do. reg., 120@124; do. 7s, 132@134; do. consol. mort., 122@123; Fifth and Sixth streets (horse), 190@—; Second and Third, 112@120; Thirteenth and Fifteenth, 78@90; Spruce and Pine, 40@44; Green and Coates, 90@—; Chestnut and Walnut, 90@93; Germantown, 71@73; Union, 110@111; West Philadelphia, 114@120; People's, 11½@12½; Continental, 103@105.

Baltimore.—Atlanta and Charlotte 1st, 107¾; Baltimore City 5s, 1916, 122¾; do. 5s, 1894, 113; do. 6s, 1890, 115½; do. 6s, 1902, 130; Canton Co. 6s, 105; Charlotte, Columbia and Augusta, 42½; George's Creek Coal, 94; Maryland Defense 6s, 104½; Marietta and Cincinnat 1st Trust certificates, 128¼; do. 2d do., 101; do. 3d do., 57; Ohio and Mississippi, Springfield div. 1st, 113¾; Virginia Midland 2d mort., 108; do. 5th mort., 93½; do. inc., 56; Virginia 10-40 coupons, 66½; do. Peeler coupons, 39; Wilmington, Columbia and Augusta, 95½. The latest quotations are: Atlanta and Charlotte 1st, 107@107¾; Baltimore and Ohio, 193@194; do. 6s, 1885, 104¼@—; Baltimore City 5s, 1900, 118@—; Canton Co. 6s, 103@106; Columbia and Greenville 1st, 100@101; Marietta and Cincinnati 1st, 128@128½; do. 2d, 101@101¾; do. 3d, 56⅜@57⅜; Northern Central, 55¾@56; do. 6s, 1900, 116¼@—; do. 5s, Series A, 98¼@98½; Ohio and Mississippi, Springfield div. 1st, 113½@114; Richmond and Danville 1915, —@96; Virginia consols, 59¾@59½; do. 10-40s, 43½@43¾; do. new 3s, 59@—.

The Coal Trade.

THE leading coal-carrying companies make the following reports of their tonnage for the week ending Oct. 28, and for the year to the same date, compared with their respective amounts carried to the same time last year:—

	Week.	1882.	1881.
Reading Railroad	204,155	7,479,478	7,204,306
Schuylkill Canal	20,237	432,446	507,068
Lehigh Valley	145,037	5,618,666	5,168,565
Delaware, Lackawanna and Western	103,250	3,743,976	3,495,487
Shamokin	27,715	941,556	899,177
Central R. R. of New Jersey	155,469	3,665,524	3,637,531
United R. R. of New Jersey	35,393	1,405,935	1,281,521
Pennsylvania Coal	36,544	1,169,575	1,145,554
Delaware and Hudson Canal	89,895	2,898,548	2,937,713
Huntingdon and Broad Top Mountain	8,899	384,327	432,953
Penn. and New York	31,028	1,304,388	1,362,477
Clearfield, Pa	53,299	2,341,101	1,966,442

The total tonnage of anthracite coal from all the regions for the week ending Oct. 28, as reported by the several carrying companies, amounted to 693,818 tons, against 624,576 tons in the corresponding week last year, an increase of 69,242 tons. The total amount of anthracite mined for the year is 23,598,135 tons, against 22,755,820 tons for the same period last year, an increase of 842,315 tons. The quantity of bituminous coal sent to market for the week amounted to 100,883 tons, against 106,944 tons in the corresponding week last year, a decrease of 6,061 tons. The total amount of bituminous mined for the year is 3,577,065 tons, against 4,027,156 tons for the corresponding period last year, a decrease of 450,091 tons. The total tonnage of all kinds of coal for the week is 794,701 tons, against 731,520 tons in corresponding week last year, an increase of 63,181 tons, and the total tonnage for the coal year is 27,175,200 tons, against 26,782,976 tons to same date last year, an increase of 392,224 tons. The quantity of coal and coke carried over the Pennsylvania Railroad for the week ending Oct. 28 was 215,117 tons, of which 159,919 tons were coal and 55,258 tons coke. The total tonnage for the year thus far has been 9,062,057 tons, of which 6,735,997 tons were coal and 2,326,060 tons coke. These figures embrace all the coal and coke carried over the road, east and west. The shipments of bituminous coal from the mines of the Cumberland coal region for the week ended Oct. 28 were 53,130 tons, and for the year to that date 1,061,134 tons, a decrease of 695,970 tons as compared with the corresponding period of last year. The shipments were: To the Baltimore and Ohio Railroad—For the week, 31,775 tons; year, 733,582 tons; decrease as compared with 1881, 388,188 tons. Chesapeake and Ohio Canal—Week, 17,488 tons; year, 181,539 tons; decrease as compared with 1881, 216,396 tons. Pennsylvania Railroad — Week, 3,552 tons, year, 134,349 tons, decrease from last year, 96,014 tons. The Reading Railroad shipment for last week, ending November 4, was about 187,000 tons, of which 50,900 tons were sent to and 35,800 tons shipped from Port Richmond, and 14,500 tons sent to and 14,000 tons shipped from Elizabethport.—*Philadelphia Ledger, Nov. 6.*

A CENT placed at compound interest when Adam was a day old would amount to a sum more than equal to a globe of solid gold the size of the earth. Without the use of logarithms what a lot of work with an Esterbrook Ledger Pen would be required to make the calculation.

G. G. DAMM, of California, was married to Miss Sarah B. Connell, of Louisville, one night last week, and now, we suppose, if a man says Sarah B. Damm, that husband will want to wallop him. What, then, is a fellow to do?

THE largest island in the world, which is also regarded as a continent, is Australia. It is 2,500 miles in length from East to West, and measures 1,950 miles from North to South. Its area is 2,984,287 square miles.

FOR SALE.

Locomotives—Four Second-hand Narrow-Gauge Engines in good order.
One Second-hand "Tank" Narrow-Gauge Engine, 10 tons.
Several Second-hand Standard-Gauge Locomotives in good order, immediate delivery.
One new 3ft. Gauge Passenger Engine, 22 tons, prompt delivery.
Six new 4ft. 8½ Gauge Locomotives, cylinders 17x24, weight 35 tons. October and November delivery.
Two new 3ft. Gauge Locomotives, Cylinders 12x18, weight 20 tons. October and November delivery.
Cars—Passenger and Freight Cars of all descriptions for early delivery.
Rails—16lb., 20lb. 30lb. 35lb. and 56lb. Rails.
Car Wheels and Axles.
Narrow-Gauge Rolling-stock a specialty.

BARROWS & CO.,
64 Broadway,
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F. W. DEVOE & CO.

Manufacturers of Fine

RAILWAY VARNISHES,

COACH AND CAR COLORS,
Ground in Oil and Japan,
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Fine Brushes adapted for Railroad use. All kinds of Artists' Materials. Colors for ready use, and all specialties for Railroad and Carriage purposes.

Railroad companies will save themselves great trouble in painting by allowing F. W. DEVOE & Co. to prepare their Passenger and Freight Car Colors. This will insure Durability, Uniformity and Economy. F. W. DEVOE & Co., manufacture from the crude materials, which are the component parts of any shade, and they understand better their chemical relationship, when in combination, than can be possible to those who simply buy their dry materials and then grind them.

SEND FOR SAMPLE CARD OF TINTS.

Cor. of Fulton and William Sts.
NEW YORK.

Continuous Automatic

FREIGHT BRAKES.

Requiring no other Connection between Cars than the ordinary Coupling-Link and Pin.

SIMPLE, DURABLE, AND EFFICIENT.

Brakes can be applied to every Car in the longest train, from the engine or cabose, or from any car in the train. It can be readily attached to any car, and adapted to ordinary brake beams, shoes, etc. There is no possibility of damaging wheels by "sliding."

PATENTED MAY 23, 1882.

☞ Railroad and manufacturing companies, or parties able to co-operate with patentee in their manufactur and introduction, are invited to correspond with

WM. C. SCHULTZE,
Surgeon C., R. I. and P. Ry.
MARENGO, Iowa Co., Iowa.

NO OTHER LINE IS SUPERIOR TO THE

FITCHBURG RAILROAD

HOOSAC TUNNEL ROUTE

WEST.

8.30 A. M. DAY EXPRESS.

Wagner Palace Drawing-Room Cars Attached.

Running through to Syracuse, N.Y., where connection is made with through sleeping-cars for Cincinnati, Cleveland, Toledo, *DETROIT AND CHICAGO.*

3.00 P. M. CINCINNATI EXPRESS.

Pullman Sleeping Car attached, running through to Cincinnati without change. (Only Line running Pullman Cars from Boston.) This car runs *via* Erie Railway and N.Y., P. & O. R.R., making direct connection for Louisville, St. Louis, Kansas City, New Orleans, and all points in Texas and New Mexico.

3.00 P. M. ST. LOUIS EXPRESS.

THE ONLY LINE which runs a THROUGH SLEEPING-CAR from

BOSTON TO ST. LOUIS WITHOUT CHANGE!

ARRIVING AT 8.00 A.M. SECOND MORNING.

Through sleeping car for Buffalo, Toledo, Fort Wayne, Logansport, Lafayette, Danville Tolono, Decatur and St. Louis, making direct connection with through Express Trains for Kansas, Colorado, Texas, and all points in the

SOUTHWEST.

6.00 P. M. PACIFIC EXPRESS.

The only line running a through sleeping-car *via* Niagara Falls, Canada Southern Railway and Detroit without change, arriving at Chicago at 8.00 A.M. second morning, making sure connections with through Express Trains for Iowa, Nebraska, Kansas, Colorado, the Pacific Coast, Wisconsin, Minnesota and all points in the

WEST AND NORTHWEST.

THE ABOVE TRAINS RUN DAILY, SUNDAYS EXCEPTED.

This Great Short Line passes through the most celebrated scenery in the country, including the famous HOOSAC TUNNEL, four and three-quarters miles long, being the longest Tunnel in America, and the third longest in the world.

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250 WASHINGTON STREET, BOSTON. 250

JOHN ADAMS, General Superintendent. F. O. HEALD, Acting Gen'l Passenger and Ticket Agent.

In effect October 23d, 1882, and subject to changes.

RAILROAD AND CANAL DIVIDEND STATEMENT.

Showing the amount of Stock Outstanding, the Dividend Periods and the date of last Dividend.

Marked thus(*)are leased roads.	Stock out-standing.	Divide'd Periods.	Last Dividend Payable.
Albany and Susq*...100	2,500,000	semi-an	July '82 2
Ashuelot.....100	210,000	q'arterly	Oct. '81 3½
Atch., Top. and S. Fe100	54,000,000	q'arterly	Nov. '82 1¼
Atlanta and W. Point100	1,232 200	semi-an	Jan. '82 6
Atlantic and St. Law*100	5,840,000	semi-an	Mar. '82 3
Augusta and Savan'h100	1,022,900	semi-an	June'81 3½
Avon, Geneseo&MtM*100	225,000	semi-an	July '81 3
Baltimore and Ohio.100	14,792,566	semi-an	Nov. '82 5
" " pref.100	5,000,000	semi-an	July '82 3
Washington Br....100	1,650,000	semi-an	Nov. '82 5
Berkshire*.....100	600,000	q'arterly	Apl. '82 1¾
Boston and Albany..100	20,000,000	q'arterly	Sept.'82 2
Bos.&N.Y.AirLine pf.100	2,795,227	q'arterly	June'82 1
Bos., Cl., F.&N.B.pref.100	1,750,100	semi-an	Oct. '82 3½
Bos., Conc.&Mont.pf*100	800,000	semi-an	Nov. '82 3
Boston and Lowell..500	3,940,000	semi-an	July '82 2
Boston and Maine....100	6,921,274	semi-an	Nov. '82 4
Boston & Providence100	4,000,000	semi-an	Nov. '82 4
Attleborough Br...100	131,700	semi-an	July '82 3½
Bos., Revere B &Lynn100	419,400	semi-an	July '82 3½
Buffalo, N. Y. & Erie*.100	950,000	semi-an	June'82 3
Camden & Atlantic.. 50	377,400	q'arterly	Nov. '82 3
" " pref. 50	880,650	q'arterly	Nov.'82 4
Camden & Burl. Co...100	381,925	semi-an	July '82 3
Canada Southern....100	15,000,000	.....	Feb. '81 2½
Cape May & Millville* 50	447,000	semi-an	June'81 3
Catawissa*..... 50	1,159,500	annual	Oct.'82 $2½
" pref..... 20	2,200,000	semi-an	Nov. '82 3½
" new pref.. 50	1,000,000	semi-an	Nov. '82 3½
Cayuga and Susq.*.. 50	589,110	semi-an	July '81 4½
Cedar Rapids&Mo.R*100	6,850,400	q'arterly	Nov. '82 1½
" " pref.100	769,600	semi-an	Aug .'82 3½
Central of Georgia...100	7,500,000	semi-an	June '82 4
Central of New Jersey100	18,563,200	q'arterly	July '76 2½
Central Ohio*..... 50	2,437,950	semi-an	July '82 3
" pref.. . 50	411,550	semi-an	July '82 3
Central Pacific 100	59,275,500	semi-an	Aug. '82 3
Chemung*..... 100	380,000	q'arterly	July '81 1½
Cheshire preferred ..100	2,155,300	semi-an	July '82 1½
Chicago and Alton...100	11,181,741	semi-an	Sept. '82 4
" " pref 100	2,245,400	semi-an	Sept. '82 4
Chi., Burl. & Quincy.100	55,337,455	q'arterly	Sept. '82 2
Chi., Iowa & Nebras*.100	3,916,200	semi-an	July '82 4
Chi., Mil. & St. Paul.100	20,404,261	semi-an	Oct. '82 3½
" pref 100	14,401,483	semi-an	Oct. '82 3½
Chi. & N. Western...100	14,988,257	semi-an	June'82 3½
" pref.100	21,525,353	q'arterly	Sept. '82 2
Chi., R. I. & Pacific..100	41,960,000	q'arterly	Nov. '82 1¾
Chi. and West Mich .100	6,151,000	semi-an	Feb. '82 2½
Chi., St.P., M.&O.pref.100	10,390,000	q'arterly	Oct. '82 1¾
C., Ind., St. L. & Chi..100	6,000,000	q'arterly	July '82 1½
Cin., Sand. & Clev.pf. 50	429,037	semi-an	Nov. '82 3
Clev. and Mahoning* 50	3,759,200	semi-an	Nov. '81 3½
Clev. and Pittsburg* 50	11,244,336	q'arterly	Sept. '82 1¾
Columbus & Xenia*. 50	1,786,200	q'arterly	Sept.'82 2
Colum. & Hocking Val.100	2,500,200	semi-an	Aug. '81 208
Concord 50	1,500,000	semi-an	Nov. '82 5
Concord and Ports.*.100	350,000	semi-an	July '82 3½
Conn. & Passump. Riv100	2,244,400	semi-an	Aug '82 3
Connecticut River ..100	2,100,000	semi-an	July '82 4
Cumberland Valley.. 50	1,292,950	q'arterly	Oct.' 82 2½
" 1st pref 50	241,900	semi-an	Apl. '82 4
" 2d pref. 50	243,000	semi-an	Apl. '82 4
Danbury & Norwalk. 50	600,000	.....	Oct. '82 2½
Dayton and Mich.*.. 50	2,402,573	semi-an	Apl. '82 1¾
" " pref. 50	1,211,250	q'arterly	July '82 2
Delaware*..... 25	1,468,940	semi-an	July '82 3
Del. & Bound Brook*100	1,652,000	q'arterly	Nov. '82 1¾
Del., Lack.& Western 50	26,200,000	q'arterly	Oct., 82 2
Denver & Rio Grande.100	29,160,000	q'arterly	Jan '82 1½
Den., South P. & Pac.100	3,500,000	.....	Aug.'80 4
Detroit, Lans. & Nor.100	1,825,600	semi-an	Aug. '80 2½
" " pref.100	2,503,380	semi-an	Aug. '82 3½
Dubuque&Sioux C'y*100	5,000,000	semi-an	Oct. '82 3
East Pennsylvania*.. 50	1,709.550	semi-an	July '82 3
East Mahanoy*..... 50	392,950	semi-an	July '82 3
Eastern (N. H.).....100	492,500	semi-an	June'82 2½
Eel River.....100	3,000,000	q'arterly	Sept. '82 $1
Elmira&Williamsp't* 50	500,000	semi-an	Nov. '82 1½
" " pref. 50	500,000	semi-an	July '82 3½
Erie and Pitsburg*.. 50	1,998,400	q'arterly	June'82 1¾
Evansville & Terre H.100	100,000	semi-an	Nov.'81 2
Fitchburg.....100	4,500,000	semi-an	July '82 3
F. & P. Marquette pf.100	6,500,000	semi-an	July '82 3
Ft. W. & Jackson pref.100	2,000,000	.....	May '82 2
Georgia. ..... -100	4,200,000	q'arterly	July '82 2½
Granite 100	1,250,000	semi-an	July '82 3
Han. & St. Jo. pref .100	5,083,024	semi-an	Aug. '82 3½
Harrisbg&Lancaster 50	1,182,500	semi-an	July '82 3½
H'ford & Conn. West'n.100	.....	.....	Nov. '82 1½
Housatonic pref. ...100	1,180,000	q'arterly	Oct. '82 2
Illinois Central.....100	39,000,000	semi-an	Sept. '82 3½
Ia. Falls & Sioux City*100	4,623,500	q'arterly	Sept. '82 1¾
Iowa R. Land Co....100	7,620,000	q'arterly	Nov. '82 1
Jefferson v. Mad. & Ind100	2,000,000	q'arterly	May '82 1¾
Joliet and Chicago*..100	1,500,000	q'arterly	June'82 1¾
Kan. C., Ft. S. & Gulf...100	4,000,000	.....	Feb. '82 2
" " pref...100	2,750,000	semi-an	Aug. '82 4
Kentucky Central...100	500,000	semi-an	June'81 1
" " pref..100	5,583,500	semi-an	June'81 1
Lake Shore&Mich. So.100	49,466,500	q'arterly	Nov. '82 2
" (guar.)100	533,500	semi-an	Aug. '82 5
Lawrence*..... 50	450,000	q'arterly	July '82 2
Lehigh Valley..... 50	27,496,895	q'arterly	Oct. '82 2
" " pref.50	106,300	q'arterly	Oct. '82 2

Marked thus(*)are leased roads.	Stock out-standing.	Divide'd Periods.	Last Dividend Payable.
Little Miami..... 50	4,637)300	q'arterly	Sept. '82 2
Little Rock & Ft. S..100	4,096,135	.....	July' 81 108
Little Schuylkill*.. . 50	2,646,100	semi-an.	July '82 3½
Long Island..... 50	10,000,000	q'arterly	Nov. '82 1
Louisville & Nashv..100	19,130,913	semi-an.	Feb. '82 3
Lowell & Andover...100	500,000	semi-an.	Jan. '82 3½
Lykens Valley.....100	600,000	q'rterly.	Oct.' 81 2½
Manchester & Law..100	1,000,000	semi-an.	Nov. '82 5
Manhattan 100	13,000,000	.....	.....
" " 1st pref.100	6,500,000	q'rterly.	Oct. '82 1½
" " 2d pref.100	6,500,000	q'rterly.	Oct. '82 1½
Marietta& Cincinnati 50	1,386,350	.....	.....
" " 1st pref 50	8,105,600	semi-an.	Sep. '66 3s
" " 2d pref 50	4,440,000	semi-an.	Sep. '66 3s
Marq. Hout. & Ont. pf..100	2,259.026	.....	Aug. '82 4
Massawippi*..... 100	400,000	semi-an.	Aug. '82 3
Metropolitan 100	6,500,000	q'rterly.	Oct. '82 1½
Michigan Central....100	18,738,204	q'rterly.	Aug.'81 1
Middlesex Central...100	280,000	semi-an.	Aug.'82 3
Mill Creek & Minehill* 50	323,000	semi-an.	July '82 5
M. Hill & Schuyl. Hav* 50	4,022,500	semi-an.	July '82 3½
Missouri Pacific.....100	28,169,800	q'rterly.	Oct. '82 1¾
Mobile&Montgomery100	3,022,517	semi-an.	Feb. '80 2½
Morris and Essex.... 50	15,000,000	semi-an.	July '82 3½
Mt Carbon&Pt Carbon 50	282,350	semi-an.	July '82 6
Nashua and Lowell..100	800,000	semi-an.	Nov. '82 4
Nashua & Rochester.100	1,305,800	semi-an.	Oct. '82 1½
Nashv. & Decatur...100	1,827,000	semi-an.	June'81 3
Nash., Chat. & St Louis 25	6,670,325	semi-an.	Apl. '82 1½
Naugatuck.....100	2,000,000	semi-an.	July '82 5
Nesquehoning Val'y* 50	1,300,000	semi-an.	Sept.'82 3
N. Castle&Beaver Val* 50	600,000	q'rterly.	Oct. '81 —
New London North'n*100	1,500,000	q'rterly.	July '82 1½
N. Y. Cen. & Hud. R.100	89,428,330	q'rterly.	Oct. '82 2
N. Y. and Harlem....100	7,950,000	q'rterly.	July '82 4
" " pref.100	1,500,000	q'rterly.	July '82 4
" City Line.. —	.....	annual	Apl. '82 3
N.Y., Lake Erie&West.100	77,083,900	.....	.....
" " pref.100	8,156,825	.....	Jan. '82 6
N. Y., N. H. & Hart...100	15,500,000	semi-an.	Jan. '82 5
N. Y., Prov. & Boston100	3,000,000	q'rterly.	Nov. '82 2
Niag. Bridg & Canand*100	1,000,000	semi-an.	July '81 3
North Carolina*.....100	3,000,000	semi-an.	Sep. '81 3
" " pref.100	1,000,000	semi-an.	Sep. '81 3
N. Eastern (S.C.) pref100	86,000	semi-an.	May '81 4
Norfolk & Western pref.	15,000,000	q'rterly.	Sept. '82 $1
North Pennsylvania. 50	4,527,150	q'rterly.	Nov. '82 1¾
Northern Central.... 50	6,142,000	semi-an.	July '82 3
Northern N. Hampsh100	3,068,400	semi-an.	June'82 3
Northern N. Jersey* .100	1,000,000	semi-an.	July '80 2½
Norwich&Worcester*100	2,604,400	semi-an.	July '82 5
Ohio and Miss. pref..100	4,030,000	semi-an.	Mar. '75 3½
Old Colony.....100	7,333,800	semi-an.	July '82 3½
Oregon R'way&Nav.100	6,000,000	q'rterly.	Nov. '82 2
Oswego & Syracuse..100	1,320,400	semi-an.	Aug. '81 4½
Panama..... 100	7,000,000	.....	July '82 6½
Paterson & Hudson*.100	630,000	semi-an.	July '82 4
Paterson & Ramapo.100	248,000	semi-an.	July '82 4
Pember. & Hightst'n*. 50	342.150	semi-an.	Jan. '82 3
Pennsylvania..... 50	83,786,570	semi-an.	Nov. '82 4½
Pennsylvania Co..... 50	20,000,000	semi-an.	June'81 2½
Peoria & Bureau Val*100	1,200,000	semi-an.	Feb. '82 4
Philadelphia & Erie*. 50	7,013,700	semi-an.	.....
" " pfd 50	2,400,000	semi-an.	Jan. '75 4
Phil, Ger. & Norrist'n* 50	2,231,900	q'rterly.	Sept.'82 3
Phil. and Reading... 50	32,726,375	q'rterly.	Jan. '76 2½
" " pref. 50	1,551,800	q'rterly.	July '76 3½
Phila. and Trenton..100	1,259,100	q'rterly.	Oct. '82 2½
Phila., Wil. and Balt. 50	11,585,750	semi-an.	July '82 4
Pittsb., Ft. W. & Chi.*100	19,714,285	q'rterly.	Oct. '82 1¾
" Special Imp.100	6,770,900	q'rterly.	Oct. '82 1¾
Pittsfield&N. Adams..100	450,000	semi-an.	July '82 2½
Portl., Saco & Portsm100	1,500,000	semi-an.	July '82 3
Providence & Worces.100	2,000,000	semi-an.	July '82 3
Rensselaer & Saratog.*100	7,000,000	semi-an.	July '82 4
Rhode Island & Mass.100	100,000	.....	Jan. '81 3
Richmond & Danv...100	3,866,000	q'rterly.	Aug. '82 2
Richmond & Peters b100	1,009,300	semi-an.	Jan. '81 3
Roch. & Genesee Val.*100	555,200	semi-an.	July '82 3
Rutland preferred.. 100	4,000,000	semi-an.	Sept. '82 1
St. L., Alt. & T. Haute.100	2,300,000	.....	.....
" " pref.100	2,468,406	.....	May '82 3
St. L. & S. Fran. 1st pref100	4,500,000	.....	Aug. '82 3½
St. L., I. Mt. & South'n .100	21,459,921	semi-an.	Feb. '74 3
St. L., Jac'ville & Chic.100	1,293,000	.....	Aug. '82 4½
" " pref.100	1,034,000	.....	Aug. '82 4½
St. P. & Duluth pref.100	4,705,000	q'rterly.	June'82 1¾
St. P., Minn. & Man..100	20,000,000	q'rterly.	Nov. '82 2
Schuylkill Valley*... 50	576,050	semi-an.	July '82 2½
Seaboard & Roanoke.100	1,229,600	semi-an.	Nov. '82 5
Shamokin V. & Pottsv 50	669,450	semi-an.	Feb. '82 3
Shore Line*.....100	1,000,000	semi-an.	July '82 4
Sioux C. & Pacific pref100	169,000	semi-an.	Oct. '82 3½
South Br. (N. J.)*....100	438,300	semi-an.	Jan. '82 3
South Western (Ga.)*100	3,892,300	semi-an.	Dec. '81 3½
Stockbridge&Pitts.*..100	448,700	semi-an.	Oct. '81 1½
Syr., Bingham&N.Y.*100	2,500,000	semi-an.	Feb. '81 2
Terre Haute & Ind...100	1,988,150	semi-an.	Aug. '82 4
Troy and Boston....100	1,609,000	semi-an.	Feb. '80 2
Union Pacific.....100	61,000,000	q rterly.	Oct. '82 1¾
United Cos of N. J.*.100	20,490,000	q'rterly.	Oct. '82 2½
Utica, Shenango&S V100	4,000,000	semi-an.	Nov. '81 3
Utica and Black Riv.100	1,772,000	semi-an.	Mar. '82 2
Vermont and Mass..100	3,050,000	semi-an.	Oct .'82 3
Wab. St. L. & Pac. pref.100	22,615,100	q'rterly.	Nov. '81 1½

Marked thus(*)are leased roads.	Stock out-standing.	Divide'd Periods.	Last Dividend Payable.
Ware River*.....100	750,000	semi-an.	July '82 3½
Warren (N. J.).....100	1,800,000	semi-an.	Apl. '82 3½
Warwick Valley.....100	340,000	semi-an.	July '82 2½
Westchest&Phil.pref100	821,300	semi-an.	July '80 2
West Jersey.....100	1,359,750	semi-an.	Sept. '82 3
Wilmingt'n&Weld'n.100	1,456,200	semi-an.	July '82 3
Wil., Col., & Aug 100	960,000	semi-an.	July '82 3
Winchester&Poto'c.*100	180,000	semi-an.	July '82 3
Winchester&Strasb.*100	74,700	semi-an.	July '82 3
Worcester & Nashua. 75	1,789,800	semi-an.	July '82 1½
HORSE-POWER R. R.			
Albany City.....100	200,000	annual	.... '80 5¼
Baltimore City..... 25	1,000,000	semi-an.	Oct. '82 3
Balt., Cat. & El. Mills...100	....	semi-an.	July '82 2
Bleecker St. & Ful. F'y.100	900,000	semi-an.	July '82 ¾
Boston&Chelsea pref. 50	110,000	semi-an.	Oct. '82 3
Broadway (Brooklyn)100	250,000	q'arterly	Oct. '82 6
B'way&7th Av, (N.Y.)100	2,100,000	q'arterly	Oct, '82 2
B'klyn&Hunter's Pt.100	400,000	semi-an.	Oct. '82 6
Brooklyn City.....100	2,000,000	q'arterly	Aug. '82 3½
Bushwick (Brooklyn)100	309,000	semi-an.	Oct. '82 6
Cambridge.....100	908,000	q'arterly	Oct. '82 4½
Cen. Park, N. & E. Riv.100	1,800,000	q'rterly.	Oct. '82 6
Christoph'r&TenthSt100	650,000	semi-an.	Aug. '82 2½
Citizens' (Phil.)..... 50	192,500	q'rterly.	Jan. '82 2½
Citizens' (Pbg.)..... 50	200,000	annual..	....'80 14½
Coney Island&Bklyn100	500,000	semi-an.	Oct. '80 5
Continental (Phil.) .. 50	580,000	semi-an.	July '82 6
D. Dock, E. B'way&Bat100	1,200,000	q'arterly	Aug. '82 4
Eighth Av. (N. Y.)...100	1,000,000	q'rterly.	Oct. '82 3
42d St. & G. St. Ferry100	747,000	semi-an.	May '82 6
Frankf. & Southw (Ph) 50	600,000	q'rterly.	Oct. '82 6
Germantown, (Ph.).. 50	572,800	q'rterly.	Oct. '82 2½
Girard College (Ph.) . 50	500,000	semi-an.	July '71 3
Grand St. & Newton.100	170,091	semi-an.	July '81 2½
Green&Coates St. (Ph) 50	150,000	q'rterly.	Oct. '82 3
Heston, Mantau&F'm 50	299,381	semi-an.	Jan. '75 4
Highland.....100	600,000	semi-an.	July '82 4
Lomb. & South Sts(Ph) 25	195,000	semi-an.	Oct. '75 4
Lynn and Boston....100	200,000	semi-an.	Nov. '82 4
Malden and Melrose.100	165,000	....	.....
Metropolitan (Bost.). 50	1,500,000	semi-an.	July '82 4
Middlesex (Boston)..100	650,000	semi-an.	Nov. '82 3½
N. Y., Bay Ridge&Jam100	150,000	..... .	Oct. '78 7
Ninth Av. (N. Y.)....100	797,320	....	.....
Orange & Newark....100	282,555	.....	.....
People's (Phila.) pref. 25	124,744	..... .	July '82 2
Philadelphia City... 50	475,000	semi-an.	July '82 4
Phila. and Darby.... 20	200,000	semi-an.	July '81 3½
Phila. & Grey's Ferry. 50	308,000	semi-an.	Jan. '82 6
Pbg, Alleg. & Manches. 50	300,000	q'rterly.	Oct. '81 3
Ridge Avenue (Ph.).. 50	420,000	semi-an.	Oct. '81 11
Second Avenue (N.Y.)100	1,199,500	semi-an.	July '82 4
Second&Third St. (Ph) 50	771,076	q'rterly.	Jan. '82 4½
17th & 19th sts (Ph.).. 50	250,000	semi-an.	July '81 3
Sixth Avenue (N. Y.)100	750,000	semi-an.	May '82 5
Somerville (Boston).100	113,000	semi-an.	Nov. '82 3
South Boston..... 50	600,000	semi-an.	July '82 4
Third Avenue, N. Y..100	2,000,000	q'rterly.	Aug '82 5
13th and 15th sts., Ph 50	334,529	q'rterly.	Jan. '82 4
23d street, N. Y.....100	600,000	semi-an.	Aug. '82 4
Union, Boston.....100	374,300	semi-an.	Jan. '82 4
Union, Phila..... 50	1,005,000	semi-an.	Jan. '82 7
West Philadelphia... 50	750,000	semi-an.	July '77 10
CANALS.			
Chesapeake and Dela 50	2,078,038	semi-an.	June'75 2
Delaware Division... 50	1,633,350	semi-an.	Aug. '82 $1
Delawa. and Hudson100	20,000,000	q'rterly.	Sept. '82 1¾
Delaware & Raritan*.100	5,847,400	q'rterly.	Oct. '82 2½
Lehigh Coal and Nav 50	11,204,250	semi-an.	June'82 2
Monongahela Nav... 50	1,004,500	semi-an.	July '82 $3
Morris, consolidated.100	1,025,000	semi-an.	Aug. '82 2
" preferred....100	1,175,000	semi-an.	Aug. '82 5
Pennsylvania..... 50	4,501,200	.....	.....
Schuyl. Nav., com.*. 50	859,100	annual..	Oct. '82 50c.
" " pref... 50	3,200,000	annual..	Oct. '82 $1
MISCELLANEOUS.			
Adams Express.....100	12,000,000	q'rterly.	Sept. '82 2
American Express... 50	18,000,000	semi-an.	July '82 3
Amoskeag Manuf. Co.100	3,000,000	semi-an.	June'81 5
Calumet&Hecla Min'g 25	100,000 S.	q'rterly.	Nov. '82 $5
Central Mining Co...100	.....	semi-an.	Feb. '82 2½
Consolidation Coal..100	10,250,000	semi-an.	Jan. '82 2
George's Creek C. & I.100	.....	semi-an.	Jan. '82 3
Maryland Coal.....100	4,400,000	semi-an.	Feb. '76 1½
Mariposa L. & Mining100	10,000,000	..... .	.....
" pref100	5,000,000	..... .	.....
Missouri Val. Land Co100	200,000	semi-an.	July '82 12
National Tube Works100	1,000,000	q'rterly.	Oct. '82 3
Pac. Mail Steamship.100	20,000,000	q'rterly.	Sept. '69 3
Pennsylvania Coal... 50	5,000,000	q'rterly.	Aug. '82 3
Pullman Palace Car...100	10,032,800	q'rterly.	Nov. '82 2
Quicksilver, com....100	5,708,700	..... .	May '82 0.4
" pref....100	4,291,300	..... .	May '82 6
Quincy Mining Co... 25	40,000 shs	semi-an.	Aug. '82 $5
Quincy R. B. Bridge..100	1,750,000	semi-an.	July '82 5
Sioux C. & I. F. L. & L. Co100	500,000	semi-an.	June '82 5
Spring Mt. Coal.....100	1,500,000	semi-an.	June '82 3½
Topeka Equip'nt Co.100	255,500	semi-an.	Oct. '82 5
United States Ex....100	7,000,000	q'rterly.	Aug. '82 1
Wells-Fargo & Co. Ex100	6,250,000	semi-an.	July '82 4
Western Union Tel..100	80,000,000	q'rterly.	Oct. '82 1½

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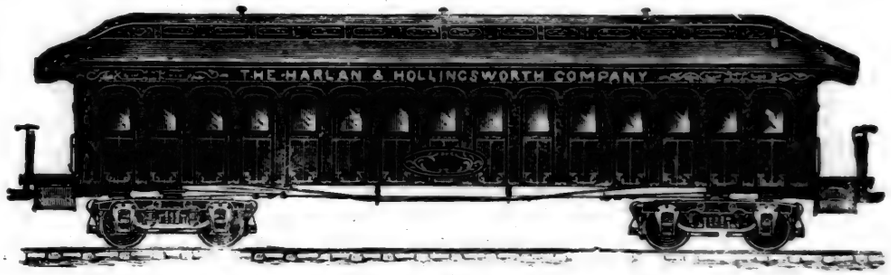
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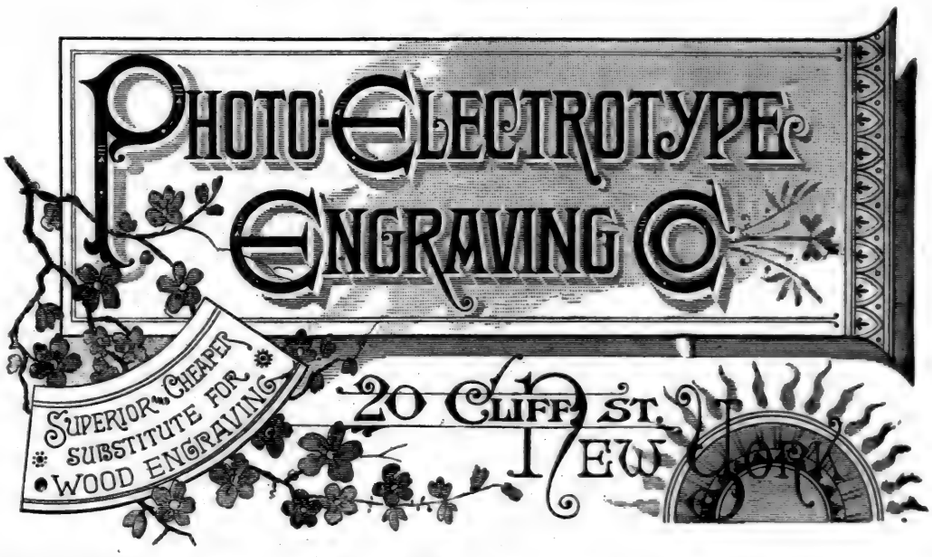
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RAILROAD EARNINGS.—MONTHLY.

	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total.
BURL., CEDAR RAP. & NORTHERN:													
1880	184,316	165,170	188,325	141,652	149,504	153,378	143,432	160,160	179,804	204,991	189,330	193,419	2,053,484
1881	167,750	124,510	148,551	184,680	165,630	205,912	174,351	209,112	221,801	221,748	203,880	232,812	2,259,037
1882	252,823	225,631	224,107	178,304	199,278	211,257	198,476	224,921	261,439	300,155	.....	.....	.....
CENTRAL PACIFIC:													
1880	1,200,615	1,070,487	1,373,438	1,356,716	1,778,488	1,724,950	1,840,067	1,973,438	1,994,997	1,120,229	2,199,466	1,905,221	20,508,113
1881	1,602,907	1,454,218	1,704,638	1,872,370	2,091,411	2,159,382	1,899,346	2,088,519	2,185,303	2,507,857	2,297,971	2,225,179	24,094,101
1882	1,839,469	1,720,675	1,969,737	2,054,687	2,342,298	2,229,105	2,020,000	2,277,000	2,474,000	.....	.....	.....	.....
CHESAPEAKE AND OHIO:													
1880	202,335	198,681	222,762	221,559	199,443	214,352	238,236	259,110	247,303	211,820	240,795	218,000	2,674,308
1881	162,540	184,389	228,479	227,343	252,235	241,135	225,096	262,858	247,144	237,303	235,585	203,562	2,707,762
1882	210,455	209,708	208,981	267,454	255,939	260,753	306,831	371,175	332,219	.....	.....	.....	.....
CHICAGO AND ALTON:													
1880	534,054	497 013	626,473	542,961	616,128	617,524	708,906	761,120	767,349	785,199	696,776	574,695	7,718,198
1881	487,890	461,641	529,915	558,190	548,556	635,860	676,205	769,751	774,790	771,844	680,133	635,307	7,553,988
1882	579,447	530,480	584,483	561,787	553,412	613,886	671,537	800,624	881,109	812,032	.....	.....	.....
CHICAGO AND NORTHWESTERN:													
1880	1,154,632	1,131,683	1,361,725	1,294,573	1,875,608	1,671,177	1,699,686	1,767,938	2,020,245	2,105,217	1,855,622	1,477,902	19,416,007
1881	1,240,664	963,204	1,178,795	1,474,612	1,879,006	2,306,440	1,983,032	2,315,164	2,292,676	2,341,098	2,019,038	1,855,477	21,849,209
1882	1,644,935	1,474,176	1,672,931	1,668,741	2,110,947	2,022,700	2,025,736	2,099,755	2,497,053	2,592,100	.....	.....	.....
CHICAGO, BURLINGTON AND QUINCY:													
1880	1,432,740	1,411,870	1,732,518	1,489,894	1,909,627	1,682,956	1,773,643	1,834,321	1,862,285	1,934,762	1,837,860	1,552,018	20,454,494
1881	1,307,948	1,034,821	1,418,149	1,574,371	1,679,455	2,083,803	1,888,358	2,173,945	2,262,981	2,031,001	1,816,133	1,905,490	21,324,150
1882	1,658,834	1,457,300	1,566,217	1,530,838	1,505,261	1,437,164	1,625,006	2,086,858	.....	.....	.....	.....	.....
CHICAGO, MILWAUKEE AND ST. PAUL:													
1880	764,298	738,749	900,675	871,041	1,134,745	1,037,958	1,026,708	991,297	1,257,677	1,493,620	1,472,037	1 397,308	13,086,119
1881	990,847	682,717	916,989	1,259,946	1,538,491	1,729,811	1,568,706	1,678,361	1,644,670	1,591,052	1,569,000	1,855,000	17,025,462
1882	1,435,000	1,377,000	1,561,000	1,518,000	1,629,000	1,620,000	1,465,000	1,545,000	1,950,000	2,251,000	.....	.....	.....
CHICAGO, ST. PAUL, MINNEAPOLIS AND OMAHA:													
1880	193,827	173,078	259,783	259,208	232,146	218,093	236,995	251,013	300,833	342,052	342,894	312,173	3,122,097
1881	257,786	158,594	251,648	261,211	350,124	404,562	383,202	385,586	373,370	370,629	380,733	391,950	3,981,296
1882	307,498	315,100	405,779	356,558	406,420	363,109	331,480	394,555	482,997	546,671	.....	.....	.....
CINCINNATI, INDIANAPOLIS, ST. LOUIS AND CHICAGO:													
1880	155,697	172,541	198,220	168,199	186,995	200,332	204,138	233,478	343,627	239,881	209,014	198,254	2,412,185
1881	182,523	171,511	191,005	183,710	191,096	192,299	177,161	229,858	228,653	212,606	194,805	192,623	2,296,916
1882	200,042	186,879	208,066	204,269	199,110	195,948	209,564	.....	259,379	.....	.....	.....	.....
DENVER AND RIO GRANDE:													
1880	124,759	126,922	160,883	164,882	193,925	295,455	373,132	400,133	406,583	473,318	408,562	349,196	3,478,007
1881	307,476	317,681	398,493	433,111	514,767	584,230	548,284	606,193	589,287	638,432	566,819	643,417	6,206,812
1882	491,914	412,987	535,055	559,917	614,298	537,462	495,797	574,040	595,306	630,598	.....	.....	.....
HANNIBAL AND ST. JOSEPH:													
1880	176,079	166,965	216,061	206,735	191,317	179,396	224,312	238,081	233,448	242,214	207,147	279,635	2,561,366
1881	154,401	122,874	176,356	190,812	172,950	190,740	201,899	210,240	215,103	231,913	201.782	180,376	2,230,961
1882	138,284	154,717	168,798	148,913	154,917	155,030	184,347	258,628	239,196	238,442	.....	.....	.....
ILLINOIS CENTRAL:													
1880	595,212	613,806	613,008	535,732	665,120	681,736	724,095	732,755	806,836	880,211	783,120	673 182	8,304,812
1881	631,281	524,499	557,789	662,493	673,259	803,887	720,004	868,407	828,847	815,238	737 218	763,475	8,586,397
1882	728,173	689,387	695,371	674,603	674,749	663,746	752,251	813,600	828,238	865,325	.....	.....	.....
INDIANA, BLOOMINGTON AND WESTERN:													
1880	80,498	89,690	116,185	90,374	85,733	106,954	103,438	116,732	110,622	121,343	96,621	104,619	1,233,079
1881	90,283	83,261	192,085	203,677	200,064	199,846	190,125	272,114	247,332	228,679	160,826	156,697	.....
1882	195,824	175,755	206,235	205,934	182,554	186,133	206,072	278,814	273,100	269,046	.....	.....	.....
LOUISVILLE AND NASHVILLE:													
1880	674,455	575,035	612,593	563,883	655,014	976,229	772,538	827,089	931,911	1,000,327	953,087	949,185	9,491,346
1881	812,118	805,124	947,959	855,704	828,726	1,227,885	817,135	876,192	951,566	1,002,950	1,065,223	1,153,779	11,344,361
1882	964,527	960,315	1,068,834	953,603	958,130	1,215,490	1,063,765	1,043,912	1,107,985	1,216,215	.....	.....	.....
MOBILE AND OHIO:													
1880	250,116	204,095	168,302	140,091	129,248	121,855	131,621	140,593	184,247	264,714	251,368	287,372	2,273,622
1881	224,347	216,768	230,916	163,551	145,803	136,517	135,549	160,789	210,262	256,924	262,986	258,212	2,403,224
1882	159,676	158,590	148,166	141,957	134,378	136,184	136,398	140,443	160,031	265,201	.....	.....	.....
NASHVILLE, CHATTANOOGA AND ST. LOUIS:													
1880	205,634	191,154	169,457	155,466	158,839	144,155	151,594	169,326	167,473	178,266	182,087	175,966	2,049,484
1881	178,143	190,866	207,710	183,525	104,430	154,549	150,430	168 317	179,979	172,121	132,059	173,127	2,075,250
1882	156,994	159,961	161,005	154,155	135,556	119,074	160,991	168,304	168,999	.....	.....	.....	.....
NEW YORK AND NEW ENGLAND:													
1880	164,232	149,907	183,845	179,689	183,701	219,891	205,056	249,885	235,642	215,491	210,856	198 108	2,396,302
1881	189,749	173,614	212,019	216,913	217,185	231,518	246,821	280,524	299,573	261,200	242,412	237,729	2,809,255
1882	213,840	217,261	265,222	263,544	283,244	290,060	300,920	353,726	338,490	310,145	.....	.....	.....
NEW YORK, LAKE ERIE AND WESTERN:													
1879	1,147,173	1,207,391	1,356,780	1,372,755	1,350,574	1,230,419	1,273,533	1,450,223	1,492,497	1,713,697	1,515,835	1,398,224	16,509,127
1880	1,296,381	1,252,218	1,644,958	1,643,151	1,592,544	1,661,812	1,580,976	1,606,874	1,786,417	1,899,910	1,799,338	1,726,788	19,149,361
1881	1,443,437	1,425,765	1,847,261	1,709,057	1,776,891	1,794,982	1,787,081	1,772,895	1,734,200	.....	.....	.....	.....
NORTHERN CENTRAL:													
1880	334,494	330,860	415,325	386,130	329,788	419,193	450,298	453,923	464,093	512,918	459,054	494,310	5,050,387
1881	386,157	382,657	452,906	487,273	465,588	487,287	440,811	498,008	429,565	449,664	487,160	476,622	5,443,697
1882	407,368	413,551	430,194	435,129	482,607	482,762	509,683	667,488	592,435	.....	.....	.....	.....
NORTHERN PACIFIC:													
1880	81,390	77,259	119,357	185,700	217,613	253,105	241,277	223,500	330,300	358,456	300,822	220,993	2,629,710
1881	116,508	78,803	162,984	216,210	312,705	412,024	393,260	434,085	534,363	583,955	428,903	434,331	4,044,576
1882	239,800	269,000	384,000	438,000	568,332	631,342	679,240	727,377	789,700	834,460	.....	.....	.....
PHILADELPHIA AND ERIE:													
1880	224,307	245,372	327,678	334,947	311,470	331,024	308,699	347,532	322,737	367,082	324,966	281,919	3,727,733
1881	224,303	225,501	285,573	293,323	343,792	350,585	291,669	303,849	276,522	292,392	284,078	282,772	3,454,309
1882	252,727	246,246	265,311	277,851	341,415	347,614	377,206	420,329	386,455	.....	.....	.....	.....
ST. LOUIS AND SAN FRANCISCO:													
1880	198,091	195,948	193,146	176,164	167,664	173,607	213,297	259,995	280,873	328,194	290,329	226,063	2,698,371
1881	212,435	178,234	262,050	265,298	283,399	260,254	252,333	286,373	279,064	308,569	284,320	287,914	3,160,245
1882	256,784	244,654	274,959	242,806	253,419	240,177	318,613	381,637	336,805	360,900	.....	.....	.....
ST. LOUIS, ALTON AND TERRE HAUTE:													
1880	153,139	163,737	168,994	155,462	147,928	150,207	191,077	216,759	204,295	221,863	188,773	184,503	2,146,741
1881	175,725	166,012	201,137	197,447	172,177	165,896	165,393	189,180	196,368	204,338	162,544	153,852	2,112,801
1882	168,087	149,619	178,145	157,450	162,842	142,742	192,017	236,137	217,659	229,96	.....	.....	.....
ST. LOUIS, IRON MOUNTAIN AND SOUTHERN:													
1880	555,983	490,195	451,560	408,241	349,053	363,454	432,655	565,869	671,219	688,365	632,052	656,951	6,265,597
1881	570,957	560,791	704,002	548,300	479,075	474,302	533,512	644,386	708,325	719,239	687,280	709 498	7,319,744
1882	516,370	501,127	585,008	581,977	519,120	529,700	515,519	675,981	724,160	809,394	.....	.....	.....
ST. PAUL, MINNEAPOLIS AND MANITOBA:													
1880	180,239	137,645	261,798	333,014	281,899	243,407	272,089	232,579	274,188	345,057	300,675	297,641	3,160,231
1881	254,187	159,482	320,962	425,685	382,642	405,322	387,488	414,954	485,736	605,708	508,530	528,262	4,878,960
1882	395,461	418 358	531,004	570,890	858,902	856,417	853,296	801,759	832,776	979,057	.....	.....	.....
TEXAS AND PACIFIC:													
1880	245,785	219.165	215,070	174,177	141,083	153,066	195,711	226,073	266,570	303,666	312,184	301,858	2,754,408
1881	281,176	260,781	319,928	295,066	281,782	285,405	328,063	381,331	345,790	419,203	357,724	381,218	3,921,569
1882	310,785	255,644	332,911	359,543	409,228	384,713	367,215	439,918	470,613	541,901	.....	.....	.....
UNION PACIFIC RAILWAY:													
1880	1,433,636	1,393,992	1,730,509	1,937,220	2,027,269	1,928,528	1,934,215	1,913,035	2,270,179	2,707,860	2,251,148	1,869,335	23,448,445
1881	1,339,799	1,374,740	1,674,860	1,766,894	2,310,238	2,884,774	2 528,826	2,638,659	2,844,357	3,169,530	2,773,608	2,267,004	27,451,831
1882	1,961,088	1 759,863	2,226,832	2,462,004	2,491,590	2,508,453	2,301,000	2,762,107	2,949,112	3,158,337	.....	.....	.....
WABASH, ST. LOUIS AND PACIFIC:													
1880	776,790	759,451	978,629	892,024	948,773	953,468	1,966,742	1,189,478	1,178,950	1,501,203	1,131,787	1,050,816	12,428,112
1881	811,617	818,922	1,121,592	1,023,482	1,144,660	1,308,093	1,131,752	1,542,838	1,490,027	1,396,300	1,399,555	1,328,278	14,461,570
1882	1,220,965	1,134,768	1,315,776	1,378,194	1,204,864	1,149,632	1,418,837	1,772,544	1,682,382	1,595,680	.....	.....	.....

COMMENCING Nov. 1, the Pennsylvania and the Baltimore and Ohio Railroad Company have determined to charge storage upon all baggage left unclaimed for over twenty-four hours after arrival at any station on either of the two roads, their branches or connections. Upon the arrival of each piece of baggage at its destination it will have a storage label put on it, with the hour and date of its arrival, along with the number of the train bringing it. The storage charged for the first day will be 25 cents for every piece, and 10 cents for every additional day it remains unclaimed. All baggage remaining for an entire year will, as customary, be sold at public auction. The next public sale of unclaimed baggage will not take place before next spring.

THE steamer Albatross, which is being built by The Pusey & Jones Company for the United States Fish Commission, is to be lighted by electricity. Wires are now being placed on the vessel, but it will be a week before the job is completed.

TEACHER in natural philosophy: "Suppose you wished to gain velocity in a train of wheels, what would you do?" Smart scholar: "Grease the axles, ma'am."

A LOCOMOTIVE now being built at Chattanooga, Tenn., is the first one ever built south of the Ohio River.

THE British steamship Panama arrived at Baltimore on the 27th ult., with 1,850 tons of iron ore.

ALL butt—A cigar stump.—[New Jersey Enterprise. So is a goat.

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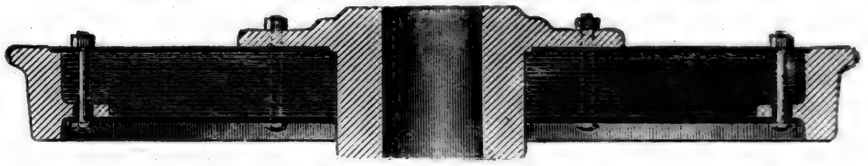
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OUR BOSTON LETTER.

[From Our Special Correspondent.]

THE MASSACHUSETTS CENTRAL.

THE annual meeting of this road was held in this city a short time ago, and some mention of the important events transpiring thereat should be made so that the prospects and growth of this new trunk line might be kept track of by the railroad public. The directors made their customary report, the substance of which was that 48 miles were completed to Jefferson's (less than half), and that all of the money realized from the sale of the $3,500,000 of bonds, which were deemed sufficient to complete the road, had been expended, and the same 48 miles were done which were done last January. They spoke of the resignations which had taken place and who had then been elected to succeed them, of the election of Mr. Aldrich to the presidency, etc., of the sad state of affairs when they took hold. The wolf was at the door, and debts and claims and law suits threatened them on every side. The employés wanted pay for the last three months' work done (unreasonable creatures), and people who had been lending the road rolling-stock for the fun of it wanted to exchange the fun for money. Horrible state of affairs! Well, they took hold, and now, how is it? The report of the treasurer will be listened to. Up to September 30, 1882, $6,705,063.76 had been expended in the construction of the road, $94,565.50 for interest, and $178,666.67 for discount on bonds. A default of $105,000 has been made on coupons due July 1, 1882, and some of those due January 1, 1882, were still unpaid. Floating debt amounted to $51,879.68, to which might be added old debts, swelling it to $77,479.68. Since the road had opened for business, it had lost $54,635.40 up to August 1, 1882, and that since then to September 30, the expenses had been $19,241.34, and the receipts $18,988.18, or in other words, the longer the road run the more it fell behind. It was plain that if the wolf was not at the door he was still in the yard and liable to stay there. Then the president told them that the road was liable to be closed up any time, which did not make them any happier. The air is full of rumors that syndicates are going to build the Moss Cut through to Northampton, but as the syndicates have so far consisted mostly of air, the outlook is not very striking. At any rate it is hardly time yet for people to begin to sell the stock they hold in rival lines on account of this trunk line, so they can continue to depend on the stock list of the JOURNAL for a while longer before allowing themselves to get panicy.

CINDERS.

The New York and New England Railroad still continues full of business. Sundays are improved to clear up freight yards, and many hundred freight-cars are moved on each one of them. With the present business, and two new connections soon to be established at the Newburg transfer, it is only a question of time when the whole road will have to be double-tracked.

The new Cunard Steamship Pavonia is at this port on her first trip. She is sister ship to the Cephalonia, described in these columns a short time ago. Her dimensions are: length, 430 ft., breadth, 46 ft. and depth 47 ft. There are accommodations for over 200 cabin and 1,000 steerage passengers. The vessel is lighted by electricity, and has a speed of 14 knots per hour. She is the 34th built by the Cunard Company and has been visited by many since being in port.

The Boston and Albany Railroad has put a large force at work and is distributing ties along the line of their new purchase, the old Woonsocket division of the New York and New England Railroad, preparatory to double-tracking it. An attempt to get at the price paid for this was a failure, as they refuse to disclose it. The good people of Newton rejoice that this piece of road is to be under the control of one corporation in the future instead of two, as formerly.

The Boston, Winthrop and Point Shirley Railroad Co. have had their annual meeting. This road is 2½ miles long, N. G., and only runs summers when people are living on the shore. During the last fiscal year it earned $9,218.65 which was a gain over last year of $2,229.67, but the road only run a portion of the season of 1881. The total expenses were $6,043.67, making a net income of $3,174.98. The road has been somewhat extended this year, $4,863.32 having been put into improvements.

The work of extending the facilities of the New York and New England Railroad to meet their enormous business still goes on, some 4 miles more of double track east of Hartford being opened to business the first of the month.

Rumors are rife that important changes are soon to be made in the management of some of our roads.

The average amount of perspicuity and penetration possessed by the ordinary human biped is not usually heavy enough to make itself a burden to the owner or to cause him to shine like the comet or an electric light in the eyes of others of his sex. If there is any one man convinced of this it is Mr. Dixie, the gentleman in charge of the Crosby Steam-Gauge and Valve Co.'s exhibit at the fair. Some of the gauges here displayed are connected with boilers and are registering the steam therefrom. The other day a smart young man with his girl n tow came along and asked Mr. D. "if those, were right." "Yes," said Mr. D., "they are, as far as we know." "Well, but I know——" pulling out his watch, when, to his confusion he discovered the difference between 120 lbs of steam to the square inch and a quarter of 9 o'clock. Smartie and the girl fled in confusion, and this is but one instance of many.

Business on the Eastern Railroad is now increased by large lots of freight bound to the West, coming to it from the Maine Central Railroad. At present it is in excess of any previous record.

The New England office of the Virginia, Tennessee and Georgia Air line is to be moved into more luxurious and commodious quarters at 290 Washington s reet.

It would seem as if the public were not content unless they have the Boston, Hoosac Tunnel and Western Railway either bought by or consolidated with some other road. The latest rumor is that Mr. Vanderbilt is after it so as to control all of the Tunnel routes. This is both believed and denied in various quarters. Time will tell.

Three hundred and sixty-eight more cars came east through the Hoosac Tunnel last month than during the same month of 1881.

The Boston merchants and exporters are pleased at the figures lately shown by the Treasury Department at Washington, by which it seems that Boston has made a steady gain against losses at other ports. The Boston district per centages for the last few years have been: for 1879, 6.88; 1880, 7.4; 1881, 8.16; and for 1882, 8.40; while at New York, Philadelphia and Baltimore they have fallen off.

The New York and New England Railroad Company, with their present equipment, find hard work to move all the business which comes to it. Large additions are to be made to its rolling-stock, as it is wholly inadequate; 22 new locomotives are ordered, and large additions are to be made to their car equipment. An independent line is to be built into Providence. A little over a year will see the road double-tracked from Boston to Hartford. Several new connections are to be made with the coal regions, one of which will shorten the route by over 100 miles. The road has been unfortunate lately in having its officers resign. Four Supts. of Divisions have resigned in about two years, and now trainmaster Thos. Sprague, of the western division has resigned, also H. P. Woodward, chief clerk of the superintendent's office. The outlook for this road, when all of its western connections are completed, cannot but be great.

The Massachusetts Central Railroad are in more trouble, they having until Nov. 15 given them by the United States Supreme Court of Washington to pay for some land they took of a Waltham man for their road, or else they are to vacate it. Schemes and projects without number have been floated to save this road, but so far they have availed nothing, and it would seem as if the storm could not be kept off much longer.

The fight between the Eastern Railroad and its little rival has not prevented the former from showing much larger earnings for October last than for the same month of last year. Probably, however, they were not made between Boston and Lynn.

"CURTIS."

IN the suit of Brown, Bonnell & Co. against Cornelius H. Delamater and George H. Robinson before Judge Shipman in the United States Circuit Court, the plaintiffs sought to recover damages for the non-delivery of a quantity of iron rails. The transaction was made on a broker's note of sale, and the Judge charged that the so-called broker's note having been made without authority from the defendants did not constitute a binding contract, and no recovery could be had thereon. The jury accordingly returned a verdict for defendants.

A CHICAGO preacher averred that he had "never seen a lady reading a newspaper in a street car;" to which the Savannah *Times* adds that he had "never seen a lady smoking on a car platform either"—all of which *Harper's Weekly* says "simply goes to show that a lady is no gentleman."

AMERICAN Railroad Journal. ESTABLISHED 1831.

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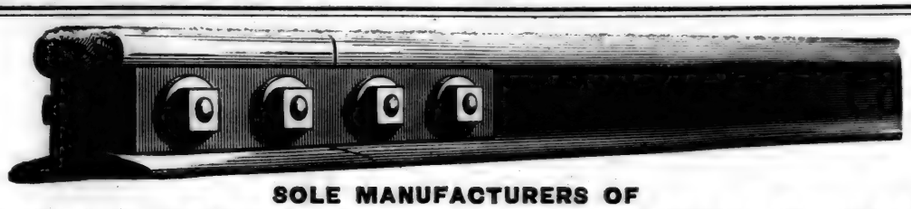
NEW DRESS,

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We are amply justified in reducing the price from its old time rate of $5.00 per year to $3.00, on account of the numerous indications we are receiving of late of the increased interest that is being taken in the JOURNAL, which warrants us in believing that the sacrifice we make in price will be much more than compensated for by the promised liberal increase in the number of subscribers, It is gratifying to us to know that the alterations made in the Journal during the past year are meeting with such general favor as is expressed in the frequent words of commendation and congratulation sent to us from old and new readers, and we feel called upon to try in every way to merit their approval and to spare no pains to place the paper before as many as possible of those who might derive benefit and profit from it. During its fifty years' experience the JOURNAL has been highly favored by an especially choice class of readers, counting among its subscribers some of the most noted banking houses, commercial bodies, financiers, and railroad men of this country and Europe. Its aim in the future will be to prove itself of more value and interest than ever to its patrons of many years standing, while by its new features it makes itself of service and interest to a broader field and to more varied departments of life and business. We desire to make the JOURNAL as useful and welcome as possible to our readers and advertising patrons, and to this end we hope to have our columns of correspondence, communications and general information full and diversified. The columns we have devoted to general communications have proved especially interesting and popular of late, and we are pleased to have our rraders favor this department with suitable contributions

We give on editorial page our new subscription rates, which are so changed in the belief that it will not only prove acceptable to many who desire to become regular readers of the paper, but that it will meet with the hearty approval of our advertising patrons, who are rapidly filling up the pages offered to them since the improvements in the JOURNAL have been started.

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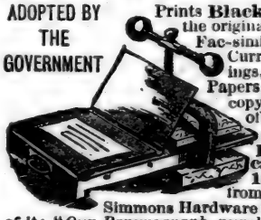
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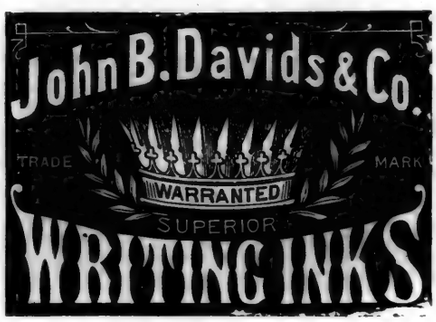
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RAILROAD, MINING, AND MILL SUPPLIES.

No. 21 Park Place, NEW YORK.

Imports of Dry Goods at New York.

THE Imports of Foreign Dry Goods at New York for the month of October, were :—

ENTERED FOR CONSUMPTION.

	1880.	1881.	1882.
Manufs. of wool....	$803,150	$1,174,678	$1,453,207
Manufs. of cotton...	1,069,000	1,264,471	1,160,710
Manufs. of silk.....	1,880,377	2,642,016	2,646,863
Manufs. flax.....	792,833	1,047,856	949.453
Miscell. dry goods...	617,491	675,495	631,592
Total ent. for consumption.....	$5.162,851	$6,804,516	$6,841,825

WITHDRAWN FROM WAREHOUSE.

	1880.	1881.	1882.
Manufs. of wool.....	$854,696	$616,344	$779,156
Manufs. of cotton...	234,696	167,583	282,670
Manufs. of silk.....	510,562	386,487	523,254
Manufs. of flax.....	382,382	337,220	291,302
Miscell. dry goods..	206,560	217,999	265,676
Total withdr'n from warehouse.....	$2,188,896	$1,725,633	$2,082,118
Add ent. for con....	5,162,851	6,804,516	6,841,825
Total thrown on the market.....	$7,351,747	$8,530,149	$8,923,943

ENTERED FOR WAREHOUSING.

	1880.	1881.	1882.
Manufs. of wool....	$611,673	$464,574	$702,538
Manufs. of cotton..	202,578	194,903	244,234
Manufs. of silk.....	518,673	473,286	637,351
Manufs. of flax....	371,702	349,851	387,643
Mis. dry goods.....	268,415	171,717	189,733
Total ent. for warehouse	$1,967,134	$1,654,281	$2,111,499
Add entered for consumption	5,162,851	6,804,516	6,841,825
Total ent. at port....	$7,129,985	$8,458,797	$8,953,324

The Imports of Foreign Dry Goods at New York for ten months from January 1, were:—

ENTERED FOR CONSUMPTION.

	1880.	1881.	1882.
Manufs. of wool...	$17,234,559	$15,727,088	$20,032,496
Manufs. of cotton	19,107,103	18,414,978	20,215,265
Manufs. of silk....	26,304,272	25,275,549	32,116,066
Manufs of flax....	11,549,538	10,573,750	11,872,578
Mis. dry goods....	7,397,425	7,190,433	7,726,787
Total entered for consumption ...	$81,592,897	$77,181,798	$91,963,192

WITHDRAWN FROM WAREHOUSE.

	1880.	1881.	1882.
Manufs. of wool..	$6,962,627	$7,385,623	$6,928,452
Manufs. of cotton.	3,477,000	3,984,065	3,316,228
Manufs. of silk....	5,193,796	4,612,546	5,240,040
Manufs. of flax...	3,855,083	4,366,786	3,478,419
Mis. dry goods....	1,696,406	2,056,500	1,972,455
Total withdrawn from warehouse.	$21,184,912	$22,315,520	$20,935,594
Add entered for consumption ...	81,592,897	77,181,798	91,963,192
Total thrown on the market.....	$102,777,809	$99,497,318	$112,898,786

ENTERED FOR WAREHOUSING.

	1880.	1881.	1882.
Manufs. of wool...	$9,200,602	$5,993,208	$7,609,919
Manufs. of cotton.	3,916,509	3,244,155	3,508,377
Manufs. of silk....	5,735,302	4,139,423	5,454,040
Manufs. of flax....	5,362,395	3,602,572	3,570,531
Mis. dry goods....	2,123,049	2,137,926	2,065,666
Total entered for warehouse	$26,337,857	$19,117,284	$22,208,533
Add entered for consumption ...	81,592,897	77,181,798	91,963,192
Total ent. at port.	$107,930,754	$96,299,082	$114,171,725

THE Hazard Manufacturing Company, of Wilkesbarre, Pa., has just completed for the Central Railroad of New Jersey the largest wire rope ever made by machinery. It is two and a half inches in diameter and 5,780 feet long. The weight of it is thirty-two tons. It will be used on the Ashley inclined plane below Wilkesbarre, and will pull twenty-four nine ton cars each trip. The life of such a rope is capable of hauling up the incline eight million tons of coal.

THE large local freight depot of the Mobile and Ohio Railroad Company at Cairo, Ills., is progressing rapidly.

Protection of Forests.

THE preservation of forests is attracting increased attention in this country. It is a subject of importance. The history of the countries of the world, and indeed of the older portions of our own country, contains a warning that we should heed. The destruction of their forests has resulted in the most disastrous climatic changes. In this country we have evil more direct to threaten us and urge us on to the work of forest culture. The increase in our population creates an increase in the demand for wood. For certain uses we must have wood: no other material can take its place. In this country our waste lands are not wooded lands; we cannot go to them for the supplies of necessity. The large areas of new country in the west are mostly treeless plains. In this respect we lack one of the advantages that European countries once possessed. This lacking will hasten the day, if not averted by decided action, when the natural growth cannot supply the demand. Wood forms the first and the last implement of humanity. It is the universal material of agriculture, manufacture, commerce and art. There will always be a demand for it; and if that future demand is to be supplied we must not wantonly waste the forests we now have.—*Exchange.*

A New "Jumbo" Derrick.

THE Pardee Car and Machine Works, at Watsontown, Penn., have just turned out for the New York, West Shore and Buffalo Railway a derrick, or what is more commonly known as a wreck car, that is considered by railroad men to be strongest and most complete car of the kind ever seen in this section. It is 35 feet long by 8 feet in width, the frame being composed of heavy wrought channel iron, 10 inches wide, and strongly braced with diagonal braces of the same material. The improvement over other derricks consists, in part, of two 10-ton jacks, one on each side of the car, which are used in lifting the body of the car so as to relieve the trucks of all strain when in operation There are also four sets of grips or pincers, connected by heavy chains with the platform, and so arranged that they can be attached to the rail and drawn tightly by means of screws on the platform, thus holding the car firmly in place while at work. The upright column, which is of cast iron, covered with boiler iron, weighs over 3,000 pounds. The entire weight of car and derrick is between 15 and 16 tons. Practical men who have inspected this improved piece of machinery say it is decidedly the finest and most complete car of the kind they have ever seen.

THE earliest attempt to obtain light by incandescence in a vacuum was made by King in 1843, who applied continuous metallic and carbon conductors, and heated them by the electric current in a Torricellian vacuum. He was followed in 1848 by Staite, who used an iridium or an iridium and platinum wire, and enveloped the holder in glass or some other non-conductor. In 1872 Konn employed graphite, and rendered it incandescent in an atmosphere of nitrogen, in which there was no wasting away of the carbon. The same principles have been followed, but with greater promise of success, in the more recent attempts of Edison' Maxim and Swan at producing illumination by means of incandescence.

THE San Francisco *Chronicle* relates that an immensely stout young lady of that city, who was exceedingly desirous of reducing her avoirdupois, was furnished by a friend with an anti-fat remedy, which acted marvelously. Every day she grew thinner. As the days went on, however, her bulk waned so rapidly that her parents became alarmed and called in medical aid. But it was too late. She glided about like a ghost. She dwindled and ebbed until, the other morning, the mother stole into her room, uttered a loud shriek, and fell senseless to the floor. Her husband rushed in just in time to see an intangible something that lay in bed shiver, grow indistinct, and disappear. His poor girl was gone, and what adds the greatest poignancy to the grief of her parents is that they cannot give their lost child a funeral, for there are no remains.

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It Insures Safety from Fire in case of Accident, Economy in Fuel and RAPID CIRCULATION. It heats quickly, is SELF-REGULATING, and can be used for either STEAM OR HOT WATER.

The Water Tubes do not come in contact with the Coals, but occupy the Smoke Flue in such a manner as to absorb the greatest amount of heat from Coal in a low state of combustion without danger of chilling the fire.

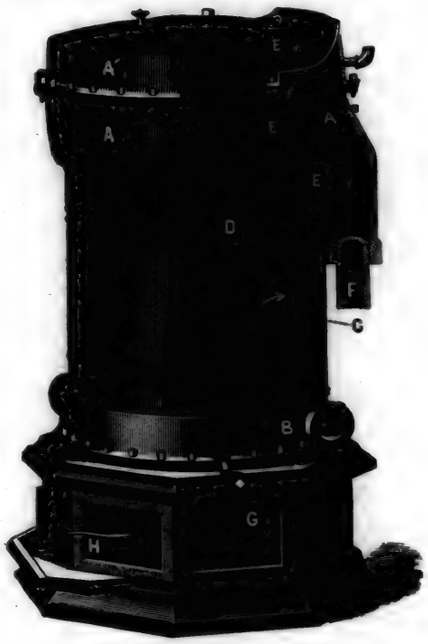
Once filled with coal the fire will last from 24 to 60 hours, according to weather, without replenishing, as proved by actual test.

At the last "Mechanics' Fair" it received the Silver Medal, being the highest award to heaters of any kind.

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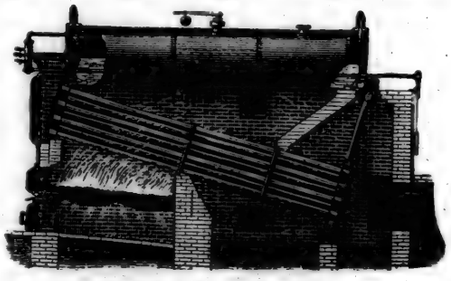
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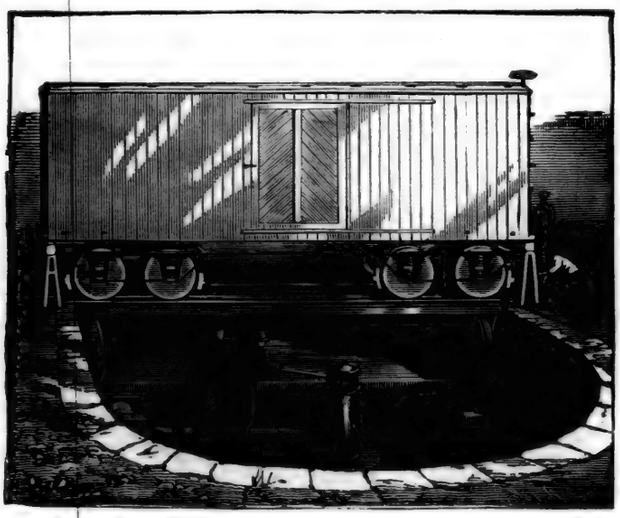
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Car Transfer Apparatus.

G. W. Atkinson, of Petersburg, Tenn., is the inventor and patentee of a Car Transfer Apparatus, which transfers cars between railroads of different gauge without raising, moving the car body or disconnecting the train.

This is accomplished by means which we will describe as briefly as possible. Four eccentrics, two at each end of the car, are placed in an excavation made across the side track. On the top of these eccentrics is placed a frame, on the top of which short rails are placed with the transfer truck upon them, to receive and carry the car trucks out and in at right angles with the side track. The excavation is made a little less than the length of a car. In operation the eccentrics are raised till the rails on the transfer truck come flush with the rails of the side track. The car is backed on the apparatus, and trestles are placed under each end of the car to support it. Next the eccentrics are lowered till the trucks are clear of the body and the rails upon which the transfer truck rests are flush with the rails placed at right angles to the side track. Then the transfer truck is pushed from under the car body some twelve or fifteen feet, and the refuse trucks run off the transfer truck to short spur tracks. The other gauge trucks are next run on the transfer truck, and this pushed back under the car body.

By the revolving of the eccentrics the trucks are now raised in position underneath the car body, and the change of trucks is made. The eccentrics, it may be added, are worked by an endless chain and capstan bars.

The advantages of Mr. Atkinson's Apparatus may be summarized as follows: It is very simple and not liable to get out of order; its use obviates the necessity of constructing long side tracks; the machine can be placed in any side track; its use obviates the running out trucks three hundred or four hundred feet to get rid of them and to switch them off; the trucks are both always at hand and out of the way; as the eccentrics have to turn only half way round, the change of trucks is made quickly, and (a very important advantage) the cars can be transferred without disturbing the passengers or freight within them. The invention is for sale. Further information may be procured by application to the inventor.

The first sod of the M. and C. Junction Railway was turned at Huntington, Quebec, on the 2d inst. At the conclusion of the ceremonies Henry McFarlane, who is constructing the road for the Company, took possession of the ground, and immediately commenced the building of the road from Huntingdon to Durham, with a large number of teams and laborers.

The value of exports from Norfolk, Va., for October, 1882, aggregated $2,191,151, against $2,519,995 for October, 1881, a decrease of $328,844.

Tunica's Safety Railway Tie.

We take pleasure in laying before our readers a few particulars of the patent Safety Railway Tie recently invented and placed on the market by Francis Tunica, Omaha, Neb.

Mr. Tunica's device is simple, and cheaply manufactured, shipped and laid down. The pieces are always of the same dimensions, whether on tangents or curves (standard or narrow gauge), and on bridges. It will last as long as the material, which is prepared for long preservation, and contains no small pieces, such as spikes, bolts, screws, nuts, fish-plates, etc., but the system forms one solid whole, which cannot get out of order. The material for the foundation plate may be either iron, steel, glass, vulcanized fibre, paper or rubber, according to the nature of the ground. Mr. Tunica recommends the tempered glass plate for this use, on solid road-beds or on concrete foundations. On bridges he prefers using a cast-iron plate, dowelled into the stringers. The use of the new tie dispenses with the services of section hands, and prevents the possibility of accidents from displaced rails. These great advantages are its sufficient recommendation. Described more particularly, in Mr. Tunica's system the railway ties are arranged on the ground diagonally to each other, in combination with a rail-chair foundation and foundation plate secured to each other. The foundation plate is placed on the concrete foundation by a projecting pin or the rail-chair keyed in the foundation. Each rail-chair is connected to two others on the other side of the track by two diagonal ties, which ties are secured as described in the last sentence. From the above it appears that the system includes the combination of the rail seated in the chair, the foundation plate provided with dowels, the ties and the concrete foundation, these several parts securely fastened together. For safety, durability, ease of handling and the benefits which will accrue from the use of it, it is believed that Mr. Tunica's system cannot be excelled. To insure nicety of fit, the concrete foundation should be capped with asphaltum laid on hot, the plate with dowels inserted while the asphaltum is in that condition and the ties covered with the usual ballast up to top of plate.

In our judgment the peculiarities of the system are so important that those interested should make inquiries of the patentee for details, manner of laying and repairing, and other information. His address is given in the first paragraph of this article.

IMPORTANT ANNOUNCEMENT TO INVENTORS.

That department of the American Railroad Journal which contains descriptions of new inventions properly coming within its range of subjects, is regarded with great notice and favor, particularly by those directly interested in learning what the latest applications of mechanical ingenuity in railroading are, and by those who have produced inventions which they desire to make as widely known as possible.

The large and widespread circulation of this paper, its prestige as the oldest railroad journal in the world, and the weight attached to its contents by the general consent of leading railroad men in all countries, give such value to its carefully prepared descriptions of new machinery and appliances as cannot be found outside of its columns.

The interest manifested by inventors in supplying us with information of their doings, and the eagerness with which this is received, encourage us to give an increased attention to that department of this paper treating of new inventions.

We therefore repeat our invitation to all persons who have produced what they regard as improvements coming within the range of railroad operations, to communicate with us promptly regarding the same.

All matter sent us will be thoroughly examined and considered, and no inventions in our opinion likely to be practicable and useful will be passed over without receiving due attention from us.

List of Recent Patents for Inventions Relating to Railway Interests.

BEARING DATE OF NOVEMBER 7, 1882.

266,961. Car-Coupling: William R. Bagley, Indianapolis, Ind., assignor of one-half to Chris. H. Harmening, same place. Filed Aug. 3, 1882.

266,964. Street-Car Gong: Charles T. Brown, Chicago, Ill. Filed April 25, 1882.

266,966. Car-Coupling: Edward J. Burns, Dayton, Ohio. Filed July 20, 1882.

266,992. Car-Coupling: Wilbur F. Heath and Max Nirdlinger, Fort Wayne, Ind. Filed Sept. 27, 1882.

267,008. Car-Coupling: George Marsellis, Mechanicsville, N. Y., assignor of one-fourth to John Caleb Green, same place. Filed April 18, 1882.

267,009. Device for Heating Railroad Cars: William Martin, Tidioute, Pa. Filed May 12, 1882.

267,012. Car-Coupling: James D. Norman and Willis A. Benson, Wellford, S. C. Filed March 31, 1882.

267,034. Car-Coupling: Isaac L. Stover, Centralia, Ill. Filed Aug. 28, 1882.

267,050. Car-Axle Box: Arnold W. Zimmerman, Swissvale, Pa. Filed Aug. 16, 1882.

267,062. Electric Distance Register: Edward R. E. Cowell, Detroit, Mich. Filed April 26, 1882.

267,078. Railway Car: Thompson Hersee, Buffalo, N. Y. Filed Sept. 13, 1881.

267,079. Car-Brake: Thompson Hersee, Buffalo, N. Y. Filed Jan. 19, 1882.

267,082. Car-Coupling: John R. Howard, Somerville, Mass. Filed July 11, 1882.

267,096. Car-Coupling: James McCree, Lansing, Mich Filed Aug. 31, 1882.

267,101. Car-Coupling: John B. Nelson, Viola, Tex Filed Sept. 13, 1882.

267,117. Car-Coupling: Theron A. Smith, Arbuckle, Cal. Filed July 31, 1882.

267,142. Car-Coupling: Francis A. Brady, Leavittsburg, Ohio. Filed June 16, 1882.

267,173. Car-Coupling: John Fenimore, Orleans, Ind. Filed July 21, 1882.

267,175. Car-Coupling: Charles Fleming, Ypsilanti, Mich. Filed April 6, 1882.

267,183. Automatic Railway-Switch: Robt. P. Garsed, Norristown, Pa. Filed May 8, 1882.

267,184. Mechanical Movement for Operating Railwa

Signals: Robt. P. Garsed, Norristown, Pa. Filed Mar 3, 1882.

267,185. Car-Starter: Eduard Gerig, Berlin, Germany. Filed Sept. 20, 1882.

267,193. Car-Coupling: Francis Griffin, Greenville, Miss. Filed May 27, 1882.

267,195. Railway Signal: George O. Hanlon, Joseph P. A. Hanlon, and John F. Hanlon, Cambridge, Mass. Filed Sept. 2, 1882.

267,210. Car-Coupling: Irvin M. Jacobs, East Greenville, Pa. Filed Aug, 18, 1882.

267,220. Spark-Arrester and Draft-Producer for Locomotives: John G. Kalbach and Thomas P. Kinsey, Reading, Pa. Filed Feb. 3, 1882.

267,229. Punch for and Method of Canceling Tickets: William L. Langley, Baltimore, Md., assignor of one-half to John Lippincott, same place. Filed March 2, 1882.

267,238. Rail-Sweeping Device for Locomotives: James T. McCoy, McCoy's Station, Ind. Filed April 24, 1882.

267,240. Car-Coupling: John A. Miller, Wadesville, Ind. Filed April 13, 1882.

267,252. Car-Coupling: George W. Putnam, Glens Falls, N. Y. Filed Aug. 24, 1882.

267,259. Electro-Pneumatic Gate and Signal Operating Apparatus: Wm. Robinson, Boston, Mass. Filed Mar. 9, 1882. Patented in England, Aug. 30, 1871. No. 2,280, and in France Feb. 29, 1872, No. 94,393.

267,267. Car-Coupling: David S. Shreve, Correct, Ind. Filed Sept. 19, 1882.

267,272. Car-Coupling: David E. Southwick, Ogdensburg, N. Y. Filed March 14, 1882.

267,293. Car-Coupling: Frank A. Westbrook, Port Jervis, N. Y. Filed Aug. 19, 1882.

267,297. Torpedo Placer: Martin D. Williams, Long Island City, N. Y. Filed April 14, 1882.

267,304. Pile for Channel and I Beams: Henry W. Borntraeger, Pittsburg, Pa., assignor to the Carnegie Bros. & Co., (limited,) same place. Filed June 5, 1882.

267,307. Car-Coupling: Ezra N. Gifford, Cleveland, Ohio, assignor to himself, William H. Gifford, same place, and George W. Taylor and Francis H. Brady, Leavittsburg, Ohio. Filed Sept. 15, 1882.

267,308. Automatic Railroad Switch: Josiah Gray, Chicago, Ill., assignor to himself and Westley Hollenbech, Conrad B. Shefler, and Jacob R. Reed, all of same place. Filed May 24, 1882.

267,312. Car-Coupling: James W. Saxon, Gainesville, Tex. Filed Oct. 5, 1882.

10,232. Railroad Car Telegraph: Joseph R. Finney, Pittsburg, assignor to Thomas B. Kerr, trustee, Allegheny, Pa. Filed Aug. 23, 1882. Original No. 231,552, dated Aug. 24, 1880.

10,233. Oil-Conductor for Car-Axle Boxes: Julius De Long, Allegheny, Pa. Filed Oct. 5, 1882. Original No. 263,490, dated Aug. 29, 1882.

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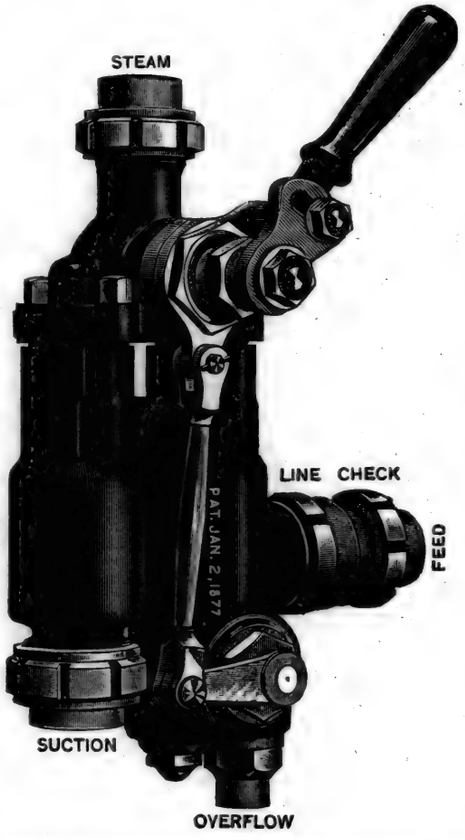
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Statement of the Public Debt of the United States, November 1, 1882.

DEBT BEARING INTEREST.

	Amount Outstanding.	Accrued Interest.
5 per cent fuunded loan of 1881, continued at 3¼ per cent.	$155,356,350 00	$1,359,368 06
3 per cent loan of July 12, 1882.	259,370,500 00	1,945,278 75
4½ per cent funded loan of 1891	250,000,000 00	1,875,000 00
4 per cent funded loan of 1907	738,929,600 00	2,463,098 67
4 per cent refunding certificates	423,750 00	1,412 50
3 per cent navy pension fund	14,000,000 00	140,000 00
Aggregate of debt bear- interest	$1,418,080,200 00	$7,784,157 98
Interest due and unpaid		2,256,053 60

DEBT ON WHICH INTEREST HAS CEASED SINCE MATURITY.

	Amount Outstanding.	Interest due and unpaid.
4 to 6 per cent. old debt, 1837.	$57,665 00	$64,174 81
5 per cent. Mexican indemnity stock, 1846-'52	1,104 91	85 74
6 per cent. bonds, 1847-'67.	1,250 00	22 00
6 per cent. bounty land scrip, 1847-'49	3,275 00	213 06
5 per cent. Texas indemnity stock, 1850-'64	20,000 00	2,945 00
5 per cent. bonds, of 1858-'74	7,000 00	875 00
5 per cent. bonds, of 1860-'71	10,000 00	600 00
6 per cent. 5-20 bonds, 1862, called	365,600 00	7,737 37
6 per cent. 5-20 bonds, June 1864, called	50,400 00	994 40
6 per cent, 5-20 bonds, 1865, called	70,450 00	18,545 25
5 per cent. 10-40 bonds, 1864, called	298,300 00	61,251 44
6 per cent. Consol. bonds, 1865, called	369,600 00	12,198 36
6 per cent. Consol. bonds, 1867, called	836,150 00	110,547 59
6 per cent. Consol. bonds, 1868, called	254,750 00	20,873 84
6 per cent. loan, Feb. 8, 1861, matured Dec. 31, 1880	77,000 00	4,830 00
5 per cent. funded loan 1881, called	782,400 00	5,050 66
Oregon War Debt, March 2, 1861, matured July 1, 1881.	8,000 00	1,570 50
6 per cent loan of July 17 and Aug. 5, 1861, matured June 30, 1881	520,900 00	10,959 00
6 per cent loanof July 17 and Aug. 5, 1861, continued at 3¼ per cent, matured Dec. 24, 1881, called	3,303,550 00	41,694 11
6 per cent. loan of March 3, 1863, matured June 30, 1881.	157,800 00	5,464 50
6 per cent loan of March 3, 1863, continued at 3½ per cent, matured August 1, 1882, called	3,839,700 00	37,980 32
1-10 to 6 per cent. Treasury notes, prior to 1846	82,525 35	2,668 06
1-10 to 6 per cent. Treasury notes, 1846	5,900 00	200 60
6 per ct. Treasury notes, 1847	950 00	57 00
3 to 6 per cent. Treasury notes, 1857	1,700 00	99 00
6 per ct. Treasury notes, 1861.	3,000 00	364 50
7 3-10 per cent. 3 years' Treasury notes, 1861	16,300 00	1,104 43
5 per cent. 1 year notes, 1863.	41,605 00	2,092 35
5 per cent. 2 year notes, 1863.	32,700 00	1,622 30
9 per ct. compound interest notes, 1863-64	218,760 00	44,707 07
7 3-10 per cent. 3 years' Treasury notes, 1864-65	138,650 00	20,393 42
6 per cent. certificates of indebtedness, 1862-63	4,000 00	253 48
4 to 6 per cent. temporary loan, 1864	2,960 00	244 19
3 per cent. certificates, called.	5,000 00	394 31
Aggregate of debt on which Interest has ceased since maturity	$11,588,945 26	$482,813 66

DEBT BEARING NO INTEREST.

Demand notes, 1861-62	$59,380 00	
Legal tender notes, 1862-63	346,681,016 00	
Certificates of Deposit	9,945,000 00	
Gold certificates, 1863 and 1882	26,360,440 00	
Silver certificates, 1878	73,607,710 00	
Unclaimed interest		5,339 96
Fractional currency, 1862, 1863 and 1864 $15,402,119 77		
Less amount estimated as lost or destroyed, act of June, 21, 1879 8,375,934 00	7,026,185 77	
Aggregate of debt bearing no interest	$463,679,731 77	$5,339

RECAPITULATION.

	Amount Outstanding.	Interest.
Debt bearing interest in coin, viz:		
Bonds at 5 per cent, continued at 3¼ per cent.	$155,356,350 00	
Bonds at 4½ per cent.	250,000,000 00	
Bonds at 4 per cent.	738,929,600 00	
Bonds at 3 per cent.	359,370,500 00	
Refunding certificates	423,750 00	
Navy pension fund, 3 p.c	14,000,000 00	
	$1,418,080,200 00	$10,040,211 58
Debt on which interest has ceased since maturity.	11,588,945 26	482,813 66
Debt bearing no int., viz:		
Old demand and legal-tender notes	$346,740,396 00	
Certificates of deposit	9,945,000 00	
Gold & silver certificates.	99,968,150 00	
Fractional currency	7,026,185 77	
	$463,679,731 77	
Unclaimed interest		5,339 96
	$1,893,348,877 03	$10,528,365 20
Total debt, principal and interest to date, including interest due and unpaid	$1,903,877,242 23	

AMOUNT IN TREASURY.

Interest due and unpaid	$2,256,053 60	
Debt on which interest has ceased	11,588,945 26	
Interest thereon	482,813 66	
Gold and silver certificates	99,968,150 00	
U. S. notes held for redemption of certificates of deposit	9,945,000 00	
Cash balance available Nov. 1, 1882	151,145,237 13	
	$275,386,199 65	
Debt, less am't in Treas'y Nov. 1, 1882	$1,628,491,042 58	
Debt, less am't in Treasury Oct. 1, 1882.	1,644,120,223 13	
Decrease of debt during the month	$15,629,180 55	
Decrease of debt since June 30, 1882	$60,423,418 14	

BONDS ISSUED TO THE PACIFIC RAILROAD COMPANIES, INTEREST PAYABLE IN LAWFUL MONEY.

	Amount Outstanding.	Accrued Interest not paid.
Central Pacific bonds, 1862-64	$25,885,120 00	$517,702 40
Kansas Pacific bonds, 1862-64	6,303,000 00	126,060 00
Union Pacific bonds, 1862-64	27,236,512 00	544,730 24
Cent. Branch Union Pacific bonds, 1862-64	1,600,000 00	32,000 00
West'n Pacific Bonds, 1862-64	1,970,560 00	39,411 20
Sioux City & Pacific bonds, 1862-64	1,628,320 00	32,566 50
Totals	$64,623,512 00	$1,292,470 24

Interest paid by the United States, $55,344,682.74; interest repaid by transportation of mails, &c., $15,338,-859.97; interest repaid by cash payments: 5 per cent net earnings, $655,198.87; balance of interest paid by United States, $39,350,623.90.

The foregoing is a correct statement of the public debt, as appears from the books and Treasurer's returns in the Department at the close of business, October 31, 1882.

CHARLES J. FOLGER,
Secretary of the Treasury.

THE Dorchester and Delaware Railroad, extending from Cambridge, Md., to Seaford, Del., twenty-seven miles, is to be sold by auction, in Cambridge, November 27, under a decree of the Circuit Court for Dorchester county. The trustees have fixed the terms—$5,000 cash and balance upon confirmation of the sale.

THE British steamship Castello cleared from Savannah, Ga., Tuesday, for Reral, Russia, with 7,100 bales of cotton, valued at $406,037. This is pronounced the most valuable cargo that ever cleared from Savannah.

INCANDESCENT electric lighting with the Swan system has proved highly satisfactory in the Paris Opera House. The use of gas in the foyer destroyed almost entirely the fine decorations.

THE Swissvale Car Company has just finished a parlor car for the Pittsburgh and Lake Erie Railroad, and is making arrangements to build 400 Zimmerman refrigerator cars.

ADVERTISE in the RAILROAD JOURNAL.

A WONDROUS copper bonanza has been discovered in Nevada, about 100 miles northeast from Bodie, California. The mine is called "Copper King." A well-beaten highway runs along the out-crop, showing copper ore, but being only copper, hundreds of prospectors for silver have passed over it, saying, "Some day there will be a big copper mine here." Nearly 2,000 feet up the mountain above Soda Springs Valley the ore body shows a width of 100 feet, and in numerous shafts the ore assays eighteen per cent of copper. Surveyors estimate the body of ore now uncovered at 45,000 tons, and value it at over two million dollars. They pronounce it the biggest and the richest copper mine in the world! Two 35-ton furnaces are being constructed, and a very short branch gives outlet to a railway leading to the Central Pacific Road via the western shore of Walker Lake.

AT the nineteenth annual meeting of the Brotherhood of Locomotive Engineers, recently held at Louisville, Ky., delegates were present from all parts of the United States and Territories, Canada and Mexico. There are now 195 divisions of the order in active operation, and the Brotherhood is stronger and more firmly knit together than ever before. The order has paid to the widows and orphans of deceased brothers in the past nineteen years nearly $2,000,000. The proceedings were harmonious and interesting, much business of importance to the order having been transacted. A new badge for delegates was adopted, consisting of an oval ring about one inch and three-quarters by one and a quarter, with a figure of a locomotive superimposed. The badges for officers are made in solid gold, the others in coin silver. It was voted to hold the next meeting in Buffalo, N. Y.

THE Earl of Aberdeen, along with his uncle, Sir Alexander Gordon, M.P., recently witnessed the operation of laying down the pipes and tanks at the entrance of Aberdeen harbor, for the purpose of testing the efficacy of the practice of pouring oil on the water to calm it in stormy weather, and thus facilitate the entrance of vessels. The bar at Aberdeen is exceedingly dangerous in rough weather, and the sandy bottom of the channel is peculiarly fitted for putting to the test the utility of the plan proposed by Mr. Shields. The Aberdeen Harbor Commissioners have been the first to avail themselves of this new plan. It will be some time before all the pipes are laid and arrangements completed, but the work is being carefully done, and Mr. Shields is confident of success. The material used is common fish oil, which is obtained at a very cheap rate.

THE Pennsylvania Railroad Company's transfer steamer Maryland, after a continuous service for twenty years, has been taken to the Harlan & Hollingsworth Company's yards, where she will be overhauled and repaired.

THE shipments of coal from the Cape Breton mines during the quarter ended September 30, aggregated 290,000 tons—an increase of 50,000 over the shipments of the same period last year.

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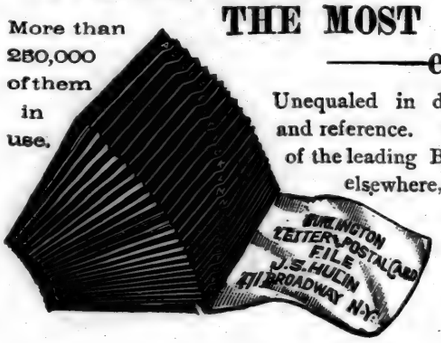
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EDITOR AMERICAN RAILROAD JOURNAL:

I beg leave to trouble you with the following: Were there any trains run between Washington and Philadelphia in 1876 at as fast a speed as sixty miles an hour?

If so, were these trains regular or special, passenger or only trains run for a trial?

There is a dispute about this between a friend of mine and myself. You would greatly oblige the undersigned if you would kindly give me information in regard to this matter.

Respectfully,

Milwaukee, Wis., Nov. 3, 1882. * * *

EDITOR AMERICAN RAILROAD JOURNAL:

It long since occurred to me, that if all railroad employés were strictly temperate men, the loss of life and property would be greatly diminished.

Having had a good opportunity to study the nature and inclinations of railroad men as a class, I find that many of them, upon whom devolves the care of life and property, are hard drinkers; and if questioned as to why they drink, knowing of the responsibility that rests upon them, we invariably get the answer, "Constant danger and loss of sleep call for stimulants," or something to that effect. I would say to all railroad officials and employés, that this is a sad mistake, in *my* estimation; and here are my reasons. I believe the constant use of beer will produce a species of degeneration of all the organs of the system. Fatty deposits, diminished circulation, conditions of congestion, and perversion of functional activities, are constantly present. Intellectually, it produces a stupor amounting almost to paralysis, arrests the reason, precipitating all the higher faculties into a mere animalism. What railroad official would like to risk his life on board a train with a half-dead engineer in charge of the engine? Yet such men are employed by the best roads in our country, and to all external appearances, to the uneducated and unskilled eye, they are men of extraordinary health and appearance. But if we observe the beer-drinker for awhile, we will eventually find that he is most incapable of resisting disease and generally finds an early grave.

I believe that every railroad official who employs drinking men upon his road, should be held responsible for all loss of life and property caused by their negligence. My reasons for making this assertion I have given above, and I think railway men would do well, both financially and morally, to adopt the rule, "employ no man if he drinks."

In looking over the long list of wrecks and collisions on one of the main lines of this country, I find many of the causes due to neglected orders, and fast running etc. And the probabilities are that if the character of the train-men was investigated, they would be found to be drinking men; hence the negligence of orders. I, for one, would hail the coming of the time when intemperance would be banished from railway circles.

J. R. WELCH, M. D.,

Spencerville, Ohio, Nov. 8, 1882.

Stopping a Bray.

MR. PAUL, a few days ago, read in some sinful newspaper that a donkey couldn't bray without raising its tail, and accordingly a bright idea struck him. He penned his famous jackass up in a corner of the stable, and climbing up in a trough, above the dead line of the animal's heels, attached a brick with three feet of clothes-line to his (the jack's) tail. Then he opened the door, smiled audibly, and waited developments. The animal walked into the lot and backed his ears for a yell, but it was no go. His tail only raised the brick high enough to hit him on the shanks. Then he whirled around and the brick struck him in the side. Then he flung up his heels and tried to stand on his head, but that fragment of a country chimney lit on the small of his back and drove him to frenzy. He climbed over the gate and dashed through the field in the direction of Augusta, closely followed by Mr. Paul's experiment. When found he was inside of Joel Neal's lot, with the brick lodged in a crack of the fence and his backbone pulled out till his ears had disappeared under his skin. Mr. Paul says that this kind of treatment may prevent the coarsest of the noise escaping, but it will demoralize the best jackass on earth.—*McDuffie (Ga.) Journal.*

As a result of costly experience the Austrian Government has decided that henceforth theatrical building must be detached. Between the auditorium and the stage there must be a wall at least 20 feet high and 18 inches thick placed above the roof for ready use in isolating the stage from the rest of the house in case of fire. The stage must be of sufficient height for the curtain to be raised without being rolled. No one is to be allowed to live in the theater, and the stage carpenter's shops, the stage appliances and the refeshment bars are to be outside the building. The dresses of the actors must be dipped in a preparation to render them fireproof, and no explosive matter is to be left in the theatre. Abundant means are to be provided for the exit of an audience.

A SOCIETY has been organized at the city of Mexico for the encourgement of the mining interests of the Republic. Among its promoters are Porfirio Diaz, Pacheco, Riva, Palario Diez Gutterrez, Camancho Miery Celis, Mariano Barcena and many of the most enterprising and wealthy men in the country. General Pacheco, Minister of Public Works, is President of the society.

AN exploratory survey is soon to be made of the region lying between Lake Superior and Hudson Bay, with a view to the construction of a railway from the Bay to Ottawa, via the Desert River.

THE recent reports of the discovery and development of gold and silver mines at various points in Central America continue to excite attention. A late issue of the Panama *Star and Herald* gives particulars of progress made in gold mining in Antioquia and Tolima. Some valuable mines owned by the Colombian Government are to be sold in December, and other mines are being worked successfully by companies formed in this country and in Europe. Recently a number of companies have been formed for the purpose of prospecting, and indications grow that a swarm of gold-hunters will soon be roving over the rocky backbone of the mountains that run along the narrow strip of territory uniting North and South America. These countries have long lain stagnant under the sway of the mixed peoples that sprang up after the Spanish conquests, but now money, machinery and enterprise will pour in upon them as long as mining enterprises prove remunerative.

A PARTY of gentlemen recently made a trip on the Southeastern Railway, in England, with the object of testing the luminosity of a railway car, a portion of the interior of which had been coated with Balmain's patent paint. The weather being dull, the zinc plates, which had received three coats of the paint specially hardened, were less sensitive than would have been the case had sunshine struck directly upon them; but, notwithstanding, on entering Blackheath tunnel an agreeable, equally diffused light proceeded from the ceiling of the compartment and the two ends, the advertisements on which were seen clearly. The hands of a watch were also easily discerned and the headings of newspaper articles read. Containing no phosphorus, the paint was without smell.

WE learn from Washington that arrangements are nearly completed at Baltimore, Boston and Portland, Me., for providing shelter and other accommodations for imported cattle, under an appropriation of $50,000 made at the last session of Congress. Hitherto the United States has compelled importers to quarantine cattle at their own expense. The Canadian Government provides full accommodations in Quebec and Montreal; cattle, therefore, which otherwise would have come into United States ports, have gone over to Canada. It is expected, when the proposed quarantine arrangements are completed, importers will bring cattle directly to the United States. Negotiations are pending for stations in New York and Philadelphia.

THE tamarack swamp on the New York, Pennslyvania and Ohio Railroad has been filled, and trains are running regularly over it. The bank is 16 feet wide and 100 feet deep, and required 100,000 yards of cinder. It is apparently permanent, and but little trouble is experienced from settling.

AN order for two more mogul engines for the Cleveland, Akron and Columbus Railway, has been placed with the Baldwin Locomotive Works, Philadelphia.

AMERICAN Railroad Journal.

ESTABLISHED 1831.

Steam Navigation, Commerce, Finance, Banking, Machinery, Mining, Manufactures.

SECOND QUARTO SERIES.—VOL. XXXVIII., No. 45.] NEW YORK, NOVEMBER 18, 1882. [WHOLE No. 2,429.—VOL. LV.

THE editor of the RAILROAD JOURNAL is pleased to receive information of railroad enterprises already entered upon or projected, items regarding the business done on the roads, such as relate to persons employed in the railroad and kindred interests; in short, about all matters which the readers of such a paper as this are gratified to find within its columns.

CONSTRUCTION.

THE Essex Center cut-off track-layers were within four miles of Windsor on the 13th inst.

THE Columbus, Hocking Valley and Toledo Railroad has just added two miles to its Snow Fork branch, completing it to Murray City.

THE Denver and Rio Grande Railway is said to have 2,000 men employed on the extension from Salt Lake to Ogden, and it is hoped to have the line completed by January 1.

THE Georgia Pacific Railway has been extended to Tallapoosa, near the Alabama line, ninety-three and a half miles from Atlanta, and trains will run through hereafter to that point.

A RAILROAD is to be built from Roanoke, Va., to the iron mines and other mineral deposits on the lands recently purchased by Mr. Samuel Colt, of Hartford, Conn. The road will be ten miles in length.

THE Pittsburgh and Western Railroad Company has made connection with the Pittsburgh and Lake Erie Railroad at New Castle. On December 1 a passenger train is to be run from Allegheny to Butler.

WORK on the International Railway is now progressing in Maine. It is proposed to connect with Bangor via the Katahdin Iron Works Railway, the Bangor and Piscataquis and the Euproean and North American Railway.

THE California Southern Railroad is now completed to Colton, a small station on the Southern Pacific Railroad, 127¼ miles from National City. The board have recently decided to extend the road to San Bernardino, about five miles north from Colton.

THE Ohio Central Railroad, which will connect with the Baltimore and Ohio Railroad near Fostoria, Ohio, is finished from Corning to Point Pleasant, Ohio, and opened to travel from Corning to Albany, a distance of thirty-five miles. It is expected that the road will connect with the Marietta and Cincinnati Railroad.

THREE new and important railroad lines have recently been established in the West, viz: a ine from St. poa-Louis to St. Paul and Minne lis composed of the St. Louis, Keokuk and Northwestern, the Burlington, Cedar Rapids and Northern and the St. Louis and Minneapolis; the new line of the Chicago, Milwaukee and St. Paul, from Chicago to Omaha; and third, the new line of the Chicago, St. Paul, Minneapolis and Omaha to Superior City. This latter new line, 166 miles long, from St. Paul to Superior City, makes a direct short line from Sioux City to Superior.

PERSONAL.

GEN. GEORGE STONEMAN, Governor elect of California, has filed with Gov. Perkins his resignation as Railroad Commissioner.

SAMUEL M. SHOEMAKER, resident manager of the Adams Express Company in Baltimore, has been elected vice-president of the company.

JAMES A. EADS of Paris, Ill., has been appointed receiver of the Danville, Olney and Ohio River Railroad Company, by the United States Circuit Court.

JOHN S. WILSON, general freight agent of the Pennsylvana, and the Philadelphia, Wilmington and Baltimore railroads, has been appointed general freight agent of the Northern Central Railway, vice A. W. Nutt, resigned.

GEN. J. H. DEVEREUX and Judge Stevenson Burke were elected directors of the New York, Chicago and St. Louis Railroad Company on the 14th inst., in place of Walston H. Brown and Wm. Fleming resigned. The road now uses the same terminal facilities at Buffalo and Chicago as the Lake Shore and Michigan Southern Railway.

SEPTIMUS C. FLEETWOOD, of Mount Vernon, has been appointed acting auditor of the New York, New Haven and Hartford Railroad Company, in the place of Edward E. Robinson, deceased. Ma. Fleetwood has been in the employ of the company for twelve years, and for the last ten years has held the position of assistant auditor.

AT a meeting of the directors of the Lake Erie and Western Railway Company on the 13th inst., the following officers were re-elected: President, C. R. Cummings, Chicago; first vice-president, J. H. Cheney, Bloomington; second vice-president, E. H. R. Lyman, New York; secretary and treasurer, B. G. Mitchell, New York; general manager, E. H. Waldron, Lafayette, Ind.; and counsel, C. S. Brice, New York.

INCORPORATION.

THE Gettysburg and Emmitsburg Railroad has been chartered, with a capital stock of $60,000, to build a road from the terminus of the Round Top Railroad, at Round Top, Adams county, to a point on the Pennsylvania and Maryland State line, a distance of six miles.

THE Dominion Transfer Company, composed of M. H. Cochrane of Compton, Henry Judah, John Bassels, and Wm. B. Smith of Montreal, and Robt. Heighen of Perth, has been incorporated for the purpose of the transport on land by means of vehicles drawn by horses, of goods, ware and merchandise in and about the cities of Montreal, Ottawa, Quebec, Toronto, Winnipeg and other places in the Dominion. The capital stock is $50,000.

THE Erie and Wyoming Valley Railroad Company was chartered at Harrisburg, Penn., on the 9th inst. The road will be 68 miles in length, extending from Port Griffith, in Luzerne county, to Lackawaxen, in Pike county, through Luzerne, Lackawaxen, Wayne and Pike counties. The capital stock is $3,000,000, and the officers are: President, Edward W. Clymer, Reading; directors, Samuel Hines, W. A. Way, Charles E. Bradbury, E. W. Ives, Scranton; E. P. Darling, J. N. Darling, Wilkesbarre.

A COMPANY has been organized by T. C. Eastman, of New York; W. H. Monroe, of Albany; W. H. Vanderbilt, and H. & W. Arnold, of Chicago, Ills., with a reported capital of $1,000,000 to oppose the Chicago dressed beef enterprise of Hammond & Co., and Swift & Co., of Chicago. They will open depots in every city where the other firms have agencies now, and will sell the beef brought from Chicago in the American Refrigerator Company's cars at a price which will just cover expenses. This is regarded as a move to crowd out the dressed beef trade in the interests of the live-stock business of the East.

THE State Department at Harrisburg, Penn., chartered on the 9th inst. the Pittsburgh and White Hall Railroad Company, the line of which will extend from White Hall tavern, Baldwin township, Allegheny county, to Third and Bingham streets, Pittsburgh, seven miles. The capital is $300,000, and the officers are: President, Oliver D. Phillips, Allegheny City; directors, R. B. Brown, C. L. Magee, Clifton W. Phillips, Oliver F. Wharton, Walter Chess, George T. Oliver, James A. Chambers and A.

M. Byers, of Pittsburgh. This line occupies the route of Keeling's coal road on Twenty-first street, and will probably follow his tunnel through Coal Hill, the ultimate object being the opening of the coal fields in that neighborhood.

A CERTIFICATE of incorporation of the Toledo and Michigan Railway Company, with a capital of $5,000,000, was filed with the Secretary of State of Ohio on the 9th inst. This is an extension northerly of the Ohio Central Railroad into the lumber districts of Michigan, so that the coal cars will have something to haul on their return trips from the Northwest. This Company has recently completed its extension from Corning to the Ohio River and Charleston, and will soon be open for business from the Northwest to the seaboard, being a trunk line between the East and Northwest. The incorporators are James E. Neal, John E. Martin, W. H. Andrews, G. G. Hadley and Alex. W. Scott. The new line will be open for business early in the spring.

AMONG the organizations incorporated at Albany on the 10th inst. was "The Order of Lafayette, of the United States of America," with its principal office in New York City. The objects of the order are to foster and stimulate love of country and respect for the republican form of government; to encourage devotion to the public service; to reward military prowess and civic virtue; to recognize the services of veterans of the wars of the nation, and of civilians who were, or shall be prominent, unselfish and generous in sustaining the nation; to relieve distress among soldiers and sailors who have or may serve under the American flag, and their widows and orphans, and to collect and preserve military and other trophies and relics and general historical information.

ORGANIZATION.

THE directors of the Philadelphia, Germantown and Norristown Railroad Co., recently elected for three years, are: Lewis Elkin, John A. Brown, Jr., Richard Dale and J. W. Johnson, Jr.

THE directors of the Market Street Passenger Railway Co. of Philadelphia, recently elected, are: P. A. B. Widener, William H. Kemble, William L. Elkins, Henry C. Howell, William R. Leeds, John L. Hill, Joseph E. Gillingham, M. S. Quay and Hamilton Disston.

AT a meeting of the stockholders of the International Railway Company, of Maine, held at Bangor on the 9th inst., the following directors were chosen: J. H. Pope, Ottawa, Ontario; W. B. Ives and D. E. McFie, Sherbrook, Quebec; Noah Woods, E. R. Burpee and F. A. Wilson, Bangor.

THE directors of the Lombard and South Streets Passenger Railway Co., Philadelphia, for the ensuing year, are: W. Rotch Wister, Edward Samuel, Howard A. Stevenson, R. N. Carson, W. H. Shelmerdine. The board elected John B. Parsons president, and Francis Hazlehurst, secretary.

THE directors of the Third Avenue (N. Y.) Railroad Co., elected on the 8th inst., are: Henry Hart, William Remsen, Lewis Lyon, Thurlow Weed, Robert George Remsen, Henry Morrison, John M. Samler, Samuel Willets, Maltby G. Lane, Daniel S. McElroy, William M. Pritchard, Samuel Hall and Silvanus S. Riker.

THE directors of the Lynn and Boston Railroad Company, elected on the 8th inst., are: Amos F. Breed, Asa A. Breed, Philip A. Chase, of Lynn, Isaac Stebbins, William R. Pearman, of Chelsea, William Sprague, John Reed, Thos. T. Proctor, E. Francis Oliver of Boston, George W. W. Dane of Andover. Amos F. Breed was elected president, and E. Francis Oliver treasurer and clerk.

AT a general meeting of the stockholders of the Dominion Bridge Company, held in Montreal on the 9th inst., the following directors were elected: Angus Thom, of Montreal; Luke Lyman, of Northampton, Mass.; Philip Johnson, of Toronto, Ont.; Ira Abbott, of Montreal, and Job Abbott, of Montreal. Mr. Job Abbott was elected president and chief engineer; Mr. Ira Abbott, vice-president; and Mr. A. Thom, secretary.

THE directors of the Metropolitan Elevated Railroad Company, elected on the 8th inst., are: Joseph S. Stout, Jacob Berry, Elijah Smith, Thomas T. Buckley, Rufus H. Gilbert, Sidney Shepard, Joseph N. Burnham, Morillo H. Gillett, Charles Duggin, Sylvester H. Kneeland, and Benjamin W. Gillett. Sylvester H. Kneeland was elected president, and Morillo H. Gillett, vice-president. John E. Body continues as secretary and treasurer.

THE directors of the Manhattan Elevated Railroad Company, elected on the 8th inst., are: Jay Gould, Cyrus W. Field, Russell Sage, R. M. Galloway, Edward M. Field, George J. Gould, Sidney Dillon, Samuel Sloan, José F. Navarro, W. E. Connor, George S. Scott, John H. Hall and H. F. Dimock. The officers are: President, Jay Gould; vice-president, R. M. Galloway; treasurer and secretary, D. W. McWilliams; general manager, F. K. Hain.

THE Burlington and Northeastern Railroad Company was organized at Burlington, Vt., on the 9th inst., with C. M. Spaulding as president; George L. Linsley, clerk and treasurer; F. M. Van Sicklen, C. M. Spaulding, Orange Buck, Henry Smilie, A. C. Spaulding, directors. The company is authorized by its charter to build a railroad from the terminus at Burlington and Lamoille to Troy and Newport. Work on the first ten miles has already begun.

AN electrical signal apparatus on a French Railway causes the blowing of a steam whistle upon a locomotive approaching a danger signal. The engineer is thus warned. This apparatus is found valuable in fogs and snow storms, when ordinary signals often escape notice.

THE Litchfield Car and Machine Company has begun the erection of an addition to their machine shops of 30 by 60 feet, to be used for storage purposes and a setting-up shop. The present setting-up shop will be occupied by new machinery.

ADVERTISE in the RAILROAD JOURNAL.

BY acts of the Legislature of New York and Connecticut the waters of Long Island Sound are divided between the two States for the purpose of determining fishing rights and possible questions of jurisdiction. Judge Nelson, of the United States Court, in a suit brought against the Providence Steamboat Company by a survivor of the Narraganset steamer disaster, has rendered a decision which, if sustained, will invalidate that part of the boundary agreement entered into by the two States relating to the division of the Sound. The Judge decides that Long Island Sound is a part of the Atlantic Ocean, and that its navigation is not governed by the provisions of the act regulating inland waters. Should this decision stand neither New York nor Connecticut could exercise proprietary right in the Sound fisheries.

Old Colony Railroad.

THE income of the Old Colony Railroad Company for the years ending September 30, 1881 and 1882, was as follows:

	1881.	1882.
From passengers	$1,913,925 90	$2,107,749 68
From freight	1,669,395 13	1,774,643 87
From expresses	98,215 07	113,886 61
From rents	35,488 83	38,066 63
From mails	37,405 40	40,023 69
From extra baggage	3,345 80	3,723 90
From miscellaneous	48,671 93	48,176 01
	$3,746,448 06	$4,126,258 39
Expenditures:		
Passenger department	$367,017 31	$436,801 96
Merchandise department	481,040 19	540,827 52
Locomotive department	628,098 31	663,437 54
Maintenance of way	563,626 17	626,707 79
General expense	226,651 31	272,301 95
Miscellaneous expense	125,014 37	139,995 32
	$2,391,447 66	$2,680,072 08
Net earnings	$1,355,000 40	$1,446,186 31
From which deduct—		
City and town taxes	$23,829 33	$33,820 37
State tax	84,324 52	106,917 37
Interest on bonds, debt, etc.	309,166 75	267,709 05
Rent paid for use of other roads	403,190 23	446,407 95
Deficit on Union Freight Railroad	627 72	201 88
Fall River Railroad lease account	.....	3,180 00
	$821,138 55	$858,236 62
Net income	$533,861 85	$587,949 69
Out of which there were paid:		
Dividend January 1, 1882	$226,014 00	
Dividend July 1, 1882	263,683 00	
Credited improvement acc't	95,000 00	
		584,697 00
Surplus for the year		$3,252 69
Add surplus September 30, 1881		759,262 98
Total surplus September 30, 1882		$762,515 67

In this surplus account is contained the earnings of the company since June 1, 1882, which will form part of the dividend on January 1, 1883, and the taxes payable in November.

Compared with the previous year, the gross earnings of 1882 show an increase of $379,810.33, the operating expenses an increase of $288,624.42, the rental an increase of $46,397.72, and the taxes an increase of $32,583.89, with a decrease in interest of $41,457.70, making the increase in net income $54,087.84.

The increase of business made it imperative to largely increase the equipment, and extensive purchases of cars and locomotives were made during the year in addition to what could be built in the shops. Six powerful locomotives have thus been supplied, 3 of which replaced old ones, making a net increase of 3. Twenty old passenger cars were disposed of

and replaced by 22 new cars of modern style and large capacity. Eighty box-freight and 200 coal cars have also been added. The amount expended for new equipment, after deducting all sums received for the old, has been $273,659.75, the whole of which has been charged to the expense and improvement accounts; so that while the equipment account on the books has not been increased, the value of the locomotives and cars is greater than at the commencement of the year. A further increase will be necessary during the current year, but the cost will not probably exceed one-half of that expended the past year. The report says:

Four thousand tons of steel rails and 256,162 sleepers have been used in the tracks which have been improved during the year. Out of 468½ miles operated by the company, about 300 miles are laid with steel. Advantage has been taken of the present low price of steel rails to contract for 5,000 tons for the ensuing year.

New stations have been built at Central Avenue, Bridgewater Iron Works, Pratt's Junction, West Leomister and South Fitchburg, and extensive repairs made on passenger stations at Boston and Taunton, and the work begun last year at South Abington has been completed. Land has been purchased at Taunton for a freight yard which has been partly filled and prepared for use, with about ninety-six hundred feet of side tracks, and an expensive grading done at Framingham upon lands leased from the Boston, Clinton, Fitchburg and New Bedford Railroad Company, to be used for freight purposes.

The second track between Somerset Junction and the tunnel at Fall River has been nearly completed, with the exception of some land damages to be paid; a second track on the main line has been extended from Braintree to Randolph, and from Attleborough Junction to Taunton. The cost of all these improvements has been charged to expenses, or to the improvement account reserved in previous years for such purposes.

We have now about twenty-three miles of double track out of fifty miles between Boston and Fall River, and the directors contemplate the necessity within a few years of completing the double track for the whole distance. It can probably be done out of income without interfering with reasonable dividends. The increase of business to the Cape district may also make necessary the extension of the double track to Marlborough, about twenty-four miles, and some grading has already been done for this purpose.

Under authority of the Legislature of 1882 a connecting track has been constructed between the main line and the South Shore branch in Braintree, and a new railroad has been built under the General Railroad law from the main line in Raynham to the terminus of the Whittenton branch in Taunton. This last road is intended to be a part of the main line between Boston and Taunton, New Bedford and Fall River, passing through the Wales Street Station in Taunton. It has been thoroughly built, with a double track of steel rails, and no crossings of highways at grade except near stations. There are still some land damages to be paid and station buildings to be constructed near the Whittenton Mills.

Under a contract with the city of Boston, the work of raising the railroad over D street has been commenced. Its probable cost will be $35,000; of this sum, $28,460.15 has been charged off this year.

During the year, a lease for ninety-nine years has been taken of the Fall River Railroad between Fall River and New Bedford, under the provisions of chapter 62 of the Acts of 1882. The Boston, Clinton, Fitchburg and New Bedford Railroad Company has exercised its option to share in this lease. The rental is to be thirty per cent of the gross earnings. Nearly all the stock and a major part of the bonds of the Fall River Railroad Company are held by or in the interest of this company.

The business of the Fall River Line to New York has been prosperous during the year, and a dividend of eight per cent on the shares of the Steamboat Company owned by this corporation has been received. The new steamship Pilgrim is nearly completed, and will be placed on the line next year. A new freight steamboat has also been built, and will be ready for business by January 1, 1883. It now seems that the investment of this company in the stock of the Steamboat Company will prove satisfactory.

The land on Fourth street in Boston has been paid for, and a very important contract has been made with the South Boston Iron Company, which is the owner of nearly all the land available for railroad purposes between Fourth street in Boston and Fort Point Channel. About 40,000 feet of land most necessary for use has been purchased and conveyed to the company, and the option has been secured for the purchase of all the remaining land of the South Boston Iron Company upon advantageous terms. If the increase of business should make it necessary, the company can become the owners, at a fair price, of about four acres of land in the immediate vicinity of the railroad, and well situated for its business.

Notes having more than one year to run have been issued during the year to nearly the extent authorized last year, and it may be necessary during the coming year, for the convenient transaction of the business of the company, to issue such notes; and the directors ask for authority to issue notes or bonds to an amount not exceeding five hundred thousand dollars. The attention of stockholders is called to the fact that the balance of interest paid has been reduced the past year by the sum of $41,457.70.

Of all the expenditures made in the past year nothing has been charged to construction except for the purchase of land and for the cost of the railroad from Raynham to Taunton, including freight yard at Taunton. These charges amount to $287,364.60. The construction account has been reduced by the sum of $5,427.39 received from the Boston, Clinton, Fitchburg and New Bedford Railroad Company for its proportion of the cost of the Whittenton branch. Many of the expenditures made have increased the value of the property. The business of the company has been prosperous, but, with the uncertainty of the future, the directors have considered it the wisest policy to pay out of the income, so far as possible, for all improvements made. If the present business continues this can do no harm. If, as is not improbable, there shall be a diminution in the amount of the business, it will be easier to pay dividends and interest upon the present stock and debt than upon an increased amount of capital. The dividend was increased in July to three and one-half per cent, which can probably be maintained in future at the same rate, unless unforseen accidents prevent. A considerable sum has been expended in the year upon the improvement of the property, and if necessity should require the expenses can be reduced in future years without impairing it. The directors have followed the course adopted in previous years in crediting to improvement account $95,000 from the surplus income remaining after payment of dividends. There now remains to the credit of this account the sum of $85,719.27.

The equipment of the road, including that received from the leased lines, is as follows: 65 passenger, 35 freight and 13 switching locomotives; 225 passenger, 43 baggage, 902 box, 6 caboose, 644 platform, 40 cattle, 72 stone, and 1,192 coal and gravel cars.

Number of miles run by passenger trains, 1,493,221; by freight trains, 887,849; by gravel and other trains, 460,837—total, 2,841,907, against 2,654,840 in 1881, an increase of 187,067.

Number of passengers carried, 6,593,471; do. carried one mile, 100,460,413—an increase in passengers carried of 669,441, and in the number carried one mile of 11,272,830.

Number of tons of merchandise carried, 1,552,616; do. carried one mile, 58,349,479—an increase in tons carried of 110,998, and in the number of tons carried one mile of 4,555,078.

BALANCE SHEET, Sept. 30,

	1881.	1882.
Construction	$10,794,338 62	$11,076,275 83
Equipment	1,191,319 08	1,191,319 08
Old Colony Steamboat Co. (stock account)	725,500 00	725,500 00
Fall River, Warren and Providence R. R. Co. (bond and stock acc't)	348,655 43	348,655 43
Nantucket and Cape Cod Steamboat Co. (stock account)	15,340 83	15,340 83
Dorchester and Milton Branch	36,937 88	36,937 88
Union Freight R. R. Co. (stock account)	79,014 42	79,014 42
Union Freight R. R. Co. (property account)	22,463 75	22,463 75
Land acc'nt, Boston, Clinton, Fitchburg and New Bedford Division	1,153 52	16,511 52
Real estate	286,987 53	286,987 53
Cash	154,551 38	161,730 21
Materials on hand	387,260 95	390,443 37
Due from agents	172,537 23	148,613 40
Bills receivable	214,939 50	400,938 31
Debit balances	87,398 84	82,479 64
Total	$14,518,398 96	$14,983,211 20
Capital stock	$7,533,800 80	$7,533,800 00
Bonded debt	5,324,000 00	5,324,000 00
Bills payable	208,057 95	738,055 95
Accounts payable	230,740 30	271,919 52
Dividends unpaid	14,876 41	21,871 41
Coupons unpaid	12,530 00	12,215 00
Due connecting lines	149,228 26	111,399 26
Credit balances	126,035 62	121,715 12
Improvement account	159,867 44	85,719 27
Surplus	759,262 98	762,515 67
Total, as above	$14,518,398 96	$14,983,211 20

President.—CHARLES F. CHOATE.

Directors.—Charles F. Choate, Frederic L. Ames, Thomas J. Borden, John S. Brayton, Samuel C. Cobb, Uriel Crocker, Samuel L. Crocker, Francis B. Hayes, George Marston, William J. Rotch, John J. Russell, Royal W. Turner, Elisha W. Willard.

Treasurer.—JOHN M. WASHBURN.

SECTION 2 of "Knight's New American Mechanical Dictionary," from the publishing house of Houghton, Mifflin & Co., Boston, just out, begins in the letter "C" and ends in "H." The work, concerning which an extended notice has appeared in these columns, contains a description of tools, instruments, machines, processes, and engineering, with indexical references to technical journals (1876–1880). It is illustrated with more than three thousand engravings. The author, Edward H. Knight, A.M. LL.D., is Chevalier de la Légion D'Honneur, was Commissioner of the United States at the Paris Exposition of 1878, a member of the International Juries, Philadelphia, 1876, Paris, 1878, and Atlanta, 1881; he is a member of the Société d'Encouragement pour La'Industrie Nationale, Paris, of the Société d'Histoire et d'Archélojie, Beaune, and was formerly examiner and is now in charge of the classification and publications of the United States Patent Office. The "New Mechanical Dictionary" is worthy of both him and its publishers, and is invaluable, not to say indispensable, to those who have occasion to use such a work. Its illustrations and letter-press, produced at the Riverside Press, Cambridge, are handsome and carefully prepared. We unreservedly commend this work of reference to all who need a trustworthy and convenient mechanical dictionary.

AMERICAN Railroad Journal.

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WE invite railroad officers to send us notice of elections, transfers, appointments, resignations, etc.; and all our readers would oblige us by furnishing for our columns any items of personal information, which may come to their knowledge, and are adapted to this department. We aim to record all new railway enterprises in the United States and Canada, and to note the progress of construction on all new roads and extensions; and we request all concerned in railway building to give us early information regarding the above, that our reports may be as complete as possible.

Subscribers are requested to report to our office any irregularity in receiving the JOURNAL.

Contributed articles relating to Railroad matters generally, Mining interests, Banking and Financial items, Agricultural development, and Manufacturing news, by those who are familiar with these subjects, are especially desired.

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New York, Saturday, November 18, 1882.

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OURSELVES.

THIS copy of the AMERICAN RAILROAD JOURNAL represents an issue the contents of which are average as to both their comprehensiveness and quality. We respectfully request that the person into whose hands this may fall, and who is not already a subscriber to the paper, examine it with attention. He will find in it, we are quite sure, the latest information on railroads and related subjects, presented in a compact, well-arranged, ably-written and very presentable form, the product of great labor and enterprise, valuable in a particular manner to persons directly interested in the subjects represented, and instructive to every reader seeking additions to his fund of knowledge on live subjects. This is a practical journal, and, as a matter of course, makes no pretensions to great superiority in its literary contents, and has no ambition to gratify by its appearance the artistic weaknesses of esthetic people. But appearance and style are by no means neglected on this account. On the contrary, such attention is given these particulars as evidence proper respect for an intelligent and refined public, and make the paper welcome for its agreeable qualities. There is no vanity in saying that the AMERICAN RAILROAD JOURNAL is the oldest and certainly one of the best papers published, dealing with its class of subjects. Its books numerously contain the names of prominent men who have subscribed for it many years, and a glance at its advertising columns convinces of the value set upon its announcements by business houses of high standing. Special endeavors have been made of late to improve the paper, and the steady gain in the number of its subscribers and advertisers, together with the liberal expansion of the correspondence addressed to this office by inventors, manufacturers, railroad and professional men and others, are expressions of appreciation which the publishers and editors most cordially acknowledge. The still further enlargement of its subscription list and advertising patronage would correspondingly increase the copiousness, value and interest of its reading matter. Railroad men now serving in a humble capacity, but who aspire to a prominent and honorable position in the business, find in the AMERICAN RAILROAD JOURNAL an invaluable aid to progress, seeing that nothing is wanting in its columns to a comprehensive contemporary view of the great interest with which they are identified; and youths and young men of promise employed on railroads and elsewhere, would be encouraged and stimulated in their work by the circulation of this journal among them. Of inestimable value through a half century, the AMERICAN RAILROAD JOURNAL will continue to be made, by the best efforts of all concerned in its production, one of the most trustworthy and useful periodicals of its kind published either in Europe or America.

REFRIGERATOR MEAT TRANSPORTATION.

A REVOLUTION is impending in the flesh meat traffic. It is a distinctive trait of the Anglo-Saxon branches of the human family that they consume large quantities of flesh as food; that of the ox, sheep and pig being the more staple varieties. Whether the pluck and perseverance of this race is to be attributed to this exceptional diet or not is a question for discussion. The mass of the peasantry of Europe, from the Mediterranean to the Arctic Sea, consume very little animal food; the grains, esculent vegetables and fruits being sufficient to sustain them in health and labor during a long lifetime. The mass of the population in Turkey, Prussia, Hindoostan, China and Japan live even more exclusively upon the vegetable products of the soil. It is evident, therefore, that a meat diet is not especially necessary to the preservation of life, nor to the development of physical energy.

Those who have traveled along the Mediterranean coast, or who have witnessed the feats of labor performed by the Greeks, Slavs and Chinese, can testify to the great strength and muscular endurance generated by vegetable food. Yet it is a common theory that animal food does immediately confer strength upon the consumer. It is for the most part, when not putrescent and simply cooked, easily digested and contains stimulating properties which do call out the reserves of strength stored in the nerve-centers. This, no doubt, is mistaken for added strength; whereas, in reality, it is an expenditure of power—an exhaustive process. It is also a favorite theory with some that the fighting qualities of the British and Americans are to be attributed to their flesh diet. This, if true, is a qualification which has its bad as well as its good side. It may render them invincible against an organized army, but it may also make them pugnacious in individual instances; and hence much of the quarrelling, turbulence, bloodshed and homicide, of which the courts alone take notice, may with equal reason be attributed to this source.

As civilization advances there will be less and less call for fighting, and more and more for working and saving; and hence, if the belligerent disposition is caused by the daily beefsteak, the sooner we begin to abandon it the better. The superior aptitude of the English

as colonists, who by the way have usually been also aggressors and plunderers, may thus be accounted for.

Whatever may be the truth about these speculations, it is demonstrable that butchers' meat is relatively an expensive kind of food. This is especially true of pork. There are all through this country families who are kept poor by the incessant demands of the butcher. The habit once contracted, it is as imperious as tobacco or alcohol; the supply must be kept up at whatever cost. Quite recently, through the exportation of large amounts of beef cattle, the fact began to dawn upon dealers that the supply was running low, and the price of carcasses ran up in New York as high as fifteen and sixteen dollars per hundred pounds. Thus began a great curtailment of flesh food for the common laborer. Resort was then had to pork and mutton. Mutton is equally nourishing and less stimulating, and therefore less harmful. Pork and hog products of all kinds are the dearest and most mischievous of human foods. It takes on an average more than 300 pounds of good corn to make 100 pounds of pork. In nutritive value, though not perhaps in market price, the corn before it is turned into swine's flesh is greater than the pork is afterwards. So far as the lard product of the hog is concerned, it is almost an unmitigated evil when introduced into the human economy.

A large part of the price of beef, mutton and pork is made up in the cost of transportation; and this has been because the supplies must be drawn from such long distances. The great meat lands of the United States have been pushed westward until now the extensive uninclosed plains of Texas, Kansas and Nebraska are the most prominent fields for the heavy supplies. To bring a steer from such immense distances by rail adds considerably to his value in the original pasture, partly because of the shrinkage in weight, from the risk and loss by death or accidents, and partly because of the fact that only from one-half to two-thirds of the weight transported was available as food at its destination.

Quite recently an experiment on a large scale has been attempted for bringing cattle already slaughtered and dressed in refrigerator cars instead of on the hoof. The first effect was to precipitate a great fall in price in the New York market. Its success was so complete as to leave no doubt as to its feasibility, and henceforth we may expect to see a more equable supply of cattle, and prices ruling generally lower. This, however, will engender a demand for more meat, and so tend to an equilibrium in prices. In another column will be found some testimony as to the results of the process thus far.

It is reported that Mr. VANDERBILT has joined Mr. EASTMAN, the great live-stock dealer, in founding another company for slaughtering the bulk of the cattle at the West, instead of bringing them alive as heretofore. The slaughtering of animals is itself a cruelty. It causes cruelty to them in transit before slaughter, and is from beginning to end shocking to the finer feelings. Anything that will tend to do away with this feature, and at the same time lessen the cost of living, will be hailed as a step both agreeable and profitable.

What has been done with oxen will be done with sheep and pigs. The process is to reduce meat immediately after slaughter to a temperature that gives the freezing point, and by means of cars with ice, properly ventilated, to maintain it at a low temperature. Molecular change of the tissues of the meat goes on slowly, and is analagous to that which has long been practiced in New York by the best butchers, and has given this city its reputation for tender meats. It is well known that freshly killed beef is tougher, and apparently less sweet to the taste, than that which has been kept at a low temperature for some time. In the same way it is the practice with the large stock houses of New York to keep meat from three to five days, and in winter from seven to ten days, before it is offered for sale to the hotels, restaurants, etc. This involves a large capital to carry a stock of meat for that length of time.

After the new plan the time passed in the car will be the equivalent of what has heretofore been passed in the ice-houses. Of course, it is decomposition and incipient rotting of the muscular fibres of the flesh which produce a tenderness so much coveted by all good livers, and no doubt a large amount of the scrofulous and febrile diseases prevailing among so-called civilized communities is due to the consumption of the deteriorated flesh food. The prevailing diseases of a flesh-eating people differ in type from those of the vegetarian natives; and it is said on high authority that wounds received by the latter heal much more promptly and certainly than the former. The flesh of a diseased or tortured animal is in extreme cases known to be poisonous. How many of the cattle slaughtered in New York are maddened and diseased at the time of their death. If the new method of supplying the East with beef shall prove to be a true economy, it will be a blessing to the health of the people as well as a saving of rolling-stock and power to the railroads.

Literary Men and the Midnight Oil.

BALZAC, among French writers, is a conspicuous example of the literary man, who in Shakespearean phrase, "doth make the night joint laborer with the day." When at work on "Le Medecin de Campagne"—that book which he estimated to be worth more than a law or twenty victories—he only slept five hours a day. He wrote from midnight till noon, then corrected proofs till four o'clock. The brief remaining interval was occupied with dining and a short promenade. Balzac had various expedients for increasing the number of hours in the day, and for getting the most labor out of himself. Craving inordinately for fame, as he so many times acknowledged in his letters to his sister, he was ready to make any sacrifice to realize the desire. At one time he "went to sleep with the fowls," at six or seven o'clock in the evening, rose at one in the morning, and scribbled till eight; then slept for an hour and a half; breakfasted and returned to harness, dining at five, and then to bed. Another practice of his was to sleep from one o'clock in the day to half-past six, and to write from seven in the evening until seven in the morning. "One must turn out copy all night and slumber by day to reach the results at which I aim," he said. He went into a kind of perverted training for this match with time—as exhausting as most matches of the kind. How fatally it terminated, hastened by the abuse of coffee, is a mournful page of literary biography. But when the curtain fell on the last act of the drama of his life, Honore de Balzac was famous. A celebrated living English novelist, whose books are decidedly sensational in color, may be said to resemble the great French romancist in at least one particular. He is reported to begin his day at six in the evening, and to struggle gamely on till six the next morning. The late Mortimer Collins, we are told, was an habitual "borrower of the night," beginning his writing when the rest of the household had retired to rest, and continuing it till dawn. Carlyle, during the period of his greatest mental activity, sat at his desk till two in the morning, though it is only fair to say that of late years he has strongly shown a belief in the early hours of the day. Thackeray, too, used often to write far into the morning; and some of Poe's best sketches were midnight pennings. "Even ourselves," writes Elia, characteristically, after having enunciated his belief that the candle is a kindlier luminary to the inspiration of genius than the sun or moon, "in these our humbler lucubrations tune our best-measured cadences (Prose has her cadences) not unfrequently to the charm of the drowsier watchman 'blessing the doors,' or the wild sweep of winds at midnight." Indeed, a close comparison of the habits of men of letters will show that a large proportion of them do their work whilst the rest of the world is wrapt in slumber.—*London Globe.*

CANAL superintendent Dutcher, of New York, announces that unless sooner closed by ice navigation on the Black River Canal will close November 23, and on the Erie, Champlain, Oswego, Cayuga and Seneca canals December 7.

CANADIAN DEPARTMENT.

MR. JAMES J. WHITE, Ottawa, Canada, writer of "Our Canadian Letter," acts as agent for the AMERICAN RAILROAD JOURNAL COMPANY, in Canada. He is authorized to receive, in behalf of the company, subscriptions and advertisements for this journal; also news of the character which he can utilize in the preparation of his Letter, or send to us for use elsewhere within these columns. He respectfully invites information concerning Railroad matters generally, Mining, Banking, Finance and Manufactures.

OUR CANADIAN LETTER.

[From our Special Correspondent.]

THE HUDSON BAY ROUTE—THE SOURIS AND ROCKY MOUNTAIN RAILROAD—MINING, RAILROAD AND OTHER NOTES.

THE CANADA PACIFIC RAILROAD.

MR. COLLINGWOOD SCHRIEBER, engineer in chief of the Government railways, who lately returned from an inspection of the Canada Pacific says:—

"The long and short of the whole matter is that the Canada Pacific Railway is being pushed forward by reliable contractors in all sections with the utmost possible speed. The rails are being laid down toward the Rockies at the rate of three or four miles per day. Along the entire line of route a population is springing up that in the judgment of the best authorities will make the road, irrespective of trans-continental freight, self-sustaining in ten years, and the company have every reason to believe that every yard of the road from Calendar to Port Moody, along the great lakes, over the prairies and through the mountains, will be completed in the year of our Lord 1887."

THE SOURIS AND ROCKY MOUNTAIN RAILROAD.

E. A. C. Pew, president of the Souris and Rocky Mountain Railway Company, leaves for England about November 25, in connection with matters concerning this and other schemes. Mr. Pew is the contractor and principal owner of the Souris and Rocky Mountain Railroad, and with his characteristic energy will push the construction of the road through rapidly. The first fifty miles will be completed by the 1st of June next, and the whole of the line within — years. The location of the lands granted to this company will soon be made known by the Government. The railway will pass through Rapid City, Fort Ellice, Battleford and Edmonton. The country through which the line will pass is considered the finest in the northwest, and is along the old route of the Canada Pacific Railway as located by Sandford Flemming—but which has since been changed by the present Government and the Canada Pacific Railway Company. Most of the settlements in the northwest exist along the proposed line of the Souris and Rocky Mountain Railroad.

Sir Hugh Allan & Co. have purchased the Portage, Westbourne and Northwestern Railway, and intend to complete the road by next fall. The new company have obtained running power over the Canadian Pacific from Portage La Prairie to Winnipeg, and that city will eventually be the eastern terminus of the road.

THE HUDSON BAY ROUTE.

The Saskatchewan *Herald* says:—

"Gen. Rosser is now chief engineer of the Winnipeg and Hudson's Bay Railway, and has sent out an expedition to take preliminary soundings and lines. Work on location will begin at Churchill and proceed toward Winnipeg. Construction will begin at the Winnipeg end, and the General stated that he believed the contract for its construction had already been let to Mr. P. J. Brown. Gen. Rosser has great faith in the Hudson's Bay route, and believes that the time is not far distant when the grain of the whole northwestern country, including Minnesota and Dakota, will find its way to Liverpool by this route. There are two Hudson's Bay railway companies. The one Gen. Rosser is connected with is the Winnipeg and Hudson's Bay Railway and Steamship Company. He will join the expeditionary force lately sent out, in December or January next. He will make the trip in company with Mr. Ross, with dog teams, a number of which have been ordered to come up from the Norway House as soon as ice forms on the streams." The people of the United States are as deeply interested in the Hudson Bay scheme as are the people of Canada, and should it prove successful it will revolutionize the commerce of the whole continent.

The advocates of the counter movement to connect Lake Superior by canal with the Red River Country of the North, thereby opening by water, communication between the Winnipeg basin and the Saskatchewan Valley and the Lakes, claim with reason that their scheme is as practicable as the Canadian scheme. The American people should agitate the matter without delay, otherwise the Canadians will reap the advantage of the carrying trade. The Canada Pacific and the Hudson Bay route or the Canada Pacific Railway alone, will carry the great bulk of the trade between Asia and Europe, and a large portion of that of the United States. Churchill River (Hudson Bay) which is open early in spring and late in fall, is nearer Liverpool by 165 miles than Montreal, and but 500 miles from Winnipeg and the center of a great wheat district. By this route over 1,300 miles of railway carriage will be saved between shipping point and Liverpool.

The Niagara Bridge Company will apply to the next Parliament for authority to build a bridge somewhere between Lewiston and Niagara Falls.

By Order-in-Council the toll on crude gypsum going east through the Welland Canal and west through the St. Lawrence canals, will be five cents per ton.

The total value of dutiable goods entered in Canada during September, for consumption, $8,773,644; duty was $2,212,368; amount of free goods, $2,908,890.

The New York and Lake Champlain Transportation Company have shipped to the United States, from Ottawa, on American boats, 16,954,571 feet of lumber.

It is reported that Messrs. H. Nichols & Son, of New York, have purchased the Allan Phosphate mine, near Ottawa. Twenty thousand dollars was given as an equivalent for a quantity of ore ready for shipment and $125,000 in a joint stock company with a paid up capital of $250,000. Mr. Kyle, of New York, and other American capitalists are interested in the mine.

Deputy Minister of Marine and Fisheries, William Smith, Esq., left Ottawa, Wednesday last, for Toronto, to confer with the Chairman of the Board of Steamboat Inspectors and others, with a view of taking further measures for the improvement and safety of inland navigation and for the construction of a better class of Lake steamers and vessels. He will also visit the light-houses and life-saving stations on the upper lakes.

IN RE IRON ORE.

A good deal is being written and said about regretting that so much fine iron ore is shipped out of Canada to the United States instead of being smelted in Canada, as it ought to be, but the truth of the matter is that this shipping of ore to the United States has done more to bring the matter of furnaces, etc. to the attention of capitalists and investors than anything else. The iron supply is inexhaustible, and lies nearly everywhere—and if parties cannot do better, why, the best policy is to sell to whoever will purchase. The Americans are the principal purchasers, and the labor created by the increasing demand for ore is of the greatest possible benefit to the localities where the ore is to be found, and Canada generally.

THE MONTREAL, OTTAWA AND WESTERN RAILROAD.

On Friday last, the following officers were elected by the directors: Hon. Louis Beaubien, president; J. J. C. Abbott, vice-president; Zef. de Bellefeuille, secretary and treasurer. The company are to build a line from St. Jerome, near Montreal, to Maniwaki, thence up the Ottawa and Gatineau Railway and further on to a point on the Canadian Pacific Railway near Lake Nipissing. This line will open up one of the richest parts of Quebec, and the gentlemen comprising its management and directorate are among the leading men of Canada. The Hon. Louis Beaubien was one of the promoters of the Canada Pacific, and vice-president of that company; is recognized as being one of the most enterprising and honorable of men. Hon. Mr. Chapleau was the late Premier of Quebec, and resigned to accept the Portfolio of Dominion Secretary of State; and the other directors are equally prominent and influential.

NOVA SCOTIA MINING.

The *New Era*, of Halifax, advocates the fostering and developing of the mining industries of Nova Scotia. It recommends that roads should be built with governmental aid; a permanent exhibit at Halifax of the mineral products, where an exhibit of the precious metals would familiarize and encourage the people in developing an interest in mining; an assay department; and asks that Government take the initiative in organizing and establishing a crushing-mill in some central location, easy of access by rail or water. The Nova Scotia mines are very rich, and invite investment. For lack of capital, many owners of valuable mines are necessitated to send their ores to be crushed and reduced to Boston, New York and England.

The Moncton Cotton Manufacturing Company Mills, with a present capacity of 11,000 spindles and 240 looms, which will be increased to 22,000 spindles and 520 looms, is nearly completed. The company will manufacture gray and colored cottons, and have machinery for knitting cotton and merino hose, of which they

will produce 7,200 hose per week. The manufacture of merino hose will be the first introduced into Canada.

A deputation waited on the Finance and Minister of Customs in reference to amending the present tariff on wool.

FALSE INVOICES.

It is alleged by the Customs Department that exporters in New York, Chicago and elsewhere, have in several instances made false invoices to defraud the government, and the customs authorities have a "black list" which shows the names of exporters and consignees. A strict watch is now kept at all the customs ports.

DISSOLUTION OF MANITOBA LEGISLATURE.

A special telegram announces that Premier Norquay of Manitoba has advised the Lieut-Governor to dissolve the Local House, and the Governor has accepted his advice, and the writs issued at once. This action is brought about by the disallowance policy of the Dominion Government in regard to Manitoba railways.

"W."

OTTAWA, Nov. 15, 1882.

Furnishing Time by Telegraph.

A COMPANY has been formed in this city for the purpose of furnishing business houses, public institutions, railways, and hotels with uniform and standard time, by means of a system of clocks regulated by telegraph. The system is entirely new, and differs entirely from that at present used in Paris and Geneva. It is known as the Himmer system, and was perfected by Vitali Himmer, an Austrian, who was formerly connected with Tiffany & Co., and is the result of several years of experimenting. The apparatus is very simple, consisting of a magnet and ratchet movement, so that there is little danger of the machinery getting out of order. There is a central regulating clock which is placed in the company's office and runs according to time furnished from the National Observatory at Washington, the pendulum of which opens and closes an electric circuit with every beat. A magnet in each clock when the circuit is closed raises a gravity lever, which catches the wheel carrying the minute hand on its pinion for about one-third of a second, and the wheel is propelled one tooth. In this manner also the levers mark off seconds or any portion of time, while the electric circuit may pass through any number of clocks—a million if the wires are properly fed. In the Himmer system the circuit-breaker and time-regulator is independent of the clock and there are no springs in the mechanism, the whole action of denoting time being accomplished by gravity. Already there is a regulator in use in the offices of the company in Temple Court which regulates clocks, marking minutes, two seconds, and one second. The company has been organized with a capital stock of $1,000,000 for manufacturing the clock, A. H. Elliott being president, B. S. Clark, secretary, and C. H. Pond, treasurer, and will at once begin to furnish time at a charge of 25 cents, 50 cents, or $1 per month, according to the style and action of the dial, and will furnish subscribers with time indicators, connecting the same with regulator stations free of charge. At present one regulator will be placed in a block so as to avoid crossing streets with wires, but eventually the whole system will be regulated from one central clock. They will work correctly as long as the batteries are in order, which will not need replenishing more than once a year. The indicators are now in use by the Pennsylvania Railroad Company, who tested them for a year. In this city they will be placed at once in the Hoffman House and in new apartment-houses up town. They will also be placed in many down-town business houses.

The Malacca Ship-Canal.

THE peninsula of Malacca offers an excellent field for a ship canal. It reaches through ten degrees of north latitude for a length of 700 miles, and is not more than 120 miles wide at its broadest part. The lower parts are very mountainous, but in the upper parts, where a ship-canal would be most serviceable, it is narrow and less hilly, and traversed by cross valleys suitable for waterways. In 1861 Messrs. Forlong and Fraser proposed a railway across the peninsula which would shorten the journey from Calcutta to Hong Kong by about a third. Their explorations served to show to capabilities of the passage of Krau for a canal between the Gulf of Siam and the Indian Ocean, by following the firth of the Pakeham River from the western side, and the valleys of the Choomphaum and Htaoung rivers from the eastern side. The latest project is that of M. Leon Dru, who proposes to cut his canal from the junction of the Pakeham River with the River Saona to Tasan, whence it would follow the Htaoung or Tayoung bed to the Gulf of Siam. The total length of cutting would be about sixty-six miles, or thirty-three miles less than that of the Suez cutting and twenty-two miles more than that of Panama. The expense is estimated at 100,000,000 francs.

Brooklyn City Railroad.

ACCORDING to a statement made by Wm. H. Hazzard, president, the Brooklyn City Railroad Company has about 700 cars, 325 of which are constantly on the tracks, averaging 2,500 trips daily and carrying 125,000 passengers, at a cost to the company of about 85 cents on the dollar. Seven hundred drivers and conductors are employed and the receipts for the year ending September 30, 1882, have been $1,956,836.92, while the payments, including dividends, amounted to $2,003,276.60. Mr. Hazard accounts for the excess of expenditures on the ground that the lines were extended from Broadway to Ridgewood, property bought, stables erected costing $150,000 a new car-house built at Greenwood and needed improvements effected, and says the company is now on a sounder basis than ever before. He complains, however, that a feeling against the company appears to exist among the masses of the people which shows itself in different ways. He thought it might have sprung up from a report that the company is doing everything it can to prevent rapid transit, which, if so, was most erroneous. The company has also been rather unfortunate, he says, in the number of damage suits for accidents. No arrangements have yet been made for starting the cars from the terminus of the bridge when completed, but that something will soon be done in this direction is certain.

New Buildings at Cornell.

WITH its customary enterprise Cornell University is erecting on its Campus two new buildings. One, which will be the finest chemical and physical laboratory possessed by any college in the United States, is nearly completed. It is built of red Medina sandstone, with yellow Ohio stone trimmings, and has its outer walls inset with medallions of eminent scientists. The other building, which will be completed by the new year, is being built of brick, 100x60 feet, with arched windows, flying buttresses and a steep roof. It will be used as a drill hall and gymnasium. A costly addition to the chapel, which shall contain the sarcophagus of Mrs. Fiske and of other benefactors of the university, is contemplated, and a new and better equipped building for the departments of architecture and civil engineering is only a question of a year or two. A magnificent library building will soon be constructed, which shall meet the present and future demands of a library already large, and having the finest endowment of any college library in America, while Cascadilla Place, whose gloomy halls long ago drove out its students, is to be entirely remodeled.—*Ithaca Standard.*

Cotton Ties.

A DECISION was rendered in the United States Supreme Court at Washington on the 6th inst. in the case of the American Cotton Tie Company (limited) et al., appellants, against Simeon W. Simmonds et al., brought here by appeal from the Circuit Court of the United States for the district of Rhode Island. The plaintiffs were the owners of patents for improvements in metallic cotton bale ties, each tie consisting of a buckle and a band. They granted no licenses to make the ties but made them themselves and supplied the market. They stamped in the metal of the buckle the words "licensed to use once only." The defendants bought as scrap iron the buckles and bands at the cotton mills after the bands had been severed to release the bale, and rolled and straightened them and riveted together the ends of the pieces of the bands and cut them into proper lengths for ties, and sold them to be used as ties, nothing being done to the buckles. It is held by this court that the defendants infringed the patents, but it is not decided that they were liable as infringers, merely because they had sold the buckle, considered apart from the band or from the entire structure, as a tie. The decree of the court below is reversed, and the cause remanded, with directions to enter a decree for the plaintiffs in respect to claim 3 of the Cook patent and claims 3, 4 and 5 of the Brodie reissued patent and the claim of the McComb patent, for an account of profits and damages as prayed in the bill, and to take such further proceedings in the suit as may be in conformity with the opinion of this court. Opinion by Justice Blatchford.

The Stock Exchanges and Money Market.

New York Stock Exchange.

Closing Prices for the week ending Nov. 15.

	Th. 9.	F. 10.	Sat. 11.	M. 13.	Tu. 14.	W. 15.
Adams Express			137			136
Albany and Susq.						
1st mortgage						
2d mortgage						
American Express	93½	93	92¾		95	
Burl., C. R. & Nor.		80			81	
1st mortgage 5s			101¾	102½	102½	
Canada Southern	67½	69	70⅞	72⅜	72½	69¼
1st mortgage guar	94	93⅞	94		95	
Central of N. Jersey	70⅞	69½	69¾	71	71½	70
1st mort. 1890			117		116	
7s, consol. ass	108½	107½	108½	108¼	108¾	108⅞
7s, convertible ass	109					108¼
7s, Income	85					
Adjustment	102¾		105			
Central Pacific	88⅜	88⅞	89⅛	89⅛	89⅛	88⅝
6s, gold						114⅛
1st M. (San Joaq)						
1st M. (Cal. & Or.)						105½
Land grant 6s		104			103⅜	
Chesapeake & Ohio	24	24¼	24½		24¾	
1st pref	34½	35¼	35¾		36¾	36¼
2d pref	25½					
1st mort., series B	87½		86½	86¼	87	87¼
Chicago and Alton	140	140¾	141	140⅞	141	140¾
Preferred						
1st mortgage	120		120			
Sinking Fund						
Chi., Bur. & Quincy	130½	130¼	130½	130⅞	131¼	129¾
7s, Consol. 1903	128¼					
Chi., Mil. & St. Paul	109¾	110¼	109	109¾	108¾	107⅝
Preferred	124½	125⅜	125⅞	124⅜	123⅞	
1st mortgage, 8s					133	
2d mort., 7 3-10s						
7s, gold						
1st M. (La. C. div)						
1st M. I. & M. div.)		124½				
1st M. (I. & D. ext.)						
1st M. (H.&D. div.)						
1st M. (C. & M. div.)						
Consolidated S. F.						125
Chi. & Northwestern	143	143½	141¾	142½	141½	138¾
Preferred	160⅜	162	161	161	161¼	157½
1st mortgage				106⅛		
Sinking Fund 6s						
Consolidated 7s						
Consol. Gold bo'ds	127⅛	126½		127		
Do. reg	126½					
Chi., R. Isl. & Pac.	130¾	131	130	130½	128⅞	128
6s, 1917, c		127⅛	127½			
Clev., Col., Cin. & Ind.	80	81	82	81½	82	81⅛
1st mortgage				120¾		
Clev. & Pittsburg gr.	139					
7s, Consolidated						
4th mortgage		110				
Col., Chi., & Ind. Cent	8½	8⅞	8¾	8½	9¼	8¼
1st mortgage						
2d mortgage						
Del. & Hud Canal.	112	112¾	112½	112	113⅛	
Reg. 7s, 1891		115¾				
Reg. 7s, 1884						
7s, 1894	113					
Del., Lack. & Western	132½	132¼	131⅞	132⅝	132⅝	131¼
2d mortgage 7s						
Consol. 1907						
Erie Railway						
1st mortgage		125				
2d mort. 5s, ext	108½					
3d mortgage	101⅜		101⅜	101⅞		102
4th mort. 5s, ext						
5th mortgage						
7s, Consol. gold				127	127	
Great West. 1st mort	105					
2d mortgage				99		
Hannibal & St. Jo						
Preferred	80		80½			80
8s, Convertible			104¾		105	105
Houston & Tex. Cen		76		73	78	
1st mortgage			109¾			
2d mortgage						
Illinois Central	147⅜	147¾	148⅛	148⅛	149	148
LakeShore & MichSo	113⅛	115⅛	115⅜	116⅛	115¾	114¾
Consol. 7s						
Consol. 7s, reg						
2d Consolidated		124¾			123	
Leh. & W. B. con. ass	102				102¼	
Long Dock bonds						
Louisville & Nash.	48¾	48⅞	49¼	51	52⅜	51
7s, Consolidated	114¾					
Manhattan			50			
1st pref						
Met. Elevated	77			87		
1st mortgage				99¾	100	
Michigan Central	100⅝	101	101¾	102¾	102⅝	100¾
7s, 1908						
Morris & Essex		126	126	125¾	125⅞	125⅞
1st mortgage						
2d mortgage						
7s of 1871						
7s, Convertible						
7s, Consolidated			124⅛	124⅛	125⅛	
N. Y. Cen. & Hud. R.	131¼	131¾	131¼	131⅞	131⅛	130½
6s, S. F. 1883			100¾			100¼
6s, S. F., 1887						
1st mortgage			133⅛			
1st mortgage, reg						133
N. Y. Elevated					100	
1st mortgage	115½		115	115		
N. Y. & Harlem						
Preferred						
1st mortgage				130		
1st mortgage, reg						130
N. Y. Lake Erie & W	38½	38⅛	38¾	39⅛	39⅛	38⅜
Preferred	81¾					81⅛
2d Consolidated	98¾	99¼	99⅛	100		100
New 2d 5s fund				97		
N. Y., N. Hav'n & Hart	185	184	184½	184		
North Mo. 1st mort					118¾	
Northern Pacific	43⅞	43⅞	44⅛	44¾	44⅜	44
Preferred	90⅜	91⅛	91⅝	92⅜	92¼	91⅞
Ohio & Mississippi	35⅜	36	37	36½	36⅜	35¼
Preferred						
2d mortgage					120½	
Consolidated 7s						118
Consol. S. Fund						
Pacific Mail S. S. Co	38¼	38½	38¼	39⅛	40¼	39⅛
Pacific R. R. of Mo.						
1st mortgage					106	
2d mortgage						
Panama						
Phila. & Reading	56½	56	57¼	57¼	56⅞	56¼
Pitts, Ft. W. & Chi. gtd	136			134		
1st mortgage	138					
2d mortgage						
3d mortgage						
Pullman Palace Car	124½	124	124¼	125⅜	125⅜	
Quicksil'r Min'g Co	8¾			9½	9⅞	9⅝
Preferred		41		43	43⅞	43⅛
St. Louis & San Fran			37		36¾	37
Preferred	56	55	54		56¼	56
1st Preferred					97	96¾
St. L., Alt'n & T. H.	39¼	41½		41½		
Preferred	80		82½			82
1st mortgage						
2d mort. pref						96½
Income bonds						
St. L., Iron Mt. & S.						
1st mortgage			116			
2d mortgage	105			104¾		104⅜
Toledo and Wabash						
1st mortgage						107
2d mortgage						
7s, Consolidated						
St. Louis Division						
Union Pacific	106½	105¾	105⅞	106⅞	106⅝	105¾
1st mortgage	115½	115				115
Land Grant 7s	110⅜					
Sinking Fund 8s	116			117⅛	118	
United States Ex		67				
Wabash, St. L. & Pac	32⅝	33	33¼	34⅜	33¾	32¾
Preferred	58½	58¼	58¼	60⅛	59¾	58⅛
New mort. 7s						
Wells-Fargo Ex	130	129	130		130	
Western Pacific b'ds						
Western Union Tel.	79¾	79⅞	80⅞	82⅜	82⅞	81¾
7s., S.F conv., 1900						
Federal Stocks:—						
U. S. 4s, 1907, reg				119⅛	118⅞	119¼
U. S. 4s, 1907, coup				119¼	118⅞	119¼
U. S. 4½s, 1891, reg				112		
U. S. 4½s, 1891, coup						
U. S. 5s, cont'd at 3⅛						
U. S. 3s, reg				102⅛	102½	102¼
Dt. of Col. 3-65s, reg						
Dt. of Col. 3-65s, coup						

Boston Stock Exchange.

Closing Prices for the Week Ending Nov. 15.

	Th. 9.	F. 10.	Sat. 11.	M. 13.	Tu. 14.	W. 15.
Atch., Top. & San. Fe.	84⅜	84⅜	84⅞	84⅜	84⅝	84⅜
1st mortgage					118⅞	
Land Grant 7s						113
Boston & Albany		174⅜	175	173⅜	174	174⅛
Boston and Lowell						
Boston & Maine						
Boston & Providence	161			161	160	
Bos'n, Hart. & Erie 7s	50⅛			50		
Burl. & Mo. R. L. G. 7s						
Burl. & Mo. R. in Neb						
6s, exempt				112½	112⅛	
4s						
Chi., Burl. & Quincy	130¼	130½	130½	131	131	129⅛
Cin., Sand. & Clev ($50)	29		29½	29		
Concord ($50)						
Connecticut River				164½		164½
Eastern	38	39			37	37
New 6s, Bonds	109¼	109¼	109½	109¾	109¾	
Fitchburg		135				
N. Y. & New England	50¼	50			51	50
7s						
Northern N. H						
Norwich & Worcester						
Ogden & Lake Cham						
Old Colony	138			137	137	137½
Ph., Wil. & Balt. ($50)			64			
Portl'd, Saco & Ports						
Pueblo & Ark Val 7s		113			114	
Pullman Palace Car		125		125½		
Union Pacific	106	105¾	105⅝	106¼	107	106¼
6s						
Land Grant 7s					110	
Sinking Fund 8s						
Vermont & Mass				132		
Worcester & Nashua					59	
Cambridge (Horse)						
Metropolitan (Horse)						
Middlesex (Horse)						
Cal. & Hecla Min'g Co	250	250¼	251	250½		251
Quincy	68	67¾		67¾		67¼

Philadelphia Stock Exchange.

Closing Prices for the Week Ending Nov. 14.

	W. 8.	Th. 9.	F. 10.	Sat. 11.	M. 13.	Tu. 14.
Allegh'y Val. 7 3-10s		122½				
7s, Income	48½		48		48½	
Buff., Pitts & West.	19¾	19¾	19⅝	19⅝	20	20¼
Camd'n & Am. 6s, '83				101⅝		
6s, 1889						
Mort. 6s, 1889		112	112		112	
Camden & Atlantic						
Preferred						
1st mortgage						
2d mortgage						
Catawissa						
Preferred						54¼
2d pref						
7s, new						
Del. & Bound Brook						
7s					125¼	
Elmira & Williamsp't						
Preferred						
Hunt. & B. Top Mt.	17					
Preferred						
2d mortgage						
Lehigh Navigation	41⅜	43	41⅜	42¼	42⅜	42¾
6s, 1884		103¼				103¾
Gold Loan		108	112⅜	112¼		112
Railroad Loan		114⅜				
Conv. Gold Loan			108			108
Consol. Mort, 7s						
Lehigh Valley	64¾	64¼	64¾		65⅛	65¼
1st mort. 6s, coup			122½		121	
1st mort. 6s, reg						
2d mort. 7s	132¾					
Consol mort. 6s	121		121			
Consol. mtg. 6s, reg	122⅛					
Little Schuylkill	58½		58¼	58½	58⅝	
Minehill & Sch. Hav'n						
North Pennsylvania			64⅛			
1st mortgage 6s						
2d mortgage 7s						
Genl. mtg. 7s, coup						
Genl. mtg. 7s, reg						
Northern Central	56			55¾	56	57
5s			98¾			
Northern Pacific	43⅜	44	43⅞	44¼	44¾	44⅛
Preferred	90	91	91⅛	91⅞	92¾	92¼
Pennsylvania R. R.	59⅞	59⅞	59⅞	60¼	60¼	60¾
1st mortgage						
Gen'l mort					124	125⅛
Gen'l mort reg						
Consol. mort. 6s						
Consol. mort. reg						
Pa. State 5s, new		117			118	
do 4s, new					113	
do 3½s, 1912						
Phila. & Reading	27¾	28¼	28¼	28⅝	28⅝	28¼
1st mortgage 6s						
7s of 1893						
7s, new convert						
Consol. mort. 7s						
Consol. mort. reg						
Gen'l mort. 6s	94¾	94¼	94½	94½	94⅝	94⅛
Def. Income bonds						
Philadelphia & Erie		21¾	21¾	21¾		
1st mortgage 5s		102⅛		102½	102½	102⅛
2d mortgage 7s			114½	114½		
Pittsb., Cin. & St. L. 7s						120
Pitts., Tit. & Buff. 7s						
Schuylkill Navi't'n						
Preferred						
6s, 1897						
6s, 1907	89¾					88
United Co. of N. J		190	190		190	
Hestonville, (Horse)						
Chestnut & Walnut						

Baltimore Stock Exchange.

Closing Prices for the Week Ending Nov. 14.

	W. 8.	Th. 9.	F. 10.	Sat. 11.	M. 13.	Tu. 14.
Baltimore & Ohio....	.....	193	193	.....	.....	.....
6s, 1885.....	.....	.....	.....	.....	104¾	104¾
Central Ohio ($50)...	.....	.....	.....	.....	.....	.....
1st mortgage.....	.....	.....	108	.....	.....	108
Marietta & Cincin'ti.	.....	.....	.....	.....	.....	.....
1st mortgage, 7s..	.....	.....	.....	.....	.....	.....
2d mortgage, 7s...	.....	.....	.....	100¾	.....	101⅛
3d mortgage, 8s...	.....	.....	.....	56¾	57	57
Northern Cen. ($50).	.....	.....	55⅜	56¼	.....	57
2d mort. 6s, 1885..	.....	.....	.....	.....	.....	.....
3d mort. 6s, 1900..	.....	.....	.....	.....	.....	.....
6s, 1900, gold.....	116	.....	.....	.....	.....	.....
6s, 1904, gold.....	.....	.....	114¾	.....	.....	114⅝
Pitts. & Connelsv. 7s.	.....	.....	.....	.....	121½	.....
Virginia 6s Consol..	59¾	59¾	59¾	59	57	.....
Consol. coupons...	62	62¾	63	65	65	65
10-40 bonds.....	43¾	43	43	43	43¼	.....
Def'd Certificates	.....	.....	12	.....	.....	.....
New 3s.....	.....	.....	.....	50	.....	.....
Western Maryland..	.....	.....	.....	.....	.. ..	.....
1st M., end. by Balt	.....	.....	.....	.....	.....	.....
2d M., do.	.....	.....	.....	.....	.....	.....
3d M., do.	.....	.....	125	.....	.....	.....
1st M., unendorsed	....	.....	.....	...	.....	.....
2d M., end. Wash Co	.....	.....	.....	.....	.....	.....
2d M., preferred...	.....	.....	.....	.....	.....	.....
City Passenger R. R.	.....	.....	.....	.....	.....	.....

London Stock Exchange.

	Closing Prices Nov. 3.	Oct. 27.		
Baltimore and Ohio 5s, 1927.....	108	110	108	110
Central of N. J., $100 shares.....	80	85	80	85
Do. consol. mort.....	110	112	110	112
Do. Income Bonds.....	88	92	88	92
Central Pacific of Cal., $100 shs..	93	94	93⅛	94⅜
Do. 1st mort. 6s, 1895-'98.....	117	119	117	119
Det., G'd Haven & Mil. Equip bds.	116	118	116	118
Do. Con. M. 5p.c., till '83 after 6p.c.	114	116	114	116
Illinois Central $100 shares.....	154	155	152	154
Do. S. F. 5s, 1903.....	104	106	104	106
Lehigh Valley Cons. mort. 1923...	115	119	115	119
Louisville and Nashville mort. 6s	92	94	93	95
Do. capital stock $100 shares...	53	55	57	59
N. Y. Cen. & Hud. R. mort. bonds.	132	136	132	136
Do. $100 shares.....	136	137	137	138
Do. mort. bonds (stg.).....	122	124	122	124
N. Y. Lake Erie & West. $100 shs.	41¼	42	43	43¼
Do. 6 p. c, pref. $100 shares....	87	89	88	90
Do. 1st Con. Mort. bonds (Erie).	127	130	127	130
Do. do. Funded Coupon bonds.	124	127	124	127
Do. 2d Consol. Mort. bonds....	101	103	102	104
Do. do. Funded Coupon bonds.	99	101	99	101
N. Y., Pa. & Ohio 1st mort. bonds.	46⅛	47¼	59	60
Do. Prior Lien bonds (sterling).	100	105	100	103
Pennsylvania $50 shares.....	65	65⅛	65¾	66¼
General Mortgage.....	122	124	122	124
Phil. & Erie Gen. mort. 6s, 1920...	117	119	117	119
Philadelphia & Reading $50 shs..	30⅛	31	31⅛	32
General Consol Mortgage. 117	119	116	118	
Do. Improvement Mortgage....	103	105	102	104
Do. Gen. Mtg. '74, ex-def'd coup.	97	99	97	99
St. L. Bridge 1st mort. gold bond.	121	123	121	123
Do. 1st. pref. stock.....	94	98	94	98
S. P'fic of Cal., 1st mort 6s, 1905-6.	107	108	106	108
Union Pacific 1st mtg. 6s, 1896-9..	117	119	117	119
Wabash, St. L. & P. $100 shares..	32	34	33	35
Do. $100 pref shares...	59⅛	60⅜	60⅛	61⅛
Do. gen. mort. bonds.....	84	85	85	87

AMERICAN RAILROAD JOURNAL.

Financial and Commercial Review.

THURSDAY EVENING, November 16, 1882.

THE quotation for call loans on stocks this forenoon was 5@6 per cent. On United States bonds the ruling rate was 3½@4 per cent. Time money on stocks was 6 per cent, and on Governments 4 per cent. Prime mercantile paper was 6@7⅛ per cent. In the afternoon the rate for call loans on stocks was 5 per cent. and in the last hour 4 per cent.

The posted rates for prime bankers' sterling were 4.81@½ and 4.85@¼. The actual rates were 4.80¼@½ and 4.84¼@¾, with cables 4.85⅛@¾, and prime commercial bills 4.79@¼. The actual rates for Continental bills are as follows: Francs, 5.24⅜@5.25⅛ and 5.20⅝@5.20. Marks 94¼@¾ and 95⅛@¼, and Guilders, 39⅝@39⅞.

The Secretary of the Treasury issued on the 10th inst. the 119th call for the redemption of bonds of the 5 per cent funded loan of 1881, continued at 3½ per cent from August 12, 1881, the principal and accrued interest of which will be paid at the Treasury of the United States in the city of Washington, D. C., on the 10th day of February, 1883, and the interest on said bonds will cease on that day, viz: Registered bonds of the acts of July 14, 1870, and January 20, 1871, continued during the pleasure of the Government under the tserm of circular No. 52, dated May 12, 1881, to bear interest at the rate of 3½ per centum from August 12, 1881, as follows: $50—No. B 477 to No. B 550, both inclusive, and No. B 1,605 to No. B 1,609, both inclusive. $100—No. B 3,651 to No. B 4,300, both inclusive, and No. B 13,299 to No. B 13,331, both inclusive. $500—No. B 1,951 to No. B 2,250, both inclusive, and No. B 5,949 to No. B 5,964, both inclusive. $1,000—No. B 9,401 to No. B 11,500, both inclusive, and No. B 20,760 to No. B 20,813, both inclusive. $5,000—No. B 2,501 to No. B 2,800, both inclusive, and No. B 5,801 to No. B 5,810, both inclusive. $10,000—No. B 9,001 to No. B 11,500 both inclusive, and No. B 18,425 to No. B 18,485 both inclusive. $20,000—No. B 1,538 to No. B 1,600, both inclusive, and No. B 2,247 to No. B 2,248, both inclusive. $50,000—No. B 3,901 to No. B 6,600, both inclusive, and No. B 6,040 to No B 6,046, both inclusive. Total, $15,000,000, The bonds described above are those last dated and numbered as required by section 3 of the act of July 14, 1870, and those embraced in the highest numbers in the several denominations as given above are the bonds which have been issued on transfers since the 118th call was issued. Many of the bonds originally included in the above numbers have been transferred or exchanged and cancelled, leaving outstanding the amount above stated.

The report of the New Haven, Derby and Ansonia Railroad Company for the year ending September 30, 1882, shows earnings of $166,402.84; operating expenses, $88,012.96; other expenditures, $63,234.91; net earnings, $78,389.98, against $48,267.85 in 1881. The number of passengers carried is 197,749, an increase of 39,366, and of tons of freight, 127,192, an increase of 11,608.

The receipts of the New York and Brooklyn Bridge Company in October were $2,678.33, and the expenditures, $72,398.06. The total receipts up to October 31 were $14,072,703.16, and the total expenditures, $14,045,683.86.

The arrangements for the sale of the Marietta and Cincinnati Railroad, and the reorganization of the Company, have been completed. The sale will be made at the Court House of Ross county, at Chillicothe, Ohio, on the 9th of December. Over 95 per cent of the holders of securities have assented to the scheme of reorganization and the time of allowing others to participate has been extended to the 15th of December.

The annual statement of the East Tennessee, Virginia and Georgia Railroad Company, submitted at the annual meeting held at Knoxville, Tenn., on the 8th inst., shows the following result: Gross revenue from 900 miles of road, excluding that from portions under construction and in hands of contractors, $3,145,482.38; expenditures, deducting material on hand, $1,862,022.39; net revenue, excluding that from divisions under construction, $1,283,460; surplus after paying interest on first mortgage and income bonds, $162,000; passengers transported, excluding those on Macon and Brunswick Division, 528,403; tons of freight, excluding Macon and Brunswick Division, 916,000. During the year 8,700 tons of steel rails were laid, making 333 miles laid with steel, exclusive of 178 miles of the Cincinnati and Georgia Division and the Knoxville and Ohio Division, which are all steel. A wharf and warehouse have been built at Brunswick, Ga.

Under the Thurman Act all that the Union Pacific Railway Company has to pay the United States Government at any time is 25 per cent of the net earnings of the main line from Omaha to Ogden—1,042 miles—which up to this time has never exceeded $1,200,000 per year, and it has been paid under the following section of the Thurman bill: "That there shall be carried to the credit of the said fund, on the first day of February in each year the one-half of the compensation for services hereinbefore named, rendered for the Government by said Union Pacific Railroad Company, not applied in liquidation of interest; and in addition thereto the said company shall, on said day in each year, pay into the Treasury to the credit of said sinking fund the sum of $850,000, or so much thereof as shall be necessary to make the 5 per centum of the net earnings of its said road payable to the United States under said act of 1862, and the whole sum earned by it as compensation for services rendered for the United States, together with the sum by this section required to be paid amounting in the aggregate to 25 per centum of the whole net earnings of said railroad company, ascertained and defined as hereinbefore provided, for the year ending on the thirty-first day of December next preceding." The earnings from the Government on the 4,000 odd miles of road owned by the Union Pacific Railway Company, 3,000 of which do not come under the provisions of the above act, have up to this time been sufficient to pay the Government for all the demands upon the company under the provisions of the Thurman act. The Government business on the branch lines increases so much faster than the Government business on the main line of the Union Pacific that in all probability, until the debt is wiped out under the action of the Thurman act, the payments of the Government to the company will exceed those of the company to the Government.

The Chief of the Bureau of Statistics at Washington reports that the total values of the exports of petroleum and petroleum products from the United States during the month of September, 1882, were $3,410,065, and during September, 1881, $4,762,711. For the nine months ended September 30, 1882, $34,356,921, and for the same period in 1881, $34,952,961.

The earnings of the Bank of Montreal for the past half year were $736,718, out of which a 5 per cent dividend of $600,000 was paid. The balance carried forward including the previous half year contingent fund is $352,122.

On Saturday last at Montreal local stocks of all kinds were demoralized. Banks and other stocks fell considerably. Money cannot be had to carry the very large amount of all kinds of securities held on margins. Holders in consequence are selling freely. Brokers are also selling out clients whose margins are exhausted. The Saturday market closed feverish and a further fall in rates is expected. Bankers think there will be no ease in money for three or four months to come.

The Canada Central Bank, with head office in Toronto, and $1,000,000 capital, will apply to Parliament for incorporation.

On Monday the Montreal stock market was again much depressed. Bank of Montreal sold down to 204¾ but recovered at the close to 205. All other Bank and miscellaneous stock declined heavily.

In Toronto the stock market opened on Monday pretty steady on a ba is of Saturday's prices. The principal business was in Commerce, Federal, Dominion and Standard Banks. These were steady and Standard was improved.

Counterfeit notes of the Union Bank of Prince Edward Island are in circulation throughout the country.

The Ontario Land investment Company of Toronto will build an arcade buildnig costing about $200,000.

The following quotations of sales of railway and other securities, for the week, are in addition to those given elsewhere in our columns.

New York.—Atlantic and Pacific 1st, 97⅛; Am. Dock and Imp. 5s, 90; Atchison, Colorado and Pacific 1st, 93⅛; Boston and New York Air Line pref., 79; Brooklyn, Bath and Coney Island 6s, 105½; Buffalo and Erie 7s, new, 122; Boston, Hartford and Erie 1st, 49¾; Chicago, Burlington and Quincy 8s, 103; do. Denver div. 6s, 83; do. Iowa div. 4s, 84½; Columbus, Hocking Valley and Toledo, 67; Chicago, St. Paul, Minn. and Omaha, 46¾; do. pref., 105½; do. consol., 107¾; Chicago, St. Louis and New Orleans, 84; Cedar Falls and Minnesota, 18; Central Iowa, 32¼; do. 1st, 108; Chicago and Northwestern S. F. 5s, 99¼; Chesapeake and Ohio cur. 6s, 53½; do. 1st, series A, 104; do. pur. money Fund, 114¼; Chicago and Alton inc., 100¾; Chicago, Milwaukee and St. Paul, La Crosse and Dav. div. 1st, 94; do. Southern Minn. div. 1st, 108¾; do. Chicago and Pacific West div. 1st, 92¾; Chicago, St. Paul and Minn. 1st, 111; Cleveland, Columbus, Cincinnati and Indianapolis consol., 121; Denver and Rio Grande, 48½; do. 1st, 108¼; do. consol., 92⅞; Dubuque and Sioux City, 90; East Tennessee, Virginia and Georgia, 10⅝; do. 1s⅝; do. 1st, 114½; do. 5s, 74¼; do. inc., 42; Evansville and Terre Haute, 82; do. 1st, 96; Elizabethtown, Lexington and Big Sandy 6s, 95; Fort Worth and Denver, 35½; Green Bay, Winona and St. Paul, 8½; Gulf, Colorado and Santa Fe, 1st, 107⅝; Houston and Texas Central Gen'l mort., 97; Hannibal and St. Joseph 6s, consol., 104; Indiana, Bloomington and Western, 39¼; do. consol. inc., 50; do. 1st, 89¾; do. Eastern div. 6s, 87; International and Gt. Northern 1st, 103; do. coupon 6s, 82; Indianapolis, Decatur and Springfield 1st, 101½; Joliet and Chicago, 140; Keokuk and Des Moines 1st, 101½; Kansas Pacific 1st consol., 101; do. 6s, 1895, 110; do. 6s, Denver div. ass., 106⅞; Long Island, 60½; Lake Erie and Western, 32½; do. 1st, 100½; Louisville, New Albany and Chicago,

76⅛; do. 1st, 103; Lafayette, Bloomington and Muncie 1st, 100; Louisville and Nashville, genl. mort. 6s, 90; do. 2d, 100; do. N. O. and Mobile div. 1st, 90; do. Evansville, Henderson and Nashville 1st, 95; do. Cecilian Branch 1st, 105½; Minneapolis and St. Louis, 28⅞; do. pref., 67; do. 1st, S. W. ext., 112; do. 2d, 59; Mobile and Ohio, 19; do. 1st deben., 80; do. 2d deben., 45; do. 3d deben., 38; Missouri, Kansas and Texas, 34⅞; do. genl. mort. 6s, 86½; do. consol., 106; do. 2d, 64¼; Missouri Pacific, 104¾; do. 1st consol., 99¾; do. 3d, 109½; Milwaukee, Lake Shore and Western 1st, 99¼; do. pref., 50; do. inc., 79½; Manhattan Beach, 18⅛; Manhattan Co., 50⅛; Memphis and Charleston, 52; Marietta and Cincinnati 2d pref., 4¼; Michigan Southern S. F., 104⅞; Metropolitan Elevated 2d, 86½; New York, Chicago and St. Louis, 15⅞; do. pref., 31½; do. 1st, 95½; Nashville, Chattanooga and St. Louis, 54¼; do. 1st, 116; New York, Ontario and Western, 27⅜; Norfolk and Western pref., 54½; do. genl. mort., 101; Northern Pacific 1st, 103¾; New Orleans Pacific 1st, 85¾; Ohio Central, 15½; do. 1st, 95; do. inc., 35; Oregon Railway and Nav., 154; do. 1st, 108½; Oregon Transcontinental, 83½; do. 1st, 108; Ohio Southern, 15¾; do. 1st, 84; Oregon Short Line, 34; do. 6s, 100¾; Ohio and Mississippi, Springfield div. 1st, 114; Peoria, Decatur and Evansville, 27⅞; do. 1st, 104½; do. Evansville div. 1st, 97¾; Rome, Watertown and Ogdensburg inc., 40½; do. ext. 5s, 69¾; Rochester and Pittsburgh, 22; do. 1st, 104¼; do. inc., 46; Richmond and Danville, 61½; do. deben., 64½; do. 6s, 95; Richmond, Danville and West Point, 29; Rensselaer and Saratoga, 142¾; Richmond and Alleghany, 17; do. 1st, 82½; St. Paul and Duluth, 38½; do. pref., 94¾; St. Paul, Minn. and Man., 149¾; do. 2d, 109¼; do. Dakotah Ext. 1st, 106½; St. Louis and Iron Mt. 5s, 75¼; do. Cairo and Fulton 1st, 107; St. Louis, Kansas City and Northern, R. E. 7s, 102; do. Omaha div. 1st, 106½; Southern Pacific of Cal. 1st, 103⅜; South Carolina 1st, 99; St. Paul and Sioux City 1st, 109½; St. Louis and San Francisco 2d, class B, 91; Texas and Pacific, 40¼; do. inc. L. G., 57¾; do. consol. 6s, 93; do. Rio Grande div. 1st, 81; Toledo, Delphos and Burlington 1st, 50; do. inc., 50¼; Utah Southern ext. 1st, 101; Wabash, St. Louis and Pacific, genl. mort., 83½; do. Chicago div. 1st, 81½; do. Toledo, Peoria and Westeru 1st, 108⅞; Louisiana consol. ex-mat. coupon, 61½; Tennessee 6s, 45; do. compromise, 51; Virginia 6s, def., 12¾; American Cable, 68; Mutual Union Tel., 27; do. 6s, 72¾; Colorado Coal and Iron, 36; do. 6s, 83½; Cameron Coal, 20½; Maryland Coal, 20⅞; Homestake Mining, 17½; Ontario, 36.

Boston.—Atlantic and Pacific blocks, 104¾; do. 6s, 94½; do. inc., 19½; Atchison, R. R., 4⅛s, 83⅛; Burlington and Missouri River in Nebraska 6s, non-exempt, 102; Boston Land, 6⅝; Boston Water Power, 2⅞; Boston, Revere Beach and Lynn, 119; Chicago, Burlington and Quincy 4s, plain, 78½; do. 4s, old, 83¾; Connotton Valley, 4⅞; Connecticut and Passumpsic Rivers R. R., 92; Chicago and West Michigan, 5s, 89; Detroit, Lansing and Northern, 75; Flint and Pere Marquette, 21; do. pref., 98; Fort Wayne and Jackson, 83; Iowa Falls and Sioux City, 89; Jackson, Lansing and Saginaw 8s, 1891, green, 112½; Kansas City, St. Joseph and Council Bluffs 7s, 113; Kansas City, Lawrence and Southern 5s, 102¼; Kansas City, Fort Scott and Gulf, 75½; do. 7s, 110½; Little Rock and Ft. Smith, 49¾; Marquette, Houghton and Ontonagon, 69; do. pref., 117; Mexican Central, 20; do. 7s, 71½; do. block No. 3, 94; Massachusetts Central, 4; do. 6s, 29¾; New Mexico and Southern Pacific 7s, 113; New York and New England 6s, 105½; Republican Valley 6s, 102; Rutland pref., 183¾; Summit Branch, 9; Sonora 7s, 103¾; Toledo, Delphos and Burlington, Branch inc., 9¾; do. Southeast div. 6s, 45; Toledo, Cincinnati and St. Louis, 4⅛; do. 6s, 60; Wisconsin Central, 16½; Allouez Mining Co., 2½; Franklin, 13½; Huron, 2⅝; Harshaw, 1⅜; National, 1⅜; Napa Consol. Quicksilver, 4½; Osceola, 33¾; Pewabic, 11; Sullivan, 1½.

Philadelphia.—Am. S. S. Co. 6s, 105; Chesapeake and Delaware Canal, 42½; do. 6s, 88⅛; Central Transp., 34½; Nesquehoning Valley, 53½; Philadelphia City 6s, 1895, 128½; do. do. 6s, 1904, 134; Philadelphia and Reading R. R. scrip, 98; do. consol. gold 6s, 114; Philadelphia, Wilmington and Baltimore 4s, 94; Philadelphia, Germantown and Norristown, 109½; Philadelphia and Reading Coal and Iron deben. 7s, 60½; Pennsylvania and New York Canal 7s, 1906, 126½; Philadelphia and Trenton 192; St. Paul and Duluth, 38; do. pref., 94½; Steubenville and Indiano 6s, 103¾; Texas and Pacific, 41⅞; do. consol. 6s, 96; Warren and Franklin 7s, 112½; West Chester and Philadelphia 7s, 117. The latest quotations are: City 6s, 108@120; do. free of tax, 127@134; do. 4s, new, 106@114; Pennsylvania State 5s, new loan, 117⅛@118⅛; do. 4s, old, 112@114; do. 4s, new, 116⅛@117; Philadelphia and Reading Railroad, 28⅛@28⅜; do. consol. mort. 7s, reg., 125@127; do. gen'l mort. 6s, coupon, 94@95; do. 7s, 1893, 118@119; do. 7s, new conv., 70@71; United New Jersey R. R. and Canal, 189⅛@190½; Buffalo, Pittsburg and Western, 19⅛@19¾; Pittsburgh, Titusville and Buffalo 7s, 95@96; Camden and Amboy mort. 6s, 1889, 111½@112½; Pennsylvania R. R., 60@60⅛; do. general mort. 6s, coupon, 124@126; do. reg., 125@126; do. consol. mort. 6s, reg., 120@122; Little Schuylkill R. R., 58@59; Schuylkill Navigation pref., 12@13; do. 6s, 1882, 88@90: Elmira and Williamsport pref., 58@60; do. 5s, —@100; Lehigh Coal and Navigation, 42@42; do. 6s, 1884, 103@104; do. R. R. loan, 114@115; do. Gold Loan, 111@113; do. consol. 7s, reg., 117@118; Northern Pacific, 43¾@44; do. pref., 91⅞@91⅞; North Pennsylvania, 64@65; do. 6s, 106@106½; do. 7s, 119@—; do. 7s, General mort. reg., 124@—; Philadelphia and Erie, 21¼@21¾; do. 7s, 114@115; do. 5s, 102@103; Minehill, 62½@63; Catawissa, 20¾@—; do. pref., 54@54; do. new pref., 52@54; do. 7s, 1900, 118@120; Lehigh Valley, 65@65¾; do. 6s, coupon, 120@123; do. reg., 121@123; do. 7s, 132@133; do. consol. mort., 122@122½; Fifth and Sixth streets (horse), 175@190; Second and Third, 115@120; Thirteenth and Fifteenth, 78½@90½; Spruce and Pine, 42@44; Green and Coates, 80@92; Chestnut and Walnut, 90@93; Germantown, 70@74; Union, 110@111; West Philadelphia, 120@—; People's, 9¾@10½; Continental, 103@105.

Baltimore.—Atlantic Coal, 1.20; Atlanta and Charlotte 1st, 107; Baltimore City 6s, 1890, 115¾; do. 5s, 1916, 121; do. 5s, 1894, 113½; Baltimore and Ohio 2d pref., 123¾; Charlotte, Columbia and Augusta, 38; do. 1st, 108; do, 2d, 99¾; Citizens Passenger R. R., 17; Cincinnati 7.30, J. & J., 131½; Marietta and Cincinnati 2d, Trust Co. certif., 100¾; do. 3d do., 56½; Maryland Defense 6s, 103½; do. Hospital 6s, 104¼; Northern Central 5s, Series A, 98½; Ohio and Mississippi, Springfield div. 1st, 113½; Virginia Midland 2d mort., 108; do. 5th mort., 94; Virginia 10-40 coupons, 67; do. Peelers, 44⅞; Wilmington, Columbia and Augusta, 108½. The latest quotations are: Atlanta and Charlotte 1st, 107@107¼; Baltimore and Ohio, 193@—; Baltimore City 6s, 1890, 114½@115; do. 5s, 1916, 121@121½; do. 4s, 1902,—@113; Columbia and Greenville 1st, 100@102; Central Ohio 6s, —@108; Canton Co. 6s, 104@—; George's Creek Coal, 92½@95; Marietta and Cincinnati 1st, 127¾@128¼; do. 2d, 101@101½; do. 3d, 56¾@57; Northern Central, 56⅞@—; do. 6s, Series A, 98@99½; do. B, —@98; Norfolk Water 8s, —@131¼; Ohio and Mississippi, Springfield div. 1st, 113¼@114¼; Richmond and Danville bonds 1915, 94½@95¼; Virginia Midland 5th mort., 93@93½; do. inc., 6s, 50@57; Virginia consols, 59¼@59½; do. 10-40s, 43¼@—; do. 3s, 48@50.

The Coal Trade.

THE leading coal-carrying companies make the following reports of their tonnage for the week ending Nov. 4, and for the year to the same date, compared with their respective amounts carried to the same time last year:—

	Week.	1882.	1881.
Phil. and Reading R. R.....	190,720	7,670,199	7,378,910
Schuylkill Canal	17,051	449,498	520,539
Lehigh Valley	132,483	5,751,098	5,293,434
Delaware, Lackawanna and Western	104,858	3,848,834	3,573,928
Shamokin	21,113	962,668	910,785
Central R. R. of New Jersey..	44,694	3,710,219	3,695,588
United R. R. of New Jersey...	37,254	1,443,189	1,314,865
Pennsylvania Coal..... ..	16,779	1,186,354	1,183,578
Delaware and Hudson Canal..	84,523	2,983,072	3,013,779
Huntingdon and Broad Top Mountain	9,741	394,068	464,400
Penn. and New York.....	29,653	1,334,042	1,399,714
Clearfield, Pa.....	49,128	2,390,229	2,018,331

The total tonnage of anthracite coal from all the regions for the week ending Nov. 4, as reported by the several carrying companies, amounted to 639,950 tons, against 601,569 tons in the corresponding week last year, an increase of 38,381 tons. The total amount of anthracite mined for the year is 24,238,088 tons, against 23,357,389 tons for the same period last year, an increase of 880,699 tons. The quantity of bituminous coal sent to market for the week amounted to 61,188 tons, against 65,060 tons in the corresponding week last year, a decrease of 3,872 tons. The total amount of bituminous mined for the year is 3,638,253 tons, against 4,092,216 tons for the corresponding period last year, a decrease of 453,963 tons. The total tonnage of all kinds of coal for the week is 701,138 tons, against 666,629 tons in corresponding week last year, an increase of 34,509 tons, and the total tonnage for the coal year is 27,876,341 tons, against 27,449,605 tons to same date last year, an increase of 426,736 tons. The quantity of coal and coke carried over the Pennsylvania Railroad for the week ending Nov. 4 was 215,515 tons, of which 158,470 tons were coal and 57,045 tons coke. The total tonnage for the year thus far has been 9,277,572 tons, of which 6,894,467 tons were coal and 2,383,105 tons coke. These figures embrace all the coal and coke carried over the road, east and west. The shipments of bituminous coal from the mines of the Cumberland coal region for the week ended Nov. 4 were 50,556 tons, and for the year to that date 1,111,690 tons, a decrease of 698,389 tons as compared with the corresponding period of last year. The shipments were: To the Baltimore and Ohio Railroad—For the week, 28,663 tons; year, 767,244 tons; decrease as compared with 1881, 387,850 tons. Chesapeake and Ohio Canal—Week, 18,039 tons; year, 199,578 tons; decrease as compared with 1881, 413,345 tons. Pennsylvania Railroad — Week, 3,287 tons, year, 137,636 tons, decrease from last year, 239,198 tons. The Reading Railroad shipment for last week, ending November 11, was about 198,000 tons, of which 46,500 tons were sent to and 44,000 tons shipped from Port Richmond, and 19,000 tons sent to and 18,500 tons shipped from Elizabethport.—*Philadelphia Ledger, Nov.* 13

A FLORIDA gentleman urges the value of some of the native woods of that State, for use in places where walnut and mahogany are now used. The irregular portions of yellow pine, when the convolution causes a twisting in and out of the fiber, is claimed to be one of the most beautiful veneering woods. The color is bright yellow and charming from its originality, and contrasts well with walnut and the darker woods. The magnolia, from its inherent beauty and fineness of grain, makes a fine finishing wood. It is also well adapted for use in imitating ebony. It is said to grow in almost inexhaustible quantities in the hummocks of Florida and therefore is not very costly to produce. The red or sweet baywood is said to be valuable for ornamental purposes, and grows in great quantities in the State. It is substantially the same as mahogany, and can be used for the same purposes. The gentleman alluded to can see no good reason why it should not be called American mahogany.

THE proposition once advanced, to secure the safety of railway travel by placing a director upon the front of the locomotive, might not be worth much after all. An official train, containing the principal officers of a line in Maine, ran into a passenger train, injuring, in some cases seriously, the occupants of the latter, and giving the railway dignitaries themselves a good shaking up. Indeed, the shock seems to have stirred up all the sense of justice of the corporation, for there was a settlement of damages with the injured persons on the spot. Had the company been represented in this accident only by a director upon the cow-catcher, there would have been no one on the spot after the crash in a position to treat with the bruised and broken patrons in the matter of compensation for injuries.—*Montreal Witness.*

THE six elegant dining cars now running on the Chicago, Milwaukee and St. Paul Railway, which were so fully described on page 883 of our last issue, were built by the Harlan & Hollingsworth Company, of Wilmington, Del.

FOR SALE.

Locomotives—Four Second-hand Narrow-Gauge Engines in good order.
One Second-hand "Tank" Narrow-Gauge Engine, 10 tons.
Several Second-hand Standard-Gauge Locomotives in good order, immediate delivery.
One new 3ft. Gauge Passenger Engine, 22 tons, prompt delivery.
Six new 4ft. 8½ Gauge Locomotives, cylinders 17x24, weight 35 tons. October and November delivery.
Two new 3ft. Gauge Locomotives, Cylinders 12x18, weight 20 tons. October and November delivery.
Cars—Passenger and Freight Cars of all descriptions for early delivery.
Rails—16lb., 20lb. 30lb. 35lb. and 56lb. Rails.
Car Wheels and Axles.
Narrow-Gauge Rolling-stock a specialty.

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Manufacturers of Fine

RAILWAY VARNISHES,

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Fine Brushes adapted for Railroad use. All kinds of Artists' Materials. Colors for ready use, and all specialties for Railroad and Carriage purposes.

Railroad companies will save themselves great trouble in painting by allowing F. W. DEVOE & Co. to prepare their Passenger and Freight Car Colors. This will insure Durability, Uniformity and Economy. F. W. DEVOE & Co., manufacture from the crude materials, which are the component parts of any shade, and they understand better their chemical relationship, when in combination, than can be possible to those who simply buy their dry materials and then grind them.

SEND FOR SAMPLE CARD OF TINTS.

Cor. of Fulton and William Sts.
NEW YORK.

Continuous Automatic

FREIGHT BRAKES.

Requiring no other Connection between Cars than the ordinary Coupling-Link and Pin.

SIMPLE, DURABLE, AND EFFICIENT.

Brakes can be applied to every Car in the longest train, from the engine or cabose, or from any car in the train. It can be readily attached to any car, and adapted to ordinary brake beams, shoes, etc. There is no possibility of damaging wheels by "sliding."

PATENTED MAY 23, 1882.

☞Railroad and manufacturing companies, or partiss able to co-operate with patentee in their manufactur and introduction, are invited to correspond with

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MARENGO, Iowa Co., Iowa.

NO OTHER LINE IS SUPERIOR TO THE

FITCHBURG RAILROAD

HOOSAC TUNNEL ROUTE

WEST.

8.30 A. M. DAY EXPRESS.

Wagner Palace Drawing-Room Cars Attached.

Running through to Syracuse, N.Y., where connection is made with through sleeping-cars for Cincinnati, Cleveland, Toledo, *DETROIT AND CHICAGO.*

3.00 P. M. CINCINNATI EXPRESS.

Pullman Sleeping Car attached, running through to Cincinnati without change. (Only Line running Pullman Cars from Boston.) This car runs *via* Erie Railway and N.Y., P. & O. R.R., making direct connection for Louisville, St. Louis, Kansas City, New Orleans, and all points in Texas and New Mexico.

3.00 P. M. ST. LOUIS EXPRESS.

THE ONLY LINE which runs a THROUGH SLEEPING-CAR from

BOSTON TO ST. LOUIS WITHOUT CHANGE!

ARRIVING AT 8.00 A.M. SECOND MORNING.

Through sleeping car for Buffalo, Toledo, Fort Wayne, Logansport, Lafayette, Danville Tolono, Decatur and St. Louis, making direct connection with through Express Trains for Kansas, Colorado, Texas, and all points in the

SOUTHWEST.

6.00 P. M. PACIFIC EXPRESS.

The only line running a through sleeping-car *via* Niagara Falls, Canada Southern Railway and Detroit without change, arriving at Chicago at 8.00 A.M. second morning, making sure connections with through Express Trains for Iowa, Nebraska, Kansas, Colorado, the Pacific Coast, Wisconsin, Minnesota and all points in the

WEST AND NORTHWEST.

THE ABOVE TRAINS RUN DAILY, SUNDAYS EXCEPTED.

This Great Short Line passes through the most celebrated scenery in the country, including the famous HOOSAC TUNNEL, four and three-quarters miles long, being the longest Tunnel in America, and the third longest in the world.

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JOHN ADAMS, General Superintendent. F. O. HEALD, Acting Gen'l Passenger and Ticket Agent.

In effect October 23d, 1882, and subject to changes.

RAILROAD AND CANAL DIVIDEND STATEMENT.

Showing the amount of Stock Outstanding, the Dividend Periods and the date of last Dividend.

Marked thus(*)are leased roads.	Stock outstanding.	Divide'd Periods.	Last Dividend Payable.
Albany and Susq*...100	2,500,000	semi-an	July '82 2
Ashuelot.....100	210,000	q'arterly	Oct. '81 3½
Atch., Top. and S. Fe100	54,000,000	q'arterly	Nov. '82 1½
Atlanta and W. Point100	1,232 200	semi-an	Jan. '82 6
Atlantic and St. Law*100	5,840,000	semi-an	Mar. '82 3
Augusta and Savan'h100	1,082,900	semi-an	June'81 3½
Avon,Genesee&MtM*100	225,000	semi-an	July '81 3
Baltimore and Ohio.100	14,792,566	semi-an	Nov. '82 5
" " pref.100	5,000,000	semi-an	July '82 3
Washington Br....100	1,650,000	semi-an	Nov. '82 5
Berkshire*.....100	600,000	q'arterly	Apl. '82 1¾
Boston and Albany..100	20,000,000	q'arterly	Sept.'82 2
Bos.&N.Y.AirLine pf.100	2,795,227	q'arterly	June'82 1
Bos., Cl., F.&N.B.pref.100	1,750,100	semi-an	Oct. '82 3½
Bos., Conc.&Mont.pf*100	800,000	semi-an	Nov. '82 3
Boston and Lowell..500	3,940,000	semi-an	July '82 2
Boston and Maine...100	6,921,274	semi-an	Nov. '82 4
Boston & Providence100	4,000,000	semi-an	Nov. '82 4
Attleborough Br...100	131,700	semi-an	July '82 3½
Bos., Revere B &Lynn100	419,400	semi-an	July '82 3½
Buffalo,N. Y. & Erie*.100	950,000	semi-an	June'82 3
Camden & Atlantic.. 50	377,400	q'arterly	Nov. '82 3
" " pref. 50	880,650	q'arterly	Nov. '82 4
Camden & Burl. Co...100	381,925	semi-an	July '82 3
Canada Southern....100	15,000,000	.....	Feb. '81 2½
Cape May & Millville* 50	447,000	semi-an	June'81 3
Catawissa*..... 50	1,159,500	annual	Oct.'82 $2½
" pref..... 20	2,200,000	semi-an	Nov. '82 3½
" new pref.. 50	1,000,000	semi-an	Nov. '82 3½
Cayuga and Susq.*.. 50	589,110	semi-an	July '81 4½
Cedar Rapids&Mo.R*100	6,850,400	q'arterly	Nov. '82 1½
" " pref.100	769,600	semi-an	Aug .'82 3½
Central of Georgia...100	7,500,000	semi-an	June '82 4
Central of New Jersey100	18,563,200	q'arterly	July '76 2½
Central Ohio*..... 50	2,437,950	semi-an	July '82 3
" pref.. . 50	411,550	semi-an	July '82 3
Central Pacific 100	59,275,500	semi-an	Aug. '82 3
Chemung*.....100	380,000	q'arterly	July '81 1½
Cheshire preferred ..100	2,155,300	semi-an	July '82 1½
Chicago and Alton...100	11,181,741	semi-an	Sept. '82 4
" " pref 100	2,245,400	semi-an	Sept. '82 4
Chi., Burl. & Quincy.100	55,337,455	q'arterly	Sept. '82 2
Chi., Iowa & Nebras*.100	3,916,200	semi-an	July '82 4
Chi., Mil. & St. Paul..100	20,404,261	semi-an	Oct. '82 3½
" " pref 100	14,401,483	semi-an	Oct. '82 3½
Chi. & N. Western...100	14,988,257	semi-an	June'82 3½
" pref.100	21,525,353	q'arterly	Sept. '82 2
Chi., R. I. & Pacific..100	41,960,000	q'arterly	Nov. '82 1¾
Chi. and West Mich .100	6,151,000	semi-an	Feb. '82 2½
Chi.,St.P.,M.&O.pref.100	10,390,000	q'arterly	Oct. '82 1¾
C., Ind., St. L. & Chi..100	6,000,000	q'arterly	July '82 1½
Cin., Sand. & Clev.pf. 50	429,037	semi-an	Nov. '82 3
Clev. and Mahoning* 50	3,759,200	semi-an	Nov. '81 3½
Clev. and Pittsburg* 50	11,244,336	q'arterly	Dec. '82 1¾
Columbus & Xenia*. 50	1,786,200	q'arterly	Sept.'82 2
Colum.&HockingVal.100	2,500,200	semi-an	Aug. '81 208
Concord 50	1,500,000	semi-an	Nov. '82 5
Concord and Ports.*..100	350,000	semi-an	July '82 3½
Conn.& Passump.Riv100	2,244,400	semi-an	Aug '82 3
Connecticut River ..100	2,100,000	semi-an	July '82 4
Cumberland Valley.. 50	1,292,950	q'arterly	Oct.' 82 2½
" 1st pref 50	241,900	semi-an	Apl. '82 4
" 2d pref. 50	243,000	semi-an	Apl. '82 4
Danbury & Norwalk. 50	600,000	.....	Oct. '82 2½
Dayton and Mich.*.. 50	2,402,573	semi-an	Apl. '82 1¾
" " pref. 50	1,211,250	q'arterly	July '82 2
Delaware*..... 25	1,468,940	semi-an	July '82 3
Del. & Bound Brook*100	1,652,000	q'arterly	Nov. '82 1¾
Del., Lack.& Western 50	26,200,000	q'arterly	Oct., 82 2
Denver & Rio Grande.100	29,160,000	q'arterly	Jan '82 1½
Den.,South P. & Pac.100	3,500,000	.....	Aug.'80 4
Detroit, Lans. & Nor.100	1,825,600	semi-an	Aug.'80 2½
" " pref.100	2,503,380	semi-an	Aug.'82 3½
Dubuque&Sioux C'y*100	5,000,000	semi-an	Oct. '82 3
East Pennsylvania*., 50	1,709 550	semi-an	July '82 3
East Mahanoy*..... 50	392,950	semi-an	July '82 3
Eastern (N. H.).....100	492,500	semi-an	June'82 2½
Eel River.....100	3,000,000	q'arterly	Sept. '82 $1
Elmira&Williamsp't* 50	500,000	semi-an	Nov. '82 1½
" " pref. 50	500,000	semi-an	July '82 3½
Erie and Pitsburg*.. 50	1,998,400	q'arterly	June'82 1¾
Evansville & Terre H.100	100,000	semi-an	Nov.'81 2
Fitchburg.....100	4,500,000	semi-an	July '82 3
F. & P. Marquette pf.100	6,500,000	semi-an	July '82 3
Ft.W. & Jackson pref.100	2,000,000	.....	May '82 2
Georgia. 100	4,200,000	q'arterly	July '82 2½
Granite 100	1,250,000	semi-an	July '82 3
Han. & St. Jo. pref .100	5,083,024	semi-an	Aug. '82 3½
Harrisbg&Lancaster 50	1,182,500	semi-an	July '82 3½
H'ford &Conn.West'n.100	.....	.....	Nov. '82 1½
Housatonic pref. ...100	1,180,000	q'arterly	Oct. '82 2
Illinois Central.....100	39,000,000	semi-an	Sept. '82 3½
Ia.Falls & Sioux City*100	4,623,500	q'arterly	Sept. '82 1¾
Iowa R. Land Co....100	7,620,000	q'arterly	Nov. '82 1
Jeffersonv. Mad.&Ind100	2,000,000	q'arterly	May '82 1¾
Joliet and Chicago*...100	1,500,000	q'arterly	June'82 1¾
Kan.C.,Ft.S.&Gulf...100	4,000,000	.....	Feb. '82 2
" " pref ..100	2,750,000	semi-an	Aug. '82 4
Kentucky Central...100	500,000	semi-an	June'81 1
" " pref..100	5,583,500	semi-an	June'81 1
Lake Shore&Mich.So.100	49,466,500	q'arterly	Nov. '82 2
" " (guar.)100	533,500	semi-an	Aug. '82 5
Lawrence*..... 50	450,000	q'arterly	July '82 2
Lehigh Valley..... 50	27,496,895	q'arterly	Oct. '82 2
" " pref.50	106,200	q'arterly	Oct. '82 2

Marked thus(*)are leased roads.	Stock outstanding.	Divide'd Periods.	Last Dividend Payable.
Little Miami..... 50	4,637)300	q'arterly	Sept. '82 2
Little Rock & Ft. S..100	4,096,135	.....	July' 81 108
Little Schuylkill*.. . 50	2,246,100	semi-an.	July '82 3½
Long Island..... 50	10,000,000	q'arterly	Nov. '82 1
Louisville & Nashv..100	19,130,913	semi-an.	Feb. '82 3
Lowell & Andover....100	500,000	semi-an.	Jan. '82 3½
Lykens Valley 100	600,000	q'rterly.	Oct.' 81 2½
Manchester & Law..100	1,000,000	semi-an.	Nov. '82 5
Manhattan 100	13,000,000	.....	.....
" " 1st pref.100	6,500,000	q'rterly.	Oct. '82 1½
" " 2d pref.100	6,500,000	q'rterly.	Oct. '82 1½
Marietta& Cincinnati 50	1,386,350	.....	.....
" " 1st pref 50	8,105,600	semi-an.	Sep. '66 38
" " 2d pref 50	4,440,000	semi-an.	Sep. '66 38
Marg.Hout.&Ont.pf...100	2,259.026	.....	Aug. '82 4
Massawippi*..... 100	400,000	semi-an.	Aug. '82 3
Metropolitan 100	6,500,000	q'rterly.	Oct. '82 1½
Michigan Central....100	18,738,204	q'rterly.	Aug. '81 1
Middlesex Central....100	280,000	semi-an.	Aug. '82 3
Mill Creek&Minehill* 50	323,000	semi-an.	July '82 5
M.Hill& Schuyl.Hav* 50	4,022,500	semi-an.	July '82 3½
Missouri Pacific.....100	28,169,800	q'rterly.	Oct. '82 1¾
Mobile&Montgomery100	3,022,517	semi-an.	Feb. '80 2½
Morris and Essex.... 50	15,000,000	semi-an.	July '82 3½
Mt Carbon&PtCarbon 50	282,350	semi-an.	July '82 6
Nashua and Lowell..100	800,000	semi-an.	Nov. '82 4
Nashua & Rochester.100	1,305,800	semi-an.	Oct. '82 1½
Nashv. & Decatur....100	1,827,000	semi-an.	June'81 3
Nash.,Chat.&StLouis 25	6,670,325	semi-an.	Apl. '82 1½
Naugatuck.....100	2,000,000	semi-an.	July '82 5
Nesquehoning Val'y* 50	1,300,000	semi-an.	Sept.'82 3
N.Castle&Beaver Val* 50	600,000	q'rterly.	Oct. '81 —
NewLondonNorth'n*100	1,500,000	q'rterly.	July '82 1½
N. Y. Cen. & Hud. R.100	89,428,330	q'rterly.	Oct. '82 2
N. Y. and Harlem....100	7,950,000	q'rterly.	July '82 4
" " pref.100	1,500,000	q'rterly.	July '82 4
" City Line.. —	.....	annual	Apl. '82 3
N.Y.,LakeErie&West.100	77,083,900	.....	.....
" " pref.100	8,156,825	.....	Jan. '82 6
N. Y., N. H. & Hart..100	15,500,000	semi-an.	Jan. '82 5
N. Y., Prov. & Boston100	3,000,000	q'rterly.	Nov. '82 2
Niag.Bridg&Canand*100	1,000,000	semi-an.	July '81 3
North Carolina*.....100	3,000,000	semi-an.	Sep. '81 3
" " pref.100	1,000,000	semi-an.	Sep. '81 3
N. Eastern (S.C.) pref100	86,000	semi-an.	May '81 4
Norfolk & Western pref.	15,000,000	q'rterly.	Sept. '82 $1
North Pennsylvania. 50	4,527,150	q'rterly.	Nov. '82 1¾
Northern Central.... 50	6,142,000	semi-an.	July '82 3
Northern N. Hampsh100	3,068,400	semi-an.	June'82 3
Northern N. Jersey*.100	1,000,000	semi-an.	July '80 2½
Norwich&Worcester*100	2,604,400	semi-an.	July '82 5
Ohio and Miss. pref..100	4,030,000	semi-an.	Mar. '75 3½
Old Colony.....100	7,333,800	semi-an.	July '82 3½
Oregon R'way&Nav.100	6,000,000	q'rterly.	Nov. '82 2
Oswego & Syracuse..100	1,320,400	semi-an.	Aug. '81 4½
Panama..... 100	7,000,000	.....	July '82 6½
Paterson & Hudson*.100	630,000	semi-an.	July '82 4
Paterson & Ramapo.100	248,000	semi-an.	July '82 4
Pember.&Hightst'n*. 50	342,150	semi-an.	Jan. '82 3
Pennsylvania..... 50	83,786,570	semi-an.	Nov. '82 4½
Pennsylvania Co..... 50	20,000,000	semi-an.	June'81 2½
Peoria & Bureau Val*100	1,200,000	semi-an.	Feb. '82 4
Philadelphia & Erie*. 50	7,013,700	semi-an.	.....
" " pfd 50	2,400,000	semi-an.	Jan. '75 4
Phil,Ger.&Norrist'n* 50	2,231,900	q'rterly.	Sept.'82 3
Phil. and Reading... 50	32,726,375	q'rterly.	Jan. '76 2½
" " pref. 50	1,551,800	q'rterly.	July '76 3½
Phila. and Trenton...100	1,250,100	q'rterly.	Oct. '82 2½
Phila., Wil. and Balt. 50	11,585,750	semi-an.	July '82 4
Pittsb., Ft. W. & Chi.*100	19,714,285	q'rterly.	Oct. '82 1¾
" Special Imp.100	6,770,900	q'rterly.	Oct.' 82 1¾
Pittsfield&N.Adams...100	450,000	semi-an.	July '82 2½
Portl., Saco & Portsm100	1,500,000	semi-an.	July '82 3
Providence &Worces.100	2,000,000	semi-an.	July '82 3
Rensselaer&Saratog.*100	7,000,000	semi-an.	July '82 4
Rhode Island& Mass.100	100,000	.....	Jan. '81 3
Richmond& Danv...100	3,866,000	q'rterly.	Aug. '82 2
Richmond & Petersb100	1,009,300	semi-an.	Jan. '81 3
Roch.&Genesee Val.*100	555,200	semi-an.	July '82 3
Rutland preferred.. 100	4,000,000	semi-an.	Sept. '82 1
St.L.,Alt. & T.Haute.100	2,300,000	.....	.....
" " pref.100	2,468,406	.....	May '82 3
St.L.&S.Fran.1st pref100	4,500,000	.....	Aug. '82 3½
St.L.,I.Mt.&South'n.100	21,459,921	semi-an.	Feb. '74 3
St.L.,Jac'ville & Chic.100	1,293,000	.....	Aug. '82 4½
" " pref.100	1,034,000	.....	Aug. '82 4½
St. P. & Duluth pref.100	4,705,000	q'rterly.	June'82 1¾
St. P., Minn. & Man..100	20,000,000	q'rterly.	Nov.'82 2
Schuylkill Valley*... 50	576,050	semi-an.	July '82 2½
Seaboard & Roanoke.100	1,229,600	semi-an.	Nov. '82 5
Shamokin V.&Pottsv 50	669,450	semi-an.	Feb. '82 3
Shore Line*.....100	1,000,000	semi-an.	July '82 4
Sioux C.&Pacific pref100	169,000	semi-an.	Oct. '82 3½
South Br. (N. J.)*....100	438,300	semi-an.	Jan. '82 3
South Western (Ga.)*100	3,892,300	semi-an.	Dec. '81 3½
Stockbridge&Pitts.*.100	448,700	semi-an.	Oct. '81 1½
Syr.,Bingham&N.Y.*100	2,500,000	semi-an.	Feb. '81 2
Terre Haute & Ind....100	1,988,150	semi-an.	Aug. '82 4
Troy and Boston.....100	1,609,000	semi-an.	Feb. '80 2
Union Pacific. 100	61,000,000	q rterly.	Oct. '82 1¾
United Cos of N. J.*.100	20,490,000	q'rterly.	Oct. '82 2½
Utica, Shenango&S V100	4,000,000	semi-an.	Nov.'81 3
Utica and Black Riv.100	1,772,000	semi-an.	Mar. '82 2
Vermont and Mass..100	3,050,000	semi-an.	Oct .'82 3
Wab. St.L.&Pac.pref.100	22,615,100	q'rterly.	Nov.'81 1½

Markedthus(*)are leased roads.	Stock outstanding.	Divide'd Periods.	Last Dividend Payable.
Ware River*.....100	750,000	semi-an.	July '82 3½
Warren (N. J.).....100	1,800,000	semi-an.	Apl. '82 3½
Warwick Valley.....100	340,000	semi-an.	July '82 2½
Westchest&Phil.pref100	821,300	semi-an.	July '80 2
West Jersey.....100	1,359,750	semi-an.	Sept. '82 3
Wilmingt'n&Weld'n.100	1,456,200	semi-an.	July '82 3
Wil., Col., & Aug 100	960,000	semi-an.	July '82 3
Winchester&Poto'c.*100	180,000	semi-an.	July '82 3
Winchester&Strasb.*100	74,700	semi-an.	July '82 3
Worcester & Nashua. 75	1,789,800	semi-an.	July '82 1½
HORSE-POWER R. R.			
Albany City.....100	200,000	annual	..... '80 5½
Baltimore City..... 25	1,000,000	semi-an.	Oct. '82 3
Balt.,Cat.&El. Mills..100	....	semi-an.	July '82 2
BleeckerSt.&Ful.F'y.100	900,000	semi-an.	July '82 3½
Boston&Chelsea pref. 50	110,000	semi-an.	Oct. '82 3
Broadway (Brooklyn)100	250,000	q'arterly	Oct. '82 6
B'way&7th Av,(N.Y.)100	2,100,000	q'arterly	Oct, '82 2
B'klyn&Hunter's Pt.100	400,000	semi-an.	Oct. '82 6
Brooklyn City.....100	2,000,000	q'arterly	Aug. '82 3½
Bushwick (Brooklyn)100	309,000	semi-an.	Oct. '82 6
Cambridge.....100	908,000	q'arterly	Oct. '82 4½
Cen.Park,N.& E.Riv.100	1,800,000	q'rterly.	Oct. '82 6
Christoph'r&TenthSt100	650,000	semi-an.	Aug. '82 2½
Citizens' (Phil.)..... 50	192,500	q'rterly.	Jan. '82 2½
Citizens' (Pbg.)..... 50	200,000	annual..	.....'80 14½
Coney Island&Bklyn100	500,000	semi-an.	Oct. '80 5
Continental (Phil.) .. 50	580,000	semi-an.	July '82 6
D.Dock,E.B'way&Bat100	1,200,000	q'arterly	Aug. '82 4
Eighth Av. (N. Y.)...100	1,000,000	q'rterly.	Oct. '82 3
42d St. & G. St. Ferry100	747,000	semi-an.	May '82 6
Frankf.&Southw (Ph) 50	600,000	q'rterly.	Oct. '82 6
Germantown, (Ph.).. 50	572,800	q'rterly.	Oct. '82 2½
Girard College (Ph.) . 50	500,000	semi-an.	July '71 3
Grand St. & Newton..100	170,091	semi-an.	July '81 2½
Green&Coates St.(Ph) 50	150,000	q'rterly.	Oct. '82 3
Heston,Mantau&F'm 50	299,381	semi-an.	Jan. '75 4
Highland.....100	600,000	semi-an.	July '82 4
Lomb.&SouthSts(Ph) 25	195,000	semi-an.	Oct. '75 4
Lynn and Boston....100	200,000	semi-an.	Nov.'82 4
Malden and Melrose.100	165,000	.....	.....
Metropolitan (Bost.). 50	1,500,000	semi-an.	July '82 4
Middlesex (Boston)..100	650,000	semi-an.	Nov. '82 3½
N.Y.,Bay Ridge&Jam100	150,000	.....	Oct. '78 7
Ninth Av. (N. Y.)....100	707,320	.....	.....
Orange &Newark.....100	282,555	.....	.....
People's (Phila.) pref. 25	124,744	.....	July '82 2
Philadelphia City.... 50	475,000	semi-an.	July '82 4
Phila. and Darby.... 20	200,000	semi-an.	July '81 3½
Phila.&Grey's Ferry. 50	308,000	semi-an.	Jan. '82 6
Pbg,Alleg.&Manches. 50	300,000	q'rterly.	Oct. '81 3
Ridge Avenue (Ph.).. 50	420,000	semi-an.	Oct. '81 11
Second Avenue (N.Y.)100	1,199,500	semi-an.	July '82 4
Second&ThirdSt.(Ph) 50	771,076	q'rterly.	Jan. '82 4½
17th &19th sts (Ph.).. 50	250,000	semi-an.	July '81 3
Sixth Avenue (N. Y.)100	750,000	semi-an.	May '82 5
Somerville (Boston).100	113,000	semi-an.	Nov. '82 3
South Boston..... 50	600,000	semi-an.	July '82 4
Third Avenue, N. Y..100	2,000,000	q'rterly.	Aug '82 5
13th and 15th sts.,Ph 50	334,529	q'rterly.	Jan. '82 4
23d street, N. Y.....100	600,000	semi-an.	Aug. '82 4
Union, Boston.....100	374,300	semi-an.	Jan. '82 4
Union, Phila..... 50	1,005,000	semi-an.	Jan. '82 7
West Philadelphia.... 50	750,000	semi-an.	July '77 10
CANALS.			
Chesapeake and Dela 50	2,078,038	semi-an.	June'75 2
Delaware Division... 50	1,633,350	semi-an.	Aug. '82 $1
Delawa. and Hudson100	20,000,000	q'rterly.	Sept. '82 1¾
Delaware & Raritan*.100	5,847,400	q'rterly.	Oct. '82 2½
Lehigh Coal and Nav 50	11,204,250	semi-an.	June'82 2
Monongahela Nav... 50	1,004,500	semi-an.	July '82 $3
Morris, consolidated.100	1,025,000	semi-an.	Aug. '82 2
" preferred....100	1,175,000	semi-an.	Aug. '82 5
Pennsylvania..... 50	4,501,200	.....	.....
Schuyl. Nav., com.*. 50	859,100	annual..	Oct.'82 50c.
" " pref... 50	3,200,000	annual..	Oct. '82 $1
MISCELLANEOUS.			
Adams Express.....100	12,000,000	q'rterly.	Dec. '82 2
American Express... 50	18,000,000	semi-an.	July '82 3
Amoskeag Manuf.Co.100	3,000,000	semi-an.	June'81 5
Calumet&HeclaMin'g 25	100,000 S.	q'rterly.	Nov. '82 $5
Central Mining Co...100	.....	semi-an.	Feb.'82 2½
Consolidation Coal..100	10,250,000	semi-an.	Jan. '82 2
George's Creek C.&I.100	.....	semi-an.	Jan. '82 3
Maryland Coal.....100	4,400,000	semi-an.	Feb. '76 1½
Mariposa L. &Mining100	10,000,000	.....	.....
" pref100	5,000,000	.....	.....
Missouri Val.LandCo100	200,000	semi-an.	July '82 12
National Tube Works100	1,000,000	q'rterly.	Oct. '82 3
Pac. Mail Steamship.100	20,000,000	q'rterly.	Sept.'69 3
Pennsylvania Coal... 50	5,000,000	q'rterly.	Aug. '82 3
Pullman Palace Car..100	10,032,800	q'rterly.	Nov.'82 2
Quicksilver, com.....100	5,708,700	.....	May '82 0.4
" pref.....100	4,291,300	.....	May '82 6
Quincy Mining Co... 25	40,000 shs	semi-an.	Aug. '82 $5
Quincy R. R. Bridge.100	1,750,000	semi-an.	July '82 5
SiouxC.&I.F.L.&L.Co100	500,000	semi-an.	June'82 5
Spring Mt. Coal.....100	1,500,000	semi-an.	June'82 3½
Topeka Eq'ip'nt Co.100	255,500	semi-an.	Oct. '82 5
United States Ex....100	7,000,000	q'rterly	Nov. '82 1
Wells-Fargo & Co. Ex100	6,250,000	semi-an.	July '82 4½
Western Union Tel..100	80,000,000	q'rterly.	Oct. '82 1½

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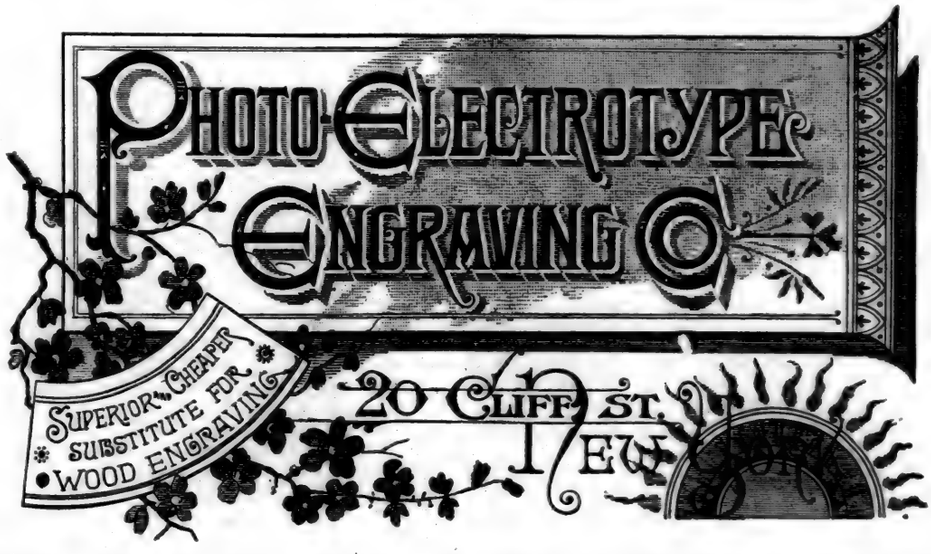
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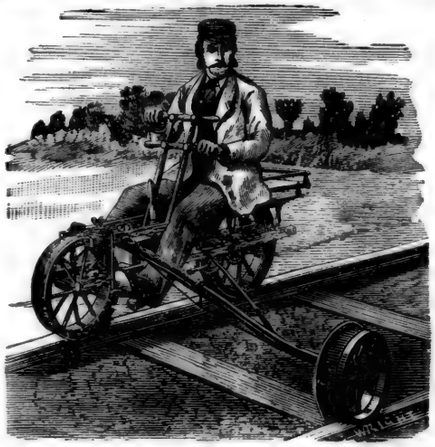
RAILROAD EARNINGS.—MONTHLY.

	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total.
BURL., CEDAR RAP. & NORTHERN:													
1880	184,316	165,170	188,325	141,652	149,504	153,378	143,432	160,160	179,804	204,991	189,330	193,419	2,053,484
1881	167,750	124,510	148,551	184,680	165,630	205,912	174,351	209,112	221,801	221,748	203,880	232,812	2,259,037
1882	252,823	225,631	224,107	178,304	199,278	211,257	198,476	224,921	261,439	300,155	.....	.....	.....
CENTRAL PACIFIC:													
1880	1,200,615	1,070,487	1,373,438	1,356,716	1,778,488	1,724,930	1,840,067	1,973,438	1,994,997	1,120,229	2,199,466	1,905,221	20,508,113
1881	1,602,907	1,454,218	1,709,638	1,872,370	2,091,411	2,159,382	1,899,346	2,088,519	2,185,303	2,507,857	2,297,971	2,225,179	24,094,101
1882	1,839,469	1,720,675	1,969.737	2,054,687	2,342,298	2,229,105	2,020,000	2,277,000	2,474,000	2,409 000	.....	.....	.....
CHESAPEAKE AND OHIO:													
1880	202,335	198,681	222,762	221,559	199,443	214,352	238,236	259,110	247,303	211,820	240,795	218,009	2,674,308
1881	162,540	184,389	228,479	227,343	252,235	241,135	225,096	262,858	247,144	236,396	235,585	203,562	2,702.762
1882	210,455	209,708	208,981	267,454	255,939	260,753	306,831	371,175	332,219	347,882	.....	.....	.....
CHICAGO AND ALTON:													
1880	534,054	497 013	626,473	542,961	616,128	617,524	708,906	761,120	767,349	785,199	696,776	574,695	7,718,198
1881	487,890	461,641	529,915	558,190	548,556	635,860	676,205	769,751	774,790	771,844	680,133	635,307	7,553,988
1882	579,447	530,480	584,483	561,787	553,412	613,886	671,537	800,624	881,109	812,032	.....	.....	.....
CHICAGO AND NORTHWESTERN:													
1880	1,154,632	1,131,683	1,361,725	1,294,573	1,875,608	1,671,177	1,699,686	1,767,938	2,020,245	2,105,217	1,855,622	1,477,902	19,416,007
1881	1,240,664	963,204	1,178,795	1,474,612	1,879,006	2,306,440	1,983,032	2,315,164	2,892,676	2,341,098	2,019,038	1,855,477	21,849,209
1882	1,644,935	1,474,176	1,672,931	1,668,741	2,110,947	2,022,700	2,025,736	2,099,755	2,497,053	2,592,100	.....	.....	.....
CHICAGO, BURLINGTON AND QUINCY:													
1880	1,432,740	1,411,870	1,732,518	1,489,894	1,909,627	1,682,956	1,773,643	1,834,321	1,862,285	1,934,762	1,837,860	1,552,018	20,454,494
1881	1,307,948	1,034,821	1,418,149	1,574,371	1,679,455	2,083,803	1,888,358	2,173,945	2,262,981	2,031,001	1,816,133	1,905,490	21,324,150
1882	1,658,834	1,457,300	1,566,217	1,530,838	1,505,261	1,437,164	1,625,006	2,086,858	.....	.....	.....	.....	.....
CHICAGO, MILWAUKEE AND ST. PAUL:													
1880	764,298	738,749	900,675	871,041	1,134,745	1,037,958	1,026,708	991,207	1,257,677	1,493,620	1,472,037	1 397,308	13,086,119
1881	990,847	682,717	916.989	1,259,946	1,538,491	1,729,811	1,568,706	1,678,361	1,644,670	1,591,052	1,569,000	1,855,000	17,025,462
1882	1,435,000	1,377,000	1,561,000	1,518,000	1,629,000	1,620,000	1,465,000	1,545,000	1,950,000	2,251,000	.....	.....	.....
CHICAGO, ST. PAUL, MINNEAPOLIS AND OMAHA:													
1880	193,827	173,078	259,783	259,208	232,146	218,093	236,995	251,013	300,833	342,052	342,894	312,173	3,122,097
1881	257,786	158,594	251,648	261,211	350,124	404,562	383,202	385,586	373,370	379,029	380,733	391,950	3,981,296
1882	307,498	315,100	405,779	356,558	406,420	363,109	331,480	394,555	482,997	546,671	.....	.....	.....
CINCINNATI, INDIANAPOLIS, ST. LOUIS AND CHICAGO:													
1880	155,697	172,541	198,220	168,199	186,995	200,332	204,138	233,478	343,627	239,881	209,014	198,254	2,412,185
1881	182,523	171,511	191,005	183,710	191,056	192,299	177,167	229,858	228,653	212,606	194,805	192,623	2,296,916
1882	200,042	186,879	208,066	204,269	199,110	195,948	209,564	.....	259,379	.....	.....	.....	.....
DENVER AND RIO GRANDE:													
1880	124,759	126,922	160,883	164,882	193,925	295,455	373,132	400,133	406,583	473,318	408,562	349,196	3,478,007
1881	307,476	317,681	398,493	433,111	514,767	584,230	548,284	606,193	589,287	638,432	566,819	643,417	6,206,812
1882	491,914	412,987	535,055	559,917	614,298	537,462	495,797	574,040	595,306	630,598	.....	.....	.....
HANNIBAL AND ST. JOSEPH:													
1880	176,079	166,965	216,061	206,735	191,317	179,396	224,312	238,081	233,448	242,214	207,147	279,635	2,561,366
1881	154,401	122,874	176,356	190,812	172,950	190,740	201,899	210,240	215,103	231,913	201.782	180,376	2,230,961
1882	138,284	154,717	168,798	148,913	154,917	155,030	184,347	258,628	239,196	238,442	.....	.....	.....
ILLINOIS CENTRAL:													
1880	595,212	613,806	613,008	535,732	665,120	681,736	724,095	732,755	806,836	880,211	783,120	673.182	8,304,812
1881	631,281	524,499	557,789	662,493	673,259	803,887	720,004	868,407	828,847	815,238	737 218	763,475	8,586,397
1882	728,173	689,387	695,371	674,603	674,749	663,746	752,251	813,600	828,238	865,325	.....	.....	.....
INDIANA, BLOOMINGTON AND WESTERN:													
1880	80,498	89,690	116,185	90,374	85,733	106,954	103,438	116,732	110,622	121,343	95,621	104,619	1,233,079
1881	90,283	83,261	192,085	203,677	200,064	199,846	199,125	272,114	247,932	225,678	160,826	156,697	.....
1882	195,824	175,755	206,235	205,934	182,554	186,133	206,072	278,814	273,100	269,046	.....	.....	.....
LOUISVILLE AND NASHVILLE:													
1880	674,455	575,035	612,593	563,883	655,014	976,229	772,538	827,089	931,911	1,000,327	953,087	949,185	9,491,346
1881	812,118	805,124	947,959	855,704	828,726	1,227,885	817,135	876,192	951,566	1,002,950	1,065,223	1,153,779	11,344,361
1882	964,527	960,315	1,068,834	953,603	958,130	1,215,490	1,063,765	1,043,912	1,107,985	1,216,215	.....	.....	.....
MOBILE AND OHIO:													
1880	250,116	204,095	168,302	140,091	129,248	121,855	131,621	140,593	184,247	264,714	251,368	287,372	2,273,622
1881	224,347	216,768	230,916	163,551	145,803	136,517	135,549	160,789	210,262	256,924	262,986	258,812	2,403,224
1882	159,676	158,590	148,166	141,957	134,378	136,184	136,398	140,443	160,031	265,201	.....	.....	.....
NASHVILLE, CHATTANOOGA AND ST. LOUIS:													
1880	205,634	191,154	169,457	155,466	158,839	144,130	151,594	169,326	167,473	178,266	182,087	175,966	2,049,484
1881	178,143	190,866	207,710	183,525	104,430	154,549	150,430	168.317	179,979	172,121	152,059	173,127	2,075,250
1882	156,994	159,961	161,005	154,155	135,556	119,074	160,991	168,304	168,999	.....	.....	.....	.....
NEW YORK AND NEW ENGLAND:													
1880	164,232	149,907	183,845	179,689	183,701	219,891	205,056	249,885	235,642	215,491	210,856	198 108	2,396,302
1881	189,749	173,614	212,019	216,913	217,185	231,518	246,821	280,524	299,573	261,200	242,412	237,729	2,809,255
1882	213,840	217,261	265,222	263,544	283,244	290,060	300,920	353,726	338,490	310,145	.....	.....	.....
NEW YORK, LAKE ERIE AND WESTERN:													
1879	1,147,173	1,207,391	1,356,780	1,372,755	1,350,574	1,230,419	1,273,533	1,450,223	1,492,497	1,713,697	1,515,835	1,398,224	16,509,127
1880	1,296,381	1,252,218	1,644,958	1,643,151	1,592,544	1,661,812	1,580,976	1,606,874	1,786,417	1,899,910	1,799,338	1,726,788	19,149,361
1881	1,443437	1,425,765	1,847,261	1,709,057	1,776,891	1,794,982	1,787,081	1,772,895	1,734,200	.....	.....	.....	.....
NORTHERN CENTRAL:													
1880	334,494	330,860	415,325	386,130	329,788	419,193	450,298	453,923	464,093	512,918	459,054	494,310	5,050,387
1881	386,157	382,657	452,906	487,273	465,588	487,287	440,811	498,008	429,565	449,664	487,160	476,622	5,443,697
1882	407,368	413,551	430,194	435,129	482,607	482,762	509,683	667,488	592,435	.....	.....	.....	.....
NORTHERN PACIFIC:													
1880	81,390	77,259	119,357	185,700	217,613	253,105	241,277	223,500	330,300	358,456	300,822	220,993	2,629,710
1881	116,508	78,803	162,984	216,210	312,705	412,024	393,260	434,085	534,363	583,555	428,903	434,331	4,044,576
1882	239,800	269,000	384,000	438,000	568,332	631,342	679,240	727,377	789,700	834,460	.....	.....	.....
PHILADELPHIA AND ERIE:													
1880	224,307	245,372	327,678	334,947	311,470	331,024	308,699	347,532	322,737	367,082	324,966	281,919	3,727,733
1881	224,303	225,501	285,573	293,323	343,792	350,585	291,669	303,849	276,522	292,392	284,078	282,772	3,454,309
1882	252,727	246,246	265,311	277,851	341,415	347,614	377,206	420,329	386,455	.....	.....	.....	.....
ST. LOUIS AND SAN FRANCISCO:													
1880	198,091	195,948	193,146	176,164	167,664	173,607	213,297	259,995	280,873	328,194	290,329	226,063	2,698,371
1881	212,435	178,234	262,050	265,298	283,399	260,254	252,333	286,373	279,064	308,569	284,320	287,914	3,160,245
1882	256,784	244,654	274,959	242,806	253,419	240,177	318,613	381,637	336,805	360,900	.....	.....	.....
ST. LOUIS, ALTON AND TERRE HAUTE:													
1880	153,139	163,737	168,994	155,462	147,928	150,207	191,077	216,759	204,295	221,863	188,773	184,503	2,146,741
1881	175,725	166,012	201,137	197,447	172,177	165,896	165,393	189,180	196,368	204,338	162,544	153,852	2,112,801
1882	168,987	149,619	178,145	157,450	162,842	142,742	192,017	236,137	217,659	229,962	.....	.....	.....
ST. LOUIS, IRON MOUNTAIN AND SOUTHERN:													
1880	555,983	490,195	451,560	408,241	349,053	363,454	432,655	565,869	671,219	688,365	632,052	656,951	6,265,597
1881	570,957	560,791	704,002	548,300	479,075	474,302	533,512	644,386	708,325	719,239	687,280	709 498	7,319,744
1882	516,370	501,127	585,008	581,977	519,120	529,700	515,519	675,981	724,160	809,394	.....	.....	.....
ST. PAUL, MINNEAPOLIS AND MANITOBA:													
1880	180,239	137,645	261,798	333,014	281,899	243,407	272,089	232,579	274,188	345,057	300,675	297,641	3,160,231
1881	254,187	159,482	320,962	425,685	382,642	405,322	387,488	414,954	485,736	605,708	508,530	528,262	4,878,960
1882	395,461	418.358	531,004	570,890	858,902	856,417	853,296	801,759	832,776	979,057	.....	.....	.....
TEXAS AND PACIFIC:													
1880	245,785	219.165	215,070	174,177	141,083	153,066	195,711	226,073	266,570	303,666	312,184	301,858	2,754,408
1881	281,176	260,781	319,928	295,066	281,782	285,405	328,063	381,331	345,790	419,203	357,724	381,218	3,921,569
1882	310,785	255,644	332,911	359,543	409,228	384,713	367,215	439,918	470,613	541,901	.....	.....	.....
UNION PACIFIC RAILWAY:													
1880	1,433,636	1,393,992	1,730,509	1,937,220	2,027,269	1,928,528	1,934,215	1,913.035	2,270,179	2,707,860	2,251,148	1,869,335	23,448,445
1881	1,339,799	1,374,740	1,674,860	1,766,894	2,319,238	2,884,774	2,528,826	2,638,659	2,844,357	3,169,530	2,773,608	2,267,004	27,451,831
1882	1,961,088	1,759,863	2,226,832	2,462,004	2,491,590	2,508,453	2,301,000	2,762,107	2,949,112	3,158,337	.....	.....	.....
WABASH, ST. LOUIS AND PACIFIC:													
1880	776,790	759,451	978,629	892,024	948,773	953,468	1,966,742	1,189,478	1,178,950	1,501,203	1,131,787	1,050,816	12,428,113
1881	811,617	818,922	1,121,592	1,023,482	1,144,660	1,308,993	1,131,752	1,542,838	1,490,027	1,397,781	1,399,555	1,328,278	14,461,870
1882	1,220,965	1,134,768	1,315,776	1,378,194	1,204,864	1,149,682	1,418,837	1,772,544	1,682,382	1,595,680	.....	.....	.....

THE Dorchester and Delaware Railroad, which is to be sold, with all its property and franchises, at public auction, in Cambridge, Md., on the 28th inst., extends from Cambridge to the Delaware line, twenty-seven miles, where it connects by branch road (6 miles) with the Delaware Railroad at Seaford, Delaware. This road is in fair repair, the iron being but little worn, and of the best quality; it does an excellent business, having daily connection to and from Baltimore by steamers.

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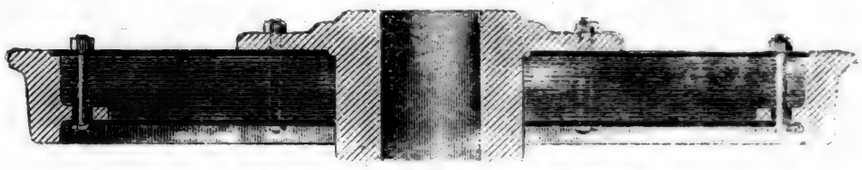
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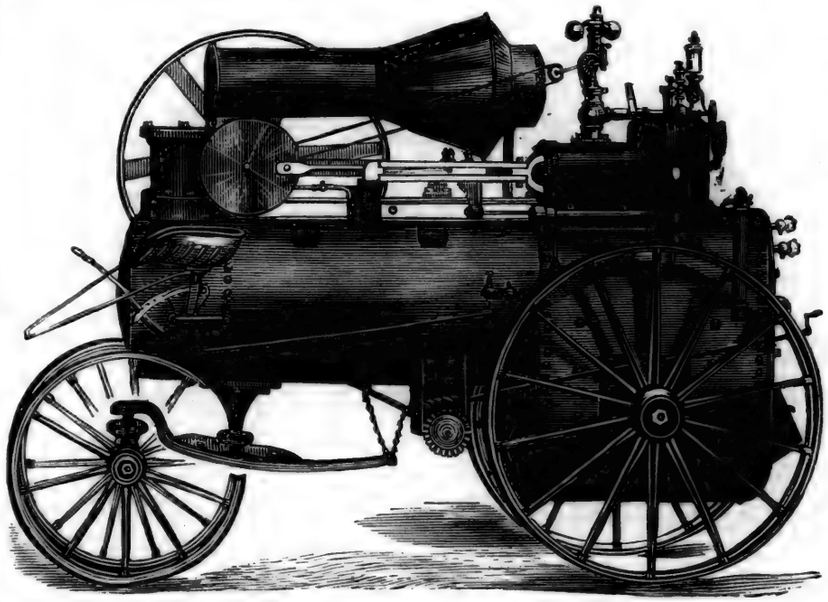
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New York Office with Col. Thos. R. Sharp, 115 Broadway.

Wilson's Attachment for Leveling Engine Boilers.

The accompanying cut is a representation of an invention relating to threshing or traction engines. It was patented September 19, 1882. The device consists of keeping boilers of moveable engines always in a level position, while going on uneven roads, by the simple device hereinafter fully described. To the center of the front axle, is pivoted a horizontal iron bar or lever, running back and below the boiler. A short standard or post is fastened to the under side of the boiler (the same as on ordinary engines). A short distance back of the front wheels, whose lower point rests in a socket or saddle, on the horizontal bar or lever and is there loosely attached so as to allow an up and down play to the lever. To the rear end of the lever is fastened a chain by the center, while the two ends of the chain are fastened to a shaft running under and across the bottom of the boiler. This shaft is held in position by boxes or hangers from the sides of the boiler. One end of this shaft being provided with a worm-gear wheel meshing into a worm-gear on the end of a long crank-rod running back to the rear of the engine so as to be operated by the engineer, who by simply turning the crank the chains are wound and unwound, thereby drawing up and letting down the rear end of the lever, thus raising and lowering the front end of the boiler; thereby preventing all danger of burning flues or crown sheet, flooding of the cylinder, etc., etc., all of which are unavoidable to traction engines without the above described improvement, and also of great advantage in setting down the engine quickly and with ease, as the boiler can be leveled by merely turning the crank. It is claimed that the above atttachment will keep any boiler level on any ordinary road, as it procures from fourteen to eighteen inches rise and fall.



WILSON'S ATTACHMENT FOR LEVELING ENGINE BOILERS.

Further particulars and all questions relating to the leveler will be cheerfully answered by addressing the inventors, Wilson Brothers, Gorham, Ontario, Co., N. Y.

Mustard's New Traction Engine.

On the twelfth of September, 1882, James E. Mustard, of Glen Hall, Ind., was granted letters patent on his new and useful improvements in traction engines. The principal object of his invention is to produce a means for driving road-engines, in which the usual cranks and consequent dead-centers are avoided, while all the power is continuously utilized. This object is accomplished by mounting upon the hubs or shaft of the driving-wheels rack-wheels or segments which drive said wheels when moved forward, but which turn loosely when moving backward; by attaching rack-bars to the piston-rods of the engines, which engage with and drive these wheels or segments, and by connecting said rack-bars by means of jointed rods, so that the force from both steam-cylinders operates upon each of said segments alternately as the segments move forward and back. A second object of the invention is to produce for such engines driving-wheels which have more than the usual resistance against slipping. This object is accomplished by attaching to the faces of the rims of said wheels, flat springs which so project as to give a greater bearing-surface on the ground than the common construction.

Professor Powers, Chicago, Ill., says Mr. Mustard's invention gives all of eighty per cent of power over the crank engine. The inventor has tested the springs for traction, and has found that they have a traction of ten times the weight they carry. Therefore in the new engine there is no dependence on weight for traction. The great advantage claimed for the invention is that the engine can be built so light that it can pass over plowed ground, and be made of great service to farmers of moderate means because of its cheapness. Steam plowing has never been a success in the United States, by reason of difficulties which Mr. Mustard claims to have overcome. He believes that by the use of his Traction Engine the farmer can plow by steam-power fifty per cent cheaper than by horse-power.

Automatic Freight Brake.

The claim is made for Widdifield & Button's Automatic Freight Brake, that it is the only automatic brake which has proved effective and trustworthy in actual freight service. However this may be, an account of its peculiarities affords interesting reading to persons understanding the subject. It may be stated, in passing, that the offices and works of the manufacturers are at Uxbridge, Ontario.

The Automatic Freight Brake is perfectly automatic. Each car is entirely independent and under the control of the engine-driver. Consequently no attention is required from trainmen. Another important advantage claimed for this brake is, that it is positive and uniform in its action, because it adjusts itself to all the various positions which the axle truck and car body assume in relation to each other when the car is in motion. A necessary consequence of this adjustment is the certainty that a given amount of pressure on the draw-bar must invariably produce the corresponding amount of braking power. The parts of the brake are manufactured of such strength as to last as long as the car itself, and provision is made to prevent unnecessary strain when the draw-bar is subjected to sudden and extreme compression. Messrs. Widdifield & Button are prepared to place their brake in service, and invite correspondence on the subject.

A missionary steamer, whose hull and machinery weigh only six tons, is now moored in the Thames in London. The vessel is named Peace, and has been built for the Baptist Missionary Society, who destine it for the service of the mission in the upper reaches of the Congo River. The boat can be taken to pieces readily for transport purposes, and the total number of pieces, none of which would be too heavy for a man to carry, would be 800. The greatest possible use has been made of all available space, and the two cabins are admirably fitted. A kitchen adapted for a stove and other cooking appliances forms a part of the equipment. A substantial awning covers the deck and between this and the sides of the vessel a wire awning is fitted to stop arrows and other missiles. It is intended to take the steamer to pieces, and pack the sections in boxes, which will be sent to the mouth of the Congo. Thence they will be borne by 800 men a distance of 300 miles up to Stanley Pool, where the steamer will be reconstructed by missionaries.

One of the foreign journals presents a singular statement in regard to diminished altitudes —the Andes, it appears, showing a sensible decline. According to this statement, Quito was found by La Condamine, in 1745, to be 9,596 feet above the sea; Humboldt, in 1803, could only make 9,570 feet of it, or twenty-six less; Boussingault, in 1831, was surprised to find the measurement show only 9,567 feet; Orton, in 1807, found it reduced to 9,520 feet; and Reuss and Stubel ascertained, as late as 1870, that it had actually shrunk to 9,356 feet. Quito, it seems, had sunk 246 feet in 125 years, and Pichincha 218 feet in the same period. The remarkable fact appears, from definite determinations, that its crater has sunk not less than 425 feet during the last twenty-six years, and Antisana 165 feet in sixty-four years.

A branch line of the Dominion Government Telegraph will be run to Prince Albert this fall.

American Railroad Journal.

ESTABLISHED 1831.

SUBSCRIPTION PRICE REDUCED

—FROM—

$5 to $3.

The American Railroad Journal,

WITH ITS VARIETY OF

New Departments,

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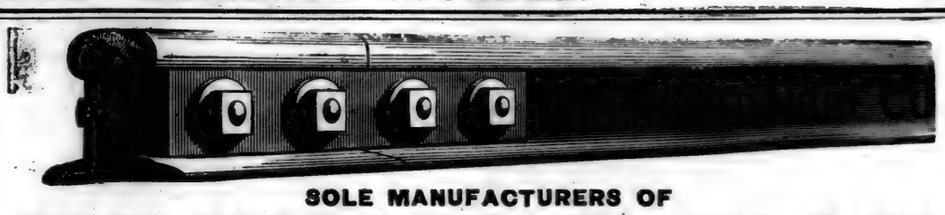
NEW DRESS,

HAS ASSUMED NEW PROPORTIONS.

We are amply justified in reducing the price from its old time rate of $5.00 per year to $3.00, on account of the numerous indications we are receiving of late of the increased interest that is being taken in the JOURNAL, which warrants us in believing that the sacrifice we make in price will be much more than compensated for by the promised liberal increase in the number of subscribers, It is gratifying to us to know that the alterations made in the Journal during the past year are meeting with such general favor as is expressed in the frequent words of commendation and congratulation sent to us from old and new readers, and we feel called upon to try in every way to merit their approval and to spare no pains to place the paper before as many as possible of those who might derive benefit and profit from it. During its fifty years' experience the JOURNAL has been highly favored by an especially choice class of readers, counting among its subscribers some of the most noted banking houses, commercial bodies, financiers, and railroad men of this country and Europe. Its aim in the future will be to prove itself of more value and interest than ever to its patrons of many years standing, while by its new features it makes itself of service and interest to a broader field and to more varied departments of life and business. We desire to make the JOURNAL as useful and welcome as possible to our readers and advertising patrons, and to this end we hope to have our columns of correspondence, communications and general information full and diversified. The columns we have devoted to general communications have proved especially interesting and popular of late, and we are pleased to have our rraders favor this department with suitable contributions

We give on editorial page our new subscription rates, which are so changed in the belief that it will not only prove acceptable to many who desire to become regular readers of the paper, but that it will meet with the hearty approval of our advertising patrons, who are rapidly filling up the pages offered to them since the improvements in the JOURNAL have been started.

We will send you the "Journal" for three months for $1. Try it, and you will be glad to continue taking it.



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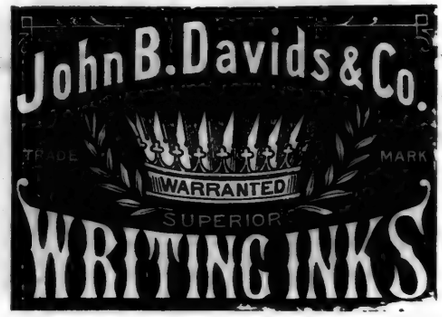
Office and Factory, Wilmington. Del.

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Prints **Black**, Violet, or Red, from the original writing, Autograph Fac-simile Circulars, Prices Current, Music, Drawings, School Examination Papers, etc., in a common copying press, at the rate of **500** per hour. **The most rapid, simple, and economical process known 1000 to 5000** printed from a single writing. The Simmons Hardware Co., of St. Louis, says of it: "*Our Papyrograph, purchased some time since, gives entire satisfaction. Would not be without it for $1,000 a year.*" For specimens of work, price-list, etc., address, with stamp, THE PAPYROGRAPH CO., 41 to 45 SHETUCKET STREET, NORWICH, CONN. **Local Agents wanted.**





THE JENKINS STANDARD PACKING is acknowledged by users as the *Best* in the world. Unlike all other Packings, the **Jenkins Standard Packing** can be made any thickness desired in a joint by placing two or as many thicknesses together as desired, and following up joint it vulcanizes in place and becomes a metal of itself (it is frequently called Jenkins Metal), and will last for years, as it does not rot or burn out. Avoid all imitations, as a good article is always subject to cheap imitations. The **genuine** has stamped on every sheet, "**Jenkins Standard Packing,**" and is for sale by the Trade generally. Manufactured only by

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PROPRIETORS JENKINS PATENT VALVES, PACKING, &c.

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We prepare and exhibit printed proofs of any proposed advertisements.

For the preparing of estimates no charge is made, and the applicant is placed under no obligation to transact his advertising business through us unless it appears to him that by doing so he will best advance his own interests.

A copy of the advertisement, a list of the papers, the space the advertisement is to occupy and the time it is to appear, should all be given with the application for an estimate of the cost.

When an advertiser does not know what he wants or what he ought to do, he can designate some sum of money within which he wishes to limit his expenditure; this will enable us to prepare for him such a list of papers as will be the best for his purpose, within the limits which he prescribes.

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NEW YORK.

CORRESPONDENCE.

[We pay no attention to communications unless the name and address of the writer are given, though the name will not be published if so requested. We assume no responsibility for statements made by correspondents, and we do not necessarily endorse ideas advanced by them. Under these conditions we think it of value to our readers to devote a liberal space to the free discussion by others—whose opinions may be at variance with our own—of subjects pertinent to our department of journalism.]

Wilmington, Wrightsville and Onslow Coast Railroad Company.

EDITOR AMERICAN RAILROAD JOURNAL:

I noticed in the November number of your JOURNAL, an article on page 859 concerning our railroad, in which it is stated that it is to be owned and operated exclusively by colored men. This statement, although I presume it was not so intended, is calculated to do us harm by preventing our white friends from taking stock in and aiding the enterprise. The "right of way" has been given by the whites and some stock taken by them, and it is by no means intended that the road shall be under the *exclusive control* and *management* of colored men, but of the stockholders. It is however intended to give to young colored men an opportunity to become skilled mechanics and engineers at the shops which will be built for the road. Since this statement has been made in the JOURNAL, I will be glad if you will make the proper explanation.

I enclose a circular and some newspaper articles which will give you a little information concerning our road; and will add that it is intended to eventually extend the road along the coast to connect with Norfolk on the north and Charleston on the south.

I am, sir, truly yours,
E. F. MARTIN, General Manager.

WILMINGTON, N. C., Nov. 11, 1882.

The Alleged Dressed Beef Syndicate.

THE alleged intention of the syndicate headed by Mr. Vanderbilt to enter the dressed beef business and undersell all competitors in this line, has occasioned considerable comment. A reporter interviewed several members of the trade on the subject, and found a diversity of opinion among them. All, however, agreed in admitting that if Mr. Vanderbilt and his syndicate really meant business, and the people took kindly to the meat thus furnished, the occupation of the local cattle slaughterer would become a thing of the past. There were some, however, who did not believe that the syndicate intended to remain in the dressed beef business for any longer time than would be necessary to crowd out and annihilate the firms who had first started in this field. Those who hold this view argue that Mr. Vanderbilt would prefer the profit arising from the transportation of live cattle as freight before all the revenue that could be derived from the buying and selling of the beef itself in the Eastern markets. Of course this whole question hinges largely upon the consumers of meat. If the Chicago dressed beef is inferior in quality, as most of the wholesale butchers here say it is, the slaughterers of New York and those who supply the other great centers of population in the Eastern States need not fear any material decline in their business. On this point, Mr. J. Strauss, the wholesale butcher, of Washington Market, is very decided in his opinion. He said: "Chicago dressed beef will never interfere with the home article in New York City or any of the large towns in the East. Chicago beef looks badly, and, worse than that, is as bad as it looks. It turns dark when exposed to the air, and has a slimy, repulsive appearance. It will sell only to the class who want cheap meat."

Moses Strauss & Co. said that they attached no importance to the competition of the Chicago beef with the meat slaughtered here. So far, they had not been affected in the least by the influx of the Western dressed beef.

Toffey & Co., of West Washington Market, make a specialty of the Chicago beef, and report that the retail butchers, their customers, are perfectly satisfied with the quality of the meat.

The reader will observe that this very important question of the quality of the beef is something upon which there is a wide difference of opinion.

The wholesale butchers generally maintain that the meat is positively bad. On the other hand, many retailers and those wholesalers who have begun to deal in the Chicago beef, say that it is not merely equal to but really superior to the meat slaughtered in this city and the neighborhood. They admit that it sometimes (though not always) has an uninviting appearance, but account for this by the warm weather which prevails at present. With the approach of a colder temperature the meat will cease to "sweat" when taken from the ice-box, and will therefore no longer present the slim appearance which some find objectionable. Another point which, in their opinion, is of great importance, is the superior tenderness of the Western meat. It stands to reason that meat four days or a week old will be tenderer than that which comes from cattle that are killed in Jersey City one day and eaten the next.

Swift & Co., the pioneers in the importation of the Chicago beef, do not seem to be at all alarmed by the prospect of competition from the Vanderbilt syndicate.

The matter of freight rates will have the most to do with the settling of this question. If freight rates should rise, of course the local slaughterers will hold their own. As regards this point, Swift & Co. say they have arranged matters satisfactorily with the Erie, the Baltimore and Ohio and the Grand Trunk roads. Mr. J. B. Hoffman, of the Erie Road, says that immense quantities of dressed beef are now coming over their rails, that there is a constant increase in the shipments, that rates are low and he does not anticipate any advance in the immediate future.

It is due to the Vanderbilt syndicate to say that all the gentlemen connected with it who have been interviewed disclaim any intention of unfriendly competition with those at present engaged in the importation of Chicago beef. They claim to have entered the field in a legitimate business way, believing that the day of home-dressed beef is over, and that the new field now opening is large enough for all.—*N. Y. Bulletin, Nov.* 14.

A FAT man from New York recently engaged a lower berth in a sleeping-car, and, after he had retired, he raised the curtain of his window and gloated in the pale moonlight and the fresh, pure air that came in at the partially opened casement. He was a great stickler for ventilation, and the thought that he was getting a glorious draught of heaven's pure air made him happy. Finally, bathed in the magnificent moonlight, he sank to sleep. In the morning he woke to find that the window was double, and that only one of them was open. Aside from the man who got up in the dark and kicked four panes of glass out of a bookcase in order to get more air, and'went to bed happy, we do not know of a sadder case of misplaced confidence.

E. P. ALLIS & Co., of Milwaukee, Wis., are building a new wood-working shop 215x65 feet and two stories high. This is in addition to these already extensive works, which cover over 15 acres.

The D. K. Miller Improved Padlock

SUPERIOR TO EVERY OTHER

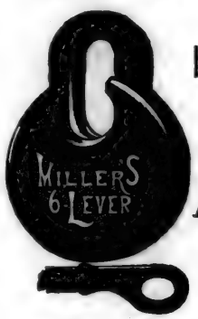
In Mechanical Construction, Security, and Durability.

MADE OF BRASS,

With Springs of the Celebrated Phosphor-Bronze,

And Warranted to Stand in Every Climate.

UNPICKABLE, NO RUSTING OR CORRODING.





Shown by general use to be the BEST Padlock in the Market for Railway Cars, Switches Tool Boxes, and for all other purposes for which padlocks are used.

Every Padlock with a different Key and *Master Key* to unlock them all; or all Padlocks with same key if required.

Send for Circulars with Details and Prices.

FAIRBANKS & COMPANY, Agents,

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THE SALMON CAR HEATER



"36 per cent of coal saved and the car kept noticeably warmer!"
by using THE SALMON CAR HEATER.
It Insures Safety from Fire in case of Accident, Economy in Fuel and RAPID CIRCULATION. It heats quickly, is SELF-REGULATING, and can be used for either STEAM OR HOT WATER.

The Water Tubes do not come in contact with the Coals, but occupy the Smoke Flue in such a manner as to absorb the greatest amount of heat from Coal in a low state of combustion without danger of chilling the fire.

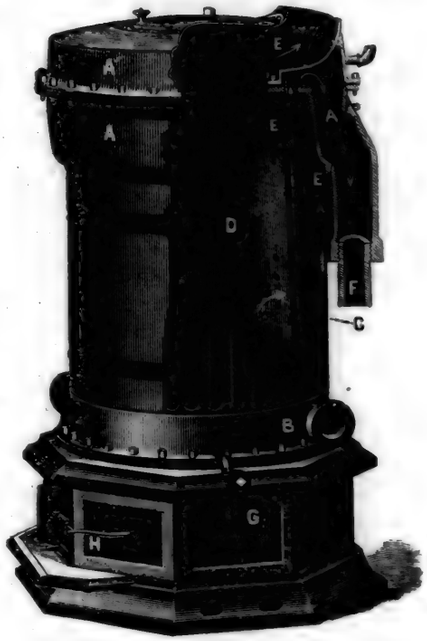
Once filled with coal the fire will last from 24 to 60 hours, according to weather, without replenishing, as proved by actual test.

At the last "Mechanics' Fair" it received the Silver Medal, being the highest award to heaters of any kind.

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COACH AND CAR VARNISHES.

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STEEL CAR PUSHER

MADE ENTIRELY OF STEEL.
ONE MAN with it can easily move a loaded car.
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SAFETY RAILROAD SWITCHES,

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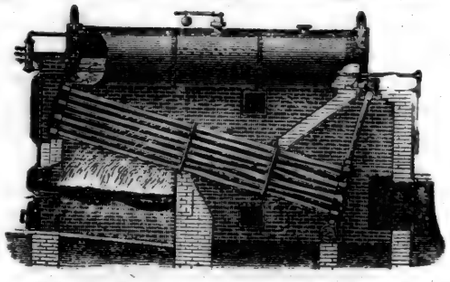
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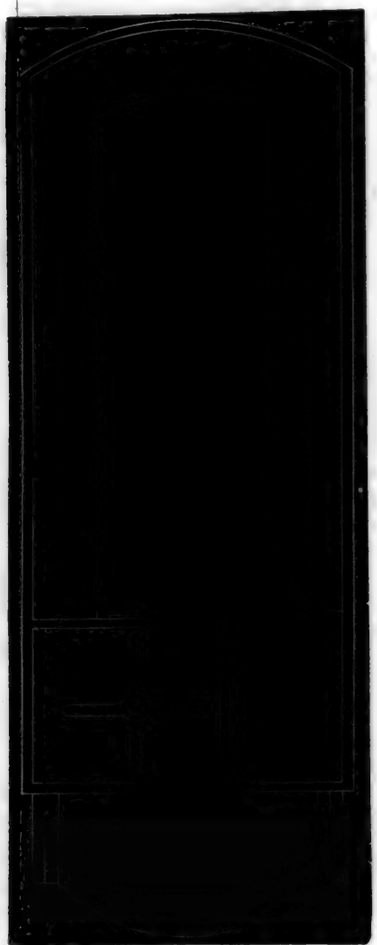
Address, Munn & Co., publishers of Scientific American, 261 Broadway, New York.
Handbook about patents mailed free.

Improvement in Street Cars.

In many large towns and small cities, where street railroads with their small—or "bobtail"—cars are useful, the company running the cars may be defrauded out of much of their legitimate income by the loose way of collecting fares, which imposes on the driver the entire control of the car and all the exactions of its passengers. People may get into the car, ride a mile or more, get out, and walk away, without paying their fare; and the driver be blamed at the end of the route for his meagre returns, and the company be swindled out of the fares.

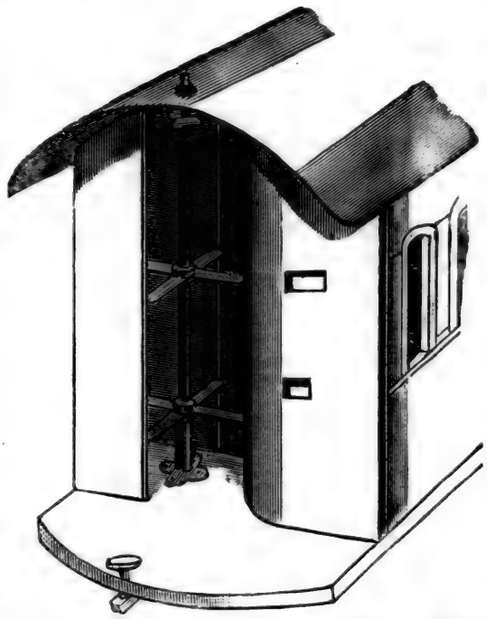
It is really impossible for the driver of a car who must be, at the same time, the conductor, or fare-collector, to control all the incomings and outgoings from the car, when some may drop off from the front and others slide off from the rear. The driver has his horses to manage, his switches to attend, his lamps to clean, and many attentions to bestow on his horses, his car, and his passengers. He cannot, under these circumstances, be depended upon to act as fare-collector and driver.

The accompanying illustrations attempt to show how it is possible to run a "bob-tail" car economically; or at least, how such a car may be made to return its proper earnings to the company.



The diagram, or plain view, shows the floor of a car as proposed. It will be noticed that the rear end of the car is inclosed, and that the side seats are extended around the rear end of the car. These rear seats would be very attractive to strangers, who would enjoy the view through the front.

The other view of the front of a car is introduced to show how the driver may control the entrance and exit of every passenger. The front of the car contains a turn-stile, that permits entrance to the car only on payment of the fare. This may be deposited in the slits provided for it, or may be given to the driver, who controls the entire management by a simple pressure of his foot on a pad in front of the platform.



In actual use the rotating stile is held locked by a ratchet and pawl, the pawl held by a spring lever under the car floor; a four-sided cam shown on the floor of the car and a similar one near the ceiling or roof of the car, retaining the stile in exact position. When passengers are to be admitted to the car, or are to come out from it, a slight pressure by the foot of the driver on the pad in front of him releases the engaging pin and allows the stile to rotate.

It is easy and inexpensive to attach to the turn-stile a register for recording every passenger that enters the car, insuring exactness in collecting fares, and furnishing a basis for statistics for collectors of facts of passenger transportation.

The stile is double, as is seen in the engraving, the lower one being designed for children and the upper one for grown people. The lower one is mounted on a hollow shaft and the upper one on a solid shaft, but both may be worked in unison, or either separately.

It will be seen that with this simple device the driver of a car may also be its fare-collector with scarcely any additional labor, and insure the company from swindling and his own honor from imputation. The patentee is Sylvestèr Bissell, who may be addressed at Hartford, Conn., relative to rights to manufacture, or contracts for application and use.

Any fancied objection to entrance and exit by the front of the car on account of personal danger is counteracted by the fact that a simple wheel-guard is supposed to be used in connection with this device, as should be the case in all street cars.

Advertise in the Railroad Journal.

Improved Window and Lookout-tube for Locomotives.

Locomotive-engine drivers in the Northern States and in Canada, who understand the serious difficulty and danger which attend the running of trains in winter, from the accumulation of frost and snow on the cab-windows, making it impossible at times to see through them at all, will appreciate Taylor's Improved Window for locomotive and steamboat cabs, light-houses, etc., and Taylor's Lookout-tube for locomotives. The object of these two inventions is to enable the engine-driver to have at all times a clear view of the railway-track ahead of the locomotive.

The window consists of a frame of wood, metal, or any other suitable material, fitted with two sashes or frames of glass, mica, or any other suitable transparent material, with a heating coil of pipe between the said transparent sheets, having suitable connections with the boiler of the locomotive.

The steam from the boiler circulating through the heating coil of pipe heats the air space between the two sheets of glass or mica, and any snow, sleet or frost on the same is melted off, leaving the window always clear, so that obstructions on the track, danger-signals, etc. can be seen at all times without the necessity of opening the window to look out, which has been necessary heretofore when the window has been frosted up. Taylor's Improved Window is very simple in construction, and is fitted into the cab of the locomotive by removing a pane of glass from one of the windows. No alteration of the ordinary window opening is necessary to its use.

The Lookout-tube consists of a tapering tube of sheet metal or any other suitable material, secured to the locomotive so that the small end enters one of the cab-windows and the large end extends to the front of the locomotive. The large end is fitted with one of the Improved Windows described in preceding paragraphs; and being in advance of all smoke and steam, or snow thrown up from the front of the locomotive by the track-clearer, etc., and always kept free from frost, the engine-driver, on looking through the tube, can have a clear view of the track ahead of the engine at all times.

These inventions, the simplicity and practical importance of which commend them to the attention of railroad companies, have been patented recently in both the United States and Canada, by John M. Taylor, Fredericton, N. B., Canada.

A new style of through tickets is being adopted by the Pennsylvania Railroad Company, which, it is expected, will operate as a check to the business of the ticket scalpers. It is the intention of the company to gradually supersede the present style of tickets with the new ones. They differ from the present ticket in the detachable portions, and instead of being stamped with the customary seal will have the name of the purchaser signed upon the back, and the date of the sale will be punched directly over the signature. This will prevent the scalpers from erasing the name and stamp on the ticket, which is done very extensively with the present style of tickets.

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ALLEN PAPER CAR WHEEL CO., 240 BROADWAY, New York.

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DAVIS, JOHN H. & CO., BANKERS AND BROKERS, 17 Wall Street, N, Y.

DODGE & SINCLAIR, MANUFACTURERS OF RUBber and Leather Belting, 21 Park Row, N. Y.

EVANS, GEO. A. IRON AND STEEL RAILS, 74 WALL Street, N. Y.

EAGLE TUBE CO., BOILER TUBES, 614 to 626 WEST Twenty-fourth Street, N. Y.

EAMES VACUUM BRAKE CO., RAILWAY TRAIN Brakes, 15 Gold Street, N. Y.

FAIRBANKS & CO., STANDARD SCALES, RAILROAD and Warehouse Trucks, and Copying-presses, 311 Broadway N. Y.

GORDON & DUGGAN, RAILWAY SWITCHES, 28 State Street, Boston, Mass.

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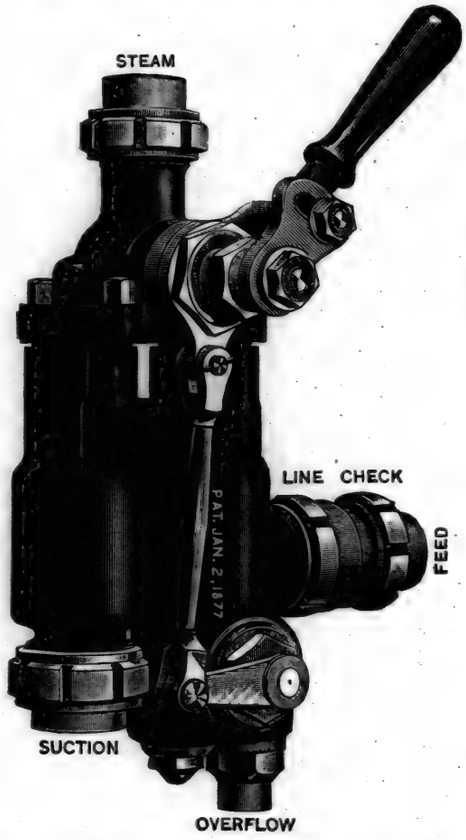
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Bemis's Dumping-Car.

THE dumping-car invented by JOHN E. BEMIS, of Waupun, Wis., upon which letters patent were granted on the 31st of October last, is a flat dumping-car adapted for use in the construction and repair of railroads, as it dumps on both sides at the same time; also in building piers, docks, etc., where large quantities of dirt and stone are handled. It is dumped by the engine. Any number of cars, from one to a whole train, can be dumped at the same time without uncoupling. When the train is to be unloaded the brakemen first arrange each car for this purpose, by an operation similar to that employed in braking, and very quick and easy of performance. Their work ends here; the engine does the rest. By a slow movement of the train from ten to fifteen feet, all the cars are dumped; and by a reverse motion to the starting-point, the platforms move back to their positions, and the cars are ready to be loaded again. Thus, by the use of the Bemis Dumping-car, no additional expense is incurred, the whole work of dumping and preparing for reloading being accomplished by the brakemen and the engine, and both these are necessary to every train, even if it consists of nothing but empty cars. When the cars are not needed for dumping, they are immediately adaptable for any kind of freight carried on flat cars, being of the same shape and size as the ordinary flat car.

Rudd's Coupler.

THE drawhead of the coupler invented by Mr. F. H. RUDD, of Hebron, Thayer county, Mich., looks like those in common use. The coupling-pin is pivoted to a latch, which is rounding on its edge next to approaching cars. Said latch is held in its proper position by an arm of suitable shape, which works in the side of the drawhead. The approaching car carries a crooked arm below and at one side of the drawhead, which arm supports a suitable rest on which the link is carried. The crooked arm engages or strikes a bar on the opposite car and rises up over it, causing the link to rise also. The link strikes the rounding edge of the latch, which on rising also raises the coupling-pin till the link passes far enough, when it drops, making the coupling secure without the help of any one. Uncoupling may be done while under full headway or standing, by means of a cranked rod running across the end of the car, having a crank on each end of it, also one that reaches to the top of the car. This rod can be worked in either place in less time than it takes to open a common jack-knife. If desired, the pin may be raised and left in a locked position, so that cars will not couple.

A PASSENGER in a Boston street car pulled the vest button of the conductor and was surprised to hear a bell ring. Bell punches are used on that line, and the old plan of carrying a small gong in the palm of the hand to strike when pretending to punch a slip has become dangerous. So the plan of concealing the gong in the vest and connecting it with a button was invented.

Commerce of New York.

THE foreign imports at New York for the month of October were :—

	1880.	1881.	1882.
Ent. for cons.....	$15,544,936	$19,940,594	$21,025,712
Do. for warehousing	6,920,298	5,596,230	69,60,724
Free goods.....	11,500,527	11,558,115	11,478,865
Specie and bullion..	16,248,590	6,969,304	1,422,945
Total ent. at port....	$50,214,351	$44,064,243	$40,888,246
Withdrawn from warehouse.....	9,036,000	9,831,590	9,810,839

The foreign imports at New York for ten months from January 1, were :—

	1880.	1881.	1882.
Ent. for cons.....	$197,844,038	$189,447,447	$221,953,476
Do. warehouse....	100,213,193	72,424,935	86,576,887
Free goods.....	104,418,365	103,720,307	109,242,028
Specie and bullion.	49,758,972	52,915,893	4,524,082
Total ent. at port..	$452,234,571	$418,508,582	$422,296,473
Withdrawn from warehouse	77,464,532	84,691,291	82,862,910

Received for Customs at the Port of New York :—

	1880.	1881.	1882.
In Jan.....	$11,960,677 78	$10,572,559 15	$13,387,515 96
In Feb.....	12,254,602 24	11,217,766 87	13,585,053 25
In March....	14,469,557 65	13,122,964 03	13,999,138 76
In April.....	11,901,071 43	11,678,760 93	11,906,105 45
In May.....	9,752,873 54	11,055,935 39	11,981,893 08
In June.....	10,699,840 52	10,993,452 70	11,428,930 11
In July.....	13,360,394 37	12,079,573 95	13,730,752 87
In August....	14,492,361 87	15,205,469 58	16,483,260 62
In Sept.....	12,856,636 10	14,104,647 51	14,690,362 47
In Oct.....	10,574,333 53	13,011,426 27	13,095,876 74
Total 10 mos.	$122,322,249 03	$123,041,556 38	$134,288,889 31

The exports from New York to foreign ports for the month of October, were :—

	1880.	1881.	1882.
Dom. produce.....	$37,129,593	$27,118,543	$27,545,169
For. free goods.....	366,514	214,238	137,306
Do. dutiable.....	649,801	522,547	495,345
Specie and bullion.	1,195,043	1,171,262	535,396
Total exports.....	$39,340,951	$29,026,590	$28,713,216
Do. exclusive of specie.....	38,145,908	27,855,328	28,177,820

The exports from New York to foreign ports for ten months from January 1, were :—

	1880.	1881.	1882.
Dom. produce.....	$339,717,413	$302,846,048	$272,178,114
For. free goods....	2,313,541	6,556,742	4,299,796
Do. dutiable....	4,205,096	4,940,221	5,046,433
Specie and bullion	7,019,819	10,512,742	45,746,916
Total exports.....	$353,255,869	$324,855,753	$327,271,259
Do. exclusive of specie.....	346,236,050	314,343,011	281,524,343

Production of Coal in the United Kingdom.

IN the United Kingdom the production of coal for the year 1871 was 117,352,028 tons, and for 1881 the total output was 154,148,300 an increase of 36,832,272 tons. The following is a comparison of the production of coal in the respective coal-yielding districts in the two years 1871 and 1881, drawn from the official statements of the mining inspectors:—

	1871.	1881.
Durham and Northumberland.....	29,190,116	35,592,420
Cumberland.....	1,428,661	1,769,213
Yorkshire.....	12,801,260	18,287,141
Derbyshire.....	5,360,000	8,508,923
Nottinghamshire.....	2,469,400	4,758,000
Warwickshire.....	723,000	1,133,419
Leicester.....	699,900	1,145,265
Stafford and Worcester.....	14,281,250	14,858,070
Lancashire.....	13,851,000	18,499,810
Cheshire.....	975,000	782,000
Shropshire.....	1,350,000	892,500
Gloucester.....	1,412,297	1,361,396
Somerset.....	673,878	731,754
Monmouth	4,915,525	5,412,840
South Wales.....	9,120,009	16,028,123
North Wales.....	2,500,000	4,300,606
Scotland.....	15,438,291	20,822,054
Ireland.....	165,750	127,585
	117,352,028	154,184,300

The table above shows that to this enormous output the great northern coal field contributed a quarter ten years ago, and, though it has added more than six million tons to its output, it yields now less than a quarter. Yorkshire, on the other hand, produces more than its proportion in the last decade, but the vast coal field of South Wales has made a still more marked stride, adding the largest proportion of all the large coal-producing districts. Scotland extends its production by five million tons; the small yield of Ireland slightly sinks in the decade, as also does that of Gloucester; but Warwickshire, Nottinghamshire, Derbyshire and Lancashire have large increases, and it is apparent that it is only scattered districts that yield less, while throughout the great bulk of the coal field the production has gone on enormously rising, if in varying proportions. It is worthy of notice that in the decade the number of miners has been increased in even a greater ratio than that of coal. There were 370,881 persons employed in and about the mines in 1871 and 495,477 last year, the maximum number being reached in 1874, when 538,829 were so employed. Thus the average production of the miners was lowered during the first three or four years, during which prices and wages rose, and since that time there has been an increase of the average production. It is still, however, lower than it was ten years ago. In 1871 every person employed in and about the mines produced on an average 316 tons of coal, but last year every person produced only 311 tons on the average. This is one of the counter-balances to low wages—when wages are low there is a fuller work on the part of the miner, and when wages are on a higher rate the average amount produced in a given period is less. An analysis of the returns for the various districts would show that there is a very considerable variation even in districts near together—the Yorkshire mines producing exactly the average, while the South Durham men bring out 80 tons each more in the year.

The American Signal System.

THE automatic signal system adopted by the Pennsylvania Railroad Company on their Tyrone Division, where 180 coal trains pass every day, comprises a wire stretched on poles between danger signals, which at the entrance of trains upon the sections mark red, danger, and passing from the sections do the same, while every switch connection instantly drops danger at the switch and at both ends. The current is created by the engine's heavy weight driving a pin into a socket and letting the battery act. The signals are boxes of white, inside of which play red curtains skilfully responding to the engine on the pegs. No accident is possible except by the failing of the battery or the falling of the wire, and the latter instantly signals danger. It is said that there is only one system of signals in use in this country, and that the English block system, —which costs a million or two a year between New York and Pittsburgh—whereas the American signal system described requires no men at all and only occasional inspection, the engine and the battery doing everything, and costing to put in full operation on a double track road $500 per mile. The old block system has had three accidents per day on a single mile of road.

SMOKERS of cigars in the cafés in some parts of Germany make it a rule to cut off carefully the end of the cigar before proceeding to smoke it, and to deposit the piece so severed in a metal box or tray placed to hold it in the center of the room. The trays are placed in the cafés by a benevolent society which has numerous branches, and the aim it has in view is to supply a certain number of poor children with a new suit of clothes at Christmas each year. The statistics furnished by nineteen of the branches in the Rhenish Provinces show that in 1881 no less than 4,500 pounds of tobacco were collected in this way. This was sold for £1,200, a sum which sufficed to provide an outfit for over 1,700 poor children, at an expense of about fifteen shillings each. The branches of the Society are steadily increasing in number, and have doubled within the last three years.

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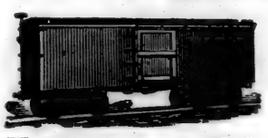


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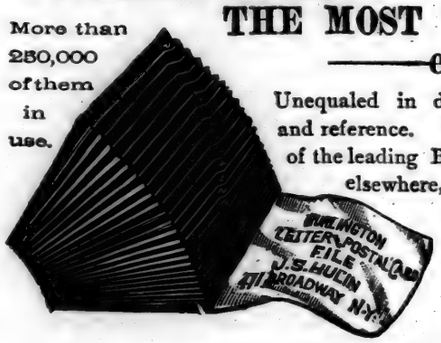
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IMPORTANT ANNOUNCEMENT TO INVENTORS.

THAT department of the AMERICAN RAILROAD JOURNAL which contains descriptions of new inventions properly coming within its range of subjects, is regarded with great notice and favor, particularly by those directly interested in learning what the latest applications of mechanical ingenuity in railroading are, and by those who have produced inventions which they desire to make as widely known as possible.

The large and widespread circulation of this paper, its prestige as the oldest railroad journal in the world, and the weight attached to its contents by the general consent of leading railroad men in all countries, give such value to its carefully prepared descriptions of new machinery and appliances as cannot be found outside of its columns.

The interest manifested by inventors in supplying us with information of their doings, and the eagerness with which this is received, encourage us to give an increased attention to that department of this paper treating of new inventions.

We therefore repeat our invitation to all persons who have produced what they regard as improvements coming within the range of railroad operations, to communicate with us promptly regarding the same.

All matter sent us will be thoroughly examined and considered, and no inventions in our opinion likely to be practicable and useful will be passed over without receiving due attention from us.

List of Recent Patents for Inventions Relating to Railway Interests.

BEARING DATE OF NOVEMBER 14, 1882.

267,321. Car-Coupling: George I. Blackley and John I. Nicholson, Greenville, and Harvey A. Holloman, White Rock, assignors of one-fourth to Thomas C. Reedy and Anderson J. Beezley, Hunt County, Tex. Filed March 18, 1882.

267,330. Car-Platform: Rensselaer A. Cowell, Cleveland, Ohio, assignor to the Cowell Platform and Coupling Company, same place. Filed April 20, 1882.

267,335. Car-Truck: Spencer B. Driggs, New York, N. Y. Filed March 13, 1882.

267,337. Car-Axle Box: Joseph Eisele, Lafayette, Ind., assignor of two-thirds to Benjamin F. Masters and Charles E. Gove, both of same place. Filed June 30, 1882.

267,338. Feed Water Alarm for steam boilers: George W. Getchell, Brewer, Me., assignor of one-half to Manly Hardy, same place. Filed Sept. 16, 1882.

267,341. Car-Spring: George F. Godley, Philadelphia, Pa. Filed July 31, 1882.

267,344. Car-Coupling: David M. Harris, Newark, N. J. Filed March 6, 1882.

267,356. Fruit and Produce Railway Transportation Car: John F. Maxfield, Bloomfield, N. J. Filed Aug. 4, 1882.

267,369. Railway Signal: John W. Purslow, Durango, Colo. Filed May 15, 1882.

267,405. Traction Engine: Julius C. Debes, Mount Vernon, Ohio, assignor to C. & G. Cooper & Co., same place. Filed Oct. 10, 1882.

267,420. Railroad Spike: Howard Greer, Chicago, Ill., assignor of one-half to George H. Christy, Trustee, Sewickley, Pa. Filed March 3, 1882.

267,425. Car-Truck: Calvin Q. Hayes, Sedalia, Mo. Filed May 3, 1882.

267,429. Railway Rail-Joint: Daniel B. Hicks, Pittsburg, Pa. Filed Aug. 25, 1882.

267,436. Apparatus for operating Railway Signals: David J. Lindsey, Las Animas, Colo. Filed Feb. 28, 1882.

267,437. Electric Station Indicator: John F. Loughlin, Hyde Park, Mass. Filed Nov. 16, 1881.

267,453. Car-Coupling Link: Albert W. Palmer, Orange, N. J. Filed Dec. 9, 1881.

267,463. Combined Steam Condenser and Tender: Herman S. Saroni, St. Paul, Minn. Filed Jan. 20, 1882.

267,464. Traction Engine: Herman S. Saroni, St. Paul, Minn. Filed Jan. 11, 1882.

267,486. Baggage-Check: Edward J. Brooks, East Orange, N. J., assignor to E. J. Brooks & Co., New York, N. Y. Filed June 10, 1882.

267,500. Railroad Gate: Jacob H. Danner, Gish's Mills, and Rufus P. Kyle, Fincastle, Va. Filed Aug. 18, 1882.

267,508. Car Wheel and Axle: Gibson W. Fairman, New York, N. Y., assignor, by direct and mesne assignments, to the Fairman Wheel and Axle Company, of New York. Filed Sept. 9, 1882.

267,522. Tool-Holder for Cars: William A. Harnden, Cambridge, and Joseph P. Doyle, Boston, Mass. Filed July 15, 1882.

267,530. Stock Car: Joel M. Holden, Boston, Mass. Filed July 10, 1882.

267,531. Car-Coupling: S. Lewis Holmes, Hillsborough, Ohio. Filed Sept. 7, 1882.

267,539. Sliding Car-Door Bolt: Walter Johnson, Jackson, Mich. Filed May 22, 1882.

267,543. Cleaning Ash-Pans of Locomotive Engines: Alden D. Kilborn and William F. Smith, Tucson, Ariz. Filed Aug. 11, 1882.

267,554. Car-Coupling: James H. McLeary, San Antonio, Tex. Filed Oct. 7, 1882.

267,561. Automatic Block Signal Mechanism for Railways: James A. Millholland, Cumberland, Md. Filed June 5, 1882.

267,564. Frog: William J. Morden, Chicago, Ill. Filed Aug. 4, 1882.

267,565. Guard Rail for Switch Frogs: William J. Morden, Chicago, Ill. Filed May 4, 1882.

267,566. Tie Bar for Railroad Switches: William J. Morden, Chicago, Ill. Filed April 10, 1882.

267,567. Railway Frog: William J. Morden, Chicago, Ill. Filed May 22, 1882.

267,568. Railway Crossing: William J. Morden, Chicago, Ill. Filed May 15, 1882.

267,569. Safety Device for Switches: William J. Morden, Chicago, Ill. Filed March 13, 1882.

267,593. Car Unloader: George W. Rolph, Toledo, Ohio. Filed Sept. 20, 1882.

267,608 Car-Coupling: William L. Skelton, Jacksonville, Ala., assignor to himself, William A. Skelton, and James J. Skelton, all of same place. Filed Sept. 6, 1882.

267,613. Locomotive Head-Light: Frank H. Talbot, Rochester, N. Y., assignor to himself and Fernando Brown, Cleveland, Ohio. Filed Sept. 14, 1882.

267,621, Car-Coupling: James A. Walker, Galesburg, Ill., assignor of one-half to Clark E. Carr, same place. Filed July 31, 1882.

267,629. Manufacture of Draw Bars: John T. Wilson, Pittsburg, Pa., assignor to Wilson, Walker & Co., (limited,) same place. Filed April 24, 1882.

267,632. Railroad Time Bulletin Board: John W. Wolcott, Clyde, Ohio. Filed Mar. 4, 1882.

267,645. Car-Coupling: James P. Davison, St. John, Ill. Filed Sept. 22, 1882.

REISSUE.

10,237. Interlocking Switch and Signal Apparatus: Matthias N. Forney, New York, N. Y. Filed March 17, 1882. Original No. 247,034, dated Sept. 13, 1881.

Catching a Rabbit for His Girl.

A YOUNG man who lives on the north side of Chicago and smokes cigarettes, heard his adored express a wish for a rabbit. Wandering at dusk past a residence surrounded by a spacious lawn, and pondering upon the possibilities of raising lucre enough to purchase a long-eared pet for the damsel, his attention was attracted by a white object on the lawn. Closer examination showed it to be a rabbit. In the shadow of some shrubs the little animal sat on its haunches, with ears erect. He chuckled to himself as he saw how he could save the money he was going to borrow to buy a rabbit with and yet get the rabbit. He climbed the fence, undismayed by the four-inch gash in his wall-paper trousers, and stole softly upon the unsuspecting rabbit. The rabbit never stirred. Taking off his elegant tile, that he had stood Dunlap off for that morning, he pounced upon the poor thing and jammed the hat down over it, and the two white ears stuck up through the new tile-top. It was an iron rabbit.

THE Georgia Car Company, of Cartersville, has recently declared a dividend of 25 per cent.

The Work Railways Provide.

THE railways are the workingmen's best friends, for the money of the railways is largely spent in paying wages. What an army of laborers is supported by the construction of new lines merely! It is stated that in the wild Territory of Idaho alone, eight thousand men are engaged preparing the pathway for the locomotive; in the fastnesses of the Rocky mountains three thousand are pushing the Denver and Rio Grande Railway westward; the solitudes of Arizona and the Californian desert are alive with the builders of the thirty-fifth parallel line; tens of thousands of men are strung along the route of the great Canadian Pacific Railway, from Ontario westward through the wilderness north of Lake Superior, on over the unbroken prairies of British Columbia and the mountainous regions of the Pacific coast; all through the western States and Territories unnumbered thousands are digging, and the money of the enterprising but not always appreciated capitalist supports them and their families. Every working day—taking the average for the year thus far—forty miles of main track are added to the railway mileage of the country, and every day 200 more men are required to operate them. If the total mileage constructed during 1882 shall be 10,500 miles, then 52,500 men will have been added to the army employed in operating the completed roads; while the work of new construction will still push forward, furnishing work and bread to multitudes. No class of men ought to be so anxious to have the railroads prosper as those whose living is obtained from railway employment.—*Ex.*

INVENTORS should find encouragement in the fact that if what they produce is of real practical value and can be made at a figure which will render the invention readily marketable because economical in price, the saving of time and labor or other advantages in its use being taken into account, as well as obviously an improvement, capitalists engaged in manufacture will jump at the opportunity of making for them on terms which cannot but prove advantageous to the originator of the improvement. This desirable state of matters is the result of the readings with which useful knowledge is circulated by means of advertisements and otherwise. On the other hand, it is not to be expected that men will be found ready to use their capital in putting on the market novel contrivances which do not answer either to remove imperfections in earlier devices, improve the manufacture of goods or economize labor, and which cannot be manufactured at a cost making their use generally expedient as an invention or as substituted for something else. The great inventions of the world have been evolved by laborious and persistent experiment, and generally by men engaged in the line of industry which they properly assist. Hard work is the lot of the inventor, but his fulfilment of the conditions laid down is certain, if he bargains with ordinary prudence, to give him both reputation and financial reward.

"VIRTUE is its own reward;" and so is villainy.

American Railroad Journal.

ESTABLISHED 1831.

Steam Navigation, Commerce, Finance, Banking, Machinery, Mining, Manufactures.

SECOND QUARTO SERIES.—VOL. XXXVIII., No. 46.] NEW YORK, NOVEMBER 25, 1882. [WHOLE No. 2,430.—VOL. LV.

THE editor of the RAILROAD JOURNAL is pleased to receive information of railroad enterprises already entered upon or projected, items regarding the business done on the roads, such as relate to persons employed in the railroad and kindred interests; in short, about all matters which the readers of such a paper as this are gratified to find within its columns.

INCORPORATION.

ARTICLES of incorporation of the Faure Electric Storage and Light Company were filed by David J. Carson, Henry H. Tallmadge and Lewis C. Tallmadge, the trustees, in the county clerk's office, New York, on the 15th inst. The capital stock is stated at $2,000,000.

A COMPANY has been organized at Wilmington, Del., under the name of the Salinas Peak Mining Company, with a charter from New Jersey, for the purpose of working a group of fine silver and copper properties in the San Andres Range, N. M., near the Fort Stanton Military Road. Capital, $300,000.

THE Walker Smoke Consuming Company has filed its certificate of incorporation at Freehold, N. J. The main offices of the Company will be at Long Branch. The Company purposes developing patents for the more complete combustion of fuel and the prevention of smoke and sparks, and will have $1,000,000 capital.

ARTICLES of incorporation of the Columbus, Fort Wayne and Northwestern Railroad Co. have been filed in Indianapolis, Ind. The road is projected to run from Van Wert, O., to Fort Wayne, Ind., thirty-five miles. This is to be a short cut connecting the Hocking Valley with the Nickel-Plate at Fort Wayne. The link between Columbus and Van Wert is already in existence. William Fleming heads the directory of the new road.

ARTICLES of incorporation were filed with the Secretary of State at Albany, N. Y., on the 22d inst. of the Rockland Lake and Valley Cottage Railroad Company; capital, $30,000; to run from a junction with the New York, West Shore and Buffalo Railway at Valley Cottage to the Lake House property, at the terminus of the road, running through it to Rockland Lake. The length of the road is two and a half miles, entirely within the county of Rockland.

ARTICLES of incorporation have been filed with the Secretary of State of Ohio of the Pomeroy, Minersville and Syracuse Street Railway Company, capital $25,000. Also of the Union Street Railway Company, Pomeroy; capital $50,000. Also of the Pittsburgh, Akron and Chicago Railroad Company; capital $50,000. Also the Pittsburgh and Maumee Railroad Company; capital $50,000. Also the Greenville, Versailles and Northwestern Railway Company; capital $250,000. The Grafton and Oberlin Railway Compan, principal office Grafton, Lorain county, Ohio; capital $200,000.

THE incorporators of the Roodhouse and Scottsville Railroad Co. have elected the following officers: John Roodhouse, president. Roodhouse, Ill.; vice-president, Milton McClure, Carlinville, Ill.; secretary, J. L. Pattison; treasurer, J. W. Armstrong, of Roodhouse. The capital stock is $200,000, and the length of the road fourteen miles. A survey will be made at once. It will be a branch of the Burlington and Ohio Railroad, and will be the connecting link between the Chicago and Alton Railroad at Roodhouse and the Indianapolis and St. Louis Railroad at Gillespie, Ill. It is known as the New Kansas City Short Line East. The Burlington and Ohio Railroad is nearly graded to Scottsville, and track-laying is progressing from Gillespie to Carlinville.

PERSONAL.

MR. H. D. AVERILL, general ticket agent of the Housatonic Railroad, is still confined to the house from his recent attack of illness, but is reported this week as slowly recovering.

JOHN SCHULLIN, of St. Louis, Mo., has been appointed general manager of the Mexican National Construction Company. James Sullivan continues to represent this company in Mexico.

THE Canadian "Independence of Parliament" act will probably be shortly amended so as to permit members of the Canadian Pacific Directory and Syndicate to sit in the Senate or House of Commons.

J. MURRAY, late of the Northern Pacific Railroad Company, has been appointed assistant superintendent of the Canadian Pacific Railway. He will have charge of the line from Brandon to Swift Current.

THE contract for the Potomac Flats Improvement has been awarded to Sanford Ross, of New York, who is characterized in the reports as the "lowest responsible bidder," and the secretary approved the recommendation.

AT a meeting of the directors of the Hannibal and St. Joseph Railroad Company, held in this city on the 15th inst., the following officers were elected: William Dowd, president; Russell Sage, vice-president; John A. Hilton, secretary, and Walter J. Hilton, treasurer.

THE President has appointed Waterman Smith, of New Hampshire, John S. Pillsbury, of Minnesota, and William H. Comstock, of New York, a commission to examine fifty miles of the Northern Pacific Railroad in the Yellowstone Valley, in the Territory of Montana.

ORGANIZATION.

THE following gentlemen have been elected directors of the American Loan and Trust Company: George H. Potts, George S. Scott, Alexander T. Van Nest, William B. Dinsmore, Joseph T. Low, Jesse Hoyt and John I. Blair.

THE following gentlemen have been elected trustees of the Edison Electric Light Company for the ensuing year: S. B. Eaton, Thomas A. Edison, Edward H. Johnson, Calvin Goddard, M. F. Moore, E. G. Fabbri and W. H. Meadowcroft.

AT the annual meeting of the Boston, Revere Beach and Lynn (narrow gauge) Railroad Co., held on the 15th inst., the following gentlemen were re-elected directors for the ensuing year: Edwin Walden, John B. Alley, Edward Tyler, David H. Sweetser, Matthew Bolles, Amos F. Breed, L. S. Judd, A. B. Martin, Isaac P. T. Edmands.

AT the annual meeting of the Sandy River Railroad Company, held at Phillips, Me., on the 15th inst., the following directors were chosen: N. B. Beal, D. L. Dennison, James Morrison, Jr., of Phillips, and P. H. Stubbs and J. W. Porter, of Strong. The directors chose N. B. Beal, president, D. L. Dennison, superintendent and P. H. Stubbs, clerk.

AT the annual meeting of the Richmond, Fredericksburg and Potomac Railroad Co., held at Richmond, Va., on the 15th inst., Col. Joseph P. Brinton was re-elected president, and A. Sydney Biddle, Charles Chauncy, J. S. Blackburn, Dr. Francis T. Willis, directors on the part of the private stockholders. Dr. Anderson was announced as State director.

AT the annual meeting of the stockholders of the European and North American Railway Company, held at Bangor, Me., on the 15th inst., the following were chosen directors: N. H. Wood, Samuel H. Bearse, Franklin A. Wilson, N. C. Ayer, Thomas J. Stewart, Sprague Adams, Charles P. Stetson, John S. Ricker, Wilbur J. Webb. At the directors' meeting

Noah Woods was elected president and Charles P. Stetson clerk.

At the recent annual session in Chicago of the Railway Conductors' Mutual Aid and Benefit Association, James G. Shearman was elected president for the ensuing year; E. A. Shadd, first vice-president; Harry M. Mounts, second vice-president; Charles Huntington, secretary and treasurer. The directors are: Thomas P. Rabb, George Hewitt, John R. Sandy, J. C. Wheeler, W. M. Calwell, F. X. Veva and J. S. Cooper.

The directors of the Indianapolis and Springfield Railroad Company, recently elected, are: John Caven, Thomas A. Morris, Franklin Landers, M. D. Manson, John Lee, L. M. Campbell, J. A. Larnerd, Thomas N. Rice, A. K. Start, George W. McCune, J. H. Piercy, T. N. Nichols, C. E. Thornton. The officers are: President, John Lee; vice-president, John Caven; secretary, Charles E. Thornton; treasurer, James M. Nichols.

At the third annual meeting of the stockholders of the Argent Mining Co., held in Philadelphia on the 13th inst., A. G. B. Hinkle, M. D., Charles H. Graham, J. T. Hampton, M.D., J. Wilson, Henry Lipman, James Fuller, M. Perrine, A. Wasserman and H. R. Deacon were elected directors. Expenses were reported amounting to $36,948.20, and the receipts from sales, etc., $17,270.83. The present balance in the treasury is $6,464.14.

At the annual meeting of the stockholders of the Baltimore and Ohio Railroad Company, held in Baltimore on the 20th inst., the following gentlemen were unanimously re-elected to serve for the ensuing year by a vote of 73,136 shares: Wm. F. Burns, Robert Garrett, John Spear Nicholas, John Gregg, Wm. W. Taylor, James Carey Coale, G. A. Von Lingen, Decatur H. Miller, Joshua G. Harvey, George W. Dobbin, Henry C. Smith and Aubrey Pearre.

At the annual meeting of the stockholders of the Boston and Providence Railroad Company, held in Boston on the 15th inst., the report of the directors, an abstract of which is given on another page of this week's issue, was presented and placed on file. James T. Hayward, Frederick P. Anthony and Charles D. Woodward were appointed a committee to receive, sort and count votes for directors, the ballot resulting in the re-election of the old board, as follows: Henry A. Whitney, Thomas P. I. Goddard, J. Huntington Wolcott, William R. Robeson, Francis M. Weld, Joseph W. Balch, Royal C. Taft. The board subsequently organized by the choice of Henry A. Whitney as president. Winslow Warren, B. B. Torrey and A. A. Folsom were re-elected respectively clerk, treasurer and superintendent of the road.

A little book on the "Dress and Care of the Feet," from the house of G. P. Putnam's Sons, very neat and pretty in its letter-press and binding, is apt to secure attention not only because of the importance of its subject but its attractive appearance. We find that it gives a well-written account of Dr. P. Kahler's method of treating diseased and deformed feet, which is recommended by many quite notable people. His address is No. 815 Broadway, New York City.

The Erie Canal Free from Tolls.

The vote at the recent election has given to the State of New York and the Northwestern States a free canal from the Lakes to the Hudson River. The Erie Canal, 345 miles long by 80 feet broad, is now as free as a navigable river. It will be a river of the future as well as of the past. "On the 30th of September, 1866," says the *New York Produce Exchange Weekly*, "it had paid for its construction, repairs and maintenance, leaving at that date a remainder from its earnings, including interest, of forty-one and a half million dollars. The Erie and Champlain canals together had on the 30th of September, 1881, a credit balance of 38½ million dollars not including interest. The Erie, the Champlain and the Oswego canals together had on September 30, 1881, a credit balance of 34½ million dollars, not including interest. These three canals are, together, 449 miles long. The entire canal system of the State, as it was, was nearly one thousand miles long. There have been taxes levied on the property of the State, over and above what the canal revenues have repaid, $19,376,742.75, the total tax for canal purposes having been $38,227,154.69. The earnings of the Erie Canal paid back $18,850,411.94 in contributions to the general fund and general fund debt. The credit balance of the Erie Canal of forty-one and a half millions, plus the taxation of $38,227,154,69, was expended for the construction and maintenance of the lateral canals, that never paid their expense of maintenance. The non-canal counties have had from taxation and the Erie Canal surplus $79,727,154.69. Of this tax of $38,227,154.69 the canal counties, including New York and Brooklyn, paid about 21.28 of it. The counties of New York, Kings, Westchester and Columbia have contributed to the interior counties about $800,000 per annum for school purposes, and of this amount the non-canal counties have annually received about $420,000. The non-canal counties have had much money spent for them. Their tax for canal purposes, in consequence of making the canals free, will be less than one-half of what they get from the school fund annually.

"If the surplus of forty-one and a half millions of the Erie Canal net earnings had been invested the interest would have been more than sufficient to maintain it free of all tolls, and to give it ten feet depth of water.

"The property of the Western and Northwestern States passing through the Erie Canal has paid tolls sufficient to give a surplus that, put at interest, would forever maintain the Erie Canal free. These States could, with good reason, demand that no more tolls should be imposed on their property when such tolls were for paying the construction of New York's lateral canals that they had never used.

"The Erie Canal has not outlived its usefulness. Freed from all tolls it will be for all time a formidable competitor of the Mississippi and the St. Lawrence routes. The daily clearances of boats from Buffalo and Oswego average from fifty to sixty, which carry about as many tons of property as fifty to sixty railway trains of 24 cars each. The Northwestern States will rejoice that New York has given them by its vote a free water highway from the lakes to the Hudson River.

"There is annually brought into the State of New York, for consumption, fifty million bushels of grain more than is grown in the State. This large quantity of grain, with a free canal, will save to the consumers half a million to a million dollars annually. Every portion of the State will share in the benefits of a free canal by its giving cheaper bread, cheaper grain, cheaper lumber, cheaper building materials, cheaper transportation of all products and a stronger holding of a vast commerce that has enriched every portion of the State."

Anthracite Coal Tonnage.

The following is an official statement of the anthracite coal tonnage for the month of October, 1882, compared with the same month in 1881:—

	1882.	1881.
Philadelphia and Reading Railroad	727,868	678,651
Lehigh Valley Railroad	603,261	549,562
Central Railroad of New Jersey	416,461	379,676
Delaware, Lackawanna and Western	470,079	411,266
Delaware and Hudson Co.	322,237	290,077
Pennsylvania Railroad	226,224	198,407
Pennsylvania Coal Co.	156,453	144,878
New York, Lake Erie and Western Railroad	22,431	34,133
Total	2,945,037	2,686,053

The following is the statement for the year 1882, compared with the year 1881:—

	1882.	1881.
Reading Railroad	5,626,993	5,616,402
Lehigh Valley Railroad	4,840,588	4,575,345
Central Railroad of New Jersey	3,485,090	3,317,801
Delaware, Lackawanna and Western	3,813,712	3,539,593
Delaware and Hudson Canal	2,563,220	2,590,132
Pennsylvania Railroad	1,973,329	1,835,602
Pennsylvania Coal	1,202,423	1,182,499
New York, Lake Erie and Western Railroad	217,925	389,949
Total	23,723,283	23,047,417

—showing an increase for the month of 258,983, and for the year 675,876. The stock of coal on hand at tide-water shipping points, October 31, 1882, was 524,050 tons; on September 30, 1882, 513,934 tons, increase 10,116 tons.

Thriving Cleveland has its *Trade Review and Western Machinist*, a prosperous looking sheet containing good reading matter and a liberal amount of advertising. With the issue of November 18 it passes into new hands, having been purchased by Messrs. William M. Day, lately an editor of the Akron *Beacon*, and formerly a night editor of the Cleveland *Leader*, and Frank A. Carter, who was associated with that gentleman on the *Beacon*. Mr. Carter has charge of the business, and Mr. Day of the editorial department of the journal, which is published weekly. We wish them the prosperity which, judging from the number before us, they are working conscientiously to earn.

The association of workmen employed at the Baldwin Locomotive Works, Philadelphia, celebrated the semi-centennial of the successful trial of the first locomotive sent out of the shops by a theatrical performance at the Chestnut Street Theater on the evening of November 23. The ancient motor was called "Old Ironsides," and was built by M. W. Baldwin on Minor street, near Sixth and Chestnut streets. It was first tried on the Germantown Railroad, running at the rate of one mile an hour. After each stoppage the engine had to be started by pushing.

Boston and Providence Railroad.

THE receipts of the Boston and Providence Railroad for the year ending September 30, 1881 and 1882, were as follows:—

	1881.	1882.
From passengers	$822,751 57	$910,763 25
From freight	533,956 52	605,221 49
From rents	19,167 82	20,529 59
From express	30,908 73	34,659 64
From mails	12,528 32	13,665 47
	$1,419,312 96	$1,584,839 44
Expenses:		
Salaries of general officers and clerks	$31,095 96	$31,047 77
Legal expenses	7,082 86	4,884 73
Insurance	5,103 92	133 00
Stationery and printing	7,725 82	8,582 00
Outside agencies and advertising	11,691 97	12,520 86
Contingencies and miscellaneous	1,608 92	1,165 87
Repairs of bridges	19,108 84	16,063 38
Repairs of buildings	80,527 62	118,006 55
Repairs of fences, road crossings and signs	3,858 16	6,528 54
Renewal of rails	13,905 85	30,822 80
Renewal of ties	22,052 78	27,436 09
Repairs of road-bed and track	99,133 20	153,246 13
Repairs of locomotives	71,791 42	93,726 29
Fuel for locomotives	107,722 11	114,838 44
Water supply	11,681 31	7,703 31
Oil and waste	14,395 39	14,521 10
Locomotive service	76,340 18	79,591 45
Repairs of passenger cars	36,282 76	69,230 55
Passenger train service	44,416 83	46,080 20
Passenger train supplies	4,485 80	6,664 55
Repairs of freight cars	36,544 79	44,256 97
Freight train service	22,115 87	23,581 86
Freight train supplies	200 28	193 40
Mileage freight cars	201 87	2,322 76
Telegraph expenses	1,839 75	1,565 05
Gratuities and damages	9,348 33	4,202 81
Agents and station service	164,395 59	184,879 56
Station supplies	18,009 54	22,159 57
	$922,667 72	$1,126,855 59
Net earnings	$496,645 24	$457,983 85
From which deduct—		
Dividends May 1 and November 1, four per cent each	$320,000 00	$320,000 00
Balance of interest account, Sept. 30	28,712 17	22,816 17
State and local taxes	89,636 59	94,017 96
Attleboro Branch rent	11,605 81	11,635 15
	$449,954 57	$448,469 28
Surplus for the year	$46,690 67	$9,514 57
Add balance September 30, 1881, $438,001.96, less $7,450.34 charged off to cover depreciation in real estate		430,551 62
Balance to credit of profit and loss September 30, 1882		$440,066 19

The gross receipts for the fiscal year ending September 30, 1880, were $1,323,925.63, the expenses (including interest) $948,772.86, and the net receipts $375,152.77. Compared with the year 1880, the gross receipts of 1881 show an increase of $95,387.33, with an increase in expenses (including interest) of $103,849.43, making a decrease in the net receipts of $8,462.10. Compared in like manner with the year 1881, the gross receipts of 1882 show an increase of $165,526.48, with an increase in expenses (including interest) of $202,702.58, making the decrease in net receipts $37,176.10. The taxes of 1880 were $20,896 in excess of those of 1879; in 1881 they were $8,588 in excess of those of 1880; and in 1882 $4,381 in excess of 1881—making a total increase in taxes in three years of $33,865.

Notes bearing seven per cent interest, due January 1 and July 1, 1881, for $50,000 each, were renewed in that year for five years at four per cent interest; a note for $100,000, due July 1, 1882, at seven per cent, has also been renewed at four per cent for five years from that date. The notes payable now stand as follows: $100,000, at 5 per cent, maturing January 1, 1883; $60,000, at 5 per cent, July 1, 1884; $100,000, at 4 per cent, Jan. 1 and July 1, 1886; $100,000, at 4 per cent, July 1, 1887—total, $360,000.

The report says that the increase in expenditures, which will naturally attract attention, has been chiefly due to more mileage, higher taxation, renewals, repairs and some additions to property, and then adds:

Taking advantage of larger receipts, many improvements heretofore delayed have been forwarded.

Small parcels of land have been purchased in Providence, Pawtucket, Readville, Roxbury and Boston. At Pawtucket, a freight house, greatly needed, and at Dedham a new passenger station and locomotive, house have been finished and occupied. An iron highway bridge has been built at Canterbury street in Roxbury, rendered necessary by the extension of the third track. The heavy ledge of rocks near by has been removed.

Next year the third track will be completed from Mount Hope to Readville, and put in operation as soon as practicable. The main drawback to this undertaking is a highway bridge at Hyde Park, where we still await the action of the town and the Norfolk County Commissioners.

Electric signals have been operated with success between Providence and Pawtucket, and additional electric warning-signals have been placed at different stations and crossings.

Forty freight cars of various descriptions, seven passenger cars and four locomotives have been bought, to which is to be added a small ownership in ten new Wagner sleeping and drawing-room cars.

At Boylston Station the road-bed has been made solid with the exception of a conduit for drainage.

All the above improvements and additions to rolling-stock and property have been charged directly to expense account.

The main line is now entirely equipped with steel, and there are twelve miles of steel rails in the branches.

On the 18th of September last, a hearing was given to petitioners for lower fares between Boston and the surburban stations. This subject has been repeatedly under consideration. The directors have no doubt that some modification in rates should be made to certain points on and after the 1st of January next. As yet no definite methods have been adopted.

The terminal facilities of the railways which center in Providence have long been unequal to the travel and business of that constantly growing city. Early in May, 1881, this corporation, in connection with the Providence and Worcester Railroad Company, asked the City Government for a conditional grant of land with a view to obtaining better accommodations for other roads as well as their own. The result of our application was the appointment of a Commission consisting of influential citizens serving without pay to consider the whole matter and to present some comprehensive plan. This led to a report, extracts from which having especial relation to the interests of this road may be found in the appendix. A supplementary report is given in full. In the opinion of experts, the adoption of the original scheme of the Commissioners would have been attended by too great cost.

It is hoped that within a brief period the different roads interested will be able to agree upon such plans as will receive the approval of the Commissioners and be satisfactory to the City Government of Providence.

The number of miles run by trains during the fiscal year ending September 30, 1882, were 888,707, against 865,216 in 1881, and 852,282 in 1880.

The whole number of passengers carried in 1882 was 4,128,299, against 3,802,405 in 1881, and 3,574,104 in 1880.

The number of passengers carried one mile in 1882 was 46,344,791, against 42,191,736 in 1881, and 42,990,453 in 1880.

The number of tons of freight moved in 1882 was 718,500, against 660,290 in 1881, and 669,468 in 1880.

Two dividends of four per cent each have been earned and declared in both the past and preceding years.

The dividends on investments in the Union Freight Railway and the preferred stock of the Providence, Warren and Bristol Railroad, have been credited to Interest Account.

TRIAL BALANCE SEPTEMBER 30,

	1881.	1882.
Construction and equipment	$4,612,774 38	$4,810,774 38
Stoughton Branch	85,400 00	85,400 00
Providence, Warren and Bristol Railroad stock	152,255 00	152,255 00
Union Freight Railroad Company stock	79,014 42	79,014 42
Real estate	198,000 00	.....
Cash and cash funds	111,462 40	36,304 44
Notes receivable	45,825 00	131,277 98
Materials on hand	144,814 59	129,543 34
Balances due from other roads, etc	97,311 27	119,584 56
Total	$5,526,884 06	$5,544,154 12
Capital stock	$4,000,000 00	$4,000,000 00
Seven per cent bonds, due 1893	500,000 00	500,000 00
Notes payable	360,000 00	360,000 00
Unpaid dividends	4,484 50	3,106 50
Dividend due Nov. 1	160,000 00	160,000 00
Balance due other roads, etc.	71,847 94	80,981 43
Profit and loss	430,551 62	440,066 19
Total, as above	$5,526,884 06	$5,544,154 12

President.—HENRY A. WHITNEY.

Directors.—Henry A. Whitney, Thomas P. I. Goddard, J. Huntington Wolcott, William R. Robeson, Francis M. Weld, Joseph W. Balch, Royal C. Taft.

Treasurer.—B. B. TORREY.

Gen'l Sup't.—A. A. FOLSOM.

IN Philadelphia, on the 15th inst., Judge Biddle entered a *nolle prosequi* in the case of Dr. Mark Spicker, who attempted to recover damages from the Pennsylvania Railroad Co. for being ejected from a train while traveling from Harrisburg to Williamsport on the Northern Central Railway. Dr. Spicker was using an excursion ticket from Philadelphia, and after leaving Harrisburg the conductor refused to take it on the ground that the time for which it was good had expired. The ticket was not limited. The non-suit was entered because the ticket was issued by the Pennsylvania Railroad Company "on account of the Northern Central Railway Company," and expressly provided that the Pennsylvania Railroad Company assumed no responsibility beyond its own lines. The plaintiff's suit, it was held, should therefore be against the Northern Central Railway Company.

FORMAL invitations were forwarded from Vicksburg, Miss., on the 18th inst. by the National Cotton Planters' Association of America to the cities of New Orleans, Galveston, Mobile, Savannah, Charleston, Richmond, Augusta, Montgomery, Nashville, Memphis, Louisville, St. Louis, Cincinnati and Baltimore to compete for the location of the World's Cotton Centennial Exposition, to be held in 1884. It is contemplated to raise $2,000,000 for this exposition, $500,000 of which is expected from the city securing the location, which will be decided upon January 1, 1883, by the Executive Committee of the association.

PAT—"An' is it the next train for Boston ye want? Faith, that wint an hour ago, sorr."

AMERICAN Railroad Journal. ESTABLISHED 1832.

PUBLISHED WEEKLY BY THE

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EDW. A. WRIGHT, *Treasurer.*
CHAS. T. VALENTINE, *Secretary.*

JULIUS C. SHAILER,
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Single copies	10

WE invite railroad officers to send us notice of elections, transfers, appointments, resignations, etc.; and all our readers would oblige us by furnishing for our columns any items of personal information, which may come to their knowledge, and are adapted to this department. We aim to record all new railway enterprises in the United States and Canada, and to note the progress of construction on all new roads and extensions; and we request all concerned in railway building to give us early information regarding the above, that our reports may be as complete as possible.

Subscribers are requested to report to our office any irregularity in receiving the JOURNAL.

Contributed articles relating to Railroad matters generally, Mining interests, Banking and Financial items, Agricultural development, and Manufacturing news, by those who are familiar with these subjects, are especially desired.

Entered at the Post Office at New York City as Second-Class Mail Matter.

New York, Saturday, November 25, 1882.

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THE ELECTIONS AND THE IRON INDUSTRY.

THERE is perturbation among the iron furnaces and rolling-mills. The price of steel rails has declined to $40 per ton, and great uncertainty hangs about the future of prices. This is due in part to the slackening of railroad construction; in part, also, to the belief that prices of material and labor have been too high for the last eighteen months; and in greater part to the anticipation that Congress at its next session will recast or seriously alter the existing tariff on importations. As we long ago foreshadowed, the steel rail combination has felt that the exorbitant duty of $28 per ton on steel rails, and $22.40 on iron rails, imposed for their benefit, could not much longer be maintained. No doubt before the elections they would have been willing to settle upon a tariff of one-half of these sums; now, however, it is doubtful if that much can be saved to incidental protection. The meaning of the vote recently cast is interpreted by both political parties to be: that taxes must be reduced—that the burdens imposed during the war shall no longer be kept up twenty years after the war has ceased, especially as its chief result is to swell the profits of certain industries which are now well able to stand alone, and to the purchase of the National debt at high rates of premium for the benefit of capitalists who are anything else than objects of Government bounty.

Both Republicans and Democrats will now make scrambling haste to obey the popular verdict; neither party deeming it prudent to be outbid by the other in the reduction of taxation. Mr. KELLEY, the Chairman of the present Committee on Ways and Means, is early in the field with a proposition to sweep away the entire Internal Revenue imposts, amounting to more than $150,000,000 a year. This represents about the amount of surplus which the Government has had for the last two or three years to expend in buying up bonds, and in improvements of rivers, harbors and public buildings. The Democrats, so far as can be discovered, are divided in councils as to whether the greater reduction shall be made from the duties on imports, or from the internal revenue taxes; ex-Speaker RANDALL, of Pennsylvania, like his colleague, Mr. KELLEY, favoring the former, while Mr. CARLISLE, his western competitor, favors the latter. It is obvious that the intention of the protectionists in both parties is to sacrifice the moneys collected on liquors and tobacco rather than that the tariff shall be changed so as to injure their special branches of industry. The presumption is that the existing tariff will also be attacked. Not the slightest attention will be paid by either party to the recommendations of the existing Special Commission. The voice of the people has superseded its mission.

If the Republicans are wise, in the evening of their day, they will offer a bill within the first week of the coming session proposing a horizontal reduction of the existing customs tariff of 10 per cent in the year 1883, and an additional 10 per cent in 1884, and so on until 50 per cent shall have been taken off. In this way the revenues from imports will be but slightly diminished, while the manufacturers will be let down without a sudden jar or shock, and in this way a monetary and commercial revulsion may be postponed or avoided. At the same time the minor items of internal taxes should be remitted altogether, retaining from fifty to sixty per cent of the present taxes on tobacco and distilled liquors, and allowing those on malt liquors to be abolished.

The steel rail combination, like the National banks, has nothing to expect from the Democratic party. It is not surprising, therefore, that some concert of action has already been had among them, and that they have resolved to either fill existing orders on half-time, or shut down their mills altogether.

The reports during the week are that large numbers of men will be thrown out of employment by the stoppage of rollin-gmills. This will be reflected back upon the furnaces and coal mines. In a measure the depression will affect the traffic of the railroads, especially those which have coal or iron industries along their lines, and thus extend to stock markets, and thence the alarm will spread all over the country. As a political demonstration, and a warning to the incoming and impetuous Democrats, this measure will have its weight. There are few orders in market for either pig iron or rails, and these few will be declined; the present quotations being merely nominal. Those who must have steel rails will be obliged to buy them on the other side, subject to the present high duty, or await the result of the struggle in Congress. The effect will be a comparative stagnation of the iron business. The railroad companies will be able to indemnify themselves somewhat for the loss occasioned by the stoppage of the iron works by the lower prices for which they will obtain their supplies—they being among the largest consumers of iron in one form or another.

The Democrats do not come into office until more than a year hence; and it is in the power of the Republicans, with their present majority, to adjust the tariff and internal taxes so that the will of the people shall be obeyed, the taxes reduced, and the surplus in the Treasury

disappear, and at the same time no violent shock be given to all those branches of employment in which America necessarily competes with Europe.

RAILROAD MEDICAL SERVICE.

BY S. S. HERRICK, M. D.

SECRETARY OF BOARD OF HEALTH, STATE OF LOUISIANA.

Introduction.

UNDER the above title the writer purposes to give the readers of the AMERICAN RAILROAD JOURNAL a comprehensive view of what medical men are contributing in the operation of railways in Europe and the United States. It is not his intention to be limited to bare recital of methods in actual use, but the liberty of making occasional comments and suggestions will be claimed as appropriate to the subject and to the pages of the JOURNAL so kindly offered to its consideration. It can not be alleged that the theme is hackneyed, and the writer trusts that its importance will be made so apparent as to excite interest for its intrinsic merits, if not for what he may be able to say himself.

In the infancy of American railroads, while they were few, short and nowhere distant from centers of population, it could not have been supposed that the companies would derive any advantage from permanent engagements with physicians; nor is it likely that such a want was then anticipated, any more than an occasion for undertaking the business of mining, manufacturing or the extensive planting of forest trees. The necessity for workshops and mechanics to make repairs on rolling-stock must have early led to the building of cars in the same shops, and the organization of this service on an extensive scale by the more important companies. In like manner, as lines lengthened and business increased, occasion for medical and surgical relief to passengers and employés multiplied, and the advantage of definite and permanent engagements with medical men became apparent.

It is evident that a strong corporation, well organized for a particular purpose, has facilities for undertaking new functions; and medical relief to employés, when they became numerous, would seem as natural a want as in a military establishment. But the actual outgrowth of railroad medical service in England and the United States has been governed by the apparent necessities of companies, to obviate the greater expense of employing medical men only when their services were indispensable, and at their own prices. In France and other countries of continental Europe, where railroads have always been more or less under direct government control, and where a paternal government assumes complete supervision of the conduct of its subjects, a well organized medical department has long existed on the more important roads.

The first, and for some time the only, occasions for the employment of medical men by railroad companies were in a surgical capacity, for the relief of those injured in accidents, when it might be presumed that the companies would be held legally responsible for consequences. A service once organized for this purpose could be made available, without much, if any, additional expense to the company, for the relief of employés, and even their families, in ordinary sickness. The physical examination of employés follows later, and last of all hygienic measures for the prevention of disease. These come latest, not because of inferior importance, but because they are the highest development in the gradual evolution of medical science. As in law, until a recent period, the safety of society was supposed to rest on the penal code, so in medicine the cure of disease long filled the measure of its functions. Even in the last quarter of the nineteenth century the penitentiary and the pound of cure are weightier, if not higher, considerations with the mass of mankind in the most civilized nations than morality and hygiene.

In railways, as in other organized industries, the tendency is toward consolidation of ownership into large and strong corporations, operating extensive lines, employing large numbers of men in a variety of departments, each well defined and under separate superintendence, but all under one general control, with a general resemblance to the organization of an army. Thus we find a department of construction and repairs of road-bed, track, bridges, buildings, etc.; another of construction and repairs of rolling-stock; another of operation; another of accounts, with several sub-divisions; another of law, for a large corporation can never keep out of court; and, last in date, a medical department. This youngest child of the household, in America at least, is only here and there acknowledged as one of the family, and scarcely ventures yet to put in a claim to the inheritance. True, the family are all liable to get sick now and then; many are liable to get hurt quite suddenly; but the doctor is abroad and can generally be got, sooner or later. The chance doctor is very apt to find his experience with this family troublesome and unprofitable, for everybody knows that it is easier to cheat the doctor than anybody else. Poor rules sometimes work both ways, and poor pay is apt to run with poor physic, as it is sure to do with poor preaching.

Under the usual American management, occasionally some infirm fellow gets into the family—a man with bad eyes or unsoundness in some vital organ. Then he may be found out by a dreadful accident, or, if killed himself, never found out. A medical inspection would sift out such cases. The cost of the inspection is a sure thing: the average American prefers to gamble on the chances.

It is said, "They do things better in France." Let us see how it is in railway management.

[TO BE CONTINUED.]

THE Erie Canal was formally opened in 1825; it then carried a boat through with ninety barrels of flour; now nine hundred barrels are the regular cargo.

A NEWSPAPER need not be large or pretentious to make its advertising valuable. But it must be a paper that is read by its subscribers.

Housatonic Railroad.

THE enterprising and liberal spirit which the Housatonic Railroad Co. are showing in regard to accommodating their patrons and providing means to secure their comfort and safety, is proving not to have been illadvised, as is shown from the traffic report for the past year and in the popularity and the prosperous condition of the road. The passenger receipts of this road for the fiscal year ending Sept. 30, 1882 show not only a handsome increase over the receipts for the year ending Sept. 30, 1881, but were the heaviest in the history of the road, exceeding the corresponding period ending in 1874, which has stood the highest on the record previous to this year. Much of this flattering and prosperous condition of the passenger department is owing to the adoption by the management of the line of a liberal policy in regard to issuing round trip, excursion and mileage tickets at reduced rates from former years, a judicious amount of advertising, which in the end always pays, and the sending out during two seasons past several editions of the valuable descriptive book, "Hills and Homes of Berkshire," thereby inviting strangers from the cities to visit the charming resorts on the line of the Housatonic road. The drawing-room cars run during the past summer between Pittsfield and New York have been a source of profit to the company as well as of great comfort to the traveling public.

The attractions which the management have added to the road in the way of improved rolling-stock, and time-tables arranged to accommodate the summer patrons as well as the local and through traffic, have evidently been adopted to good advantage. An extension of the Housatonic road further into Massachusetts is wanted by the region through which it would probably pass, and it would seem that the present popularity it enjoys with its patrons, and the inducements held out by a connection with the great Hoosac Tunnel route and local development, would be strong influences in getting the work of extension speedily under way.

THE Chicago, Burlington and Quincy Railroad Company has recently substituted for its stock of local tickets at the Chicago depot a ticket printing and registering machine, which prints the tickets from card-board as wanted. It consists of a small rotary press, which fills in the date and destination of tickets and registers the same on a consecutively numbered report blank, so that the agent in making out his report of sales has only to cut off the report stub and foot up the amount. The tickets used are in rolls of 1,000 each, printed in two colors and consecutively numbered. The destination is filled in by means of changeable dies. A single motion of the lever inks the type, dates and fills in the destination of the ticket, registers date and amount, and separates the ticket and a duplicate stub from the roll of tickets. The new contrivance is made to take the place at the Union depot in Chicago of a stock of four hundred different kinds of tickets. This new ticket register is to be introduced into all of the principal stations of the Burlington road, three hundred being already in use by that line.

Hot Air Blast and Smoke Consuming Device for Locomotives—Patented September 12, 1882.

EDITOR AMERICAN RAILROAD JOURNAL:

DEAR SIR:—The improvements in the stationary steam-engine, both land and marine, of late years have been both numerous and great, and most of these improvements have been made with one object in view, viz., economy of fuel. So great have been these improvements, that our Atlantic steamships can cross the ocean with fifty per cent less fuel than they could thirty years ago. But when we look at the locomotive do we see the same advancement? No: we see just the same engine she was fifty years ago, when George Stephenson opened the Liverpool and Manchester Railway. There has been only one improvement worthy of note since that time; that is the link-motion, and the old gentleman was himself the inventor. (Of course I am speaking of fuel-saving improvements only.)

There are very few persons except railroad men who are aware of the vast amount of heat that goes to waste through the smoke-stack of a locomotive. And of these there are not many who realize what a great saving of fuel might be made by the introduction of hot air instead of cold air into a furnace. It is within the memory of the writer that the smelting of iron ore was all done with cold air, and then the output would be from seventy to one hundred tons per week. Now since the introduction of hot hot air one thousand tons is no uncommon thing, and that too with but very little more fuel than it would take for one hundred tons before. Now to utilize the waste heat of a locomotive is the object of this invention.

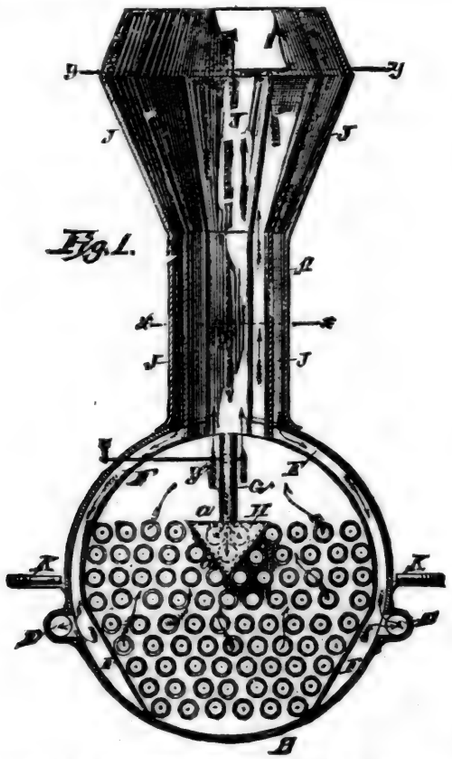
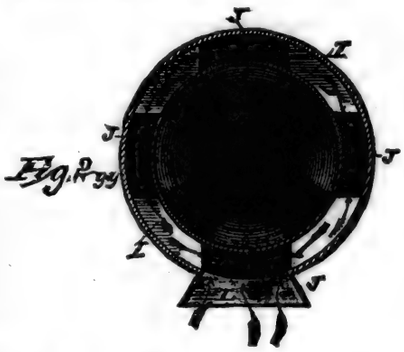


Fig. 1 is a transverse section. Fig. 2 is a top view of the smoke-stack. Fig. 3 is a horizontal section of the waist of the stack. Fig. 4 is a longitudinal vertical section. Fig. 5 is a view of the rear of the fire-box above and below the foot-board.

As there are more reference letters in the engravings than need explaining we will refer to those only which are essential to its working. It must be remembered that the smoke-stack needs to be modified somewhat; it must be at least two and a half inches wider than at present, so as to make room to get in all the heating surface possible.



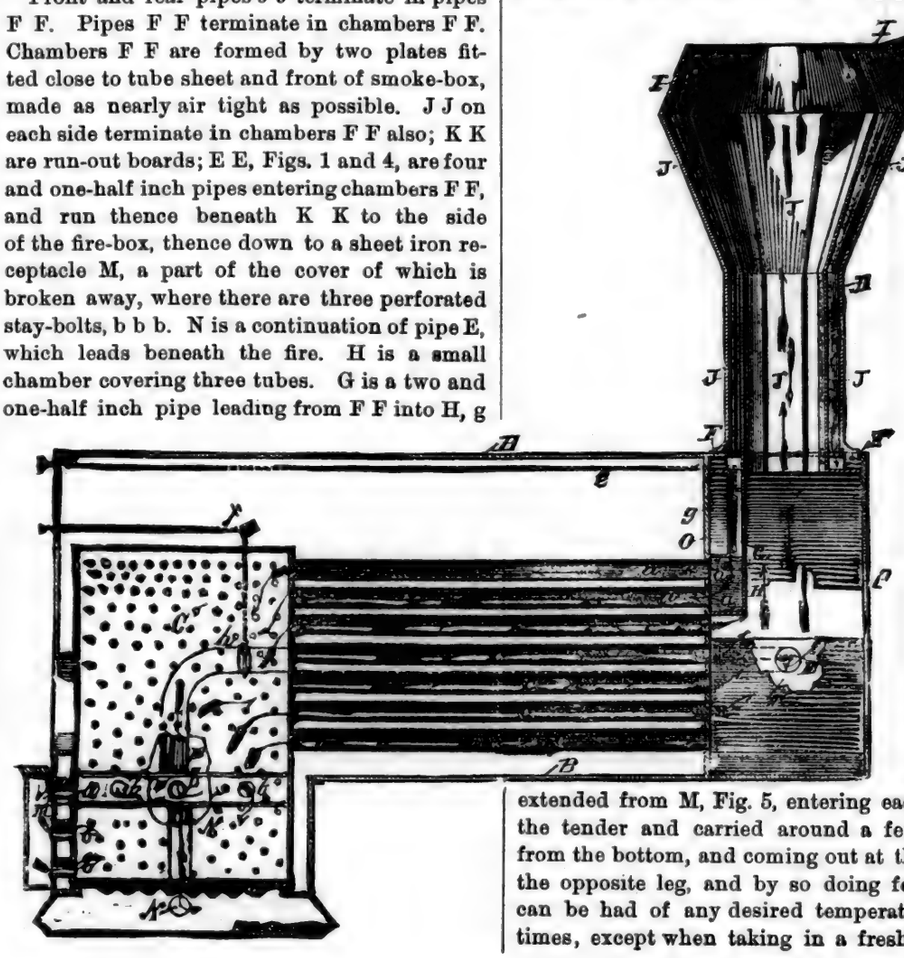
In Fig. 2 there is a circular passage three inches wide by ten inches deep, projecting through the stack, forming the inlet opening L. J J J J are air passages, three inches by ten inches, tapering down to one and one-half by eight inches down to base of stack. In the smoke-box are two half circle pipes, F F, one next the tube sheet, the other next to the front of smoke-box, which is not seen.



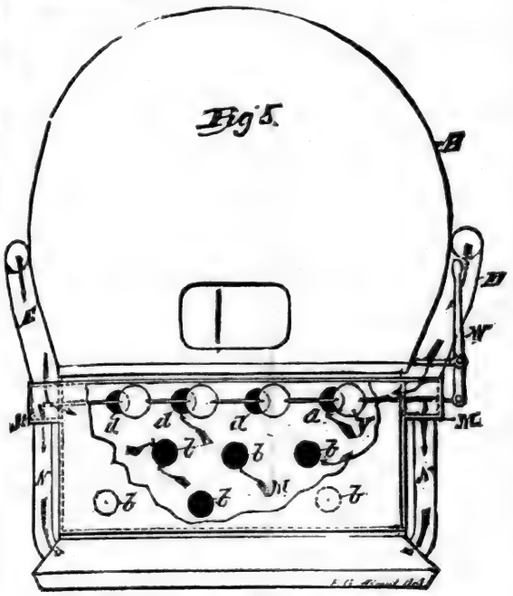
Front and rear pipes J J terminate in pipes F F. Pipes F F terminate in chambers F F. Chambers F F are formed by two plates fitted close to tube sheet and front of smoke-box, made as nearly air tight as possible. J J on each side terminate in chambers F F also; K K are run-out boards; E E, Figs. 1 and 4, are four and one-half inch pipes entering chambers F F, and run thence beneath K K to the side of the fire-box, thence down to a sheet iron receptacle M, a part of the cover of which is broken away, where there are three perforated stay-bolts, b b b. N is a continuation of pipe E, which leads beneath the fire. H is a small chamber covering three tubes. G is a two and one-half inch pipe leading from F F into H, g is a damper in said pipe, h is a damper in pipe E. Perforations b b b b, Figs. 4 and 5, lead into the fire; d d d lead above the fire, with slide V and lever W to regulate the blast. Now when the engine is in motion, the air entering L passes around and down J J J J, down through F F, down into the chambers F F, thence through pipes E E into M, Figs. 4 and 5, which I will call a jacket.

Now if there was nothing to be gained but the heat of the exhaust steam, which cannot be less than 250 deg., it would pay for the improvement. But when we take into consideration the heat of the gases as they enter the stack, what must be the temperature of that heat? Certainly not less than 600 deg. when an engine is running from twenty to forty miles per hour. Now you can imagine the effect of such a large volume of heated air entering the furnace below the fire, through the fire and above the fire, d d d. Fig. 5, and H, Figs. 1 and 4, are intended to be operated when putting on a fresh fire. It matters not how much steam a boiler may generate; if it is allowed to blow off into the atmosphere, there can be no saving of fuel. The next thing to do therefore is to enlarge the exhaust, and in this case it can be enlarged to nearly double its present size, and by so doing there will be no need of spark arresters, deflectors, etc., for there will be no cinders of any account to set fire to woodland and prairie. Mr. Editor, when I go out on a calm morning and hear an engine exhaust two or three miles distant, it brings to my mind the saying of "Poor Richard" when he said, "Gentlemen, you are paying too much for your whistle."

There is more which this device will accomplish; a two and one-half inch pipe can be extended from M, Fig. 5, entering each leg of the tender and carried around a few inches from the bottom, and coming out at the top of the opposite leg, and by so doing feed-water can be had of any desired temperature at all times, except when taking in a fresh supply,



Now, sir, if there were no other merit but this to recommend it, this would be sufficient for its adoption.



But this is not all: this device can be extended through every coach in a passenger train, and with proper radiators will heat every coach better than any stove possibly can do, and at the same time be very much more safe; there being no danger of cars taking fire in case of an accident, thus avoiding the possibility of human beings being roasted to death. Of course, I don't wish to be understood as saying that this invention will save from twenty to thirty per cent of fuel and heat a whole train of cars at the same time; that would be asking too much. I am perfectly well aware that theory very often fails when put into practice, but this theory—if theory it be—is based upon common sense and upon scientific principles.

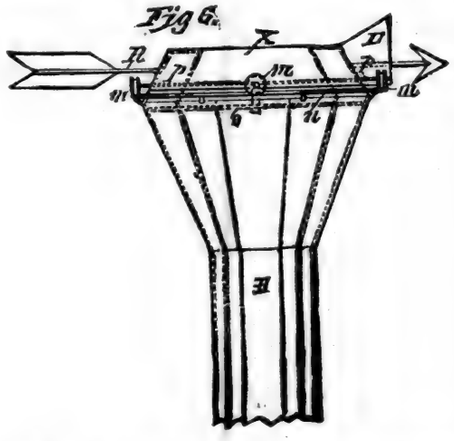


Fig. 6 is a double stack from top to bottom, with the same taper at the top as the other, say three inches tapering down to three-quarters, or one inch in the waist; that is, the inside lining will be as much smaller at base of stack. The rear and front are closed and the air goes down the sides into chambers F F, the same as the others. There are six inches of the cone of the outside stack cut away all around it. X is a circular slide or cover, with inlet-opening L cut out of it, with wheels m m m m fastened on to it, which slide with wheels run on track n n n n, thereby keeping inlet L to the wind at all times, for switch-engines or others.

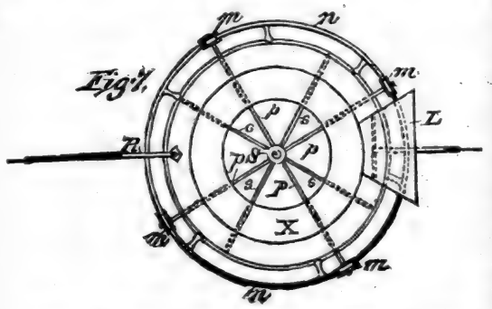


Fig. 7 is a top view of same, which explains itself. Now, sir, I am afraid to say more, for fear you may get your "back up" and consign this to the waste-backet never to see daylight, and send me off to the "devil" for better "copy." However, I must inform you that I have been laboring under a severe attack of "hot air fever," and that I never "pulled the lever" of this machine in a public capacity before, so that I trust you will be pleased to deal very leniently with me.

Yours truly,

JOHN CAMPBELL, SR.

BAY VIEW, WIS.

P. S.—For further information interested parties may address as above.

The Krupp Works at Essen.

THE firm of Friedrich Krupp owns near Essen 3,250 good and healthy lodgings for families, inhabited by about 16,000 people. The various colonies are transversed by wide streets, lighted by gas, and are supplied with good and sufficient water by the aqueduct of the factory. The annual rent for family lodgings of from two to four pieces (besides cellar and attic accommodation) varies from 66 to 180 marks. Single workmen can find board and lodging at a large boarding-house, capable of holding 1,800, at 80 pfennige (20c. United States currency) a man a day. For more experienced and better paid men a special boarding establishment has been put up, at which they can live for 1 mark 10 pfennige (27½ cents United States currency) per head and day. There are 150 lodgings set aside for the foremen and officials of the factory. There is also a common bakery, which turns out annually 130 tons of white and 2,100 tons of black bread; a butchery, furnishing the meat for the work-people from 450 pieces of large cattle and 1,500 smaller animals per annum; besides shops of every description, a selters-water manufactory, a tavern called the "Essener Hof," seven beer-saloons with billiards, bowling-alleys, etc. The colony of Kronenberg has a daily market. The trading-places, shops, etc. give employment to 270 persons, and their annual transactions amount to 2,250,000 marks, all the sales being "cash." On principle, no profits are to be made, and thus far subsidies have been required every year, the management of the shops, etc. not being an association on the part of the workmen, but an undertaking on that of the firm, and conducted on its account for the benefit of the work-people. The cast-steel factory has a hospital, a house for contagious diseases and a bath-house. Special care is taken of the schools. School-houses, with twenty airy school-rooms, are placed at the disposal of colony Altendorf; Kronenberg and Schederhof have a private school, conducted by one rector, eight male and four female teachers, besides two assistants. The pupils number about 1,000. For instruction in feminine handiwork there are two industrial schools, one for adults, the other for schoolgirls; the former under the direction of an inspectress and eight female teachers to upwards of 700 pupils; the latter conducted by twelve female teachers, one-half of whom are widows of former workmen.—*Stahl und Eisen.*

Overworking Boilers.

DOUBTLESS much of the *mystery* of boiler explosions could be traced to the above-mentioned practice of over-weighting, a practice criminal in its nature and inexcusable on any grounds whatever. If the manufacturer needs more steam, let him get more boilers in which he can safely make the desired quantity of steam. To additionally load the safety-valve is to test every part of the boiler beyond the safety point, and if an explosion does not result it is not the fault of the criminally careless engineer, or his principal, the manufacturer. It is the height of foolhardiness to risk the lives of those engaged in the works or in the vicinity of the boiler, and to risk the liability of destruction of the buildings adjacent, simply that a few dollars may be saved or that a little more steam could be supplied than the safety limit in the boiler would permit. Some have the foolish idea that because a boiler has done good service for a number of years, it can be relied upon to perform duty beyond that prescribed by the rules of safety. They reason that because it has never exploded, therefore it never will. But frequent explosions reported within the past few years should demonstrate that this view is erroneous. A due regard for the rights of others should deter a manufacturer from overworking his boiler, for, should an explosion occur, the lives and property of individuals residing in the vicinity will be imperilled. If the boiler is insured, then certainly such treatment of it as we have mentioned is a fraud upon the insurance company. But even were there no outside considerations, self-interest alone should teach the owners the impolicy of working their boilers beyond a safe pressure.—*Artisan.*

ACCORDING to the Official Gazette of the United States Patent Office there were issued in the six months ending June 30, 1882, no less than 161 patents for car-couplers for railroad use, and in the batch of patents announced as allowed on the 7th of November—the crop of one week—there were twenty-two more car-couplers, and it wasn't a particularly good week for car-couplers either. To the observer of these Patent Office reports the multifariousness of car-couplers becomes a cause of hideous fascination and ever-increasing wonder. How so many ways of attaching two objects together can be contrived will probably never be known to anybody but the Patent Commissioners. Perhaps, if the truth were known, there are a thousand or more car-coupler patents, all exactly alike, and when the 1,001st comes in, just like all the others, the maddened Commissioners shut their eyes and sigh, "Allowed," on general principles.

The Stock Exchanges and Money Market.

New York Stock Exchange.

Closing Prices for the week ending Nov. 22.

	Th.16	F.17.	Sat.18.	M.20.	Tu.21.	W.22.
Adams Express	.....	.....	.....	.....	138	.....
Albany and Susq	.....	131	.....	.....	131	.....
1st mortgage	.....	.....	.....	.....	.....	.....
2d mortgage	104½	.....	.....	.....	.....	.....
American Express	.....	96	95½	.....	94	.....
Burl., C. R. & Nor	.....	.....	.....	.....	79	.....
1st mortgage 58	101	.....	102	.....	.....	102
Canada Southern	70⅛	69¾	68⅛	66½	64¾	67
1st mortgage guar	94⅞	94⅜	94¾	94⅞	94	93¾
Central of N. Jersey	70½	68⅞	68	65¾	65½	66⅜
1st mort. 1890	.....	.....	.....	.....	.....	.....
7s, consol. ass	.....	.....	.....	.....	107¾	.....
7s, convertible ass	108½	.....	.....	.....	.....	103
7s, Income	.....	85	.....	.....	.....	.....
Adjustment	.....	.....	.....	.....	105	104
Central Pacific	89	88⅝	88	86⅞	84¾	85⅞
6s, gold	115	115	114	.....	114¼	.....
1st M. (San Joaq)	108	.....	.....	.....	.....	.....
1st M. (Cal. & Or.)	105¼	.....	.....	.....	104¾	.....
Land grant 6s	.....	.....	.....	.....	104	.....
Chesapeake & Ohio	24½	24⅛	24⅜	24	23½	22¾
1st pref	36	35	.....	.....	30¼	32
2d pref	.....	26	.....	25⅝	25	.....
1st mort., series B	87¼	87½	.....	87¾	86⅞	86
Chicago and Alton	.....	.....	136¼	134¾	134½	130½
Preferred	.....	.....	.....	140	.....	.....
1st mortgage	.....	.....	.....	.....	.....	.....
Sinking Fund	.....	.....	112	.....	.....	.....
Chi., Bur. & Quincy	130	12,¾	129⅛	128	125	126
7s, Consol. 1903	.....	129	.....	128	.....	.....
Chi., Mil. & St. Paul	108⅛	107⅜	107	103⅛	101¾	103⅛
Preferred	123⅞	123	122½	119¾	118	120
1st mortgage, 8s	.....	.....	.....	133	.....	.....
2d mort., 7 3-10s	.....	.....	.....	.....	.....	.....
7s, gold	.....	130	.....	.....	.....	129
1st M. (La. C. div)	.....	.....	.....	.....	.....	.....
1st M. I. & M. div.)	.....	.....	.....	.....	.....	.....
1st.M. (I. & D. ext.)	.....	.....	.....	.....	.....	.....
1st M. (H.&D. div.)	.....	.....	.....	.....	.....	119
1st M.(C. & M.div.)	.....	.....	.....	.....	.....	.....
Consolidated S. F.	.....	.....	125	125	.....	.....
Chi. & Northwestern	139⅞	139	140	134¾	131¾	134⅛
Preferred	159⅞	159	158¼	155	152½	151
1st mortgage	.....	.....	.....	.....	.....	.....
Sinking Fund 6s	.....	.....	.....	.....	.....	.....
Consolidated 7s	.....	.....	.....	.....	.....	.....
Consol. Gold bo'ds	.....	.....	127	127	126½	128
Do. reg	.....	.....	.....	.....	.....	127
Chi., R. Isl. & Pac	129	127¾	128¼	126	125⅛	125⅜
6s, 1917, c	.....	128	.....	.....	.....	.....
Clev.,Col.,Cin.&Ind	81	82	80	75	74¾	74
1st mortgage	.....	.....	.....	.....	.....	.....
Clev. & Pittsburg gr	.....	.....	.....	.....	.....	139
7s, Consolidated	124¾	.....	.....	.....	.....	.....
4th mortgage	.....	.....	.....	.....	.....	.....
Col.,Chi.,& Ind. Cent	6⅛	6¼	6	5⅛	5⅝	5⅜
1st mortgage	.....	.....	121	.....	.....	121
2d mortgage	.....	.....	.....	.....	.....	.....
Del. & Hud Canal	113	111¾	111	108¾	107¾	108⅛
Reg. 7s, 1891	115½	.....	116	.....	.....	.....
Reg. 7s, 1884	.....	.....	105⅝	.....	.....	.....
7s, 1894	.....	.....	.....	.....	.....	.....
Del.,Lack.& Western	132½	130⅜	128⅝	124⅜	125⅛	127⅛
2d mortgage 7s	.....	.....	.....	.....	.....	.....
Consol. 1907	.....	.....	.....	130	.....	.....
Erie Railway	.....	.....	.....	.....	.....	.....
1st mortgage	.....	.....	.....	.....	.....	.....
2d mort. 5s, ext	.....	.....	.....	.....	.....	.....
3d mortgage	.....	.....	.....	.....	.....	.....
4th mort. 5s, ext	.....	.....	.....	106½	.....	.....
5th mortgage	.....	.....	.....	.....	.....	.....
7s, Consol. gold	.....	.....	125⅛	126	.....	.....
Great West. 1st mort	.....	108	108	.....	.....	.....
2d mortgage	.....	.....	.....	.....	.....	.....
Hannibal & St. Jo	.....	.....	.....	.....	.....	.....
Preferred	80¼	.....	82	80	79	.....
8s, Convertible	105	.....	.....	.....	.....	105
Houston & Tex. Cen	78	.....	.....	75	.....	.....
1st mortgage	.....	.....	.....	.....	.....	.....
2d mortgage	.....	.....	.....	.....	.....	.....
Illinois Central	147⅜	147⅜	147	145⅜	143	145¾
LakeShore&MichSo	115	114⅜	114¼	112⅜	111¾	112⅞
Consol. 7s	.....	.....	.....	.....	.....	.....
Consol. 7s, reg	.....	.....	.....	.....	.....	125
2d Consolidated	.....	.....	.....	.....	.....	.....
Leh. & W. B. con.ass	.....	102⅛	.....	.....	102⅛	.....
Long Dock bonds	121	.....	.....	.....	.....	.....
Louisville & Nash.	51⅝	51¾	52	51¾	50⅛	51⅜
7s, Consolidated	.....	115⅛	115⅛	.....	115⅛	.....
Manhattan	.....	.....	.....	.....	45	44
1st pref	.....	.....	85	.....	85	85
Met. Elevated	.....	.....	86	.....	85⅛	.....
1st mortgage	100¼	.....	100¼	100¼	100⅜	.....
Michigan Central	101¼	100½	100	93	96¼	97¾
7s, 1902	122	.....	.....	.....	.....	.....
Morris & Essex	.....	.....	.....	124½	.....	.....
1st mortgage	.....	.....	134	.....	.....	.....
2d mortgage	.....	.....	.....	.....	.....	.....
7s of 1871	.....	.....	.....	.....	.....	.....
7s, Convertible	.....	.....	.....	.....	.....	.....
7s, Consolidated	.....	.....	.....	.....	.....	.....
N.Y. Cen. & Hud. R.	131⅛	130¾	130¾	128⅛	126⅞	128
6s, S. F. 1883	.....	.....	100⅛	.....	.....	100⅜
6s, S. F., 1887	.....	.....	.....	.....	.....	.....
1st mortgage	133	.....	.....	.....	.....	.....
1st mortgage, reg	.....	.....	.....	.....	.....	.....
N. Y. Elevated	.....	.....	.....	.....	.....	.....
1st mortgage	115⅝	.....	.....	115⅛	.....	115¾
N. Y. & Harlem	.....	.....	.....	.....	.....	.....
Preferred	.....	.....	.....	.....	.....	.....
1st mortgage	.....	.....	.....	.....	.....	.....
1st mortgage, reg	.....	.....	.....	.....	.....	.....
N. Y. Lake Erie & W	38⅛	38¾	38⅛	36½	34⅞	36
Preferred	82½	85	84⅞	84¾	81⅜	80¼
2d Consolidated	99¾	.....	99⅝	99	98⅞	99
New 2d 5s fund	.....	.....	.....	97⅜	.....	.....
N.Y.,N.Hav'n&Hart	.....	185	.....	186	.....	.....
North Mo. 1st mort	.....	.....	.....	.....	.....	.....
Northern Pacific	45	45⅜	45¾	44⅛	43	44⅛
Preferred	92⅝	94¾	94⅞	93⅜	92¾	94⅛
Ohio & Mississippi	33⅞	34⅛	34¾	33	33	32¾
Preferred	.....	.....	.....	.....	.....	.....
2d mortgage	.....	.....	.....	.....	121	120¾
Consolidated 7s	.....	.....	.....	.....	.....	.....
Consol. S. Fund	117⅛	.....	.....	.....	.....	117
Pacific Mail S. S. Co	38¾	39	.....	36	35⅛	35¼
Pacific R. R. of Mo.	.....	.....	.....	.....	.....	.....
1st mortgage	.....	.....	.....	.....	.....	105¾
2d mortgage	.....	.....	.....	.....	111¼	.....
Panama	.....	.....	.....	.....	.....	.....
Phila. & Reading	57¼	56¼	54	50¾	49⅝	50¾
Pitts,Ft.W.&Chi.gtd	.....	.....	.....	133½	132½	.....
1st mortgage	138	137	.....	.....	.....	.....
2d mortgage	.....	.....	.....	.....	.....	.....
3d mortgage	.....	128	.....	.....	.....	.....
Pullman Palace Car	.....	125	125	121	122	124
Quicksil'r Min'g Co	.....	.....	9¾	.....	.....	.....
Preferred	.....	.....	.....	.....	.....	43
St. Louis & San Fran	.....	.....	.....	36	33	32½
Preferred	.....	.....	.....	54¼	54	53¾
1st Preferred	.....	.....	.....	.....	96	.....
St. L., Alt'n & T. H.	.....	40½	46½	44½	.....	43
Preferred	.....	80⅜	90⅛	90	88	84
1st mortgage	.....	.....	.....	.....	.....	.....
2d mort. pref	.....	110	109½	.....	.....	.....
Income bonds	.....	.....	.....	.....	.....	.....
St. L., Iron Mt.& S.	.....	.....	.....	.....	.....	.....
1st mortgage	.....	.....	.....	.....	.....	.....
2d mortgage	.....	.....	.....	.....	103⅜	.....
Toledo and Wabash	.....	.....	.....	.....	.....	.....
1st mortgage	.....	.....	.....	.....	.....	.....
2d mortgage	.....	.....	.....	.....	.....	.....
7s, Consolidated	.....	.....	.....	.....	.....	.....
St. Louis Division	.....	.....	.....	.....	.....	.....
Union Pacific	107¼	107	106⅞	105⅝	104⅞	105⅞
1st mortgage	.....	115	115	.....	115	.....
Land Grant 7s	110½	.....	.....	.....	.....	110⅜
Sinking Fund 8s	.....	.....	.....	.....	.....	117½
United States Ex	.....	.....	.....	.....	.....	64
Wabash, St. L.& Pac	33¾	33	33⅛	30⅞	30⅛	30⅛
Preferred	59⅛	58⅛	58¼	57	54	55⅞
New mort. 7s	.....	.....	.....	.....	.....	.....
Wells-Fargo Ex	.....	.....	.....	129	130	.....
Western Pacific b'ds	.....	.....	.....	.....	112	.....
Western Union Tel.	82⅜	82⅝	82	81⅜	80¼	81⅞
7s., S.F conv., 1900	.....	.....	.....	.....	.....	.....
FEDERAL STOCKS :—						
U. S. 4s, 1907, reg	.....	.....	.....	.....	.....	119
U. S. 4s, 1907, coup	119⅛	119¼	119⅛	119¾	.....	.....
U. S. 4½s, 1891, reg	.....	112½	.....	.....	112¼	112½
U. S. 4½s, 1891, coup	113⅜	.....	.....	.....	113	113
U. S. 5s, cont'd at 3⅛	102⅛	.....	.....	.....	.....	.....
U. S. 3s, reg	.....	102	101¾	.....	102	.....
Dt. of Col. 3-65s, reg	.....	.....	.....	.....	.....	.....
Dt. of Col.3-65s,coup	.....	.....	.....	.....	.....	.....

Boston Stock Exchange.

Closing Prices for the Week Ending Nov. 22.

	Th.16.	F.17.	Sat.18.	M.20.	Tu.21.	W.22
Atch.,Top.&San.Fe.	84⅛	84¾	84½	84⅛	83¼	82⅞
1st mortgage	118⅞	118⅞	118¾	118¾	.....	118⅞
Land Grant 7s	.....	.....	.....	.....	.....	.....
Boston & Albany	173¾	.....	173	173	173	173
Boston and Lowell	.....	.....	.....	98½	.....	.....
Boston & Maine	.....	151	.....	.....	.....	.....
Boston& Providence	.....	.....	.....	.....	160½	.....
Bos'n,Hart.& Erie7s	49	.....	.....	.....	46¼	.....
Burl.& Mo.R.L.G.7s	.....	.....	115¾	.....	115⅝	.....
Burl.& Mo.R.in Neb	.....	.....	.....	.....	.....	.....
6s, exempt	.....	.....	.....	112¾	.....	.....
4s	.....	.....	.....	.....	.....	.....
Chi.,Burl. & Quincy	129¾	130	130	128⅜	125⅞	125⅛
Cin.,Sand&Clev($50)	.....	28¾	.....	.....	.....	.....
Concord ($50)	.....	.....	.....	.....	.....	.....
Connecticut River	.....	.....	.....	.....	.....	.....
Eastern	39	31½	33¼	.....	33	31⅜
New 6s, Bonds	109¾	110	.....	109¾	108¾	108¾
Fitchburg	142	132	.....	132	132	.....
N.Y. & New England	49	48¼	48½	.....	46	44¾
7s	.....	.....	.....	.....	116	115½
Northern N. H	.....	.....	.....	.....	.....	.....
Norwich&Worcester	.....	160	.....	.....	.....	.....
Ogden & Lake Cham	.....	.....	.....	.....	.....	.....
Old Colony	137½	.....	137½	138	.....	138
Ph.,Wil.&Balt.($50)	.....	.....	.....	.....	.....	.....
Portl'd,Saco & Ports	.....	.....	.....	.....	.....	.....
Pueblo & Ark Val 7s	.....	.....	112⅞	.....	.....	.....
Pullman Palace Car	.....	.....	.....	125	.....	123
Union Pacific	107	107⅛	107¾	106⅝	105	105
6s	.....	.....	.....	.....	.....	.....
Land Grant 7s	.....	.....	.....	.....	.....	.....
Sinking Fund 8s	116	.....	.....	.....	.....	.....
Vermont & Mass	.....	.....	.....	.....	.....	.....
Worcester & Nashua	.....	.....	.....	.....	.....	.....
Cambridge (Horse)	.....	.....	.....	.....	.....	.....
Metropolitan(Horse)	.....	.....	.....	.....	.....	.....
Middlesex (Horse)	.....	.....	.....	.....	.....	.....
Cal.&Hecla Min'gCo	250	.....	.....	250	250¾	249⅛
Quincy	67¼	67¾	67	.....	66	64¾

Philadelphia Stock Exchange.

Closing Prices for the Week Ending Nov. 21.

	W.15.	Th.16.	F.17.	Sat.18.	M.20.	Tu 21
Allegh'y Val. 7 3-10s	.....	.....	.....	.....	.....	.....
7s, Income	49½	.....	.....	49¾	49	.....
Buff., Pitts & West.	19¾	.....	19⅝	19¼	18	16
Camd'n & Am. 6s, '83	.....	.....	.....	.....	.....	.....
6s, 1889	.....	.....	.....	.....	.....	.....
Mort. 6s, 1889	112	.....	112	112	.....	.....
Camden & Atlantic	.....	.....	.....	.....	.....	.....
Preferred	.....	.....	.....	.....	.....	.....
1st mortgage	.....	.....	.....	.....	.....	.....
2d mortgage	.....	.....	.....	.....	.....	.....
Catawissa	.....	.....	.....	.....	.....	.....
Preferred	54½	.....	.....	.....	53½	53½
2d pref	.....	52⅝	.....	.....	.....	.....
7s, new	.....	.....	.....	.....	.....	.....
Del. & Bound Brook	.....	.....	.....	.....	.....	.....
7s	.....	.....	.....	.....	.....	.....
Elmira&Williamsp't	.....	.....	.....	.....	.....	.....
Preferred	.....	.....	.....	.....	.....	.....
Hunt. & B. Top Mt.	.....	17	.....	.....	16½	.....
Preferred	.....	.....	.....	.....	.....	.....
2d mortgage	.....	.....	.....	.....	.....	.....
Lehigh Navigation	42	42¼	42	41½	40½	38⅞
6s, 1884	.....	.....	.....	103	103¼	.....
Gold Loan	112	.....	112¼	112½	.....	.....
Railroad Loan	.....	.....	.....	115	.....	.....
Conv. Gold Loan	.....	.....	.....	.....	.....	108
Consol. Mort, 7s	.....	.....	.....	.....	.....	.....
Lehigh Valley	65¾	65½	65¾	65¾	64½	64
1st mort. 6s, coup	.....	.....	.....	.....	.....	.....
1st mort. 6s, reg	.....	.....	.....	.....	.....	.....
2d mort. 7s	.....	132¾	.....	.....	.....	.....
Consol mort. 6s	.....	.....	.....	.....	.....	.....
Consol.mtg.6s,reg	.....	.....	122¾	.....	.....	119¼1
Little Schuylkill	.....	.....	.....	.....	.....	.....
Minehill&Sch.Hav'n	.....	.....	62¾	62¾	.....	.....
North Pennsylvania	.....	.....	.....	64¼	.....	64
1st mortgage 6s	.....	.....	.....	.....	.....	.....
2d mortgage 7s	.....	.....	.....	.....	.....	.....
Genl. mtg.7s,coup	.....	.....	.....	.....	.....	.....
Genl. mtg. 7s, reg	.....	.....	.....	.....	.....	.....
Northern Central	57	.....	56⅞	56⅝	.....	55
5s	.....	.....	.....	.....	.....	.....
Northern Pacific	44½	45	45⅞	45⅞	44¾	43⅛
Preferred	91⅞	92¾	94⅜	94¾	93⅛	92¾
Pennsylvania R. R.	60	60	60⅛	59⅞	59¼	57¾
1st mortgage	.....	.....	.....	.....	.....	.....
Gen'l mort	.....	.....	.....	.....	.....	125
Gen'l mort reg	.....	.....	.....	.....	.....	.....
Consol. mort. 6s	.....	.....	.....	.....	.....	.....
Consol. mort. reg	.....	.....	.....	.....	.....	119½
Pa. State 5s, new	.....	118½	.....	.....	.....	.....
do 4s, new	.....	.....	.....	.....	.....	.....
do 3½s, 1912	.....	.....	.....	.....	.....	.....
Phila. & Reading	28¼	28⅝	28½	27	25¼	24⅞
1st mortgage 6s	.....	.....	.....	.....	.....	.....
7s of 1893	.....	.....	.....	.....	118¾	.....
7s, new convert	.....	.....	69½	70	.....	.....
Consol. mort. 7s	.....	.....	.....	.....	126½	.....
Consol. mort. reg	.....	.....	.....	.....	.....	.....
Gen'l mort. 6s	94¼	94½	94½	94¾	94	93¾
Def.Income bonds	.....	.....	.....	.....	.....	.....
Philadelphia & Erie	21⅛	21⅛	21	21	.....	20
1st mortgage 5s	102⅛	.....	.....	.....	.....	.....
2d mortgage 7s	.....	.....	.....	.....	.....	.....
Pittsb.,Cin.&St.L.7s	.....	.....	.....	.....	.....	.....
Pitts.,Tit.&Buff. 7s,	.....	.....	.....	.....	.....	.....
Schuylkill Navi't'n	.....	.....	.....	.....	.....	.....
Preferred	.....	12	12	.....	.....	.....
6s, 1897	.....	.....	.....	.....	.....	.....
6s, 1907	.....	89	.....	89¼	.....	.....
United Co. of N. J.	190	.....	.....	190	.....	189
Hestonville, (Horse)	.....	.....	.....	.....	.....	.....
Chestnut&Walnut)	.....	.....	.....	.....	.....	.....

Baltimore Stock Exchange.

Closing Prices for the Week Ending Nov. 21.

	W. 15.	Th. 16.	F. 17.	Sat. 18.	M. 20.	Tu. 21.
Baltimore & Ohio....	193	.....	.....	.....	.....	.....
6s, 1885.....	.....	.....	.....	.....	.....	.....
Central Ohio ($50)...	.....	.....	.....	.....	48	.....
1st mortgage.....	.....	103	.....	.....	.....	108
Marietta & Cincin'ti.	.....	.....	.....	127¾	.....	.....
1st mortgage, 7s..	.....	.....	.....	.....	127⅞	127¾
2d mortgage, 7s...	101⅛	.....	100⅞	.....	100¼	99⅛
3d mortgage, 8s..	.....	56¾	56¼	56⅛	56	55⅛
Northern Cen. ($50).	56⅞	.....	.....	.....	.....	.....
2d mort. 6s, 1885..	.....	.....	.....	.....	.....	.....
3d mort. 6s, 1900..	.....	.....	.....	.....	.....	.....
6s, 1900, gold.....	116¾	.....	.....	.....	.....	.....
6s, 1904, gold.....	.....	.....	.....	.....	.....	.....
Pitts. & Connelsv. 7s.	.....	.....	122	.....	.....	.....
Virginia 6s Consol..	.....	59¾	60	61⅝	61⅜	60⅛
Consol. coupons...	66	66	.....	67½	.....	.....
10-40 bonds.....	.....	.....	44⅛	45	44	43¾
Def'd Certificates	.....	.....	.....	.....	.....	.....
New 3s.....	.....	.....	.....	.....	.....	.....
Western Maryland..	.....	.....	.....	.....	.....	.....
1st M., end. by Balt	.....	.....	.....	.....	.....	.....
2d M., do.	.....	.....	.....	.....	.....	.....
3d M., do.	.....	.....	.....	.....	.....	.....
1st M., unendorsed	.....	.....	.....	.....	.....	.....
2d M., end. Wash Co	.....	.....	.....	.....	.....	.....
2d M., preferred...	.....	.....	.....	.....	.....	.....
City Passenger R. R.	.....	.....	.....	.....	.....	.....

London Stock Exchange.

	Closing Prices Nov. 3.	Oct. 27.
Baltimore and Ohio 5s, 1927.....	108	110	108	110
Central of N. J., $100 shares.....	80	85	80	85
Do. consol. mort.....	110	112	110	112
Do. Income Bonds.....	88	92	88	92
Central Pacific of Cal., $100 shs..	93	94	93⅛	94⅛
Do. 1st mort. 6s, 1895–'98.....	117	119	117	119
Det., G'd Haven & Mil. Equip bds.	116	118	116	118
Do. Con. M. 5p.c., till '83 after 6p.c.	114	116	114	116
Illinois Central $100 shares.....	154	155	152	154
Do. S. F. 5s, 1903.....	104	106	104	106
Lehigh Valley Cons. mort. 1923...	115	119	115	119
Louisville and Nashville mort. 6s	92	94	93	95
Do. capital stock $100 shares...	53	55	57	59
N. Y. Cen. & Hud. R. mort. bonds.	132	136	132	136
Do. $100 shares.....	136	137	137	138
Do. mort. bonds (stg.).....	122	124	122	124
N. Y. Lake Erie & West. $100 shs.	41⅛	42	43	43⅛
Do. 6 p. c, pref. $100 shares....	87	89	88	90
Do. 1st Con. Mort. bonds (Erie).	127	130	127	130
Do. do. Funded Coupon bonds.	124	127	124	127
Do. 2d Consol. Mort. bonds....	101	103	102	104
Do. do. Funded Coupon bonds.	99	101	99	101
N. Y., Pa. & Ohio 1st mort. bonds.	46⅛	47⅛	59	60
Do. Prior Lien bonds (sterling).	100	105	100	105
Pennsylvania $50 shares.....	65	65⅛	65¾	66⅛
General Mortgage.....	122	124	122	124
Phil. & Erie Gen. mort. 6s, 1920...	117	119	117	119
Philadelphia & Reading $50 shs..	30⅛	31	31⅛	32
General Consol Mortgage.	117	119	116	118
Do. Improvement Mortgage....	103	105	102	104
Do. Gen. Mtg. '74, ex-def'd coup.	97	99	97	99
St. L. Bridge 1st mort. gold bond.	121	123	121	123
Do. 1st. pref. stock.....	94	98	94	98
S. P'fic of Cal., 1st mort 6s, 1905–6.	107	108	106	108
Union Pacific 1st mtg. 6s, 1896–9..	117	119	117	119
Wabash, St. L. & P. $100 shares..	34	34	33	35
Do. $100 pref shares...	59½	60⅜	60⅛	61⅛
Do. gen. mort. bonds.....	84	85	85	87

AMERICAN RAILROAD JOURNAL.

Financial and Commercial Review.

THURSDAY EVENING, November 23, 1882.

TEN per cent was the ruling rate for Stock Exchange borrowers this morning. Time loans were 6 per cent, and prime mercantile paper 6@8 per cent. In the afternoon the rate for money on stocks was 10@12 per cent, but at the close 6@7 per cent. The highest rate was 20 per cent.

Bankers' bills were quoted at 4.79½@4.80 for long, 4.83½@4.84 for demand, and 4.84½@4.85 for cable transfers. Commercial bills were at 4.78@4.78½. Francs sold at 5.24⅜@5.23¾ and 5.21¼@5.20⅝, Reichmarks at 94¼@94⅜ and 95⅛@95¼, and Guilders at 39⅞@40.

The gross receipts of the Philadelphia and Reading Railroad Company for the month of October, were $2,229,512.92, the expenses $1,105,961.47, and the net earnings $1,123,551.45; the gross receipts of the Coal and Iron Company were $1,592,217,47, the expenses $1,444,268.04, and the net earnings $147,949.43—the total earnings of both companies being $4,821.730,39, the total expenses $2,550,229.51, and the net earnings $1,271,500.88; an increase of $229,235.10 as compared with the corresponding month last year. The total net earnings of both companies for the year to date were $9 651,553.16, being an increase, as compared with the corresponding period of last year, of $565,610.32. The coal tonnage of the company for the year to date is 8,076,802 tons. an increase of 306,704 as compared with the corresponding period last year.

At a meeting of the directors of the New York, Lake Erie and Western Railroad Company, held on the 16th inst., President Jewett submitted a brief statement, outlining the coming annual report, showing the results of the road's operation for the year ending September 30, 1882. The statement placed the gross earnings of the company from traffic at $19.975,773.81, a decrease of $739,831.37 as compared with the year ending September 30, 1881. The operating expenses amounted to $13,088,093.74, a decrease of $168,136.32, making the net earnings from traffic $6,887.680.07, a decrease of $571,695.05. The percentage of operating expenses to gross traffic earnings was 65½, an increase of 1½. The earnings from all sources other than traffic aggregated $780,655.02, a decrease of $63,650.94, the total earnings from traffic and these other sources being $20,756,428.83, a decrease of $803,482.31. The surplus earnings for the year amounted to $1,166,642.02, a decrease of $720,775.72. The total number of tons transported during the year was 11,895,238, an increase of 808,415 over the previous year.

The report of the Register of the Treasury at Washington for the fiscal year ended June 30, 1882, shows the receipts of the Government (exclusive of public debt) to have been, in round numbers, $403,000,000, and the expenditures (exclusive of redemption of public debt) $258,000,000. The total number of coupon and registered bonds issued was 104,346, amounting to $478,827,150. The number of coupon and registered bonds canceled was 303,903, amounting to $650,027,400. The number of interest checks registered after payment was 155,013. The number of paid coupons registered was over 3,000,000, and the number of coupon bonds examined, registered, and scheduled over 100,000. More than 50,000 warrants and 33,000 drafts were registered; over 14,000 certificates for the settlement of accounts furnished to the accounting officers, and over 24,000 accounts received and filed. Seventeen million one hundred and twenty-four thousand one hundred and ninety-six legal tender notes, representing $78,077,301, were counted, examined, and sent to the committee for destruction; also 237,210 fractional currency notes, amounting to $51.621; 465,680 silver certificates, for $921,175, and 21,880 refunding certificates, amounting to $218,300, were redeemed. The total tonnage of the country having documents outstanding at the close of the fiscal year is shown to have been 4,165,933 tons, in 24,368 vessels. The number of vessels built was 1,371; tonnage, 282,270 tons.

The Attorney General of the State of New York has rendered an opinion that parsonages, even though they be on the same lot with churches, are liable to be taxed if the parsonages are owned by the church trustees or corporations. It is held that the section of law referring to the exemption of clergymen does not apply to parsonages owned by the church trustees or corporations.

The Committee on Ways and Means met in Washington on the 21st inst., and adjourned until the 5th of December; it being decided by them that nothing could be accomplished until the Reports of the Tariff Commission, and the Treasury Department were in hand. W. D. Kelley, Chairman of the Committee, it is stated, expresses himself on all occasions as being in favor of abolishing all internal revenue taxes, A prominent member of the Committee from the West is reported to have said that, while it would be impossible to anticipate the action of the Committee, it might safely be said that there is a feeling among its members in favor of reducing the taxes as much as may be done having due regard to the necessities of the Government for current expenses, for the sinking fund and for the interest on the public debt. Whether or not this reduction of internal taxes to the lowest possible figure compatible with these necessities would make tobacco free and leave the tax on whiskey alone, or take it off whi key as well, making a clean sweep, as desired by Mr. Kelley, he could not say. He recalled the Revenue bill of the last session which passed the House and which contemplated a reduction in the revenues of $23,000,000. This took the tax off everything but tobacco and whiskey, and it is now generally admitted that a greater reduction than $23,000,000 is demanded by considerations of public welfare and may safely be made. The members of the Committee present at the meeting are all pronounced protectionists, and the gentleman interrogated was careful to confine himself to the general question of agreement on such reduction as the condition of the Treasury would warrant. It is a fair conclusion from his remarks that the Committee will favor the entire removal of taxes from everything except tobacco and whiskey and a reduction of the taxes on those articles.

At Montreal on the 18th inst. sterling exchange stood at 108½. At Toronto stocks were quite, but prices firm, a few sales were made with an advance over Friday's. There were no sales of Montreal, Ontario or Merchants, but Ontario bids advanced ¼ and Toronto 1, Merchants weakening ¼ more on account of its rapid advance than anything else.

At a meeting of the shareholders of the Bank of Nova Scotia, held November 18th, a resolution authorizing the directors to amalgamate with the Union Bank of Prince Edwards Island, and to increase the capital to $250,000 for carrying on the purposes of the amalgamation, was passed.

On Tuesday, November 21st, the Montreal Stock Market was steady at Saturday's closing prices.

On the 16th inst. the Montreal stock market was stronger than for some days previous. Montreal sold 1 better and advanced to 202½. Ontario 1 better,

On the 18th inst. Montreal offered at 203¾, with 203⅛ bid—a slight advance by buyers.

The following were the closing quotations on the Toronto Stock Exchange Nov. 18:

	Noon. Asked.	Bid.
BANKS.		
Montreal.....	203¾	203⅛
Ontario.....	.....	118½
Toronto.....	174½	174
Merchants, ex-div.....	124¾	124½
Commerce.....	137½	137
Imperial.....	142	140
Federal.....	156	155¾
Dominion.....	201	200¾
Standard.....	115½	115¼
MISCELLANEOUS.		
Western Assurance.....	.....	162½
Consumers' Gas.....	.....	148¾
Dominion Telegraph.....	94	.....
Northwest Land Co....	56¼	58⅜
Ontario and Qu'Appelle....	190	185
LOAN COMPANIES.		
Canada Permanent.....	235	230
Western Canada.....	195	.....
Union.....	132	131¼
Building & Loan.....	108	106
Imperial Savings.....	111	.....
Farmers' Loan.....	127½	.....
L. & C. L. & A.....	.....	134½
National Investment.....	.....	108¾
People's Loan.....	110½	.....
London and Ontario Investment.....	.....	117½
Manitoba Loan.....	125	121
Huron and Erie.....	161	.....
Dominion Sav. & Loan.....	122	.....
Canada Sav. & Loan.....	131¼	.....
Ontario Invsstment....	140	136
Farmers & Traders Loan.....	110	106

SALES.—Commerce 10 at 136¼, 20 at 136¾, 70 at 137. Imperial, 10 at 140. Federal, 10 at 156, 10 at 155¾. Standard, 100 at 115½, 20 at 115¼. Consumers' Gas, 30, 72 at 148¾. B. & Loan Association, 50 at 106. Lon. & Can. L. & A., 200, 50 at 134½. Real Estate, Loan and Debenture Company, 10, 2 at 97.

The Canadian Pacific Railway Company has placed on the market, free of settlement and cultivation duties, all the odd numbered sections allotted to them under their contract west of the river between the twenty-four-mile limit on the main line and the international boundary as far as the western boundary of the old province, and west of the boundary between the main line and the belt line for a distance of twenty-one miles comprising altogether 2,500,000 acres. The prices range from $4 to $10.

The gross earnings of the Petersburg Railroad (Petersburg, Va., to Weldon, N. C., 64 miles) for the year ending September 30, 1882, were $298,543.63, the current expenses $159,703.22, and the net earnings $138,840.41.

The Denver and Rio Grande Railway Company gave the usual thirty days' notice to the Stock Exchange on the 21st inst. of its intention to issue 38,400 shares of stock, of the par value of $100, amounting to $3,840,000. In his letter to the Exchange the secretary states that the issue is "to provide means for the completing and finishing of so much of the company's lines as, including the division to Utah, together with the mileage heretofore completed, will make 1,300 miles of finished road; and to discharge certain obligations incurred on account

thereof, and other lawful purposes." The new issue makes the capital stock of the company $33,000,000. Authority to increase the capital to $50,000,000 was given to the company about a year ago.

The Chief of the Bureau of Statistics reports that the total values of the exports of breadstuffs from the United States in the month of October, 1882, were $15,205,103; October, 1881, $14,839,914: four months ended October 31, 1882, $84,881,719; four months ended October 31, 1881, $80,311,635; ten months ended October 31, 1882, $149,737,960; ten months ended October 31, 1881, $192,292,555.

The value of the exports from the United States of provisions, tallow and dairy products in October, 1882, was $4,660,042, and in October, 1881, $8,920,520; in ten months ended 31st October, 1882, $78,036,011, and in same time 1881, $111,723,571. The value of the exports of dairy products in six months ended 31st October, 1882, was $9,290,862, and in same time 1881, $13,510,432.

The Chief of the Bureau of Statistics reports that during the month of October, 1882, there arrived in the customs districts of Baltimore, Boston, Detroit, Huron, Minnesota, New Orleans, New York, Passamaquoddy, Philadelphia and San Francisco 57,689 passengers, of whom 45,965 were immigrants, 8,367 citizens of the United Staies returned frem abroad and 3,357 aliens not intending to remain in the United States. The number of immigrants arrived in October, 1881, was 67,929. The total number of immigrants arrived in the above named customs districts and from the principal foreign countries during the four months ended October 31, 1882, was 203,986, against 239,734.

A special general meeting of the shareholders of the Canada Southern Railway Company will be held at St. Thomas, Ontario, on the 30th inst., at 2 P. M., to consent to an agreement with the Michigan Central Railroad Company, under the provisions of Section 60 of the Railway act of 1879, and for other business consequent thereon.

The dividend of 11.1 per cent declared on the preferred stock of the Northern Pacific Railroad Company, is payable January 15, 1883, to holders of record December 10, 1882, in five years' 6 per cent obligations of the company, dated January 1, 1883.

The following quotations of sales of railway and other securities, for the week, are in addition to those given elsewhere in our columns.

New York.—Boston and New York Air Line pref., 78½; Cincinnati, Sandusky and Cleveland 1st, 95: Chicago, Burlington and Quincy 5s, S. F., 102¾; Chicago and Northwestern S. F. 5s, 99; Chicago, St. Paul, Minn. and Omaha, 44¼; do. pref., 102¾; do. consol., 107½; Columbus, Hocking Valley and Toledo, 67; Chicago and Alton inc., 100¼; Chicago, St. Louis and New Orleans, 82; Central Iowa, 32; do. debt. certif., 60½; Chesapeake and Ohio 1st, series A, 104; do. cur. 6s, 50: Chicago, Milwaukee and St. Paul, Southern Minn. div. 1st, 107½; do. Chicago and Pacific West div. 92¾; do. La Crosse and Dav. div. 1st, 94: do. Mineral Point div., 90½; Columbus, Chicago and Indiana Central 1st, Trust Co. certif., ass. sup., 115; do. inc., 50; Danbury and Norwalk, 75; Denver and Rio Grande, 41¾; do. 1st, 106; do. consol., 91; Dubuque and Sioux City, 88; Denver, South Park and Pacific 1st, 97½; East Tennessee, Virginia and Georgia, 9¾; do. pref., 17½; do. 1st, 114; do. 5s, 72; do. inc., 39⅞; Evansville, Henderson and Nashville 1st, 95; Evansville and Terre Haute 1st, 96; Fort Worth and Denver, 39½; do. 1st, 71; Elizabethtown, Lexington and Big Sandy 6s, 96; Green Bay, Winona and St. Paul, 7; Gulf, Colorado and Santa Fe, 1st, 107¼; Houston and Texas Central Gen'l mort., 97; Hannibal and St. Joseph 6s, consol., 104; International and Gt. Northern 1st, 101; do. coupon 6s, 82; Indiana, Bloomington and Western, 33; do. 1st, 89; Indianapolis, Decatur and Springfield 1st, 101; Iowa Midland 8s, 130; Kansas Pacific 1st consol., 100; do. 6s, Denver div. ass., 106; Lake Shore div. bonds, 120½; Louisville, New Albany and Chicago, 73; do. 1st, 103½; Long Island, 58; do. 116; Lake Erie and Western 26½; Louisville and Nashville, genl. mort. 6s, 90½; Minneapolis and St. Louis, 27; do. pref., 65; do. 2d, 103; Mobile and Ohio, 18; do. 1st deben., 79; do. 2d deben., 45; do. 3d deben., 36; Missouri, Kansas and Texas, 31⅝; do. genl. mort. 6s, 85; do. 7s, consol., 104½; do. 2d, 53; Missouri Pacific, 102½; do. 1st consol., 100; do. 3d, 109½; Milwaukee, Lake Shore and Western pref., 46; do. 1st, 97; do. inc., 79¼; Manhattan Beach, 16; Michigan Southern S. F., 105; Memphis and Charleston, 46; Northern Pacific 1st, 104¼; New Orleans Pacific 1st, 85⅝; New York, Chicago and St. Louis, 14½; do. pref., 29½; do. 1st, 95, Nashville, Chattanooga and St. Louis, 47; New York, Ontario and Western, 26¼; Norfolk and Western, 17; do. pref., 51⅜; do. genl. mort., 100¾; Ohio Southern, 14½; do. 1st, 85; Ohio Central, 13⅜; do. inc., 32; do. Terminal Trust, 6s, 9s; Oregon Railway and Nav., 154; do. 1st, 108; Oregon Transcontinental, 83¾; Oregon Short Line, 34¼; Ohio and Mississippi, Springfield div. 1st, 114; Peoria, Decatur and Evansville, 26; Rochester and Pittsburgh, 19¼; do. 1st, 104¼; do. inc., 44⅞; Richmond and Alleghany, 14; do. 1st, 83½; Richmond and Danville, 59; do. 6s, 93⅞; do. deben., 61¾; Richmond, Danville and West Point, 25; Rome, Watertown and Ogdensburg, 30; do. ext. 5s, 68½; do. inc., 40¾; St. Paul and Duluth pref., 90; ;St. Paul, Minn. and Man., 141½; do. 1st, 110; do. 2d, 100; St. Louis and Iron Mt., Cairo and Fulton 1st, 107; do. Cairo, Ark. and Texas 1st, 107; do. 5s, 73; do. Ark. Branch 1st, 109: St. Louis, Kansas City and Northern, R. E. 7s, 103; do. Omaha div. 1st, 107; South Carolina 1st, 99: Southern Pacific of Cal. 1st, 103½; St. Louis and San Francisco 2d, class A, 96¾; do. B, 90; do. C, 90⅜; St. Louis, Alton and Terre Haute div. bonds, 47; Texas and Pacific, 38⅛; do. 1st, 130; do. inc. L. G., 53; do. Rio Grande div. 1st, 77; Utah Southern ext. 5s, 101: Wabash, St. Louis and Pacific. genl. mort. 6s, 81; do. Chicago div. 1st, 81; Arkansas 7s, Central R. R. issue, 11; Alabama Class A, 83; Louisiana consols., 68½; do. ex mat. coupon, 61; Missouri 6s, 1887, 108¾: North Carolina 6s, new, R. R. issue., 130; Tennessee 6s, 46; do. compromise, 52; Virginia 6s, consol. ex-mat. coupon, 60¼; American Cable, 66; Mutual Union Tel., 22½; do. 6s, 71; Colorado Coal and Iron, 27½; do. 6s, 121; Consolidation Coal, 27½; New Central Coal, 19; Deadwood Mining, 4; Homestake 17½; Ontario, 36; Standard, 5⅞.

Boston.—Atlantic and Pacific, unlisted, 93; do. inc., 16; do. blocks, 101½; Boston Land, 6¼;Chicago, Burlington and Quincy 4s, plain, 78; do. 4s, Denver ext., 80½; do. 7s, 126¾; Central Iowa, 31¾; Chicago and West Michigan, 5s, 89; Connotton Valley, 3⅞; do. pref., 6¼; Cedar Rapids and Missouri River, 106½; Eastern (N. H.) R. R., 92; Flint and Pere Marquette, 20; do. pref., 98; Iowa Falls and Sioux 88;Jackson, Lansing and Saginaw 8s, 106¼; Kansas City, Lawrence and Southern 5s, 102¾; Kansas City, Fort Scott and Gulf, 78; do. pref., 120; do. 7s, 110½; Kansas City, St. Joseph and Council Bluffs 7s, 114; Little Rock and Ft. Smith, 45; Mexican Central, 20; do. 7s, 65⅞; do. block No. 3, 86; Marquette, Houghton and Ontonagon, 63; Massachusetts Central, 3½; do. 6s, 28½; New York and New England 6s, 105¼; New Mexico and Southern Pacific 7s, 112; Oregon Short Line 6s, 97¼; Rutland pref., 17; Sonora 7s, 102⅞; Toledo, Cincinnati and St. Louis, 4¾; do. 6s, 45½; do. inc., 12; Toledo, Delphos and Burlington, 6s, 42; do. Southeast div. 6s, 46; do. Branch inc., 10; Wisconsin Central, 13; Allouez Mining Co., 2½; Franklin, 19; Huron, 2¼; Osceola, 34; Pewabic, 9.

Philadelphia.—Central Transp., 34¼; Norfolk and Western, 17¾; Oil Creek 1st, 103; Philadelphia and Reading inc. 7s, 92; do. scrip, 98@96;Philadelphia City 6s, 1903, 134¼; do. 4s, 1904, 113; Pennsylvania Co. 4½s, 96; Pennsylvania Canal 6s, 89; Philadelphia, Wilmington and Baltimore 4s, 93¾; Pennsylvania and New York Canal 7s, 1896, 122⅞; Texas and Pacific 1st, 105; do. consol. mort. 6s, 95; Union and Titusville 7s, 95; West Jersey and Atlantic 6s, 108. The latest quotations are: City 6s, 108@120; do. free of tax, 127@134; do. 4s, new, 106@114; Pennsylvania State 5s, new loan, 118@119; do. 4s, old, 112@114; do. 4s, new, 116@117; Philadelphia and Reading Railroad, 24⅜@24½; do. consol. mort. 7s, reg., 125@126; do. gen'l mort. 6s, coupon, 94@94¼; do. 7s, 1893, 118@119; do. 7s, new conv., 70@71; United New Jersey R. R. and Canal, 188@190; Buffalo, Pittsburg and Western, 16@16¼; Pittsburgh, Titusville and Buffalo 7s, 95@96; Camden and Amboy mort. 6s, 1889, 111⅛@112¼; Pennsylvania R. R., 57⅝@57¾; do. general mort. 6s, coupon, 125@126½; do. reg., 124@126; do. consol. mort. 6s, reg., 120@122; Little Schuylkill R. R., 58@59; Schuylkill Navigation pref., 11⅛@12½; do. 6s, 1882, 89@90: Elmira and Williamsport pref., 58@60; do. 5s, —@100; Lehigh Coal and Navigation, 38¾@38¾; do. 6s, 1884, 103@104; do. R. R. loan, 114@115; do. Gold Loan, 112@113; do. consol. 7s, reg., 117@118; Northern Pacific, 43¼@43¼; do. pref., 92¼@92½; North Pennsylvania, 64@64¼; do. 6s, 106@106½; do. 7s,119@—; do. 7s, General mort. reg., 124@—; Philadelphia and Erie, 20@20½; do. 7s, 114@115; do. 5s, 102@103; Minehill, 62½@63; Catawissa, 20¾@21; do. pref.,53@54; do. new pref., 52@54; do. 7s, 1900, 118@120; Lehigh Valley, 63@—; do. 6s, coupon, 122@123; do. reg., 122@123; do. 7s, reg., 132@133; do. consol. mort. reg., 119@120; Fifth and Sixth streets (horse), —@190; Second and Third, 115@116¼; Thirteenth and Fifteenth, 79@80; Spruce and Pine, 42@44; Green and Coates, 80@92; Chestnut and Walnut, —@93; Germantown, 70@73; Union, 110@111; West Philadelphia, 120@—; People's, 9¼@10¼; Continental, 103@105.

Baltimore.—Atlantic Coal, 1.10; Atlanta and Charlotte 1st, 106¾; Baltimore and Ohio 2d pref., 123¾; Baltimore City 6s, 1890, 114¼; do. 5s, 1894, 113; do. 5s, 1916, 121; do. 4s, 1920, 111½; Charlotte, Columbia and Augusta, 37; George's Creek, 94; Maryland Defense 6s, 103⅝; Northern Central Sterling, 1904, 105; Northern Central 5s, Series A, 98⅞; do. B, 98¼; Richmond and Danville 6s, gold, 94½; Virginia Midland 5th mort., 93¾; do. inc., 54; Virginia 10-40 coupons, 67; Wilmington, Columbia and Augusta, 107½. The latest quotations are: Atlanta and Charlotte 1st, 1907, 106¾@107; Baltimore and Ohio, —@195; Baltimore City 6s, 1886, —@108½; do. 6s, 1890, 114¼@114¾; do. 6s, 1900, 124@126; do. 5s, 1894, 113@113¼; do. 5s, 1916, 120¾@121; Central Ohio 48¼@—; do. 6s, 107½@108; Columbia and Greenville 1st, 1916, 100@102; Canton Co. 6s, 104@—; Marietta and Cincinnati 7s, 1891, 127¾@128½; do. 7s, 1896, 99¾@99¾; do. 8s, 1890, 55@55⅝; N. W. Virginia 6s, 104@106; Northern Central, 55¼@56¾; do. 6s, 1900, gold, —@116¾; do. 5s, Series A, 98@—; do. B, —@98¼; Ohio and Mississippi, Springfield div. 1st, 114@115; Richmond and Danville 6s, gold, 94@94½; Virginia Midland 2d mort., 108@108½; do. 5th mort. —@94; do. inc., 52@55; Virginia consols, 60½@60¾; do. 10-40s, 43½@44; do. 3s, —@49¾; Western Maryland 1st unendorsed, 109@—.

The Coal Trade.

THE leading coal-carrying companies make the following reports of their tonnage for the week ending Nov. 11, and for the year to the same date, compared with their respective amounts carried to the same time last year:—

	Week.	1882.	1881.
Phil. and Reading R. R.....	199,626	7,869,826	7,575,964
Schuylkill Canal	22,444	471,943	540,437
Lehigh Valley	137,202	5,883,300	5,429,539
Delaware, Lackawanna and Western	96,485	3,945,320	3,689,082
Shamokin	23,136	985,804	933,000
Central R. R. of New Jersey..	100,493	3,810,812	3,801,882
United R. R. of New Jersey...	35,946	1,479,136	1,350,875
Pennsylvania Coal..... ..	36,562	1,222,917	1,220,230
Delaware and Hudson Canal..	84,835	3,067,907	3,099,828
Huntingdon and Broad Top Mountain	4,962	399,031	457,397
Penn. and New York.....	30,409	1,364,452	1,437,851
Clearfield, Pa.....	65,863	2,456,092	2,075,744

The total tonnage of anthracite coal from all the regions for the week ending Nov. 11, as reported by the several carrying companies, amounted to 664,579 tons, against 661,779 tons in the corresponding week last year, an increase of 2,800 tons. The total amount of anthracite mined for the year is 24,902,665 tons, against 24,019,168 tons for the same period last year, an increase of 883,497 tons. The quantity of bituminous coal sent to market for the week amounted to 114,080 tons, against 114,868 tons in the corresponding week last year, a decrease of 788 tons. The total amount of bituminous mined for the year is 3,791,113 tons, against 4,248,138 tons for the corresponding period last year, a decrease of 457,025 tons. The total tonnage of all kinds of coal for the week is 778,659 tons, against 776,647 tons in corresponding week last year, an increase of 2,012 tons, and the total tonnage for the coal year is 28,693,778 tons, against 28,267,306 tons to same date last year, an increase of 426,472 tons. The quantity of coal and coke carried over the Pennsylvania Railroad for the week ending Nov. 11 was 215,729 tons, of which 161,248 tons were coal and 54,481 tons coke. The total tonnage for the year thus far has been 9,493,301 tons, of which 7,055,715 tons were coal and 2,437,586 tons coke. These figures embrace all the coal and coke carried over the road, east and west. The shipments of bituminous coal from the mines of the Cumberland coal region for the week ended Nov. 11 were 52,606 tons, and for the year to that date 1,164,207 tons, a decrease of 707,923 tons as compared with the corresponding period of last year. The shipments were: To the Baltimore and Ohio Railroad—For the week, 31,928 tons; year, 799,173 tons; decrease as compared with 1881, 389,835 tons. Chesapeake and Ohio Canal—Week, 18,586 tons; year, 218,165 tons; decrease as compared with 1881, 213,618 tons. Pennsylvania Railroad — Week, 1,670 tons; year, 139,336 tons, decrease from last year, 105,816 tons. The Reading Railroad shipment for last week, ending November 18, was about 205,000 tons, of which 52,500 tons were sent to and 37,000 tons shipped from Port Richmond, and 12,900 tons sent to and 15,500 tons shipped from Elizabethport.—*Philadelphia Ledger, Nov.* 20.

FOR SALE.

Locomotives—Two Second-hand Narrow-Gauge Engines in good order.
One Second-hand "Tank" Narrow-Gauge Engine, 10 tons.
Several Second-hand Standard-Gauge Locomotives in good order, immediate delivery.
One new 3ft. Gauge Passenger Engine, 22 tons, prompt delivery.
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Two new 3ft. Gauge Locomotives, Cylinders 12x18, weigh; 20 tons. December and January delivery.
Cars—Passenger and Freight Cars of all descriptions for early delivery.
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Running through to Syracuse, N.Y., where connection is made with through sleeping-cars for Cincinnati, Cleveland, Toledo, *DETROIT AND CHICAGO.*

3.00 P. M. CINCINNATI EXPRESS.

Pullman Sleeping Car attached, running through to Cincinnati without change. (Only Line running Pullman Cars from Boston.) This car runs *via* Erie Railway and N.Y., P. & O. R.R., making direct connection for Louisville, St. Louis, Kansas City, New Orleans, and all points in Texas and New Mexico.

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ARRIVING AT 8.00 A.M. SECOND MORNING.

Through sleeping car for Buffalo, Toledo, Fort Wayne, Logansport, Lafayette, Danville Tolono, Decatur and St. Louis, making direct connection with through Express Trains for Kansas, Colorado, Texas, and all points in the

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The only line running a through sleeping-car *via* Niagara Falls, Canada Southern Railway and Detroit without change, arriving at Chicago at 8.00 A.M. second morning, making sure connections with through Express Trains for Iowa, Nebraska, Kansas, Colorado, the Pacific Coast, Wisconsin, Minnesota and all points in the

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In effect October 23d, 1882, and subject to changes.

RAILROAD AND CANAL DIVIDEND STATEMENT.

Showing the amount of Stock Outstanding, the Dividend Periods and the date of last Dividend.

Marked thus(*)are leased roads.	Stock outstanding.	Divide'd Periods.	Last Dividend Payable.
Albany and Susq*...100	2,500,000	semi-an	July '82 2
Ashuelot.....100	210,000	q'arterly	Oct. '81 3½
Atch., Top. and S. Fe100	54,000,000	q'arterly	Nov. '82 1½
Atlanta and W. Point100	1,232 200	semi-an	Jan. '82 6
Atlantic and St. Law*100	5,840,000	semi-an	Mar. '82 3
Augusta and Savan'h100	1,022,900	semi-an	June'81 3½
Avon, Genesee&MtM*100	225,000	semi-an	July '81 3
Baltimore and Ohio.100	14,792,566	semi-an	Nov. '82 5
" " pref.100	5,000,000	semi-an	July '82 3
Washington Br....100	1,650,000	semi-an	Nov. '82 5
Berkshire*.....100	600,000	q'arterly	Apl. '82 1¾
Boston and Albany..100	20,000,000	q'arterly	Sept.'82 2
Bos.&N.Y.AirLine pf.100	2,795,227	q'arterly	June'82 1
Bos.,Cl.,F.&N.B.pref.100	1,750,100	semi-an	Oct. '82 3½
Bos.,Conc.&Mont.pf*100	800,000	semi-an	Nov. '82 3
Boston and Lowell..500	3,040,000	semi-an	July '82 2
Boston and Maine...100	6,921,274	semi-an	Nov. '82 4
Boston & Providence100	4,000,000	semi-an	Nov. '82 4
Attleborough Br...100	131,700	semi-an	July '82 3½
Bos., Revere B &Lynn100	419,400	semi-an	July '82 3½
Buffalo,N. Y. & Erie*.100	950,000	semi-an	June'82 3
Camden & Atlantic.. 50	377,400	q'arterly	Nov. '82 3
" " pref. 50	880,650	q'arterly	Nov. '82 4
Camden & Burl. Co..100	381,925	semi-an	July '82 3
Canada Southern....100	15,000,000	.....	Feb. '81 2½
Cape May &Millville* 50	447,000	semi-an	June'81 3
Catawissa*..... 50	1,159,500	annual	Oct.'82$2½
" pref..... 20	2,200,000	semi-an	Nov. '82 3½
" new pref.. 50	1,000,000	semi-an	Nov. '82 3½
Cayuga and Susq.*.. 50	589,110	semi-an	July '81 4½
Cedar Rapids&Mo.R*100	6,850,400	q'arterly	Nov. '82 1½
" " pref.100	769,600	semi-an	Aug .'82 3½
Central of Georgia...100	7,500,000	semi-an	June '82 4
Central of New Jersey100	18,563,200	q'arterly	July '76 2½
Central Ohio*..... 50	2,437,950	semi-an	July '82 3
" pref.. . 50	411,550	semi-an	July '82 3
Central Pacific 100	59,275,500	semi-an	Aug. '82 3
Chemung*.....100	380,000	q'arterly	July '81 1½
Cheshire preferred ..100	2,155,300	semi-an	July'82 1½
Chicago and Alton...100	11,181,741	semi-an	Sept. '82 4
" " pref 100	2,245,400	semi-an	Sept. '82 4
Chi., Burl. & Quincy.100	55,337,455	q'arterly	Sept. '82 2
Chi., Iowa & Nebras*.100	3,916,200	semi-an	July '82 4
Chi., Mil. & St. Paul.100	20,404,261	semi-an	Oct. '82 3½
" pref 100	14,401,483	semi-an	Oct. '82 3½
Chi. & N. Western...100	14,988,257	semi-an	June'82 3½
" pref.100	21,525,353	q'arterly	Sept. '82 2
Chi., R. I. & Pacific...100	41,960,000	q'arterly	Nov. '82 1¾
Chi. and West Mich .100	6,151,000	semi-an	Feb. '82 2½
Chi.,St.P.,M.&O.pref.100	10,390,000	q'arterly	Oct. '82 1¾
C., Ind., St. L. & Chi..100	6,000,000	q'arterly	July '82 1½
Cin., Sand. & Clev.pf. 50	429,037	semi-an	Nov. '82 3
Clev. and Mahoning* 50	3,759,200	semi-an	Nov. '81 3½
Clev. and Pittsburg* 50	11,244,336	q'arterly	Dec. '82 1¾
Columbus & Xenia*. 50	1,786,200	q'arterly	sept.'82 2
Colum.&HockingVal.100	2,500,200	semi-an	Aug. '81 208
Concord 50	1,500,000	semi-an	Nov. '82 5
Concord and Ports.*.100	350,000	semi-an	July '82 3½
Conn.& Passump.Riv100	2,244,400	semi-an	Aug '82 3
Connecticut River ..100	2,100,000	semi-an	July '82 4
Cumberland Valley.. 50	1,292,950	q'arterly	Oct.' 82 2½
" 1st pref 50	241,900	semi-an	Apl. '82 4
" 2d pref. 50	243,000	semi-an	Apl. '82 4
Danbury & Norwalk. 50	600,000	.....	Oct. '82 2½
Dayton and Mich.*.. 50	2,402,573	semi-an	Apl. '82 1¾
" " pref. 50	1,211,250	q'arterly	July '82 2
Delaware*..... 25	1,468,940	semi-an	July '82 3
Del. & Bound Brook*100	1,652,000	q'arterly	Nov. '82 1¾
Del., Lack.& Western 50	26,200,000	q'arterly	Oct., 82 2
Denver & Rio Grande.100	29,160,000	q'arterly	Jan '82 1½
Den.,South P. & Pac.100	3,500,000	.....	Aug.'80 4
Detroit, Lans. & Nor.100	1,825,600	semi-an	Aug.'80 2½
" " pref.100	2,503,380	semi-an	Aug. '82 3½
Dubuque&Sioux C'y*100	5,000,000	semi-an	Oct. '82 3
East Pennsylvania*., 50	1,709 550	semi-an	July '82 3
East Mahanoy*..... 50	392,950	semi-an	July '82 3
Eastern (N. H.).....100	492,500	semi-an	June'82 2½
Eel River.....100	3,000,000	q'arterly	Sept. '82 $1
Elmira&Williamsp't* 50	500,000	semi-an	Nov. '82 1½
" " pref. 50	500,000	semi-an	July '82 3½
Erie and Pitsburg*.. 50	1,998,400	q'arterly	June '82 1¾
Evansville & Terre H.100	100,000	semi-an	Nov.'81 2
Fitchburg.....100	4,500,000	semi-an	July '82 3
F. & P. Marquette pf.100	6,500,000	semi-an	July '82 3
Ft.W. & Jackson pref.100	2,000,000	.....	May '82 2
Georgia. 100	4,200,000	q'arterly	July '82 2½
Granite 100	1,250,000	semi-an	July '82 3
Han. & St. Jo. pref .100	5,083,024	semi-an	Aug. '82 3½
Harrisbg&Lancaster 50	1,182,500	semi-an	July '82 3½
H'ford &Conn.West'n.100	.....	.....	Nov. '82 1½
Housatonic pref. 100	1,180,000	q'arterly	Oct. '82 2
Illinois Central.....100	39,000,000	semi-an	Sept. '82 3½
Ia.Falls & Sioux City*100	4,623,500	q'arterly	Dec. '82 1¾
Iowa R. Land Co....100	7,620,000	q'arterly	Nov. '82 1
Jeffersonv. Mad.&Ind100	2,000,000	q'arterly	May '82 1¾
Joliet and Chicago*..100	1,500,000	q'arterly	June'82 1¾
Kan.C.,Ft.S.&Gulf....100	4,000,000	.....	Feb. '82 2
" " pref...100	2,750,000	semi-an	Aug. '82 4
Kentucky Central...100	500,000	semi-an	June'81 1
" " pref..100	5,583,500	semi-an	June'81 1
Lake Shore&Mich.So.100	49,466,500	q'arterly	Nov. '82 2
" " (guar.)100	533,500	semi-an	Aug. '82 5
Lawrence*..... 50	450,000	q'arterly	July '82 2
Lehigh Valley..... 50	27,496,895	q'arterly	Oct. '82 2
" " pref. 50	106,300	q'arterly	Oct. 82 2

Marked thus(*)are leased roads.	Stock outstanding.	Divide'd Periods.	Last Dividend Payable.
Little Miami..... 50	4,637)300	q'arterly	Sept. '82 2
Little Rock & Ft. S..100	4,096,135	.....	July' 81 108
Little Schuylkill*.. . 50	2,646,100	semi-an.	July '82 3½
Long Island..... 50	10,000,000	q'arterly	Nov. '82 1
Louisville & Nashv..100	19,130,913	semi-an.	Feb. '82 3
Lowell & Andover...100	500,000	semi-an.	Jan. '82 3½
Lykens Valley.....100	600,000	q'rterly.	Oct.' 81 2½
Manchester & Law..100	1,000,000	semi-an.	Nov. '82 5
Manhattan 100	13,000,000	.....	.....
" " 1st pref.100	6,500,000	q'rterly.	Oct. '82 1½
" " 2d pref.100	6,500,000	q'rterly.	Oct. '82 1½
Marietta& Cincinnati 50	1,386,350	.....	.....
" " 1st pref 50	8,105,600	semi-an.	Sep. '66 38
" " 2d pref 50	4,440,000	semi-an.	Sep. '66 38
Marq.Hout.&Ont.pf..100	2,259.026	.....	Aug. '82 4
Massawippi*..... .100	400,000	semi-an.	Aug. '82 3
Metropolitan 100	6,500,000	q'rterly.	Oct. '82 1½
Michigan Central....100	18,738,204	q'rterly.	Aug.'81 1
Middlesex Central...100	280,000	semi-an.	Aug.'82 3
Mill Creek&Minehill* 50	323,000	semi-an.	July '82 5
M.Hill& Schuyl.Hav* 50	4,022,500	semi-an.	July '82 3½
Missouri Pacific.....100	28,169,800	q'rterly.	Oct. '82 1¾
Mobile&Montgomery100	3,022,517	semi-an.	Feb. '80 2½
Morris and Essex.... 50	15,000,000	semi-an.	July '82 3½
Mt Carbon&PtCarbon 50	282,350	semi-an.	July '82 6
Nashua and Lowell..100	800,000	semi-an.	Nov. '82 4
Nashua & Rochester.100	1,305,800	semi-an.	Oct. '82 1½
Nashv. & Decatur...100	1,827,000	semi-an.	June'81 3
Nash.,Chat.&StLouis 25	6,670,325	semi-an.	Apl. '82 1½
Naugatuck.....100	2,000,000	semi-an.	July '82 5
Nesquehoning Val'y* 50	1,300,000	semi-an.	Sept.'82 3
N.Castle&Beaver Val* 50	600,000	q'rterly.	Oct. '81 —
NewLondonNorth'n*100	1,500,000	q'rterly.	July '82 1½
N. Y. Cen. & Hud. R.100	89,428,330	q'rterly.	Oct. '82 2
N. Y. and Harlem....100	7,950,000	q'rterly.	July '82 4
" " pref.100	1,500,000	q'rterly.	July '82 4
" City Line.. —	....	annual	Apl. '82 3
N.Y.,LakeErie&West.100	77,083,900	.....	.....
" " pref.100	8,156,825	.....	Jan. '82 6
N. Y., N. H. & Hart..100	15,500,000	semi-an.	Jan. '82 5
N. Y., Prov. & Boston100	3,000,000	q'rterly.	Nov. '82 2
Niag.Bridg&Canand*100	1,000,000	semi-an.	July '81 3
North Carolina*.....100	3,000,000	semi-an.	Sep. '81 3
" " pref.100	1,000,000	semi-an.	Sep. '81 3
N. Eastern (S.C.) pref100	86,000	semi-an.	May '81 4
Norfolk & Western pref.100	15,000,000	q'rterly.	Sept. '82 $1
North Pennsylvania. 50	4,527,150	q'rterly.	Nov. '82 1¾
Northern Central.... 50	6,142,000	semi-an.	July '82 3
Northern N. Hampsh100	3,068,400	semi-an.	Dec. '82 3
Northern N. Jersey*.100	1,000,000	semi-an.	July '80 2½
Norwich&Worcester*100	2,604,400	semi-an.	July '82 5
Ohio and Miss. pref..100	4,030,000	semi-an.	Mar. '75 3½
Old Colony.....100	7,333,800	semi-an.	July '82 3½
Oregon R'way&Nav.100	6,000,000	q'rterly.	Nov. '82 2
Oswego & Syracuse..100	1,320,400	semi-an.	Aug.'81 4½
Panama..... 100	7,000,000	.....	July '82 6½
Paterson & Hudson*.100	630,000	semi-an.	July '82 4
Paterson & Ramapo.100	248,000	semi-an.	July '82 4
Pember.&Highst'n*. 50	342,150	semi-an.	Jan. '82 3
Pennsylvania..... 50	83,786,570	semi-an.	Nov. '82 4½
Pennsylvania Co..... 50	20,000,000	semi-an.	June'81 2½
Peoria & Bureau Val*100	1,200,000	semi-an.	Feb. '82 4
Philadelphia & Erie*. 50	7,013,700	semi-an.	.....
" " pfd 50	2,400,000	semi-an.	Jan. '75 4
Phil,Ger.&Norrist'n* 50	2,231,900	q'rterly.	Sept.'82 3
Phil. and Reading... 50	32,726,375	q'rterly.	Jan. '76 2½
" " pref. 50	1,551,800	q'rterly.	July '76 3½
Phila. and Trenton..100	1,250,100	q'rterly.	Oct. '82 2½
Phila., Wil. and Balt. 50	11,585,750	semi-an.	July '82 4
Pittsb., Ft. W. & Chi.*100	19,714,285	q'rterly.	Oct. '82 1¾
" Special Imp..100	6,770,900	q'rterly.	Oct. '82 1¾
Pittsfield&N.Adams..100	450,000	semi-an.	July '82 2½
Portl., Saco & Portsm100	1,500,000	semi-an.	July '82 3
Providence &Worces.100	2,000,000	semi-an.	July '82 3
Rensselaer&Saratog.*100	7,000,000	semi-an.	July '82 4
Rhode Island& Mass..100	100,000	.....	Jan. '81 3
Richmond& Danv...100	3,866,000	q'rterly.	Aug. '82 2
Richmond & Petersb100	1,009,300	semi-an.	Jan. '81 3
Roch.&Genesee Val.*100	555,200	semi-an.	July '82 3
Rutland preferred.. 100	4,000,000	semi-an.	Sept. '82 1
St.L.,Alt. & T.Haute.100	2,300,000	.....	.....
" " pref.100	2,468,406	.....	May '82 3
St.L.&S.Fran.1st pref100	4,500,000	.....	Aug. '82 3½
St.L.,I.Mt.&South'n.100	21,459,921	semi-an.	Feb. '74 3
St.L.,Jac'ville & Chic.100	1,293,ccc	.....	Aug. '82 4½
" " " pref.100	1,034,ccc	.....	Aug. '82 4½
St. P. & Duluth pref.100	4,705,000	q'rterly.	June'82 1¾
St. P., Minn. & Man..100	20,000,000	q'rterly.	Nov. '82 2
Schuylkill Valley*.... 50	576,050	semi-an.	July '82 2½
Seaboard & Roanoke.100	1,229,600	semi-an.	Nov. '82 5
Shamokin V.&Pottsv 50	669,450	semi-an.	Feb. '82 3
Shore Line*.....100	1,000,000	semi-an.	July '82 4
Sioux C.&Pacific pref100	160,000	semi-an.	Oct. '82 3½
South Br. (N. J.)*....100	438,300	semi-an.	Jan. '82 3
South Western (Ga.)*100	3,892,300	semi-an.	Dec. '81 3½
Stockbridge&Pitts.*. 100	448,700	semi-an.	Oct. '81 1½
Syr.,Bingham&N.Y.*100	2,500,000	semi-an.	Feb. '81 2
Terre Haute & Ind...100	1,088,150	semi-an.	Aug. '82 4
Troy and Boston....100	1,609,000	semi-an.	Feb. '80 2
Union Pacific..... .100	61,000,000	q rterly.	Oct. '82 1¾
United Cos of N. J.*.100	20,490,000	q'rterly.	Oct. '82 2½
Utica, Shenango&S V100	4,000,000	semi-an.	Nov.'81 3
Utica and Black Riv.100	1,772,000	semi-an.	Mar. '82 2
Vermont and Mass..100	3,050,000	semi-an.	Oct .'82 3
Wab. St.L.&Pac.pref.100	22,615,100	q'rterly.	Nov.'81 1½

Markedthus(*)are leased roads.	Stock outstanding.	Divide'd Periods.	Last Dividend Payable.
Ware River*.....100	750,000	semi-an.	July '82 3½
Warren (N. J.).....100	1,800,000	semi-an.	Apl. '82 3½
Warwick Valley.....100	340,000	semi-an.	July '82 3½
Westchest&Phil.pref100	821,300	semi-an.	July '80 2
West Jersey.....100	1,359,750	semi-an.	Sept. '82 3
Wilmingt'n&Weld'n.100	1,456,200	semi-an.	July '82 3
Wil., Col., & Aug 100	960,000	semi-an.	July '82 3
Winchester&Poto'c.*100	180,000	semi-an.	July '82 3
Winchester&Strasb.*100	74,700	semi-an.	July '82 3
Worcester & Nashua. 75	1,789,800	semi-an.	July '82 1½
HORSE-POWER R. R.			
Albany City.....100	200,000	annual	.... '80 5½
Baltimore City..... 25	1,000,000	semi-an.	Oct. '82 3
Balt.,Cat.&El. Mills..100	....	semi-an.	July '82 2
BleeckerSt.&Ful.F'y.100	900,000	semi-an.	July '82 ¾
Boston&Chelsea pref. 50	110,000	semi-an.	Oct. '82 3
Broadway (Brooklyn)100	250,000	q'arterly	Oct. '82 6
B'way&7th Av,(N.Y.)100	2,100,000	q'arterly	Oct, '82 2
B'klyn&Hunter's Pt.100	400,000	semi-an.	Oct. '82 6
Brooklyn City.....100	2,000,000	q'arterly	Aug. '82 3½
Bushwick (Brooklyn)100	309,000	semi-an.	Oct. '82 6
Cambridge.....100	908,000	q'arterly	Oct. '82 4½
Cen.Park,N.& E.Riv.100	1,800,000	q'rterly.	Oct. '82 6
Christoph'r&TenthSt100	650,000	semi-an.	Aug. '82 2½
Citizens' (Phil.)..... 50	192,500	q'rterly.	Jan. '82 2½
Citizens' (Pbg.)..... 50	200,000	annual..	....'80 14½
Coney Island&Bklyn100	500,000	semi-an.	Oct. '80 5
Continental (Phil.) .. 50	580,000	semi-an.	July '82 6
D.Dock,E.B'way&Bat100	1,200,000	q'arterly	Aug.'82 4
Eighth Av. (N. Y.)...100	1,000,000	q'rterly.	Oct. '82 3
42d St. & G. St. Ferry100	747,000	semi-an.	May '82 6
Frankf.&Southw (Ph) 50	600,000	q'rterly.	Oct. '82 6
Germantown, (Ph.).. 50	572,800	q'rterly.	Oct. '82 2½
Girard College (Ph.) . 50	500,000	semi-an.	July '71 3
Grand St. & Newton.100	170,091	semi-an.	July '81 2½
Green&Coates St.(Ph) 50	150,000	q'rterly.	Oct. '82 3
Heston,Mantau&F'm 50	299,381	semi-an.	Jan. '75 4
Highland.....100	600,000	semi-an.	July '82 4
Lomb.&SouthSts(Ph) 25	195,000	semi-an.	Oct. '75 4
Lynn and Boston....100	200,000	semi-an.	Nov.'82 4
Malden and Melrose.100	165,000	.....	.....
Metropolitan (Bost.). 50	1,500,000	semi-an.	July '82 4
Middlesex (Boston)..100	650,000	semi-an.	Nov. '82 3½
N.Y.,Bay Ridge&Jam100	150,000	.....	Oct. '78 7
Ninth Av. (N. Y.)....100	797,320	.....	.....
Orange &Newark....100	282,555	.....	.....
People's (Phila.) pref. 25	124,744	.....	July '82 2
Philadelphia City... 50	475,000	semi-an.	July '82 4
Phila. and Darby.... 20	200,000	semi-an.	July '81 3½
Phila.&Grey's Ferry. 50	308,000	semi-an.	Jan. '82 6
Pbg,Alleg.&Manches. 50	300,000	q'rterly.	Oct. '81 3
Ridge Avenue (Ph..).. 50	420,000	semi-an.	Oct. '81 11
Second Avenue (N.Y.)100	1,199,500	semi-an.	July '82 4
Second&ThirdSt.(Ph) 50	771,076	q'rterly.	Jan. '82 4½
17th &19th sts (Ph.).. 50	250,000	semi-an.	July '81 3
Sixth Avenue (N. Y.)100	750,000	semi-an.	May '82 5
Somerville (Boston).100	113,000	semi-an.	Nov. '82 3
South Boston..... 50	600,000	semi-an.	July '82 4
Third Avenue, N. Y..100	2,000,000	q'rterly.	Aug '82 5
13th and 15th sts.,Ph 50	334,529	q'rterly.	Jan. '82 4
23d street, N. Y.....100	600,000	semi-an.	Aug.'82 4
Union, Boston.....100	374,300	semi-an.	Jan. '82 4
Union, Phila..... 50	1,005,000	semi-an.	Jan. '82 7
West Philadelphia... 50	750,000	semi-an.	July '77 10
CANALS.			
Chesapeake and Dela 50	2,078,038	semi-an.	June'75 2
Delaware Division... 50	1,633,350	semi-an.	Aug. '82 $1
Delawa. and Hudson100	20,000,000	q'rterly.	Dec. '82 1¾
Delaware & Raritan*.100	5,847,400	q'rterly.	Oct. '82 2½
Lehigh Coal and Nav 50	11,204,250	semi-an.	June'82 2
Monongahela Nav... 50	1,004,500	semi-an.	July '82$3
Morris, consolidated.100	1,025,000	semi-an.	Aug. '82 2
" preferred....100	1,175,000	semi-an.	Aug.'82 5
Pennsylvania..... 50	4,501,200	.....	.....
Schuyl. Nav., com.*. 50	859,100	annual..	Oct.'82 50c.
" " pref... 50	3,200,000	annual..	Oct. '82 $1
MISCELLANEOUS.			
Adams Express.....100	12,000,000	q'rterly.	Dec. '82 2
American Express... 50	18,000,000	semi-an.	Jan. '82 3
Amoskeag Manuf.Co.100	3,000,000	semi-an.	June'81 5
Calumet&HeclaMin'g 25	100,000 S.	q'rterly.	Nov. '82 $5
Central Mining Co....100	.....	semi-an.	Feb.'82 2½
Consolidation Coal..100	10,250,000	semi-an.	Jan. '82 2
George's Creek C.&I.100	.....	semi-an.	Jan. '82 3
Maryland Coal.....100	4,400,000	semi-an.	Feb. '76 1½
Mariposa L. &Mining100	10,000,000	.....	.....
" pref100	5,000,000	.....	.....
Missouri Val.LandCo100	200,000	semi-an.	July '82 12
National Tube Works100	1,000,000	q'rterly.	Oct. '82 3
Pac. Mail Steamship.100	20,000,000	q'rterly.	Sept.'69 3
Pennsylvania Coal... 50	5,000,000	q'rterly.	Aug. '82 3
Pullman Palace Car..100	10,032,800	q'rterly.	Nov. '82 2
Quicksilver, com....100	5,708,700	.....	May '82 0.4
" pref....100	4,291,300	.....	May '82 6
Quincy Mining Co... 25	40,000 shs	semi-an.	Aug. '82 $5
Quincy R. R. Bridge.100	1,750,000	semi-an.	July '82 5
SiouxC.&I.F.L.&L.Co100	500,000	semi-an.	June'82 5
Spring Mt. Coal.....100	1,500,000	semi-an.	June'82 3½
Topeka Equip'nt Co.100	255,500	semi-an.	Oct. '82 5
United States Ex....100	7,000,000	q'rterly	Nov. '82 1½
Wells-Fargo & Co. Ex100	6,250,000	semi-an.	July '82 4
Western Union Tel..100	80,000,000	q'rterly.	Oct. '82 1½

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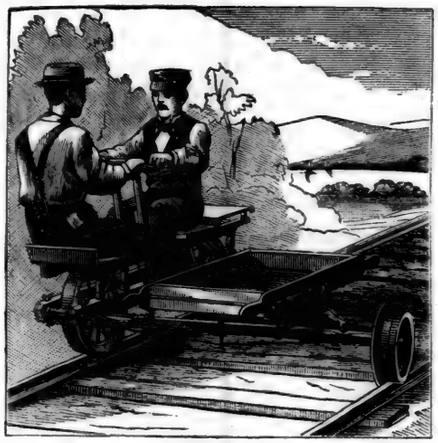
H. F. WORRALL, Treasurer, 8 Exchange Place, Boston, Mass.

RAILROAD EARNINGS—MONTHLY.

	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total.
Burl., Cedar Rap. & Northern:													
1880	184,316	165,170	188,325	141,652	149,504	153,378	143,432	160,160	179,804	204,991	189,330	193,419	2,053,484
1881	167,750	124,510	148,551	184,680	165,630	205,912	174,351	209,112	221,801	221,748	203,880	232,812	2,259,037
1882	252,823	225,631	224,107	178,304	199,278	211,257	198,476	224,921	261,439	300,155	.....	.....	.....
Central Pacific:													
1880	1,200,615	1,070,487	1,373,438	1,356,716	1,778,488	1,724,930	1,840,067	1,973,438	1,994,997	1,120,229	2,199,466	1,905,221	20,508,113
1881	1,602,907	1,454,218	1,709,638	1,872,370	2,091,411	2,159,382	1,899,346	2,088,519	2,185,303	2,507,857	2,297,971	2,225,179	24,094,101
1882	1,839,469	1,720,675	1,969,737	2,054,687	2,342,298	2,229,105	2,020,000	2,277,000	2,474,000	2,409 000	.....	.....	.....
Chesapeake and Ohio:													
1880	202,335	198,681	222,762	221,559	199,443	214,352	238,236	259,110	247,303	211,820	240,795	218,009	2,674,308
1881	162,540	184,389	228,479	227,343	252,235	241,135	225,096	262,858	247,144	236,396	235,585	203,562	2,702,762
1882	210,455	209,708	208,981	267,454	255,939	260,753	306,831	371,175	332,219	347,882	.....	.....	.....
Chicago and Alton:													
1880	534,054	497 013	626,473	542,961	616,128	617,524	708,906	761,120	767,349	785,199	696,776	574,695	7,718,108
1881	487,890	461,641	529,915	558,190	548,556	635,860	676,205	769,751	774,790	771,844	680,133	635,307	7,553,988
1882	579,447	530,480	584,483	561,787	553,412	613,886	671,537	800,624	881,109	812,032	.....	.....	.....
Chicago and Northwestern:													
1880	1,154,632	1,131,683	1,361,725	1,294,573	1,875,608	1,671,177	1,699,686	1,767,938	2,020,245	2,105,217	1,855,622	1,477,902	19,416,007
1881	1,240,664	963,204	1,178,795	1,474,612	1,879,006	2,306,440	1,983,032	2,315,164	2,292,676	2,341,098	2,019,038	1,855,477	21,849,209
1882	1,644,935	1,474,176	1,672,931	1,668,741	2,110,947	2,022,700	2,025,736	2,099,755	2,497,053	2,592,100	.....	.....	.....
Chicago, Burlington and Quincy:													
1880	1,432,740	1,411,870	1,732,518	1,489,894	1,909,627	1,682,956	1,773,643	1,834,321	1,862,285	1,934,762	1,837,860	1,552,018	20,454,494
1881	1,307,948	1,034,821	1,418,149	1,574,371	1,679,455	2,083,803	1,888,358	2,173,945	2,262,981	2,031,001	1,816,133	1,905,490	21,324,150
1882	1,658,834	1,457,300	1,566,217	1,530,838	1,505,461	1,437,164	1,625,006	2,086,858	2,186,400	.....	.....	.....	.....
Chicago, Milwaukee and St. Paul:													
1880	764,298	738,749	900,675	871,041	1,134,745	1,037,958	1,026,708	991,297	1,257,677	1,493,620	1,472,037	1 397,308	13,086,119
1881	990,847	682,717	916,989	1,259,946	1,538,491	1,729,811	1,568,706	1,678,361	1,644,676	1,591,052	1,569,000	1,855,000	17,025,462
1882	1,435,000	1,377,000	1,561,000	1,518,000	1,629,000	1,620,000	1,465,000	1,545,000	1,950,000	2,251,000	.....	.....	.....
Chicago, St. Paul, Minneapolis and Omaha:													
1880	193,827	173,078	259,783	259,208	232,146	218,093	236,995	251,013	300,833	342,052	342,894	312,173	3,122,097
1881	257,786	158,594	251,648	261,211	350,124	404,562	383,202	385,586	373,370	379,029	380,733	391,950	3,981,296
1882	307,498	315,100	405,779	356,558	406,420	363,109	331,480	394,555	482,997	546,671	.....	.....	.....
Cincinnati, Indianapolis, St. Louis and Chicago:													
1880	155,697	172,541	198,220	168,199	186,995	200,332	204,138	233,478	343,627	239,881	209,014	198,254	2,412,185
1881	182,523	171,511	191,005	183,710	191,056	192,299	177,161	229,858	228,653	221,320	194,805	192,623	2,296,916
1882	200,042	186,879	208,066	204,269	199,110	195,948	209,564	.....	259,379	.....	.....	.....	.....
Denver and Rio Grande:													
1880	124,759	126,922	160,883	164,882	193,925	295,455	373,132	400,133	406,583	473,318	408,562	349,196	3,478,007
1881	307,476	317,681	398,493	433,111	514,767	584,230	548,284	606,193	589,287	638,432	566,819	643,417	6,206,812
1882	491,914	412,987	535,055	559,917	614,298	537,462	495,797	574,040	595,306	630,598	....	.....	.....
Hannibal and St. Joseph:													
1880	176,079	166,965	216,061	206,735	191,317	179,396	224,312	238,081	233,448	242,214	207,147	279,635	2,561,366
1881	154,401	122,874	176,356	190,812	172,950	190,740	201,899	210,240	215,103	231,913	201,782	180,376	2,230,961
1882	138,284	154,717	168,798	148,913	154,917	155,030	184,347	258,628	239,196	238,442	.....	.....	.....
Illinois Central:													
1880	595,212	613,806	613,008	535,732	665,120	681,736	724,095	732,755	806,836	880,211	783,120	673.182	8,304,812
1881	631,281	524,499	557,789	662,493	673,259	803,887	720,004	868,407	828,847	815,238	737 218	763,475	8,586,397
1882	728,173	689,387	695,371	674,603	674,749	663,746	752,251	813,600	828,238	865,325	.....	.....	.....
Indiana, Bloomington and Western:													
1880	80,498	89,690	116,185	90,374	85,733	106,954	103,438	116,732	110,622	121,343	95,621	104,619	1,233,079
1881	90,283	83,261	192,085	203,677	200,064	199,846	190,125	272,174	247,932	225,678	160,826	156,697	.....
1882	195,824	175,755	206,235	205,934	182,554	186,133	206,072	278,814	273,100	269,046	.....	.....	.....
Louisville and Nashville:													
1880	674,455	575,035	612,593	563,883	655,014	976,229	772,538	827,089	931,911	1,000,327	953,087	949,185	9,491,346
1881	812,118	805,124	947,959	855,704	828,726	1,227,885	817,135	876,192	951,566	1,002,950	1,065,223	1,153,779	11,344,361
1882	964,527	960,315	1,068,834	953,603	958,130	1,215,490	1,063,765	1,043,912	1,107,985	1,216,215	.....	.....	.....
Mobile and Ohio:													
1880	250,116	204,095	168,302	140,091	129,248	121,855	131,621	140,593	184,247	264,714	251,368	287,372	2,273,622
1881	224,347	216,768	230,916	163,551	145,803	136,517	135,549	160,789	210,262	256,924	262,986	258,212	2,403,224
1882	159,676	158,590	148,166	141,957	134,378	136,184	136,398	140,443	160,031	265,201	.....	.....	.....
Nashville, Chattanooga and St. Louis:													
1880	205,634	191,154	169,457	155,466	158,839	144,130	151,594	169,326	167,473	178,266	182,087	175,966	2,049,484
1881	178,143	190,866	207,710	183,525	104,430	154,549	150,430	168,317	179,979	172,121	152059	173,127	2,075,250
1882	156,994	159,961	161,005	154,155	135,556	119,074	160,991	168,304	168,999	180,319	.....	.....	.....
New York and New England:													
1880	164,232	149,907	183,845	179,689	183,701	219,891	205,056	249,885	235,642	215,491	210,856	198 108	2,396,302
1881	189,749	173,614	212,019	216,913	217,185	231,518	246,821	280,524	299,573	261,200	242,412	237,729	2,809,255
1882	213,840	217,261	265,222	263,544	283,244	290,060	300,920	353,726	338,490	310,145	.....	.....	.....
New York, Lake Erie and Western:													
1879	1,147,173	1,207,391	1,356,780	1,372,755	1,350,574	1,230,419	1,273,533	1,450,223	1,492,497	1,713,697	1,515,835	1,398,224	16,509,127
1880	1,296,381	1,252,218	1,644,958	1,643,151	1,592,544	1,661,812	1,580,976	1,606,874	1,786,417	1,899,910	1,799,338	1,726,788	19,149,361
1881	1,443,437	1,425,765	1,847,261	1,709,057	1,776,891	1,794,982	1,787,081	1,772,895	1,734,200	.....	.....	.....	.....
Northern Central:													
1880	334,494	330,860	415,325	386,130	329,788	419,193	450,298	453,923	464,093	512,918	459,054	494,310	5,050,387
1881	386,157	382,657	452,906	487,273	465,588	487,287	440,811	498,008	429,565	449,664	487,160	476,622	5,443,697
1882	407,368	413,551	430,194	435,129	482,607	482,752	509,683	667,488	592,435	.....	.....	.....	.....
Northern Pacific:													
1880	81,390	77,259	119,357	185,700	217,613	253,105	241,277	223,500	330,300	358,456	300,822	220,993	2,629,710
1881	116,508	78,803	162,984	216,210	312,705	412,024	393,260	434,085	534,363	583,955	428,903	434,331	4,044,576
1882	239,800	269,000	384,000	438,000	568,332	631,342	679,240	727,377	789,700	834,460	.....	.....	.....
Philadelphia and Erie:													
1880	224,307	245,372	327,678	334,947	311,470	331,024	308,699	347,532	322,737	367,082	324,966	281,919	3,727,733
1881	224,303	225,501	285,573	293,323	343,792	350,585	291,669	303,849	276,522	292,392	284,078	282,772	3,454,309
1882	252,727	246,246	265,311	277,851	341,415	347,614	377,206	420,320	386,455	.....	.....	.....	.....
St. Louis and San Francisco:													
1880	198,091	195,948	193,146	176,164	167,664	173,607	213,297	259,995	280,873	328,194	290,329	226,063	2,698,371
1881	212,435	178,234	262,050	265,298	283,399	260,254	252,333	286,373	279,064	308,569	284,320	287,914	3,160,245
1882	256,784	244,654	274,959	242,806	253,419	240,177	318,613	381,637	336,805	360,900	.....	.....	.....
St. Louis, Alton and Terre Haute:													
1880	153,139	163,737	168,994	155,462	147,928	150,207	191,077	216,759	204,295	221,863	188,773	184,503	2,146,741
1881	175,725	166,012	201,137	197,447	172,177	165,896	165,393	189,180	196,368	204,338	162,544	153,852	2,112,801
1882	168,987	149,619	178,145	157,450	162,842	142,742	192,017	236,137	217,659	229,962	.....	.....	.....
St. Louis, Iron Mountain and Southern:													
1880	555,983	490,195	451,560	408,241	349,053	363,454	432,655	565,869	671,219	688,365	632,052	656,951	6,265,597
1881	570,957	560,791	704,002	548,300	479,075	474,302	533,512	644,386	708,325	719,239	687,280	709 498	7,319,744
1882	516,370	501,127	585,008	581,977	519,120	529,700	515,519	675,981	724,160	809,394	.....	.....	.....
St. Paul, Minneapolis and Manitoba:													
1880	180,239	137,645	261,798	333,014	281,899	243,407	272,089	232,579	274,188	345,057	300,675	297,641	3,160,231
1881	254,187	159,482	320,962	425,685	382,642	405,322	387,488	414,954	485,736	605,708	508,530	528,262	4,878,960
1882	395,461	418 358	531,004	570,890	858,902	856,417	853,296	801,759	832,776	979,057	.....	.....	.....
Texas and Pacific:													
1880	245,785	219.165	215,070	174,177	141,083	153,066	195,711	226,073	266,570	303,666	312,184	301,858	2,754,408
1881	281,176	260,781	319,928	295,066	281,782	285,405	328,663	381,331	345,790	419,203	357,724	381,218	3,921,569
1882	310,785	255,644	332,911	359,543	409,228	384,713	367,215	439,918	470,613	541,901	.....	.....	.....
Union Pacific Railway:													
1880	1,433,636	1,393,992	1,730,509	1,937,220	2,027,269	1,028,528	1,934,215	1,913,035	2,270,179	2,707,860	2,251,148	1,869,335	23,448,445
1881	1,339,799	1,374,740	1,674,860	1,766,894	2,319,238	2,884,774	2,528,826	2,638,659	2,844,357	3,169,530	2,773,608	2,267,004	27,451,831
1882	1,961,088	1,759,863	2,226,832	2,462,004	2,491,590	2,508,453	2,301,000	2,762,107	2,949,112	3,158,337	.....	.....	.....
Wabash, St. Louis and Pacific:													
1880	776,790	759,451	978,629	892,024	948,773	953,468	1,966,742	1,189,478	1,178,950	1,501,203	1,131,787	1,050,816	12,428,112
1881	811,617	818,922	1,121,592	1,023,482	1,144,660	1,308,993	1,131,752	1,542,838	1,490,027	1,397,781	1,399,555	1,328,278	14,461,579
1882	1,220,965	1,134,768	1,315,776	1,378,194	1,204,864	1,149,632	1,418,837	1,772,544	1,682,382	1,595,680	.....	.....	.....

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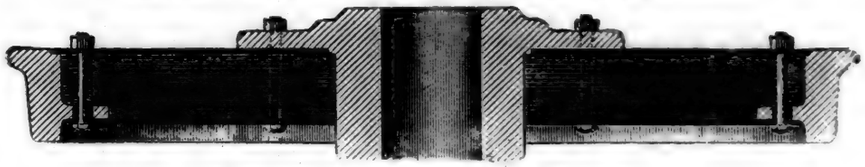
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OUR CHICAGO LETTER.

[From our Special Correspondent.]

THE CABLE RAILROAD.

One of the first objects to attract a visitor's eye in this city is the sight of street cars moving along without visible means of propulsion; and as this road is one of the three in the world, a description of it can but be of interest. Its manner of operating is the principle of the endless chain propelled by a stationary engine. The cost of it was enormous, and was perhaps greater in this city than it would be elsewhere, as there is practically no foundation to the town, and one had to be built for the heavy cable. The whole process was this: The management of the Chicago City Railway Company (south side) became convinced that there was a better way of operating their road than by horses, and after investigating the various methods, decided that the cable system was the best, and visited San Francisco, where at that time the only one in the world was in use. Being much pleased with what they saw, they proceeded to lay one in this city. The street of their main line, from Thirty-ninth street up State street to Madison, was opened and a cement foundation put in under that portion occupied by the track, having set in it iron braces every little way. Attached to these, every thirty-two feet, were placed pulleys sixteen inches in diameter, on which the cable rests. There are at present two systems of cables in operation, one extending from the engine house at Twenty-first street north to Madison, where it passes around a horizontal pulley twelve feet in diameter, and returns under the south-bound track to the engine. This cable is one and one-quarter inches in diameter and composed of 114 strands of stout wire.

At Twenty-first street it passes around another horizontal pulley under the street, and thus turning at right angles enters the engine-house. As it passes in it goes through an instrument called a tell-tale, which if a break has occurred in the cable, instantly rings a loud gong notifying the engineer, who at once shuts off steam and stops before the break has time to return under the street. After entering, the cable passes over the drum of the engine, passing around it four times to prevent slipping. Leaving this it is carried around what is called the tension-drum which rests on a sliding bed. A large chain is attached to the further end of this, which is carried back over a wheel and a 5,800 lb. weight attached to it. This pulls the tension-drum back as slack is allowed on the cable, thus always keeping it tight.

When a large number of cars catch hold of it, this wheel and weight are drawn forward, and if six or seven along the line let go of it at once, it creates a slackness which is at once remedied by the weight. After passing over the latter wheel the cable returns under the street again. Power is furnished by four Wheelock engines of 250-horse power each, one only of which was at work on the day the writer looked it over.

The grip cars, as they are called, are built on the principle of any open horse-car, and are only about half as long. In the center of these stands the driver, who works two levers similar in appearance to the reversing lever of a locomotive. One of these operates the grip and the other the brake. In the center of the space between the rails is a narrow opening about five-eighths of an inch wide, which must extend as far as the rails go. By looking closely through this the cable can be seen in motion under the street. At the lower end of this lever is a sheet of steel about fifteen inches long and four-eighth swide, which after passing down through the open place in the street, extends into a piece two feet long and two inches wide, faced on its lower side with hard marble.

This is the surface which catches hold of the cable. Below this and on the same lever is its opposite, which comes below the cable and whose surface is composed of small rollers on which the cable rests. When the driver catches hold, the pressure is at first light and the cable slips through it until the grip tightens and holds it, when the car starts. The cable in passing out of the engine-house runs through hot tar, and thus does not wear much at this constantly occuring friction. Attached to the grip-cars are from one to three ordinary horse-cars. Mr. Holmes, the superintendent, said in conversation with the writer, that the true economy of it consisted in attaching but one car to a grip-car, although at present they were running trains of two and three.

From Twenty-first street to Thirty-ninth, south, the cable runs seven miles per hour, and from Twenty-first to Madison, north, it runs six miles per hour. At that point the cars pass around two blocks via Madison, Wabash avenue and Lake street, back to the corner of State street and Madison, and here the speed is but three miles per hour. This is caused by a pulley on the same axle as the one the cable returns to the engine on, at the corner of State and Madison streets, and which is but half the diameter of it, or only six feet, on which this loop runs independently.

By Jan. 1, 1883, the company will have 19 miles in running order at a cost of $3,000,000, and the superintendent has great confidence in its economy of operation over horse power. The branches will continue to be operated by horses, and the cars, when they arrive at the main line, are attached to the rear of the grip trains and hauled up town. Great trouble has been caused, so far, by careless people getting on the track, and the number of fatalities have been large. But the fault has not been with the company, as their men exercise great care, and the warning bells of the cars are going all the time.

The company was obliged to put iron gates on the side of the platforms next to the double-track, as passengers would persist in getting off directly in front of approaching trains, and since this was done several have taken the pains to climb up over these and get down on that side, one of whom was killed. People do not seem to understand that there is a difference between these cars and horse-cars, and display the same indifference toward them which they do toward the latter, while the celerity with which teams clear the way in response to the notes of the bell is noticeable. The momentum of three loaded cars is much greater than one, and they cannot be stopped in the same distance.

The company are at work on a scheme for extending the cable system out on the Archer avenue line, but as this involves the crossing of the south branch of the Chicago River and a slip, they are now trying to solve the problem and think that they will be able to do so, although just how does not yet appear clear.

A question has arisen in connection with these cable roads which is as yet unanswered, viz: How will they work with snow and ice? At San Francisco, the only place where they have had an extended trial there is no snow. The superintendent of the Chicago road says that he anticipates no trouble as plows will be run constantly during snow storms, and the engine wont get tired, as the horses do.

There is another point to be looked at in economy of operation, and that is that formerly, each car run required a driver and conductor. Under the present arrangement, only the grip car needs two men, the driver or engineer and the conductor, and the remainder of the cars of the train but one man each. There is much complaint made by the public at these cars, as the middle of the street must be kept about as clear as if a steam railroad ran through it, and the public wail is already beginning to be heard, saying, the grip cars must go, and every additional person killed adds to the hue and cry.

A noticeable feature of this style of road is the brake used, which is continuous in its operation. By the pressure of the lever previously mentioned, against the grip-car axle, a drum is revolved by the momentum of the car, and a chain is wound upon it, setting up every brake on the train. By this arrangement the train is as much under the control of the driver as any single horse car.

It is said that the road is making money, and that its stock is hard to get, but time will tell the success of the experiment, as already a second cable has had to be put in, the first one being broken so much by the operations of inexperienced men upon it. At all events, the result will be looked for with interest.

"Curtis."

Chicago, November 22, 1882.

We notice that our useful English contemporary, *The City*, a weekly commercial, financial and industrial review published in London, issued with its number for November 4, a well-executed cartoon containing portraits of electric light inventors. *The City* embodies in every number a large amount of information upon the subjects indicated. One excellent feature in that one under review is a series of biographical sketches, seventy-six in all, of the inventors whose portraits appear in the cartoon supplement. As the cost of the whole production, book and pictorial supplement, is only three pence (six cents), the enterprise of the publishers deserves what we most cordially give it, an emphatic recognition. The fight for an improved lighting of great cities, to their material, and it may be added, moral advantage, is one to be commended; and *The City* is decidedly aggressive in this struggle for a brighter future.

The loftiest mountain is Mount Everest or Guarisanker, of the Himalaya range, having an elevation of 29,002 feet above the sea level.

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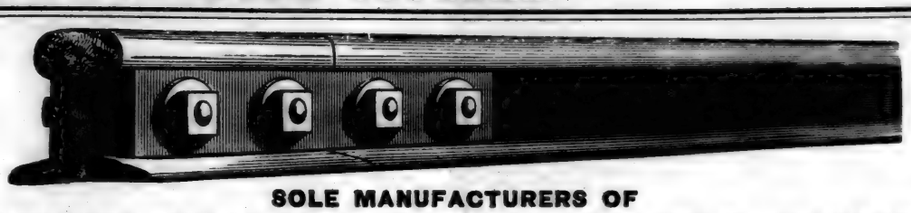
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We give on editorial page our new subscription rates, which are so changed in the belief that it will not only prove acceptable to many who desire to become regular readers of the paper, but that it will meet with the hearty approval of our advertising patrons, who are rapidly filling up the pages offered to them since the improvements in the JOURNAL have been started.

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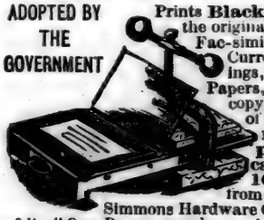
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The Canadian Canals.

THE River St. Lawrence, with the system of canals established on its course above Montreal, and the Lakes of Ontario, Erie, St. Clair, Huron and Superior, provides, says the report of Sir Charles Tupper, a system of navigation which extends from the Straits of Belle-Isle to Thunder Bay and Duluth, at the head of Lake Superior, a distance of 2,384 statute miles. The difference in level between Lake Superior and Three Rivers, Que., where tidal influence ceases, is about 600 feet. Between Lake Superior and Huron is the Sault Ste. Marie canal, built by the United States, whose lock lifts 18 feet. All the remaining canal navigation via the St. Lawrence to the sea is provided by Canada, whose canals constructed between Montreal and Lake Erie overcome, by their locks, a height of 533½ feet. These are the Lachine, Beauharnois, Cornwall, Farran's Point, Rapide Plat, Galops and Welland. Their aggregate length is 70½ miles; number of locks, 53.

From the table on page 152 of the report for 1881 of the Minister of Railways and Canals, we obtain a very satisfactory statement of distances, thus:—

	Miles.
Straits Belle-Isle to tide water	900
Tide water to Montreal	86
Lachine Canal	8½
Lake St. Louis	15¼
Beauharnois Canal	11¼
Lake St. Francis	32¾
Cornwall Canal	11½
River and Farran's Canal	16¼
Rapide Plat Canal	4
River	4½
Iroquois Canal	3
Junction and Galops do	4⅝
Prescott to Kingston (River)	66⅜
Lake Ontario	170
Welland Canal	27
Lake Erie	232
River Detroit	18
Lake St. Clair	25
River Ste. Clair	33
Lake Huron	270
River Ste. Marie	54
Sault Ste. Marie Canal	1
Lake Superior	390
Total	2,384

Of these 2,384 miles from Lake Superior to the straits of Belle-Isle, 71 miles are artificial navigation, and 2,313 open navigation. From these straits to Liverpool is a distance of 2,231 statute miles, making in all 5,615 miles from say Duluth to Liverpool.

The size of the locks on the Rapide Plat, Farran's Point, and Galops canals (collectively known as the Williamsburgh Canals) is 200 feet in length by 45 in width, with 9 feet water on the sills, and the lockage in all 31½ feet, six locks. This group of canals has a breadth of 90 feet at the surface of the water and 50 feet on the bottom of the canal. The Beauharnois Canal has nine locks, 200x45 feet each, with a total rise, or lockage, of 82½ feet, overcoming the Cascades Cedars and Coteau Rapids. This also has 9 feet of water on the sills. Its breadth on the bottom is 80 feet and at the surface 120. In the Cornwall Canal, which is being enlarged, there are seven locks, five 220 by 45 feet, and two 270 by 45 feet, whose rise is 48 feet and depth of 9 to 14 feet of water. This canal overcomes the Long Sault Rapids and the Williamsburgh group, the Galops, Iroquois, Cardinal, and Farran's Point Rapids. Upon the old Lachine Canal, the locks, five in number, were of the same dimensions as those first named, having a total rise of 44¾ feet, and reaching past the St. Louis Rapids. The bottom breadth was 80 feet and the surface breadth 120 feet. The scheme of enlargement gives the two new locks at Montreal a depth of 18 feet, and the three to the westward 14 feet, their dimensions being 270 feet by 45. The canal itself is to be 15 feet deep, and 150 feet wide; but the prism from Cote St. Paul to the Harbor of Montreal 200 feet wide by 19 feet deep. So much for the lower St. Lawrence canals.

A channel is under contract, we should have said, whereby through submarine blasting at the Galops rapids, a depth of 16 to 17 feet will be attained for a distance of 200 feet in width.

The new line of the Welland Canal from Port Dalhousie on Lake Ontario, to Port Colborne, on Lake Erie, has a total rise or lockage of 326¾ feet, by 25 lift locks and 1 tidal lock. The dimensions of the lift locks are 270 feet by 45, the present depth 12 feet, and the contemplated depth 14 feet. The summit level of the canal having been lowered to that of Lake Erie, a regular supply of water may at all times be had.

This completes the chain of our canals on the St. Lawrence line, and it is the object of the Government to make the whole route fit for vessels of 12 to 14 feet draught of water, just as it has been the aim, now happily attained, of the Harbor Commission of Montreal, to offer a twenty-five foot channel from the sea and a twenty-five foot harbor, to ocean-going craft.

Though not equal in extent or general importance to the other, the navigable route between Montreal and Ottawa, and from that capital to Kingston, a total of 246¼ miles, affords space for a large traffic. Apart from the Lachine Canal, there are 59 locks with a lockage of 533½ feet within this distance, represented by the St. Anne's Lock and piers, the Carillon, the Chute a Blondeau, the Grenville, and the Rideau canals. These had all been shallower works and with smaller locks than the St. Lawrence series, but new works are in progress which will give nine feet water in locks 45x200 feet. On the Rideau canal system there is 282 feet lift from Ottawa to the Narrows, near Chaffey's and 164 feet fall thence to Kingston. The summit level is at the upper Lake Rideau.

By means of the Richelieu River and the Chambly Canal, which are connected on the American side of the line by Lake Champlain with the Erie Canal and the Hudson, navigation between the St. Lawrence and the city of New York, 411 miles, is secured. There are on the Chambly Canal nine locks, with 7 feet depth of water, the smallest being 118 feet by 23. What is known as the Trent River navigation, composed of a chain of lakes and rivers between Lake Huron and the Bay of Quinte on Lake Ontario, 235 miles, was begun in 1837, and intended to be made continuous. Only part, however has been made navigable, and that mostly for the passage of timber; 155 miles of the distance from Trenton to Lindsay and Lake Scugog is available for light-draft vessels. The Murray Canal, connecting the Bay of Quinte with Lake Ontario near Trenton has been authorized and is being proceeded with. We conclude with the St. Peter's Canal, connecting St. Peter's Bay, on the Atlantic, with the Bras d'Or Lakes of Cape Breton, Nova Scotia, over an isthmus half a mile across. Its breadth is 55 feet, depth 18 feet, and the lock is 48 by 200 feet.—*Toronto Monetary Times.*

ANOTHER trial trip of the Shaw locomotive was made, on the 17th inst., over the Delaware and Bound Brook Railroad. A run of fifty miles was made in fifty-six minutes, drawing three cars. The Shaw locomotive is being brought to public notice by William E. Lockwood, its peculiarity being that it has double cylinders on each side and the driving-wheels have no counter balance. By this system it is claimed the swaying motion of the engine is obviated, as well as the tremendous hammering on the rails by the counter-balances. The Shaw first ran experimentally on the Boston and Providence Railroad in June of last year; and subsequently on the Fitchburg Railroad. In the following September it was transferred to the Camden and Atlantic Railroad, on which, in November, 1881, it ran sixty miles in seventy-seven minutes, less two stoppages of six minutes, making the actual running time sixty-one minutes.

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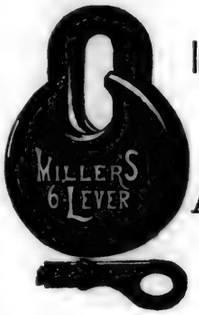
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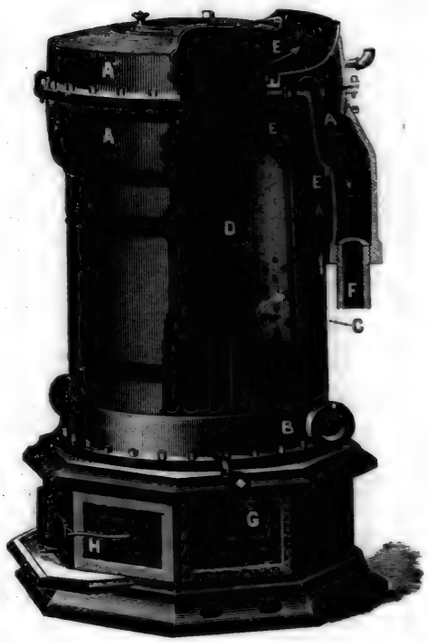
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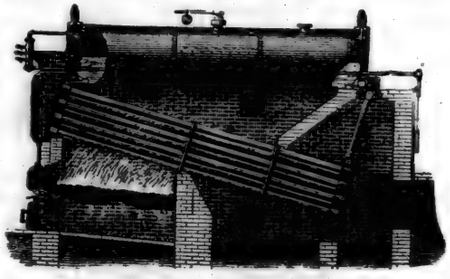
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OUR CANADIAN LETTER.

[From our Special Correspondent.]

THE FULL TEXT OF THE ORDER DISALLOWING THE MANITOBA RAILWAYS—RAILROAD AND OTHER NOTES.

The disallowance of the Manitoba Railways, which is just now attracting and exciting so much interest among all classes, both in Canada and the United States, is herewith explained in the following certified copy of a report of a committee of the Privy Council, approved by the Deputy Governor, November 3d, 1882—

The Committee of the Privy Council have had under consideration a report from the Minister of Justice, in which he recommends that the power of disallowance vested in Your Excellency in Council under section 90 of the British North America Act, 1867, be exercised in regard to the following Acts of the Legislature of the Province of Manitoba, namely :—

44 Victoria, chapter 38 (1881), intituled "An Act to incorporate the Manitoba Tramway Company."

44 Victoria, chapter 39 (1881), intituled "An Act to incorporate the Emerson and Northwestern Railway Company."

45 Victoria, chapter 30 (188-), intituled "An Act to encourage the building of Railways in Manitoba."

The Committee learn that authentic copies of these Acts were received by the Secretary of State as follows :—44 Victoria, chapters 38 and 39 (1881), on the 28th day of February, 1882, and 45 Victoria, chapter 30, (1882), on the 3d day of October, 1882.

The Committee, whilst concurring in the report of the Minister of Justice and humbly advising Your Excellency to disallow each and every of the said Acts, desire to record the expression of their constant anxiety that the action of the Legislatures of the several Provinces of the Dominion should be interfered with under the power of disallowance reserved to Your Excellency in Council by the British North America Act, 1867, as seldom as possible ; but when, as in the case of these Acts, the declared policy of Parliament adopted for the common weal is set a nought, and local legislation enacted leading indirectly, and directly too, to its frustration, the Committee of the Privy Council conceive that they are compelled by their duty to Parliament humbly to advise Your Excellency to use the power in question.

They further advise that a copy of this minute, when approved, and of the report of the Minister of Justice, be transmitted by the Secretary of State to the Lieutenant-Governor of Manitoba for the information of his Government.

JOHN J. MCGEE,
Clerk, Queen's Privy Council,
Canada.

DEPARTMENT OF JUSTICE,
Ottawa, 31st October, 1882.

To His Excellency the Governor-General in Council :

The undersigned has the honor to report,

That the contract dated October 21, 1880, made between the Government of Canada and the Canadian Pacific Railway Company contained the following clause:—

"15. For twenty yaars from the date hereof, no line of railway shall be authorized by the Dominion Parliament to be constructed south of the Canadian Pacific Railway from any point at or near the Canadian Pacific Railway except such line as shall run southwest, or to the westward of southwest, nor to within 15 miles of latitude 49; and in the establishment of any new Province in the Northwest Territories provision shall be made for continuing such prohibition after such establishment until the expiration of the said period."

This contract was approved and ratified by Parliament by an Act assented to on the 15th day of February, 1881, and the action of the Government in regard to the direction and limits of Railway construction in the territories of the Dominion became part of the legislation of Parliament and of the settled policy of the country.

By an Act of Parliament, 44 Victoria, chapter 14 intituled "An Act to provide for the extension of the boundaries of the Province of Manitoba," and by an Act of the Legislature of Manitoba, 44 Victoria, chapter 1, intituled "An Act for the extension of the boundaries of the Province of Manitoba," it is provided as follows :—

"(*b*) The said increased limit and territory thereby added to the Province of Manitoba shall be subject to all such provisions as may have been or shall hereafter be enacted respecting the Canadian Pacific Railway and the lands to be granted in aid thereof."

The policy of the Government thus confirmed by Parliament and acquiesced in by legislation in the Province of Manitoba is intended to prevent the diversion of the traffic of the Northwest Territories to the railway system of the United States and to endeavor by all means possible to secure it to Canadian railways.

Two Acts in addition to one already disallowed were passed by the Legislature of Manitoba in the session of 1881, and one in the session of 1882, which are in conflict with the settled policy above referred to.

By 44 Victoria, Chapter 38 (1881 Manitoba), intituled, "An Act to incorporate the Manitoba Tramway Company," power is given to the corporators to construct and operate cheap iron or wooden tramways along all or any of the public highways of the Province, having first secured the consent of the municipality within which the said public highway is situate.

By section 15, sub-section 4, power is given to make, complete, alter, and keep in repair the tramway with one or more sets of rails or tracks to be worked by the force and power of steam, or of the atmosphere, or of animals or by mechanical power or by any combination of them, the corporators having substantially the power to build and open a railway.

By 44 Victoria (1881) chapter 39 (Manitoba) intituled "An Act to incorporate the Emerson and Northwestern Railway Company, ' the corporators are empowered to construct a railway from a point on the west side of the Red River opposite the town of Emerson in the Province of Manitoba, to Mountain City or Nelsonville' in the said Province, and thence northwest to a point on the western boundary of the said Province, and also a branch line from Mountain City or Nelsonville aforesaid to the said boundary.

Emerson is situated directly on or very near to the boundary of the United States, and Mountain City is situated within "fifteen miles of the 49th parallel of latitude." This Company by its charter could not only construct a line crossing the Canadian Pacific Railway, and running from it in a southeasterly direction to a point practically on the boundary between Manitoba and the United States, but could also construct a line west from Mountain City, and wholly within fifteen miles of the 49th parallel.

By 45 Victoria, chapter 30 (Manitoba), intituled "An Act to encourage the building of railways in Manitoba," power is given within the legislative authority of the Province for the incorporation by letters patent of any number of persons not less than five for the purpose of constructing, maintaining, and operating railways for public use in the conveyance of persons and property in the Province of Manitoba.

The Act last mentioned was passed subsequent to the extension of the limits of Manitoba, but no provision is made in the Act to give effect to the terms and conditions upon which the boundaries of that Province were enlarged that is, there is nothing in it to prevent the corporators from exercising their powers within the added territory. This act is, therefore, not only open to the objections pointed out in regard to the two Acts passed during the session of 1881, but is capable of being used to contravene the terms in regard to the Canadian Pacific Railway upon which the boundaries of the Province of Manitoba were enlarged.

In order that the General Acts should conform to the legislation of Parliament in regard to the Canadian Pacific Railway, provision should have been made that no Company thereby incorporated should be authorized to construct a line of railway south of the Canadian Pacific Railway from any point at or near that railway, unless the line ran southwest or to the westward of southwest, and terminated at a point distant at least fifteen miles from the 49th parallel of latitude.

The undersigned, for the reason above stated, humbly recommends that the said Acts, namely:—

44th Victoria (1881), chapter 38—

"An Act to incorporate the Manitoba Tramway Company ";

44th Victoria (1881), chapter 39—

"An Act to incorporate the Emerson and Northwestern Railway Company ";

45th Victoria (1882), chapter 30—

"An Act to encourage the building of railways in Manitoba ";

—be disallowed.

(Signed) A. CAMPBELL,
Minister of Justice.

After carefully considering the above, it will be seen the government could not do otherwise.

"THE CHIGNECTO SHIP RAILWAY."

The engineering party have completed their examination and survey of the country between the Bay of Fundy and the Gulf of St. Lawrence, and located the route. Mr. Darnton Hutton, representing the English capitalists, left for England. Mr. Ketcham the projector will ar-

(Continued on page 946).

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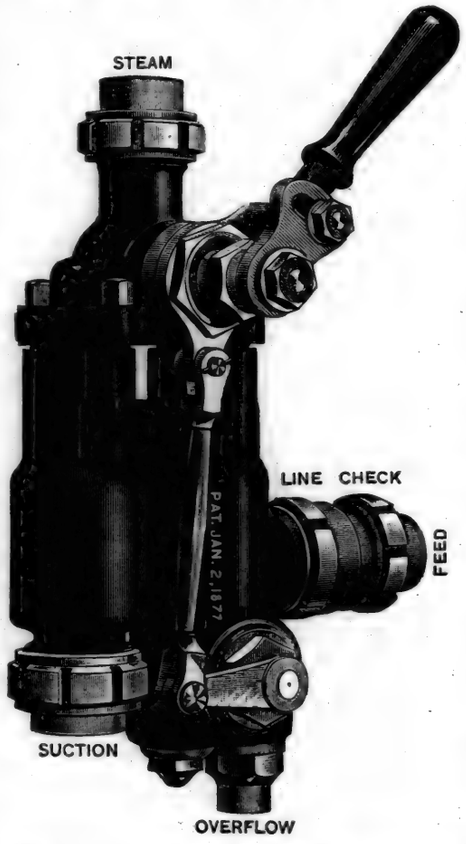
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rive in Ottawa during the week to submit his plans to the Government, and enter into an agreement with them, after which he sails for England, to make the working plans and drawings and secure the remaining capital for the enterprize.

J. L. McGonald & Co., Bankers and Brokers, of Halifax, have failed; liabilities about $110,000.

A new sugar refinery will be established at Dartmouth.

It is estimated that this season there passed through the St. Johns (N. B.) River, about 125,000,000 of logs in 42,000 joints of 3,000 feet each.

RAILROAD NOTES.

General Manager Van Horne, of the Canada Pacific, has arrived at Montreal, where he will henceforth establish his headquarters.

The Canada Pacific are completing arrangements for a grand excursion from Winnipeg to different points in Ontario and Quebec, about Christmas.

It is said that the Portland and Ogdensburg Railway have offered their road for sale to the C. P. R., and as the Canada Pacific have running rights over the Southeastern from Montreal to Newport, N. H., it is within the view of many that Portland, Maine, may be made a winter port.

The Canada Pacific are pledged to make a Canadian winter port, and must keep to their agreement, although there is nothing to prevent Portland being a terminal point.

The Toronto, Grey and Bruce Railway Co. will apply to the Ontario Legislature for power to issue bonds and debenture stock and to re-arrange their bonded debt; to make running arrangements with railways; to purchase, charter and work steamers, elevators, etc.

The leasing of the Canada Southern to the Michigan Central is exercising, considerably, the people along the line.

The Dominion Railway Trust and Construction Co. of Canada, with a capital of $1,000,000, will apply to Parliament for incorporation with power to lease and work railways, elevators, telegraph lines, and charter boats, and contract for building bridges, telegraph lines, and to equip railways.

It is said that the Grand Trunk Railway contemplate advancing the commercial traveller rates from 2c to 2½c per mile.

The Canada Pacific Southwestern Branch have laid track to Manitoba City.

The Canada Pacific Railway workshops at Montreal, when completed, will give employment to some 2,000 men, principally skilled hands.

Brazilian Consul-General W. D. Bently, also agent general of the Brazilian and French line of steamers left, Monday, for France, to make arrangements and to encourage French emigration to Canada.

The survey of the Ottawa, Waddington and New York Railroad is being pushed forward rapidly, and in a few days will be completed.

Work is progressing favorably on the Kingston and Pembroke Railway, and on the Pontiac and Pacific Railway.

Petitions from the Ottawa, Waddington and New York Railway and the New York Railway Bridge Co. were presented to the Ottawa Council, Monday night last, asking for a bonus of $150,000 to be granted the Railway for the construction of a railway bridge across the river at Ottawa. Matter referred to committee.

The Ontario and Quebec Railway, between Toronto and Montreal, will be 309 miles long. One hundred miles is now graded, and by next year in December, the entire track will be laid and in working order.

The new Bolt Works at Toronto, when completed, will employ about 400 hands.

THE MANAGER OF THE CANADA ATLANTIC RAILWAY.

D. C. Linsley, the contractor and manager of the Canada Atlantic Railway, was born at Burlington, Vt., and educated at Middlebury. Mr. Linsley was assistant engineer under General Rosser, on the Northern Pacific. He was also prominently connected with the Vermont Central, and constructed the Burlington and Lamoille Railway, the Burlington and City Water. Mr. Linsley accomplished a remarkable engineering work in making the tunnel on the Vermont Central, near Burlington. In the construction of the Canada Atlantic, Mr. Linsley has fully upheld the eminent reputation he has as an engineer. His system of track-laying and construction was so correct that he could tell three months ahead the point that each section would reach on a given day. Mr. Linsley is tall and commanding, about 50 years of age, in the full vigor of manhood, and it is safe to say there is no man in Canada who is more popular with his employés or more highly respected by all classes. Mr. G. M. Sprague, the very popular secretary of the manager, is also highly esteemed.

PERSONAL.

One of the most successful and popular men in Canada is James MacLaren, President of the Bank of Ottawa. Mr. MacLaren has been one of the most successful of Canadian lumbermen, and has, by careful attention, amassed a very large fortune. We believe that the Canada government would be performing a graceful act, and one that would meet with the approval of all shades of politics, in appointing Mr. MacLaren to one of the vacant senatorships. Although Mr. MacL. is a Reformer, he has not been a pronounced one, and has never been active in politics. The government is very strong in followers and could well afford to be generous and just in this case by appointing Mr. MacLaren, and thereby honoring the lumbering men, of whom he is one of the most distinguished. It would also be an encouragement to the young men of the country to know that successful business men might receive honors that have been heretofore given to politicians.

I am desired, on behalf of a prominent Canadian gentleman, to gratefully acknowledge the uniformly kind treatment received by him, and all who came under his observation, from deputy collector L. H. Smith, of Richford, Vermont, whose uniform kindness and courtesy to all are deserving of especial notice.

"W."

OTTAWA, November 22, 1882.

A FURNACE that will make a hundred tons of pig iron a day is to be erected at Chattanooga, Tenn.

Steel.

STEEL is only iron in its best and most valuable form. The chemists once considered that it was a definite chemical compound of iron and carbon, and named it carburet of iron, and it was believed by some that this contained twenty equivalents of iron to one of carbon; but we now know that we may have a steel of a very wide range of carburization, and that (as absolutely pure iron is unknown) all irons, whether wrought iron, cast iron, or "steel," are equally carburets of iron, so long as the carbon is not graphitic. Steel, as we may continue to call it, is not more distinctive from other forms of iron than are wrought and cast iron from each other; yet it is the only form of iron which is at once fusible and malleable, and it possesses, besides, the peculiar property of being greatly hardened by being heated and then plunged into water. It is not unlikely that, for all purposes of construction, cast iron and wrought iron will yet become obsolete materials, and useful only for the conversion into the best kind of iron, viz., "steel." And it may happen yet that we shall drop the almost meaningless term "steel," and call it "iron" only. Cast iron might then be described as crude or raw iron, and wrought iron as rotten iron or burnt iron, as it really is—its valuable constituent, carbon, being burnt out to an injurious extent in the toilsome and, indeed, barbarous operation of "puddling." Not alone in tensile strength, but in ductility or toughness, steel is now as much better than the wrought iron as the latter is better than cast iron; and steel has the further advantage that it is manageable in castings or forgings of any weight, where, on the other hand, cast iron would be too brittle and too weak, and wrought iron unsafe from the danger of unsound welds and internal crystallization.

Of late years iron, whether known by that name or as "steel," has been growing in strength and adaptability, and it has thus attained qualities which would have been incredible thirty years ago. We now have castings, forgings, rolled bars, rails, wire, etc. made of "steel," which are beyond all comparison stronger and tougher than iron in any other form known before. It is this wonderful growth of iron, so far as useful qualities are concerned, that has made the metallurgy of steel so popular among non-professional men, thousands of whom are now nearly as well informed upon it as upon those more engrossing questions of ordnance and ship-armor, upon which at least half of all the reading men in the civilized world now hold definite opinions. Bessemer's wonderful discovery turned general attention to the philosophy of iron making, and to the beautiful combinations of which iron is capable, and it is now well understood that there are other and not less beautiful analyses to be discovered, which will yet give to iron an intrinsic value, not only greater than that of gold and silver, but far beyond anything now known of the best steel. The great secret of iron cultivation, if we may employ such a term, is crystallization, and this cannot long elude the grasp of the genius of metallurgy; and when we once control the size, form and arrangement of the crystals of iron, in all its stages of conversion, we shall have made it, in effect, a new metal.—*Trade Review and Western Machinist.*

Some of the illuminated buoys introduced in European waters have been made to burn thirty days, and some four times that period—those of a certain size, containing gas sufficient to furnish the light, for one year, the flame being constant and steady night and day, and requiring no attention whatever after being once put in operation. The lantern attached to the buoy admits air enough to feed the flame, but not a particle of water can enter. The most violent gales, or the greatest force of the waves, produce no effect upon this light; it burns with undimmed brightness as long as gas is in its reservoir, and the light, it is asserted, can be thrown six or seven miles in clear weather. The refilling of the buoy at certain intervals, which is performed by a tender, requires but a few minutes' time; it is accomplished by simply passing the gas from a storeholder, by means of a flexible tube, into the buoy.

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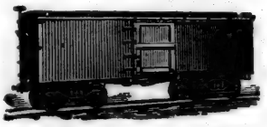
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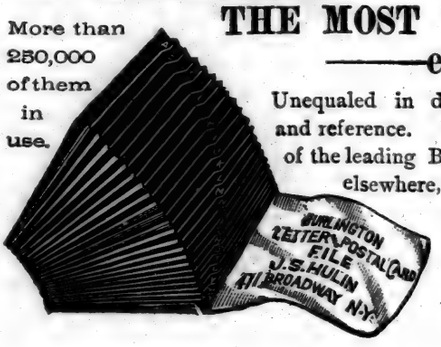
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2. Its columns contain at least a notice of every patent granted in the United States upon railroad and kindred inventions. In many cases more than this is desirable, and

3. Its editors invite communications from inventors regarding their inventions.

4. Such communications are treated with a view to their publication, and appear within these columns in all cases when this is desirable.

5. This is the oldest railroad journal in the world, and therefore

6. Inventors cannot do themselves better service in order to advance their interests, than to act upon the foregoing information.

List of Patents for Inventions Relating to Railways, Manufacturing, Mining, Machinery, Etc.

BEARING DATE OF NOVEMBER 21, 1882.

267,662. Car-Coupling: Ezra F. Beal, Everett, Mass., assignor, by mesne assignments, to himself and Alonzo Dean, same place. Filed July 31, 1882.

267,664. Car-Coupling: Richard T. Bishop, St. Louis, Mo. Filed Sept. 5, 1882.

267,667. Apparatus for Extinguishing Fire in Railway Cars: Marcus Brockway and Charles N. Watts, Jamestown, N. Y., assignors of one-third to Porter Sheldon, same place. Filed June 28, 1882.

267,681. Apparatus for Controlling the Movement of Trains: Edward N. Dickerson, Jr., New York, N. Y. Filed April 11, 1881.

267,692. Oil and Water Injector: Omar H. Jewell, Chicago, Ill. Filed Sept. 26, 1882.

267,705. Railroad Gate: William T. McClure, Joe, and Walter N. Mitchell, Blue Ridge Springs, Va. Filed Aug. 12, 1882.

267,725. Valve-Gear for Oscillating Engines: Henry F. Shaw, Boston, Mass. Filed April 24, 1882.

267,726. Locomotive Engine: Henry F. Shaw, Boston, Mass. Filed Aug. 18, 1882.

267,727. Friction Buffer: Thomas Shaw, Philadelphia, Pa. Filed Aug. 24, 1882.

267,743. Method of Purifying Natural Waters for Use in Steam Boilers: Charles B. Dudley, Altoona, Pa. Filed Nov. 3, 1881.

267,749. Car-Coupling: Elijah M. Hobbs, Santa Rosa, Cal. Filed Sept. 5, 1882.

267,761. Steam Generator: James C. Stead, Brooklyn, N. Y. Filed April 27, 1882.

267,772. Railway Hand-Car: William J. Brewer, Bombay, India. Filed March 22, 1882. Patented in India April 10, 1880, No. 27; in England April 17, 1880, No. 1,588; in Belgium Oct. 18, 1880, No. 52,796; in France Oct. 18, 1880, No. 139,214, and in Austria Oct. 29, 1881, No. 26,478.

267,784. Sheathing and Roofing for Railway Cars: Robert Fulton and Alexander De Lano, Detroit, Mich. Filed July 27, 1882.

267,789. Car-Coupling: Young P. Hudson, Gatewood, Mo. Filed Sept. 15, 1882.

267,810. Device for Feeding and Watering Stock in Cars: Alfred D. Tingley, New York, N Y., assignor to Charles Edgar Tingley, Adrian, Mich. Filed March 25, 1882.

267,823. Car-Coupling: Charles Beebee, Ravenswood, N. Y. Filed April 27, 1882.

267,830. Table Caster for Dining Cars: J. M. Blackburn, Meriden, Conn., assignor of one-half to Charles S. Perkins, same place. Filed Oct. 19, 1882.

267,850. Car-Coupling: George W. Eltzroth and Isaac Raypholtz, Marion, Ind. Filed Aug. 23, 1882.

267,862. Nut Lock: Addison C. Fletcher, New York, N. Y. Filed Oct. 23, 1882.

267,868. Car-Coupling: John A. Frazier, Lilly Chapel, Ohio. Filed June 24, 1882.

267,881. Car-Coupling: Nathan M. Hale, Grand View, Tex. Filed Sept. 25, 1882.

267,891. Stock-Loading Chute: Daniel E. Hogbin, Ellinwood, Kans. Filed Aug. 15, 1882.

267,908. Car-Coupling: Frank C. Lynn, Norristown, Pa., assignor to himself and Amon W. Geiger, same place. Filed Oct. 12, 1882.

267,916. Car Wheel: George W. Miltimore, Chicago, Ill. Filed Sept. 26, 1882. Patented in England Aug. 15, 1882, No. 3,885.

267,922. Street Car Motor: Lewis C. Parker, Robinson, Kans. Filed April 27, 1882.

267,930. Metallic Railway Tie: George L. Putnam, Mt. Vernon, N. Y. Filed July 14, 1882.

267,941. Station Indicator: John Van Fleet Ryerson, New Brunswick, N. J. Filed June 21, 1882.

267,978. Railway Electric Signal Apparatus: Oscar Gassett, Boston, Mass., assignor to the Union Switch and Signal Company, Pittsburg, Pa. Filed Jan. 3, 1882.

267,979. Railway Electric Signal Apparatus: Oscar Gassett, Boston, Mass., assignor to the Union Switch and Signal Company, Pittsburg, Pa. Filed Jan. 3, 1882.

Martin's Car-Coupler.

The car-coupler upon which letters patent were granted Orin D. D. Martin, Augusta, Ga., recently, is simple and practicable, and adapted for both passenger and freight cars, whether of the same height or not, a difference of from two to twelve inches making no difference. It is automatic, and couples with the old-style links and coupling-pin. The crooked link is adapted for use when the variation between the height of the cars is considerable, and the straight one in other cases. Mr. Martin's coupler is sixteen inches in length. The link box is cross-wise, and all the machinery of the invention, which is very simple, is inclosed in the draw-head and thus protected from damage. This invention, which insures great rapidity, ease and safety in coupling, is placed at the service of railroad corporations and others, on terms which are procurable from the patentee, who also supplies full particulars of his device to inquirers.

Improved Street Car.

The principal advantage claimed for the street car invented by Samuel Howe, of Oakland, Cal., and upon which letters patent have been issued at Washington, is its capacity to adjust itself to all imperfections of roadway. This, as a matter of course, gives less wear to both the car and roadway and greater ease and comfort to passengers. The body of Mr. Howe's car rests entirely on a spring, which gives it freedom to vibrate all ways; and is supported on a truck-frame provided with wheels. This separation of the car body and the wheels is the first leading peculiarity of the invention. Another is that the wheel axles have springs or buffers at their ends, which may be of rubber or of metal in any suitable form. By this means the axles are free to vibrate to all imperfections of the track, to switches and to curves. The old-style car body is rigid in every movement excepting up and down, and when the brake is on, is so altogether. Manifestly, a contrast of the old car with Mr. Howe's is favorable to his, so far as theory goes.

But as the old saying is, "The proof of the pudding lies in the eating;" and by the actual use of the Howe car its superiority is shown to be unquestionable. Six of his cars are in use at Oakland, with the following results: Passengers ride with greater comfort in them on account of their easy motion, which is so marked that switches and curves are scarcely noticed by them, if at all. They are able also to converse while the car is going, without inconvenience from noise. These practical advantages of Mr. Howe's invention are, we are sure, good reasons why it should be investigated further by all who are interested in giving the public the most comfortable and convenient means of locomotion.

Signaling by Electricity.

A device for signaling by electricity has been invented by Hanlon Bros., of Cambridge, Mass. It consists of an electro magnet which, when charged from a battery, instantly puts in motion machinery by which a glass globe composed of segments or arcs of different colors is caused to rotate so as to bring whatever colored segment is required in the path of the rays of light, thus producing an effect by which approaching trains can be signaled at any distance, and in one or both directions, at the same instant. This signal apparatus is so constructed that while it can be operated from an office to any distance on the road, it also, by means of an indicator attachment in the office from which it is operated, marks and indicates any desired change of signal at the same instant of operation.

Underground Sun and Moon.

Two very extravagant stories may be referred to as relating to the subterranean existence of the sun and moon during their absence from the sky. Four brothers once caught the moon and hung it upon some oak-trees, and a quarter of the moon was buried with each brother as he died. When, therefore, in course of time the four quarters met in the under world, they became reunited, and shining as a complete moon they raised the dead from their sleep; so that it became necessary to send St. Peter to replace the lost luminary in heaven. Here at least is a distinct trace of the moon's presence below the earth.

The story of the sun from Servia is even more ridiculous. When the devils fell, their king carried off the sun from heaven affixed to a lance. The archangel St. Michael was seen to try to recover it. He therefore made friends with the arch-fiend, and on coming to a lake proposed a bathe. The sun on its spear having been fixed in the soil, the archangel suggested a trial in diving. But as soon as the devil had dived, St. Michael made the sign of the cross and ran off with the sun as fast as he could, hotly pursued, however, in a moment by his enemy, who just contrived to scratch the foot of the retreating archangel as he returned to the place whence he came. It was for a consolation to the latter that all men afterward who should come into the world were destined to have indented soles. The sun in this story never actually arrived underground, but it is evident for what destination it was bound.—*Cornhill Magazine.*

AMERICAN Railroad Journal.

ESTABLISHED 1831.

Steam Navigation, Commerce, Finance, Machinery, Mining, Manufactures.

SECOND QUARTO SERIES.—VOL. XXXVIII., No. 48.] NEW YORK, DECEMBER 2, 1882. [WHOLE No. 2,431.—VOL. LV.

THE editor of the RAILROAD JOURNAL is pleased to receive information of railroad enterprises already entered upon or projected, items regarding the business done on the roads, such as relate to persons employed in the railroad and kindred interests; in short, about all matters which the readers of such a paper as this are gratified to find within its columns.

INCORPORATION.

THE Ohio Valley Construction Company, Bepre, Ohio, has been incorporated with a capital of $2,000,000.

A CHARTER has just been granted to the Johnson Beasley Coal Company, of Centralia, Columbia county, to mine anthracite coal, with a capital of $150,000.

A CORPORATION has been formed in St. Paul, Minn., with a capital of $10,000,000, for the development of the vermilion ore lead on the northwest shore of Lake Superior. A railroad will be built from the mines to Duluth or some other point on the lake where a good port may be formed.

PERSONAL.

J. MURRAY has been appointed assistant superintendent of the Canadian Pacific Railway.

WM. S. BALDWIN has been appointed general passenger agent at Buffalo, N. Y., of the Oil City and Chicago Railroad Company.

W. W. ALLEN has been appointed assistant superintendent of the Atchison, Topeka and Santa Fé Railroad, with office at Topeka, Kansas.

THE president has appointed Colgate Hoyt of New York, to be Government director of the Union Pacific Railway, in place of George E. Spencer, dismissed.

SAMUEL TATE, JR., and Thomas R. Sharp have been elected directors of the Memphis and Charleston Railroad Co., vice W. M. Duncan and W. T. Hatch, resigned.

THE committee appointed by the directors of the Central Railroad of New Jersey to devise means for removing the receivership is composed of Robert Garrett, of Baltimore, Edward C. Knight, of Philadelphia, and Sidney Shepherd, of Buffalo.

C. E. WARD, who has had charge of the "Railway News" in the Chicago *Times* for several years, has resigned his connection with that paper to accept the position of manager of the Allen Paper Car Wheel Company at Pullman, Ill.

THE president has appointed William C. Church, of New York, A. C. Gibbs, of Oregon, and David W. Stormont, of Kentucky, commissioners to examine twenty-five miles of the Northern Pacific Railroad, on the Clarke's Fork Division, in Montana Territory.

T. B. GOWEN, president and receiver of the Philadelphia and Reading Railroad Co., arrived at his home in Philadelphia from Europe on the 28th ult. The special train which conveyed him from Jersey City to Wayne Junction, 85 miles, made the run in eighty-eight and a half minutes.

CONSTRUCTION.

THE Mexican Central Railroad has been completed as far as Guanajuato.

THE construction of a street railway in Delaware City, Del., is being "talked of" in that city.

THE Reading, Marietta and Hanover Railroad will be completed to Chickies early next year.

A NARROW-GAUGE railway has been completed from Sheffield, Penn., to Garfield in the oil region.

THREE-FOURTHS of the grading on the Jersey Shore and Pine Creek Railroad has been completed.

IT is reported that work is about to begin on the new railroad to run along the north and east shores of Staten Island.

THE survey of the Delaware River, Phœnixville and Lancaster Railroad, between Phœnixville and Lancaster, has been completed.

THE Wilmington and Northern Railroad Company is making preliminary surveys for an addition to its South Side extension to the Delaware river.

THE projectors of the Annapolis and Baltimore Short-Line Railroad propose to begin grading on their road in a few days and to finish it by June 1, 1883.

THE Utah extension of the Denver and Rio Grande Railway was opened on the 27th ult. to Grand Junction, 425 miles from Denver, Col., and 167 miles from Salt Lake City.

THE new branch of the Southwest Railroad, which runs from a point between Fairchance and Oliphant to the Marie Coke Works in Fayette county, Penn., has been completed.

THE announcement is made that the tunnel of the New York, West Shore and Buffalo Railway at West Point is completed. The last brick in the arching was laid on the 24th ult.

THE contract for the bed of a railroad from Merion Station to Manayunk, a distance of five miles, has been awarded by the Pennsylvania Railroad Co. to Mr. McManus, of Lancaster, Penn.

THE Galveston *News* has a special from Eagle Pass of 26th ult. which states that "at 10 A. M. to-morrow ground will be broken on the Mexican side for the Mexican Pacific Railroad. Interesting ceremonies are on the programme."

THE formal opening of the North Branch and West Branch Division of the Pennsylvania Railroad took place on the 23d ult. when an excursion train of eight cars passed over the road from Wilkesbarre to Sunbury and return.

THE track of the Mexican National Railway is being laid at the rate of one and one-half miles per day; the main line will reach Acambara, 175 miles from the City of Mexico, by Jan. 10, and Celabay, 198 miles from there, by March.

THE Nebraska, Topeka, Iola and Memphis Railway are now operating their road from Girard, on the 'Frisco Line, to Walnut, Kan., over the Missouri, Kansas and Texas, a distance of seventeen miles, and have completed the survey to Humboldt.

FIFTEEN miles of steel track are being laid near Westminster and between Union Bridge and the Monocacy, on the Western Maryland Railroad. Contracts will be let this month for iron bridges over the Monocacy and Antietam creeks, to replace wooden ones.

ENGINEERS have commenced at Brockton, Mass., the survey for a new railroad, which, it is understood is to run from the Old Colony Railroad at Hingham to the Boston and Providence Railroad at Stoughton, passing through Brockton, Abington and Rockland.

THE work of widening the Pittsburgh Southern Railroad, recently purchased by the Baltimore and Ohio Railroad Company, is now in progress. It is expected that the cars will run over the broad gauge between Washington, Penn., and Pittsburgh, via Finleyville, inside of four months.

THE Chippewa Falls and Superior line of the Chicago, St. Paul, Minneapolis and Omaha Railway has been completed to Hudson. The Bayfield line will be finished to Ashland by January 1. Both lines secure to the railroad

company two valuable land grants in northern Wisconsin—that of the old Chicago and Superior Line Company and what is known as the Northern Wisconsin grant. The connections between the road named and the Northern Pacific at Superior are finished.

THE Bridgton and Saco River Railroad in Maine, which will probably be opened to the public in December, is eighteen miles in length, and runs from Bridgton to Hiram, intersecting at the latter point the Portland and Ogdensburg Railroad. The new line is a two-foot gauge road, equipped with steel rails and well built.

THE effect of the recent decision of the Supreme Court of Illinois, in the case of the Chicago and Western Indiana Railway Co., vs. the City of Chicago, will be to bring the terminus of that road, the Chicago and Eastern Illinois, and two or three other lines half a mile nearer the heart of the city than at present.

THE New York, Philadelphia and Norfolk Railroad Company have made two contracts in Accomack for clearing the way for the road-bed of their road, and the contractors are now at work. It is thought that the road can be built very rapidly and cheaply, estimating the cost at $12,000 per mile. It runs from Salisbury to Pocomoke in a perfectly straight line, eighteen miles.

IT is said the Canada Southern Railway and Michigan Central Railroad companies, which have just formed pooling arrangements, contemplate a new Suspension Bridge at Niagara Falls, so that they can have an independent connection with the Rome, Watertown and Ogdensburg Railroad, and perhaps form a connection with the Ogdensburg and Lake Champlain and Portland and Ogdensburg railroads.

The Virginia "Coupon-Killer" Killed.

THE Supreme Court of Appeals of Virginia, all the members concurring, decided on the 23d ult., that the act of the Legislature passed at the last session in the matter of the State debt known as the "coupon-killer" does not include the coupons of the act of 1879 known as the McCulloch bill. Under this decision these coupons are receivable for State taxes. Judge L. L. Lewis, elected by the Readjusters at the last session of the Legislature as Judge Moncure's successor, concurred. A subsequent bill, passed by the Legislature, known as "Coupon-killer No. 2," however, virtually kills the above decision, as it provides that on and after December 1, 1882, all State revenues shall be collected in gold, silver, United States Treasury notes, national bank notes, and nothing else. The McCulloch coupons are therefore no longer receivable for taxes.

A SPECIAL meeting of the Western Association of General Passenger and Ticket Agents has been called to meet on Tuesday, December 12, 1882, at the Dennison House, Indianapolis, Ind., at 10 o'clock, A. M., "for the purpose of a general revision of basing and other rates, and each line in the territory is urgently requested to have a representative present."

A School Car.

A CAR has recently been turned out of the West Albany Car Shops, where it was constructed under the superintendence of A. H. Catlin, who is to have charge of it, in which it is designed to impart instruction to the locomotive engineers employed on the New York Central and Hudson River Railroad in the method of operating the Westinghouse Automatic Air-brake. The car, which is an ordinary baggage car, is fitted up with all of the piping and appliances that would be used in connection with the air-brakes on a train of 25 cars. Mr. Catlin has caused these appliances to be so arranged that he can at any time disconnect one section from another and give practical demonstrations of how the brakes will work on any number of cars from 1 up to the entire 25. There are three gauges at one end of the machinery, one similar to that which every locomotive carries, to indicate the air pressure on the train, another to show the air pressure in each auxilary reservoir under the cars, and a third to show the pressure on the brake piston when the brake is applied. "There are a score of important points that we can make clear to the engineers by means of this apparatus," remarked Mr. Catlin, "which they would not be likely to learn in the mere running of their trains. Here everything connected with the brake is presented to view, and I can teach an engineer more about the practical workings of the brake here in one hour than he would be likely to learn in six months on the road." An official order will soon be issued by the authorities of the railroad requiring all locomotive engineers to secure a certificate to the effect that they understand the Westinghouse air-brake thoroughly. After due time has been allowed them to receive instruction in the school car, each engineer will be examined on the subject of the air-brakes. It is the intention to move the car about from point to point between Albany, Niagara Falls and Buffalo, so as to render it accessible to the engineers employed on different divisions of the road.

A New Style Locomotive.

STRONG'S express locomotive is a novelty in this country, and bids fair to spring into general use on every road where its merits are properly appreciated. The designer of the engine spent a long time in England and on the Continent, taking note of all the good points in locomotives used abroad, and upon his return constructed an engine embodying the results of his studies. In the boiler of Mr. Strong's locomotive the corner bars and side stays are done away with, the fire-box is designed to insure complete combustion of fuel by burning the gases and sparks, the driver coupling so arranged that the side rod is unnecessary, and there is also a better distribution of wearing surface on brasses or crank-pins than is the case in ordinarily constructed locomotives when the power for both wheels is transmitted through the forward pin. The valve motion is also improved and the feed-water heated by a portion of the exhaust. In short, the locomotive is so constructed as to be economical and as fast as it is desirable, and always have a reserve of power for a heavy train, while at the same time it is simple and not liable to derangement, and safe for those who run it as well as those who ride behind it, and one that shall burn its coal in so perfect a manner as to do away with the cinders and smoke.—*North American.*

Illinois Central Railroad.

DURING the month of October, 1882, the traffic on the lines operated by this Company was (estimated):—

In Illinois	$674,887 00
In Iowa (leased lines)	190,438 00
Total	$865,325 00

The traffic for the same month in 1881, on the same mileage, was (actual):—

In Illinois	$646,190 14
In Iowa (leased lines)	169,048 11
Total	$815,238 25

During October, 1882, the land sales were 2,938.47 acres for $15,487.58, and the cash collected on land contracts was $20,256.11.

L. A. CATLIN, *Secretary.*

Stopping Engines by Electricity.

A METHOD for stopping steam engines by the electric current in case of a break-down of machinery or other accident in factories, or in the event of an impending collision on board steamships, has been devised by Mr. Tate, manager of some large woolen mills in Bradford, Eng. The apparatus consists mainly of a weighted suspension rod, an ordinary Leclanché battery, an electro-magnet and conducting wires leading to any number of points from which it is desired the engine shall be controlled. The electro-magnet is placed in a small box at the top of the stopping apparatus, which is connected with the stop-valve of the engine. Should an accident occur to the machinery in any part of the factory where the electric push is fixed, upon the button's being pressed and contact made the electro-magnet acts upon a lever, which releases the weighted suspension rod. This rod instantly descends by gravity, and in its descent it opens a three-way cock, by which means steam is admitted from the boiler to a cylinder containing a piston, which latter is raised, and, in rising, closes the stop-valve and shuts off the steam. In like manner the captain of a steamship can from the bridge stop the engines of his vessel instantly should he see danger imminent, thus avoiding the delay incidental to the giving of a signal to the engineer and the risk of that signal being misunderstood in the moment of peril.

J. E. SMITH, of Leicester, England, has suggested a novel method of building bridges either for temporary or permanent use, which seems to have many advantages both in simplicity and cheapness. Iron or steel cylinders, twenty, forty or more feet in diameter, constructed of plates riveted to rolled iron or steel ribs, are rolled into the stream over which it is desired to carry the bridge. These gigantic cylinders with half their diameters sunk under the water form so many arches upon which a level road can easily be thrown. The cylinders can be built upon the spot where they are required, or, filled in with a temporary floor at one end, can be readily floated to their destination. The system is expected to be useful in laying railroads across land subject to occasional flood.

Boston and Albany Railroad.

THE receipts of the Boston and Albany Railroad Company for the years ending September 30, 1881 and 1882, were as follows:—

	1881.	1882.
From passengers	$2,668,044 95	$3,014,160 83
From freight	4,328,905 90	3,984,132 70
From mails and other sources	878,334 66	792,079 91
	$7,875,285 51	$7,790,373 44
Expenditures:		
Maintenance of permanent way	$920,290 25	$821,017 43
Maintenance of engines	362,396 88	426,892 20
Maintenance of passenger and freight cars	653,545 58	597,760 27
Maintenance of buildings, docks, ferry, etc.	502,819 90	290,862 14
Transportation expenses	3,146,421 69	3,352,764 37
General expenses	102,937 84	111,694 36
	$5,688,412 14	$5,600,790 77
Net income	$2,186,873 37	$2,189,382 67
From which deduct—		
Interest	$470,000 00	$566,450 00
Eight per cent dividend	1,600,000 00	1,503,550 00
Dividend on Pittsfield and North Adams Railroad	22,500 00	22,500 00
Rental Ware River Railroad	52,500 00	52,500 00
	$2,145,000 00	$2,145,000 00
Surplus not divided	$41,873 37	$44,382 67
Add balance to credit of profit and loss September 30, 1881		2,588,538 91
Total as in Trial Balance, Sept. 30, 1882		$2,632,921 58

The gross receipts for the fiscal year ending September 30, 1880, were: from passengers, $2,361,498.94; from freight, $4,530,913.06; from mails, and other sources, $848,706.99—total receipts, $7,741,118.99; total expenditures, $5,248,500.85; net income, $2,492,618.14. Compared with the year 1880, the gross receipts of 1881 show an increase of $134,166.52, the expenditures an increase of $439,911.29, and the net income a decrease of $305,744.77. Compared in like manner with the year 1881, the gross receipts of 1882 show a decrease of $84,912.07, the expenses a decrease of $87,421.37, and the net income an increase of $2,509.30.

The total number of passengers carried in 1882 was 7,524,138, of whom 104,192 were through and 7,419,946 way; of the through passengers carried, 88,737 were first class and 15,455 third class, and of the way passengers, 7,419,931 were first class and 15 third class. The total number of passengers carried in 1881 was 6,799,178; and in 1880, 5,993,297—showing an increase in 1882 over 1881 of 724,960, and in 1881 over 1880 of 805,881. The total number of passengers carried one mile in 1882 was 151,255,032; in 1881, 135,421,102; and in 1880, 113,154,374—showing an increase in 1882 over 1881 of 15,833,930, and in 1881 over 1880 of 22,266,728.

The total number of tons moved in 1882 was 3,415,329—1,075,234 going westward, and 2,340,095 eastward; in 1881 the number of tons moved was 3,593,923; and in 1880 was 3,310,539—showing a decrease in 1882, compared with 1881, of 178,594; and an increase in 1881, compared with 1880, of 283,384. The number of tons moved one mile in 1882 was 374,317,338; in 1881 was 417,108,612; and in 1880 was 375,452,804—showing a decrease in 1882, compared with 1881, of 42,791,274; and an increase in 1881, compared with 1880, of 41,655,808. The equivalent number of tons carried one mile over the whole road in 1882 was 1,871,586, in 1881 was 2,085,543, and in 1880 was 1,877,264. The total movement of both passengers and freight in 1882 was 525,572,370; in 1881 was 552,529,714; and in 1880 was 488,607,178. The report says:—

The loss in freight tonnage is wholly in the eastward movement. The tons carried from Boston to Albany and points west of the Hudson River increased from 157,035 in 1881 to 223,620 in 1882; and the whole number of tons carried West, including the local traffic, from 895,215 to 1,075,234. It is gratifying to find that the trade between Boston and the West in general merchandise has increased so largely. It seems from this exhibit of the tonnage movement that the industries of the State have suffered no loss, at least in the volume of business, notwithstanding the partial failure of the crops.

An analysis of the earnings shows a substantial increase in all branches of the passenger service. Receipts from local traffic have increased $125,526.42; from passengers to and from other roads, $220,589.46; from mails and expresses, $75,574.50—a gain in all departments of the passenger traffic, over last year, of $421,690.38.

The receipts for transportation of freight have decreased $344,773.20, not as much as the revenue from passengers has increased. The income from local freight has increased $74,261.58, while the tonnage has fallen off 13,275. Through freight shows a loss both in tonnage and receipts. The tons moved are 170,644 less, and the revenue $400,603.57 less. The movement of freight to and from other roads, except those west of Albany, shows a gain of 5,325 tons, but a falling off of $18,431.21 in money.

The gain in both branches of transportation over last year is $76,917.18. The revenue from miscellaneous sources, however, shows a marked falling off. The receipts for gravel were $109,213.32 against $216,060.44 in 1881; from elevators, wharves and warehouses $200,845.29 against $260,241.74 in 1881. The income from rents and interests is $4,414.32 greater than last year. The total loss in gross receipts from all sources is $84,912.07.

The local tonnage of 1882 was 1,782,339, do. one mile 119,044,968; through tonnage 987,927, do. one mile 201,478,060; to and from other roads, except west of Albany, 645,063, do. one mile 53,794,310. The rate per ton per mile for freight was: local, 1.786 cent; through, 0.551 cent; other, 1.389 cent.

The local tonnage of 1881 was 1,795,614, do. one mile 128,269,685; through tonnage 1,158,571, do. one mile 235,823,319; to and from other roads 639,738, do. one mile 53,015,608. The rate per ton per mile was: local, 1.600 cent; through, 0.641 cent; other, 1.445 cent.

The loss on tonnage is attributed to the failure of the crops, and the high price of grain in the markets of the West, which prevented a free movement of cereals for export. The report briefly reviews the history of the trunk line war as explaining the loss in rate on through freight, and then adds:

With good crops in the West, a prospect of a fair export traffic in cereals, and the trunk lines at peace, we may reasonably look for a fairly remunerative business with the West the present season.

The retirement of the State from participation in the management of the affairs of the company is mentioned, which was effected on the 18th of August, by the exchange of the stock of the company held by the State for five per cent bonds, payable twenty years from date, at the rate of $160 for each share owned by the commonwealth, since which time the State has had no representation in the board of directors. In conclusion the report says:

The expenditures on account of the third and fourth tracks between Boston and Charles River, together with the cost of new buildings and extensions, amounting to $300,548.57, have been charged to the operating expenses of the year. There were built in the shops of the company 7 locomotives, 277 merchandise cars of various kinds, 3 drawing-room, 12 passenger and 2 mail cars. The cost is charged to repairs of locomotives and cars. The track, rolling-stock and buildings are in good condition.

The Trustees of the improvement fund have received $53,680.34 from the securities held by them. This amount has been placed to the credit of premium, which now stands debited with $23,234.18.

The equipment of the road consists of 62 passenger, 154 freight and 29 switching engines, 206 passenger, 47 baggage and postal, 5,220 merchandise and 627 other cars, and 11 snow ploughs.

The number of miles run by engines in 1882 was: passenger trains, 1,805,924; freight trains, 3,608,313; gravel trains, etc. 156,278—total miles run, 5,570,515, against 5,954,094 in 1881, and 5,450,729 in 1880.

According to the report of the Auditor the amount of unpaid freight bills for the year ending September 30, 1882, was $24,397.37, of which $22,408.85 was secured by freight on hand.

The cost of the road to September 30, 1882, was $24,368,716.50, and of the equipment $3,145,400.

TRIAL BALANCE, SEPTEMBER 30, 1882.

	1881.	1882.
Cost of road and equipment	$27,514,116 50	$27,514,116 50
Cost of South Boston property	175,098 22	175,098 22
Hudson River bridges	475,485 00	475,485 00
Materials	654,181 15	401,337 28
Real estate and land	119,678 96	119,678 96
Ledger balances due from individuals and corporations	365,163 82	365,163 82
West Stockbridge Railroad stock	13,000 00	13,000 00
Cash	429,010 65	879,799 03
Notes receivable	300,000 00	300,000 00
Trustees Improvement Fund	799,532 94	799,532 94
Springfield and North-Eastern Railroad	439,064 92	439,064 92
Boston and Albany Railroad stock	.....	3,858,400 00
Total	$31,284,332 16	$35,340,676 67
Capital stock	$20,000,000 00	$20,000,000 00
Seven per cent bonds	5,000,000 00	5,000,000 00
Six per cent bonds	2,000,000 00	2,000,000 00
Five per cent bonds	.....	3,858,000 00
Unclaimed dividends and interest	407,475 00	352,600 00
Dividend P. and N. A. R. R. due Jan. 1	11,250 00	11,250 00
Dividend Ware River Railroad, due Jan. 1	26,250 00	26,250 00
Notes payable	168,500 00	231,208 00
Ledger balances due agents and corporations	282,785 31	428,914 15
Improvement Fund	799,532 94	752,471 60
Ware River Sinking Fund	.....	47,061 34
Profit and loss	2,588,538 91	2,632,921 58
Total, as above	$31,284,332 16	$35,340,676 67

President.—WILLIAM BLISS.

Vice-President—JAMES A. RUMRILL.

Directors.—William Bliss, Henry Colt, George O. Crocker, John Cummings, Edward B. Gillett, Moses Kimball, James A. Rumrill, Charles S. Sargent.

Treasurer.—CHARLES E. STEVENS.

Gen'l Sup't.—WALTER H. BARNES.

"How much for the broad-faced chicken on the fence?" inquired an Irishman of a farmer, the other day. "That's not a chicken—it's an owl!" replied the farmer. "I don't care how ould he is—I would like to buy him," said the Irishman.

American Railroad Journal.

ESTABLISHED 1832.

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WE invite railroad officers to send us notice of elections, transfers, appointments, resignations, etc.; and all our readers would oblige us by furnishing for our columns any items of personal information, which may come to their knowledge, and are adapted to this department. We aim to record all new railway enterprises in the United States and Canada, and to note the progress of construction on all new roads and extensions; and we request all concerned in railway building to give us early information regarding the above, that our reports may be as complete as possible.

Subscribers are requested to report to our office any irregularity in receiving the JOURNAL.

Contributed articles relating to Railroad matters generally, Mining interests, Banking and Financial items, Agricultural development, and Manufacturing news, by those who are familiar with these subjects, are especially desired.

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New York, Saturday, December 2, 1882.

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COPIES of this JOURNAL are occasionally distributed as an advertisement, and should not be returned to the office. The proper use for them is their thorough examination, which will result in business to the publishers.

OUR friend and correspondent in Brussels, (the receipt of whose numerous "postals" we take this method of acknowledging) is informed that the holders of Tennessee State bonds in this country are generally funding them into the new Compromise issue bearing a lower rate of interest. The State is quite able to meet the interest charge on the debt as scaled down, and it is believed will do so promptly without further efforts at repudiation. The exchange can be made by forwarding the old issues to the State Treasurer at Nashville by express, or the old bonds can be sold at the current market rates in New York, and the new ones bought with the proceeds. There will be very little advantage or loss in the two methods; the convenience or safety of the transaction differs according to the situation of the parties holding.

THE SPASM IN THE MONEY MARKET.

THERE is a tendency in human nature, and especially in that part of humanity which seeks to avoid earning the daily bread by the sweat of the brow from muscular manual labor, to carry things to extremes. Hence we have great fluctuations in supply and demand of money and of commodities. Following the example of the elements, and often following that change as closely as the shadow follows the substance, we have alternate droughts and floods—seasons of plenty and scarcity. Last week, and measurably this week, we have witnessed a severe spasm in the money market in New York. Instead of the legal rate of six per cent, money was borrowed for the purpose of stock speculation, for short periods, as high as fifty per cent per annum. A great part of this scarcity of money is artificial; but the artificial scarcity could not be brought about to such a degree of intensity unless there were a real scarcity at the bottom of which this is but the exaggerated record.

To the average observer it must appear, of course, as if there was just as much money now as at any other time. Little or no gold is being shipped from the country; why, therefore, should there be any scarcity? The answer to this is that the volume of exports is not quite equal to the volume of imports, and the balance of trade must be settled sometime or other by increased exports, or by debts of various forms which must eventually be paid with interest in money or property. In a word, the national extravagance anticipates future earnings.

Aside from this, however, the prices of United States bonds have been carried to such high figures by the practice of buying up $150,000,000 a year for purposes of redemption, that the temptation is strong for banks to surrender their circulating notes to the Treasury, demand their bonds, and pocket the certain profit which they can now take. This is a curtailment of the loanable money of the country, and if it should go much further will be a temptation to the political party expecting to enter into power to listen to propositions for further issues of Treasury notes, "greenbacks," in time of peace.

It will be charged that the present depression has resulted from the excessive railroad construction. This is a confusion of cause and effect. So many railroads were being projected and built because capital was abundant two or three years ago, and the profits on railroad building were excessive. Such was the avidity of capitalists for railroad bonds—which had theretofore proved to be lucrative investments—that it became possible for railroad builders to realize more from the sale of mortgage bonds than the properties had cost to build, leaving the stock, and in some cases income bonds, as additional profit to the contractors. This is not true of all the new railroads building, but has been notoriously true of some of the roads built by speculators, not for the legitimate purposes of owning, maintaining and working them.

Among the benefits to be derived from this financial storm will be the putting an end to this kind of legerdemain. Many of these new railroad enterprises, for which there is no legitimate traffic demand, will come to grief, while the older roads will be exempt from their threatened opposition for another period of years. It is, in other words, a struggle for existence in the world of trade, in which the fittest survive and the unfit are crushed out.

Temporarily, the market rates (but not the values) of good substantial properties are lower; and after the storm is over their shares and secured bonds will rank higher than ever. Some of the stocks, however, are still higher than their merits warrant; and it is safe to predict that the tendency will be toward lower prices for two years to come—until it is determined whether a new political party is to hold the reins of power, and what its policy will be upon the finances, the tariff, the public debt, banking and currency.

The strife of rate cutting by the three or four railroads extending between Chicago, St. Paul and Omaha is merely a symptom of the genera

trouble. Competition between old and new roads traversing the same territory is liable to break out at any time; and at such times speculators for a fall will take advantage and "raid the market." This they could not do it prices were not too high already, and too many people holding stocks in which they have only the ownership of a slender margin.

RAILROAD MEDICAL SERVICE.

BY S. S. HERRICK, M. D.

SECRETARY OF BOARD OF HEALTH, STATE OF LOUISIANA.

(*Continued.*)

THE FRENCH SYSTEM.

THE printed regulations of the Eastern Railway and of the Paris, Lyons and Mediterranean Railroad have been furnished to me, through the courtesy of the U. S. Consul-general at Paris. Those of the latter will serve to illustrate the nature of the service in France. They were promulgated in 1864, and are still in force. Their substance is as follows:—

The Medical Service is divided into sections, each of which is assigned to a physician residing at the chief point of the section, and appointed by the Board of Directors on the recommendation of the general manager. The service has its headquarters at Paris, under a physician-in-chief appointed by the directory, which appoints also such consulting and adjunct physicians as are required. The salaries of the physicians and details of the service are established by the directory, on the recommendation of the general manager.

DUTIES OF THE PHYSICIANS.

These are as follows:—

1. To attend gratuitously upon sick and injured employés, and all other persons accidentally injured upon the lines or in the premises of the company.

2. To ascertain and certify (form 1354) the general health and degree of corporeal fitness of applicants for the various branches of service.

3. To answer all calls for attendance in case of accidents upon the lines and in the establishments of the company.

4. To advise the directory in questions of hygiene and in the settlement of damages for personal injuries.

5. To inspect monthly, as far as possible, all establishments whose *personnel* is entrusted to their care, in order to certify their sanitary condition, and to inspect the relief-chests, medical stores and apparatus of the medical service.

6. To report monthly to the physician-in-chief (form 1357) the condition of the sick and wounded and the results of their monthly inspections, adding thereto any necessary observations and requisitions.

7. To certify and countersign bills of hospitals, apothecaries and other purveyors, and those of private physicians, previous to forwarding to the physician-in-chief.

THE DUTIES OF THE PHYSICIAN-IN-CHIEF are as follows:—

1. To supervise the medical service of all the company's lines, and inspect the same as often as he deems necessary.

2. To examine and countersign all bills for ordinary expenditures (those of hospitals, apothecaries and other purveyors), and to advise superintendents of the operating and construction departments concerning extraordinary expenditures of the medical service (bills of private physicians, thermal-water establishments, indemnity for personal injuries, etc.), before transmitting them to the central bureau of accounts in the department of operation.

3. To consider all matters which are to be submitted to the superintendents of operation and construction, such as: applications for extension of medical relief, for sending to mineral springs, and for indemnity on account of injuries; investigations and reports upon grave accidents; applications for positions in the medical corps.

4. He also receives the monthly reports of his subordinates and consolidates their statements concerning the general health of the *personnel* and sanitary condition of the establishments of the company into a general report, which he makes annually to the general manager, and in which he includes his own observations upon prevailing diseases and upon the medical service in general.

5. The physician-in-chief is besides charged with the general superintendence of the medical service; with receiving petitions or claims addressed to him by physicians, superintendents, or sick persons in matters which concern the medical service; with the collection of documents which can contribute to improving the health of employés and the sanitary condition of the company's establishments; with assisting personally, in case of grave accidents, in the organization of relief, and with aiding by counsel and influence, in concert with the Legal Service, the adjustment of indemnities for personal injury; with making several times a year an inspection of the Medical Service and of the company's establishments; with suggesting any hygienic and medical measures which he may deem expedient to the company.

6. All petitions, documents, letters, etc. relative to the Medical Service are sent to him through the administrative channel.

MEDICAL EXAMINATION OF EMPLOYÉS AND WORKMEN.

No individual, except portresses, female gate-keepers and sanitary employés, can enter the service of the company without previous examination by a company's physician, who gives him a certificate (form 1354) declaring the state of his general health and degree of his corporeal fitness for the particular position desired, in conformity with the nomenclature (form 1358). This certificate is demanded by his foreman and attached to his record (*dossier*).

[TO BE CONTINUED.]

WE are informed that the Chicago, Rock Island and Pacific Railroad have placed *unlimited* tickets at cut rates from Chicago to St. Paul in the hands of ticket brokers in this city. This would seem to justify the strictures that have been made upon the action and animus of this Company in their war upon the Chicago, Milwaukee and St. Paul Railroad.

Norfolk and Western Railroad.

THE following is a comparative statement of the earnings, expenses and net earnings of the Norfolk and Western Railroad for the month of October:—

	1882.	1881.
Gross earnings	$272,318 11	$246,529 74
Expenses	119,688 57	98,535 98
Net earnings	$152,629 54	$147,993 76

For the ten months from January 1 to October 31, the earnings, expenses and net earnings were:—

	1882.	1881.
Gross earnings	$1,943,747 21	$1,832,594 79
Expenses	1,066,126 41	944,461 57
Net earnings	$877,620 80	$888,133 22

—showing an increase for the month in gross earnings of $25,788.37, in expenses of $21,152.59, and in net earnings of $4,635.78; and for the ten months an increase in gross earnings of $111,152.42, with an increase in expenses of $121,664.84, making a decrease in the net earnings of $10,512.42.

Pennsylvania Railroad.

THE statement of the business of all the lines of the Pennsylvania Railroad Company east of Pittsburgh and Erie, for October, 1882, as compared with the same month in 1881, shows:

An increase in gross earnings of	$987.083
An increase in expenses of	301,403
An increase in net earnings of	$685,680

The ten months of 1882, as compared with the same period in 1881, show:

An increase in gross earnings of	$3,996,622
An increase in expenses of	3,102,246
An increase in net earnings of	$894,376

All lines west of Pittsburgh and Erie for the ten months of 1882 show a surplus over all liabilities of $1,593,772, being a decrease as compared with the same period in 1881 of $984,905.

Northern Central Railway.

THE Northern Central Railway Company furnishes the following comparative statement of its gross earnings and operating expenses for the month of October:—

	1882.	1881.
Gross earnings	$550,224 86	$449,663 57
Operating expenses	286,286 19	278,882 06
Extraordinary expenses	57,824 77	91,440 08
Total expenses	$344,110 96	$370,332 14
Net earnings	$206,113 90	$79,341 63

Ten months ended October 31:—

	1882.	1881.
Gross earnings	$4,971,502 36	$4,479,916 64
Operating expenses	2,745,919 59	2,746,514 08
Extraordinary expenses	278,644 32	405,595 24
Total expenses	$3,024,563 91	$3,152,109 32
Net earnings	$1,946,938 45	$1,327,807 32

Philadelphia and Erie Railroad.

THE Philadelphia and Erie Railroad Company makes the following exhibit of business for the month of October, 1882:

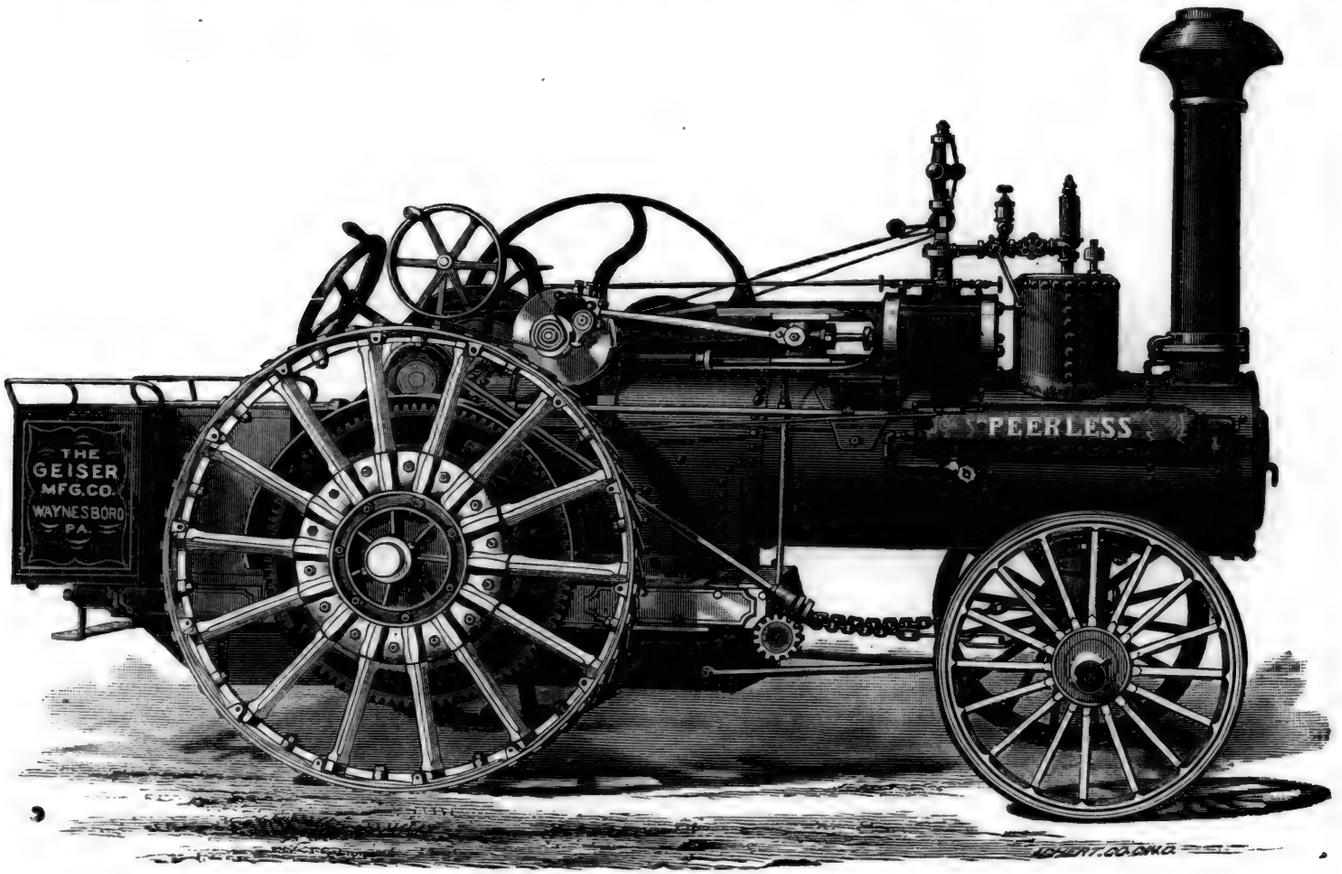
Gross earnings	$397,164 22
Gross expenses	238,823 73
Net earnings	$158,340 49
Net earnings, 1881	90,807 71
Increase	$67,532 78
Net earnings ten months of 1882	$1,228,841 74
Net earnings ten months of 1881	892,910 10
Increase	$335,931 6

The Peerless Traction Engine.

We present herewith a cut and description of the lately improved Peerless Traction Engine or road locomotive. The boiler is of the ordinary locomotive type with the engine located on the side and near the top of it, having its cylinder toward the smoke-box, and the fly-wheel and traction gearing at the rear of the boiler within easy access of the engineer, and so located as to bring all the weight upon the traction wheels. A frame formed of wrought-iron sills extends from the front of the fire-box to a sufficient distance to the rear of the same, where it supports the platform for the driver and fireman, the coal-bunkers and tool-box, and underneath these a water tank. This wrought-iron frame is carried by heavy springs, and supports the side frames of cast-iron, one on each side of the fire-box. These side frames on their lower sides have openings or pedestals similar to a locomotive frame, in which are held the boxes or bearings through which the main axle passes, revolving similarly to those of a locomotive, and in which the boxes are allowed lateral movement without causing any jar to the boiler or machinery when passing over rough or uneven roads. On the upper sides of these frames are carried the bearings for the counter-shaft and crank-shaft, which latter are so formed by a casting as to connect the side frames rigidly together at the top. By this arrangement the entire weight of the crank-shaft, pillow blocks, fly-wheel and traction gearing is carried by the springs already mentioned. On one end of the counter-shaft is a spur gear wheel driven by a pinion on the crank shaft, just outside of one of the bearings for the same, while on the opposite side and on the counter-shaft is a pinion engaging into the main or driving gear-wheel. This gear turns on a hollow trunnion, fastened on the outside of the housing or side frame and through which the main or driving axle passes, having sufficient room for any extreme vertical movement of the boiler upon the springs when passing over uneven roads.

On the driving axle outside of the main or propelling gear is located the compensating gear, which is of a new construction and is made with inter-meshing spur pinions which gear into internal gear-wheels, one of which is formed on the hub of one of the large driving or propelling wheels, which revolves freely on the axle, while the other is an internal gear wheel keyed to the axle which drives the propelling wheel on the opposite side, it being keyed to the axle. The inter-meshing pinions above referred to are carried in a wheel between the above named internal gear-wheel. The pinions are in pairs. The pairs gear together one-half the width of their face on the wheel which carries them, while the other half gears into internal gear-wheels, accomplishing the same, as does the old bevel wheel compensating gear, and is superior from the fact that there is no side thrust (consuming power) as is the case with bevel gears, thus applying all the power to the gearing in the direction the wheel revolves. This gearing is all inclosed in a dust-proof case.

The improvement consists of a malleable iron ring which is carried between the main and compensating gears, being connected elastically to the main or driving gear by two links or rods diametrically opposite to each other for the forward motion, and two for the backward motion and then similarly connected from the ring to the compensating gear. These links or rods pass through lugs or projections cast on the compensating gear, having sufficient play in the lugs to allow them to move back and forth when the two gear wheels change their positions. The rods or links extend far enough through the lugs to hold a series of rubber pads to take up sudden jars and shocks. The links, by being attached at right angles to each other, connecting the ring to the compensating gear, and this to the main or driving gear, permits of vertical movement of the driving gear, no matter how uneven and rough the road may be, and allows of the full power being applied to the traction wheels, without strain, acting similarly to a universal coupling, the ring having somewhat the movement of a grimble-ring in a surveyor's instrument.



THE PEERLESS TRACTION ENGINE.

The traction wheels are of large diameter and broad face, the tire being fluted to secure better contact with the earth. The felloes are made of malleable iron with pockets or recesses in which are inserted the spokes, and are bolted to the tire. The hub is of cast-iron, surrounded by an iron ring with its outer face tapered, and resting on this ring are the spokes, each being provided with a metal plate or heel. The spokes are retained in place by means of a plate bolted to the sides against the hub. Should any of the spokes become loose, they can be simultaneously set out against the felloes by tightening the bolts in the hub, these drawing up on the tapered ring. By the combination of iron and wood and the securing of quick adjustment when necessary, it is claimed that

this wheel will outwear any other style for the service required.

The motion of the engine is reversed by a new device, using but one eccentric. The advantages claimed over the link motion and all other reversing devices are, that no part of it is in action, except when in the act of reversing, which makes it more durable, giving no trouble to the operator, because requiring no adjusting. It is easy to operate, there being no danger whatever in doing so, even with a full pressure of steam on the valve.

The boiler is made with a crown-sheet sloping toward the rear, and so arranged as to have it always covered with water when running down hill, and is provided with a large dome, which, in connection with a dry pipe, insures dry steam whether going up or down hill. A brake is used by which the engineer can perfectly control the momentum of the engine. A steering attachment is provided, and this, together with the reverse gear blower, throttle, cylinder cocks, grate-bar, ash-pan drop, and all parts requiring the attention of the engineer, is within easy reach as he stands on the platform.

This engine is protected by letters patent granted to Mr. F. F. LANDIS, and is manufactured by The Geiser Manufacturing Company, of Waynesboro, Penn.

ORGANIZATION.

H. J. JEWETT has been elected president, and G. B. Smith vice-president of the Chicago and Atlantic Railroad Company. The directors elected in place of others who retired are: J. H. Adams, C. C. Waite, T. A. Lewis and J. R. Townsend.

THE directors of the Mobile and Ohio Railroad Company, elected on the 25th ult., are: W. Butler Duncan, Cornelius H. Clark, Adrian Iselin, Jr., Jacob Hays, James H. Fay, W. H. Hays, A. L. Rines, Moses Waring, Henry Hall, W. H. Pratt, August Belmont, Jr., E. L. Russell and S. P. McMahon.

AT the annual meeting of the stockholders of the Mississippi and Tennessee Railroad Co., held on the 24th ult., the old board of directors was re-elected, with the exception of Calvin F. Vance, who replaces the late H. S. McComb. F. M. White was elected president; S. H. Lamb, secretary. M. Burke was re-elected superintendent.

AT a meeting of the stockholders of the South Tredegar Iron and Nail Company, in Chattanooga, Tenn., on the 21st ult., H. L. Fox, of St. Louis, was elected president, and J. M. Duncan vice-president and manager. It was decided to increase the stock to $200,000, and the capacity of the mill will be largely increased. It now employs 350 hands.

THE directors of the Union Ferry Company (New York and Brooklyn) elected on the 22d ult., are: Henry E. Pierrepont, Nathan D. Morse, Charles E. Bill, Abiel A. Low, Horace B. Claflin, Samuel McLean, James S. T. Stranahan, Simeon B. Chittenden, James How, Walter N. Degrauw, Byran H. Smith, Ripley Ropes, Peter C. Cornell, Isaac Hall, William A. Perry.

AT the annual meeting of the stockholders of the Charlottesville and Rapidan Railroad Company, in Alexandria on the 18th ult., the following directors were elected: Alfred Earnshaw, L. W. Reid, W. H. Marbury, R. T. W. Duke, R. F. Mason, Thos. P. Wallace and John S. Barbour. L. W. Reed was unanimously elected president and J. S. B. Thompson secretary and treasurer.

THE stockholders of the Highland Street Railway Company, at their annual meeting in Boston on the 21st ult., re-elected the old board of directors, as follows: Donald Kennedy, Samuel Little, Jacob Pfaff, Joseph H. Chadwick, Moody Merrill, S. S. Rowe, Charles J. Hayden, Henry Pfaff. At a subsequent meeting Moody Merrill was re-elected president, Samuel Little treasurer and John L. Swift clerk.

THE stockholders of the Wilmington, Columbia and Augusta Railroad Company held their annual meeting in Wilmington, N. C., on the 21st ult., and elected the following board of directors: Wm. T. Walters, S. M. Shoemaker, B. F. Newcomer, George C. Jenkins, Enoch Pratt, J. Don Cameron, George S. Brown, H. B. Plant, R. R. Bridgers and H. B. Short. At a subsequent meeting of the directors, R. R. Bridgers was elected president, and W. T. Walters vice-president.

AT the annual meeting of the stockholders of the Wilmington and Weldon Railroad Company, held at Wilmington, N. C., on the 21st ult., the following directors were elected: Wm. T. Walters, B. F. Newcomer, Samuel M. Shoemaker and H. Walters of Baltimore; H. B. Plant, of New York; R. R. Bridgers, A. J. De Resset and Donald McRae, of Wilmington; E. B. Borden, of Goldsboro; W. H. Willard, of Raleigh, and George Howard, of Tarboro. The officers are: R. R. Bridgers president, and B. F. Newcomer vice-president.

THE stockholders of the Memphis and Charleston Railroad Company met in Memphis on the 22d ult., and elected the following board of directors: Jere Baxter, G. M. Fogg, of Nashville; T. W. Evans, H. E. Garth, Simon Borg, of New York; Samuel Tate, Jr., Thomas R. Sharp, Napoleon Hill, R. D. Frazer, J. A. Hayes, Jr., W. M. Farrington, of Memphis, Tenn., W. R. Rison, of Huntsville, Ala., and John S. Wilkes, of Pulaski, Tenn. The board organized by electing Jere Baxter president, Thomas R. Sharp vice-president, and S. R. Cruse secretary.

THE Anglesea Railroad Company was organized in Camden, N. J., on the 22d ult., and the following directors elected: John T. Ryon, Frederick E. Swope, George W. Reed, Marmaduke B. Taylor, Ebenezer Westcott, Josiah S. Hackett and John J. Burleigh. The following officers were chosen: President, Frederick E. Swope; secretary and treasurer, George W. Reed; solicitor, Marmaduke B. Taylor, superintendent, Ebenezer Westcott. The route of the road has already been surveyed and graded and the ties procured. It will begin at a point on the West Jersey Railroad, about one mile below Cape May Court-House Station, and extend in a southeasterly direction to Anglesea, on the "Five-Mile Beach." The amount of $2,000 per mile, according to law, was deposited with the State Treasurer on the 20th ult., and it is expected the road will be completed within a short time.

AT the annual meeting of the New York, Lake Erie and Western Railroad Company, held at the office of the company in this city on the 28th ult., the following gentlemen were elected directors for the ensuing year: Theron R. Butler, Charles Dana, Thomas Dickson, Harrison Durkee, R. Suydam Grant, Hugh J. Jewett, John Taylor Johnston, Edwin D. Morgan, William L. Strong, Jacob H. Schiff, James J. Goodwin, and John Frederick Pierson, of this city; F. N. Drake, Corning, N. Y.; Solomon S. Guthrie, Buffalo, N. Y.; Cortlandt Parker, Newark, N. J.; Homer Ramsdell, Newburg, N. Y., and J. Lowber Welsh, Philadelphia, Penn. The board is the same as that of last year, with the addition of Messrs Goodwin and Pierson, of this city, who were chosen to fill vacancies existing. The board authorized the payment of the interest on the income bonds and a dividend of six per cent on the preferred stock for the year 1882.

The Deepest Coal Mine in America.

THE deepest coal mine in this country is at Pottsville, Penn. The shaft is 1,576 feet deep. From its bottom, almost a third of a mile down, 200 cars, holding four tons each, are lifted every day. They are run upon a platform, and the whole weight of six tons is hoisted at a speed that makes the head swim, the time occupied in lifting a full car being only a little more than a minute. The hoisting and lowering of men into coal mines is regulated by law in that State, and only ten can stand on a platform at once under penalty of a heavy fine. However, carelessness cannot be prevented, and unaccustomed visitors are appalled by it. "A person of weak nerves," says a correspondent, "should not brave the ordeal by descending the Pottsville shaft. The machinery works as smoothly as a hotel elevator, but the speed is so terrific that one seems falling through the air. The knees after a few seconds become weak and tremulous, the ears ring as the drums of these organs are forced inward by the air pressure, and the eyes shut involuntarily as the beams of the shaft seem to dash upward only a foot or two away. As one leaves the light of the upper day the transition to darkness is fantastic. The light does not pass into gloom in the same fashion as our day merges into night, but there is a kind of phosphorescent glow, gradually becoming dimmer and dimmer. Half way down you pass, with a roar and sudden crash, the ascending car; and at last, after what seems several minutes, but is only a fraction of that time, the platform begins to slow up, halts at a gate, and through it you step into a crowd of creatures with the shapes of men, but with the blackened faces, the glaring eyes, and wild physiognomies of fiends."

A GOOD woman who hates tobacco gave her husband some morphine to cure him of his bad habit. The result was quick and satisfactory, and her neighbors say she looks well in black.

The Stock Exchanges and Money Market.

New York Stock Exchange.

Closing Prices for the week ending Nov. 29.

	Th.23.	F.24.	Sat.25.	M.27.	Tu.28.	W.29.
Adams Express	.....	135	.....	.....	.....	.....
Albany and Susq.	.....	.....	.....	.....	.....	.....
1st mortgage	.....	.....	.....	.....	.....	.....
2d mortgage	.....	.....	.....	.....	.....	.....
American Express	93½	95	.....	95	.....	95
Burl., C. R. & Nor.	.....	.....	.....	.....	.....	79
1st mortgage 5s	102½	....	.....	102	102	102½
Canada Southern	64⅝	63¾	65	66	67⅝	67
1st mortgage guar	93⅛	93	93⅜	93½	93⅜	94⅛
Central of N. Jersey	66	65	66¾	66¾	69¼	71⅜
1st mort. 1890	116	.....	.....	.....	.....	116⅛
7s, consol. ass	109⅛	.....	.....	.....	.....	109
7s, convertible ass.	.....	.....	.....	.....	.....	.....
7s, Income	.....	.....	.....	.....	.....	.....
Adjustment	105⅝	.....	.....	.....	.....	.....
Central Pacific	85	85	85⅛	86	87⅞	87⅛
6s, gold	.....	.....	.....	.....	115	.....
1st M. (San Joaq)	.....	.....	.....	.....	.....	.....
1st M. (Cal. & Or.)	.....	.....	.....	.....	.....	.....
Land grant 6s	.....	104	.....	.....	.....	.....
Chesapeake & Ohio	23	22⅜	.....	23	22¾	.....
1st pref	33	31½	31¾	33	34	34
2d pref	24¾	.....	.....	.....	.....	.....
1st mort., series B	86	86	86¼	85	.....	85
Chicago and Alton	132	129⅛	129¾	132⅛	132	133
Preferred	.....	.....	.....	.....	.....	.....
1st mortgage	.....	.....	.....	.....	.....	.....
Sinking Fund	.....	.....	.....	.....	.....	.....
Chi., Bur. & Quincy	123¾	123	124⅛	125¼	128	125½
7s, Consol. 1903	.....	.....	.....	.....	.....	.....
Chi., Mil. & St. Paul	101	98⅞	100¼	103¾	104	103
Preferred	119	116¾	118⅜	120⅛	120	120
1st mortgage, 8s	.....	.....	.....	.....	.....	.....
2d mort., 7 3-10s	.....	.....	.....	.....	.....	.....
7s, gold	.....	.....	.....	.....	.....	.....
1st M. (La. C. div)	.....	.....	.....	.....	.....	.....
1st M. I. & M. div.)	.....	.....	.....	.....	.....	.....
1st.M. (I. & D. ext.)	.....	.....	.....	.....	.....	.....
1st M. (H.&D. div.)	.....	.....	.....	.....	.....	.....
1st M.(C. & M.div.)	.....	.....	.....	.....	.....	126¼
Consolidated S. F.	.....	.....	124½	.....	.....	.....
Chi. & Northwestern	133⅛	131⅛	133¼	135¾	136½	136
Preferred	152¾	150	149⅞	151¾	154	155
1st mortgage	.....	.....	.....	.....	.....	.....
Sinking Fund 6s	.....	.....	109⅜	.....	.....	.....
Consolidated 7s	131	....	130	.....	.....	.....
Consol. Gold bo'ds	.....	127⅛	.....	128⅜	128	.....
Do. reg	.....	.....	.....	128	.....	.....
Chi., R. Isl. & Pac.	125⅛	123⅛	125⅛	126¾	128¼	128
6s, 1917, C	.....	.....	.....	.....	.....	.....
Clev., Col., Cin. & Ind.	74⅛	72½	73	73	.....	75
1st mortgage	.....	.....	.....	.....	.....	.....
Clev. & Pittsburg gr.	139	.....	.....	139	.....	.....
7s, Consolidated	....	139	....	124	.....	.....
4th mortgage	.....	122½	.....	.....	.....	.....
Col., Chi., & Ind. Cent	5⅞	5⅛	5⅝	6¼	5¾	5
1st mortgage	121	.....	.....	.....	.....	.....
2d mortgage	.....	.....	.....	.....	.....	.....
Del. & Hud Canal.	108⅛	107⅞	108	106¾	107½	108¼
Reg. 7s, 1891	.....	.....	.....	116	.....	.....
Reg. 7s, 1884	.....	.....	.....	.....	.....	.....
7s, 1894	.....	....	113½	.....	.....	103½
Del., Lack. & Western	125¾	125½	126	125¾	126	127⅝
2d mortgage 7s	.....	.....	.....	.....	.....	.....
Consol. 1907	.....	.....	.....	.....	.....	.....
Erie Railway	....	.....	.....	.....	.....	.....
1st mortgage	.....	.....	.....	.....	.....	.....
2d mort. 5s, ext.	.....	.....	.....	.....	.....	.....
3d mortgage	.....	.....	102	.....	.....	.....
4th mort. 5s, ext.	.....	.....	.....	107½	.....	107⅛
5th mortgage	.....	.....	.....	.....	.....	.....
7s, Consol. gold	....	.....	.....	.....	126½	.....
Great West. 1st mort	.....	.....	.....	.....	.....	.....
2d mortgage	.....	.....	.....	.....	.....	.....
Hannibal & St. Jo.	.....	.....	.....	.....	.....	.....
Preferred	.....	.....	.....	.....	.....	.....
8s, Convertible	105	.....	.....	.....	.....	.....
Houston & Tex. Cen	70	70	.....	72	73	73⅛
1st mortgage	.....	.....	109	.....	.....	110
2d mortgage	.....	.....	.....	.....	.....	.....
Illinois Central	144	142	143	144⅞	144½	145
LakeShore&MichSo	111¾	111¼	112½	111⅞	113¾	113⅞
Consol. 7s	.....	.....	.....	.....	.....	.....
Consol. 7s, reg	.....	.....	.....	.....	.....	.....
2d Consolidated	.....	.....	.....	.....	.....	.....
Lsh. & W. B. con. ass	102	.....	101½	.....	102	102
Long Dock bonds	....	.....	.....	122	.....	.....
Louisville & Nash.	49¾	49	50	50¾	51½	52
7s, Consolidated	.....	.....	.....	.....	.....	.....
Manhattan	.....	.....	43	44	.....	.....
1st pref	85	.....	.....	.....	85	.....
Met. Elevated	87	85	.....	84	.....	.....
1st mortgage	.....	100	.....	99¾	99⅛	99¾
Michigan Central	95	94½	95⅛	96½	97¾	97¼
7s, 1902	122	.....	.....	.....	.....	.....
Morris & Essex	124	.....	124	.....	.....	124
1st mortgage	135	.....	.....	.....	.....	.....
2d mortgage	.....	.....	.....	.....	.....	.....
7s of 1871	.....	.....	.....	.....	.....	.....
7s, Convertible	...	.....	.....	.....	.....	.....
7s, Consolidated	.....	.....	.....	...	...	124½
N. Y. Cen. & Hud. R.	126¾	126¾	128	128½	130¾	130¾
6s, S. F. 1883	100½	.....	.....	.....	.....	....
6s, S. F., 1887	...	.....	.....	109	.....	.....
1st mortgage	.....	.....	132½	.....	.....	.....
1st mortgage, reg.	....	.....	.....	.....	.....	.....
N. Y. Elevated	.....	....	.....	.....	.....	.....
1st mortgage	114½	.....	.....	.....	115	.....
N. Y. & Harlem	.....	.....	.....	.....	.....	.....
Preferred	.....	.....	.....	.....	.....	.....
1st mortgage	.....	.....	.....	.....	.....	.....
1st mortgage, reg	....	.....	.....	.....	.....	.....
N. Y. Lake Erie & W	35¼	35	35⅞	36⅜	37	36⅞
Preferred	80½	.. .	81	82⅛	85⅜	84¼
2d Consolidated	.....	98½	98	98¾	100¼	100
New 2d 5s fund	.....	.....	.....	97⅛	97	.....
N. Y., N. Hav'n & Hart	.....	184	.....	185	.....	.....
North Mo. 1st mort	.....	.....	....	.....	.....	.....
Northern Pacific	43¾	46½	43	44⅛	44⅝	45¼
Preferred	93¼	92¾	93¼	94¼	95	95⅞
Ohio & Mississippi	33⅛	31	31⅛	34⅞	34⅛	34⅝
Preferred	.....	.....	.....	.....	.....	.....
2d mortgage	.....	.....	.....	.....	.....	.....
Consolidated 7s	117	.....	.....	.....	.....	.....
Consol. S. Fund	.....	.....	.....	.....	.....	.....
Pacific Mail S. S. Co	36	32¾	35	34⅞	35	36
Pacific R. R. of Mo.	.....	.....	.....	.....	.....	.....
1st mortgage	.....	106	.....	.....	.....	.....
2d mortgage	110⅜	.....	.....	.....	.....	.....
Panama	.....	.....	.....	.....	.....	.....
Phila. & Reading	49⅜	48¼	49⅝	50¾	51⅜	52
Pitts, Ft. W. & Chi. gtd	.....	.....	135	.....	134	. ...
1st mortgage	137⅛	.....	.....	.....	.....	.....
2d mortgage	.....	.....	.....	.....	.....	.....
3d mortgage	.....	.....	.....	.....	.....	.....
Pullman Palace Car	124⅛	121	120¼	122⅛	124½	125
Quicksil'r Min'g Co	.....	.....	.....	.....	.....	.....
Preferred	44	.....	.....	.....	44	.....
St. Louis & San Fran	32	31	32⅜	33	.....	.....
Preferred	53¾	51	49⅜	51	51	53
1st Preferred	91	93	90	92	92	.....
St. L., Alt'n & T. H.	42	41	41	43	44½	44
Preferred	.....	83⅛	83¾	85	86⅜	88⅛
1st mortgage	.....	.....	.....	.....	116	....
2d mort. pref	.....	.....	.....	.....	.....	.....
Income bonds	.....	.....	.....	.....	.....	.....
St. L., Iron Mt. & S.	.....	.....	.....	.....	.....	.....
1st mortgage	.....	.....	.....	115½	.....	.....
2d mortgage	104	.....	.....	....	102¾	102¾
Toledo and Wabash	....	.....	.....	.....	.....	.....
1st mortgage	.....	106⅛	....	.....	.....	.....
2d mortgage	.....	96	....	....	.....	.....
7s, Consolidated	.....	.....	.....	.....	.....	.....
St. Louis Division	.....	.....	.....	.....	.....	.....
Union Pacific	105¾	103¾	102⅛	104	104	104⅜
1st mortgage	115¼	.....	115½	.....	115	.....
Land Grant 7s	110⅜	.....	.....	.....	.....	110⅛
Sinking Fund 8s	117⅜	117	117	116	116	116¼
United States Ex	64	65	.....	62	.....	.....
Wabash, St. L. & Pac	29⅛	28⅛	29¼	29¾	30¼	31⅛
Preferred	53¾	51⅞	53	53⅞	54⅞	54⅞
New mort. 7s	.....	.....	.....	.....	.....	.....
Wells-Fargo Ex	.....	129	129	127	128	129½
Western Pacific b'ds	.....	111⅞	.....	.....	.....	.....
Western Union Tel.	80¾	79¾	80½	81¾	81⅞	82⅛
7s, S. F conv., 1900	.....	....	.....	.....	.....	.....
FEDERAL STOCKS:—						
U. S. 4s, 1907, reg	119¼	119	. ...	118¾	....	119⅛
U. S. 4s, 1907, coup.	119¾	.. ..	118⅞	.....	118⅞	119⅛
U. S. 4½s, 1891, reg.	112	.....	111⅞	.....	...	.....
U. S. 4½s, 1891, coup	.....	... .	....	113	.....	....
U. S. 5s, cont'd at 3⅛	.....	.....	.....	.....	.....	.....
U. S. 3s, reg	.....	101¾	.....	101⅞	102	102
Dt. of Col. 3-65s, reg	.....	.....	.....	.....	.....	.....
Dt. of Col. 3-65s, coup	.....	.....	.....	.....	.....	.....

Boston Stock Exchange.

Closing Prices for the Week Ending Nov. 29.

	Th.23.	F.24.	Sat.25.	M.27.	Tu.28.	W.29.
Atch., Top. & San. Fe.	83	83	83¾	83¾	85¼	86¼
1st mortgage	.....	118⅞	.....	118⅞	.....	.....
Land Grant 7s	.....	.....	.....	.....	.....	.....
Boston & Albany	172½	173⅛	....	173½	173¾	173
Boston and Lowell	98	.....	.....	99	.....	98⅛
Boston & Maine	.....	.....	149	147½	....	146½
Boston & Providence	160	.....	160¼	.....	160¼	.....
Bos'n, Hart. & Erie 7s	.....	44	....	.....	.....	.....
Burl. & Mo. R. L. G. 7s	115¼	.....	.....	.....	.....	.....
Burl. & Mo. R. in Neb	.....	.....	.....	.....	.....	.....
6s, exempt	.....	112½	.....	.....	.....	.....
4s	.....	...	.....	.....	.....	.....
Chi., Burl. & Quincy	124¾	123⅜	124¾	125½	125	125¾x
Cin., Sand. & Clev ($50)	26	.....	25	.....	25	.....
Concord ($50)	.....	....	101½	.....	.....	.....
Connecticut River	.....	.....	.....	.....	.....	.....
Eastern	.....	.....	31½	.....	30	.....
New 6s, Bond	108¼	108¼	108¼	108¼	108¼	108¼
Fitchburg	132	132	.....	.....	.....	132½
N. Y. & New England	45	44	44¼	45½	46	48
7s	115⅞	115	.....	114⅜	114⅞	115
Northern N. H.	.....	.....	.....	.....	.....	.....
Norwich & Worcester	.....	.....	.....	.....	.....	.....
Ogden & Lake Cham	.....	.....	.....	.....	.....	.....
Old Colony	138¼	.....	.....	137	137	.....
Ph., Wil. & Balt. ($50)	.....	.....	.....	.....	.....	.....
Portl'd, Saco & Ports	.....	.....	.....	....	.....	.....
Pueblo & Ark Val 7s	.....	.....	112	.....	.....	.....
Pullman Palace Car	124	123	.....	123	124	.....
Union Pacific	105⅞	103¾	101⅝	102⅞	103¾	104¾
6s	.....	.....	.....	.....	.....	112⅜
Land Grant 7s	.....	.....	.....	.....	.....	.....
Sinking Fund 8s	.....	.....	.....	.....	.....	.....
Vermont & Mass	.....	.....	.....	.....	131	.....
Worcester & Nashua	.....	.....	.....	58	.....	....
Cambridge (Horse)	.....	.....	.....	.....	.....	.....
Metropolitan (Horse)	....	.....	.....	76½	.....	75
Middlesex (Horse)	.....	.....	.....	.....	.....	.....
Cal. & Hecla Min'g Co	250	249¾	249½	250	.....	249
Quincy	64⅛	64	63¼	61	58½	60¼

Philadelphia Stock Exchange.

Closing Prices for the Week Ending Nov. 28.

	W.22.	Th.23.	F.24.	Sat.25.	M.27.	Tu 28.
Allegh'y Val. 7 3-10s	.....	.....	.....	.....	.....	.....
7s, Income	.....	.....	.....	.....	.....	.....
Buff., Pitts & West.	17½	17½	17¾	17¾	17⅞	18
Camd'n & Am. 6s, '83	.....	101¾	.....	.....	.....	.....
6s, 1889	....	....	.....	.....	.....	.....
Mort. 6s, 1889	.....	112	....	.....	.....	.....
Camden & Atlantic	.....	.....	.....	.....	.....	.....
Preferred	....	.....	.....	... .	.....	.....
1st mortgage	.....	.....	.....	.....	.....	.....
2d mortgage	.....	.....	.....	.....	.....	.....
Catawissa	.....	.....	.....	.....	20½	.....
Preferred	....	.....	.....	53	.....	53
2d pref	.....	52	52	52	52	52
7s, new	.....	.....	.....	.....	.....	.....
Del. & Bound Brook	.....	.....	.....	.....	.....	.....
7s	.....	125⅜	125⅛	125⅛	.....	.....
Elmira & Williamsp't	.....	.....	.....	.....	.....	.....
Preferred	.....	.....	.....	.....	.....	.....
Hunt. & B. Top Mt.	.....	.....	.....	.....	.....	16
Preferred	....	...	.....	.....	.....	.....
2d mortgage	.....	.....	.....	.....	.....	.....
Lehigh Navigation	38¾	38⅞	39	40	40	40
6s, 1884	.....	.....	103	.....	103¼	.....
Gold Loan	.....	.....	.....	.....	.....	.....
Railroad Loan	.....	.....	.....	.....	115	.....
Conv. Gold Loan	....	....	.....	.....	.....	.....
Consol. Mort, 7s	.....	.....	.....	.....	.....	.....
Lehigh Valley	64¼	64¼	64⅝	65	64½	64
1st mort. 6s, coup	....	.....	.....	.....	.....	.....
1st mort. 6s, reg	.....	.....	.....	.....	.....	.....
2d mort. 7s	132	.....	.....	.....	.....	.....
Consol mort. 6s	.....	.....	.....	.....	.....	.....
Consol. mtg. 6s, reg	....	.....	119⅛	.....	.....	.....
Little Schuylkill	.....	.....	.....	.....	.....	.....
Minehill & Sch. Hav'n	.....	.....	62⅞	62¾	62¾	.....
North Pennsylvania	64	64	64⅛	64	.....	64
1st mortgage 6s	.....	.....	.....	.....	.....	.....
2d mortgage 7s	.....	.....	.....	.....	.....	.....
Genl. mtg. 7s, coup	.....	.....	.....	.....	.....	.....
Genl. mtg. 7s, reg	....	.....	.....	... .	.....	... .
Northern Central	55	55	.....	55½	.....	.....
5s	.....	.....	.....	98½	.....	.....
Northern Pacific	44	43⅜	42¾	43½	44⅛	44⅜
Preferred	94⅛	93⅜	92¾	93½	94⅜	94¾
Pennsylvania R. R.	58	58⅛	58⅛	58⅜	60	60⅛
1st mortgage	.....	.....	.....	.....	.....	.....
Gen'l mort	.....	.....	.....	.....	.....	125
Gen'l mort reg	.....	.....	.....	125	.....	...
Consol. mort. 6s	.....	.....	.....	.....	.....	.....
Consol. mort. reg	....	.....	119½	.....	.....	.....
Pa. State 5s, new	.....	.....	.....	.....	.....	.....
do 4s, new	.....	.....	.....	.....	.....	.....
do 3½s, 1912	.....	.....	.....	.....	.....	.....
Phila. & Reading	25¼	24¼	24¼	24⅝	25	25⅜
1st mortgage 6s	.....	.....	.....	.....	.....	.....
7s of 1893	.....	.....	.....	.....	.....	.....
7s, new convert	.....	65	66	65¾	.....	66
Consol. mort. 7s	.....	.....	.....	.....	.....	.....
Consol. mort. reg	.....	.....	.....	.....	66	.....
Gen'l mort. 6s	92¾	93	92⅜	92⅜	93	92¾
Def. Income bonds	.....	.....	.....	.....	.....	.....
Philadelphia & Erie	.....	....	.....	.....	19	19
1st mortgage 5s	.....	101¾	.....	.....	.....	.....
2d mortgage 7s	.....	.....	114⅜	.....	.....	.....
Pittsb., Cin. & St. L. 7s	.....	.....	.....	118	.....	120
Pitts., Tit. & Buff. 7s	.....	.....	.....	.....	.....	.....
Schuylkill Navi't'n	. ..	.. ..	.. ..	.....	.....	.....
Preferred	.....	.....	.....	.....	.....	.....
6s, 1897	.....	.....	.....	.....	.....	.....
6s, 1907	89	.....	.....	.....	.....	.....
United Co. of N. J.	.....	189	189	.....	.....	188¾
Hestonville, (Horse)	.....	....	.....	15⅜	.....	....
Chestnut & Walnut)	.....	.....	....	.....	.....	.....

Baltimore Stock Exchange.

Closing Prices for the Week Ending Nov. 28.

	W. 22.	Th. 23.	F. 44.	Sat. 25.	M. 27.	Tu. 28.
Baltimore & Ohio....	193½	.....	193¼	193	.....	.....
6s, 1885.....	.....	.....	.....	.....	.....	.....
Central Ohio ($50)...	.....	.....	.....	....	.....	.....
1st mortgage.....	.....	.....	.....	.....	.....	.....
Marietta & Cincin'ti.	.....	.....	.....	.....	.....	.
1st mortgage, 7s..	.....	.....	126	127	.....	128
2d mortgage, 7s...	99	99⅛	99¼	99⅛	99¾	.....
3d mortgage, 8s..	55	.....	55	54	54⅜	.....
Northern Cen. ($50).	55⅛	55	.....	55	55⅛	55
2d mort. 6s, 1885..	105¼	.....	...	.....	.....	.....
3d mort. 6s, 1900..	.....	.....	.....	.....	.....	.....
6s, 1900, gold.....	.....	.....	.....	....	.....	.....
6s, 1904, gold.....	. ...	.....	.....	.....	.....	.....
Pitts. & Connelsv. 7s.	122	.....	122	121⅛	121	.....
Virginia 6s Consol..	60⅛	61¼	61⅛	61¼	62⅛	62⅛
Consol. coupons...	65¼	65	65	.....	.....	.....
10-40 bonds.....	43	45	42¾	44¼	43⅛	43⅞
Def'd Certificates	.....	.....	.....	.....	.....	.....
New 3s.....	.....	.....	.....	.....	47	.....
Western Maryland..	.....	.....	.....	.....	.. ..	.....
1st M., end. by Balt	.....	.....	.....	.....	.....	.....
2d M., do.	.....	.....	.....	....	.....	.. ..
3d M., do.	.....	.....	.....	....	.....	.....
1st M., unendorsed	....	.....	.....	...	.....	109⅛
2d M., end. Wash Co	.....	.....	.....	.....	.....	.....
2d M., preferred...	.....	.....	.....	.....	.....	.....
City Passenger R. R.	.....	.....	.....	.....	.....	.....

London Stock Exchange.

	Closing Prices— Nov. 17.		Nov. 10.	
Baltimore and Ohio 5s, 1927.....	108	110	108	110
Central of N. J., $100 shares.....	80	85	80	85
Do. consol. mort.....	110	112	110	112
Do. Income Bonds.....	88	92	88	92
Central Pacific of Cal., $100 shs..	91½	92½	91	92
Do. 1st mort. 6s, 1895-'98.....	117	119	117	119
Det., G'd Haven & Mil. Equip bds.	116	118	116	118
Do. Con. M. 5p.c., till '83 after 6p.c.	115	117	114	116
Illinois Central $100 shares.....	151⅛	153⅛	151⅛	152⅛
Do. S. F. 5s, 1903.....	104	106	104	106
Lehigh Valley Cons. mort. 1923...	112	116	115	119
Louisville and Nashville mort. 6s	89	91	91	93
Do. capital stock $100 shares...	52	54	50⅛	51⅛
N. Y. Cen. & Hud. R. mort. bonds.	134⅛	135⅛	132	136
Do. $100 shares.....	136	137	135	136
Do. mort. bonds (stg.).....	122	124	122	124
N. Y. Lake Erie & West. $100 shs.	39¾	40¼	39⅛	39⅛
Do. 6 p. c, pref. $100 shares....	86	88	84	86
Do. 1st Con. Mort. bonds (Erie).	127	130	127	130
Do. do. Funded Coupon bonds.	124	127	124	127
Do. 2d Consol. Mort. bonds....	99	101	101⅛	102⅛
Do. do. Funded Coupon bonds.	97	99	99	101
N. Y., Pa. & Ohio 1st mort. bonds.	51	52	49	50
Do. Prior Lien bonds (sterling).	100	105	100	105
Pennsylvania $50 shares.....	61¾	62¼	64¼	64¾
General Mortgage.....	123	125	122	125
Phil. & Erie Gen. mort. 6s, 1920...	117	119	117	119
Philadelphia & Reading $50 shs..	29¼	29¾	29	29⅛
General Consol Mortgage.	117	119	117	119
Do. Improvement Mortgage....	103	105	103	105
Do. Gen. Mtg. '74, ex-def'd coup.	96	98	96	98
St. L. Bridge 1st mort. gold bond.	121	123	121	123
Do. 1st. pref. stock.....	94	98	94	98
S. P'fic of Cal., 1st mort 6s, 1905-6.	106⅛	107⅛	106⅛	107⅛
Union Pacific 1st mtg. 6s, 1896-9..	117	119	117	119
Wabash, St. L. & P. $100 shares..	33	36	32	34
Do. $100 pref shares...	60⅛	61⅛	60	61
Do. gen. mort. bonds.....	82	84	84	87

AMERICAN RAILROAD JOURNAL.

Financial and Commercial Review.

WEDNESDAY EVENING, November 29, 1882.

CALL money on stock collaterals this morning was 5@6 per cent, after 1 o'clock it was 4 per cent, and in the last hour 3½ per cent.

The posted rates for bankers' bills were 4.80@4.84, with actual business at 4.79¼@½ for 60 days, 4.83¼@½ for demand, 4.84@½ for cables. Commercial bills were 4.77½@4.78. Francs, 5.25@5.21¾. Reichmarks, 94¼@⅜ and 95⅛@¼. Guilders, 39⅝ and 39⅞.

The Controller of the currency at Washington reports that three National banks were placed in the hands of receivers during the year ended November 1, namely: The Mechanics' National of Newark, N. J., the Pacific National of Boston, and the First National of Buffalo, N. Y. The affairs of ten national banks were closed up during the year. Since the beginning of the national banking system eighty-seven banks have been placed in the hands of receivers and 420 have voluntarily closed business. The losses to creditors during this period of nearly twenty years is, as far as can be ascertained, about $7,000,000. About 70 per cent of the proved claims against insolvent banks have been paid and thirty-two of them paid their indebtedness in full.

The negotiations for the settlement of the long-standing differences between the Vermont Central and the Vermont and Canada railroads have been brought to a successful termination. At a meeting of the directors of the Central Vermont Railroad Company, held in Boston on the 22d inst., it was unanimously voted to accept the terms of the compromise, which provide for the issue of $7,000,000 first mortgage five per cent bonds on the Vermont and Canada and Vermont Central railroads, all their equipment and other property. These bonds are to run thirty years from July, 1883, interest to begin in April 1883, and to be payable thereafter in July and January. Of these bonds $1,000,000 will be used to take up the $3,000,000 stock of the Vermont and Canada, at 33⅓ cents on a dollar. The holders of the different classes of Vermont and Canada bonds, including equipment, guaranteed, income and extension, and Stanstead, Shefford and Chambly bonds, amounting to a total of $4,357,000, will receive dollar for dollar in the new five per cents without back interest. Another million of the $7,000,000 will be used to cancel the floating debt, and the remaining $643,000 will liquidate the present indebtedness of the Central Vermont Railroad. There will also be issued $750,000 in preferred stock, which will be given in exchange for the first and second mortgage bonds of the Vermont Central Railroad at the rate of 20 and 10 cents on a dollar respectively, without interest.

The above plan of compromise will become binding when the holders of a majority of all classes of the securities affected shall have assented. The stockholders of the Vermont and Canada authorized a compromise on this basis at a meeting a few weeks ago. The Central Vermont, by its recent action, signified its assent, and individual holders of the Vermont and Canada bonds have acquiesced to make the consummation of the arrangement practically assured. When the terms of adjustment have been fully carried out the Central Vermont will take a lease of the two roads—the Vermont and Canada and the Vermont Central—and will guarantee the payment of the interest on the $7,000,000 of five per cents, and interest on the preferred stock when earned, after the payment of the interest on the bonds, the interest on the preferred stock not, however, to be cumulative. The mortgage of $7,000,000 is to be made to the American Loan and Trust Company of Boston, which is empowered to perfect the title to the property and to exchange the bonds for the old securities. Holders of securities to be exchanged will be required to deposit them with the Trust Company, taking its receipt, and the new bonds will be issued as soon as the necessary assent is given.

The above compromise is to be in full settlement of all existing differences, and the suits pending between the two roads in both the State and Federal courts are to be withdrawn. The new bonds thus become a clean first lien on all the property of the two roads, and will probably rank as a first-class security. The property thus mortgaged is appraised at between $15,000,000 and $20,000,000 total value. Of course this pooling of interests amounts to a virtual purchase of the Vermont Central and the Vermont and Canada roads by the Central Vermont Railroad Co. Legislative sanction would be necessary to a consolidation of charters under one corporative head, but to all intents and purposes the result is the same. The long-pending litigation threatened the utter ruin of all concerned. The Central Vermont trust was unable to make binding contracts with the Grand Trunk Railway Co. on the north or the Boston, Lowell and Concord and the Fitchburg roads on the south. The danger was that the Grand Trunk would secure an other eastern outlet, as it soon must do, and that soon all share in through business would be lost. That would mean disaster to the whole system.

Concerning the relations of the Central Vermont and the Grand Trunk, it is, as has been stated, untrue that a lease of the former to the latter is contemplated. But it is hoped and expected that the Grand Trunk will find its eastern outlet over these lines. The matter could probably be arranged by means of a traffic contract. The Grand Trunk would obtain terminal facilities in Boston over the Boston, Lowell and Concord or the Fitchburg, and it would reach this city via New London. But all arrangements with other roads are matters for the future.

A decision was rendered in the Supreme Court at Washington, on the 27th inst., in the tax case of the United States against the Erie Railway Company—error to the Circuit Court of the United States for the Southern District of New York. This was a suit to recover from the company taxes amounting in the aggregate to £9,300 sterling alleged to be due on certain interest coupons attached to bonds of the company held and owned by non-resident aliens. The Circuit Court held that the company was not liable for the taxes. This Court, however, reversed that judgment, citing "Railroad Company vs. The Collector, 100, United States, 595." The cause is remanded, with directions to enter a judgment in favor o the United States and against the railway company fo the equivalent in lawful money of the United States of the tax of £9,300 sterling, with interest at the rate of six per cent per annum from the several times when the same became due and payable, according to the agreed statement of facts on which the submission was made below. The opinion was delivered by Chief-Justice Waite. Justice Field filed a dissenting opinion. Justices Bradley and Harlan concurred in the judgment, but not in the opinion of the Chief-Justice.

The receivers of the Philadelphia and Reading Railroad give notice that they will purchase December 6, the coupons of the Colebrookdale Railroad Company at the rate of four per cent per annum, and the interest and coupons of the following divisional coal land mortgages at the rates named: Forbes and Delano tract, six per cent; Hartmen & Myer, Reed et al., six per cent; Richard Wood estate, four per cent, and West Point tract, four per cent.

At a meeting of the stockholders of the New York, New Haven and Hartford Railroad Company held at New Haven on the 25th inst., the lease of the Boston and New York Air Line was ratified by a vote of 76,837 to 40. The lease provides an unconditional guarantee by the former of four per cent per annum for ninety-nine years upon the preferred stock of the latter company.

The Secretary of the Treasury sent on the 25th inst. the following dispatch to the Assistant Treasurer in this city: "In lieu of a call for bonds of the five per cent funded loan of 1881, continued at three and one-half per cent by highest numbers at a notice of three months, as required by law, and then in anticipation of payment without rebate of interest, the Secretary of the Treasury will, on the 28th of February next, receive and pay $10,000,000 of those bonds which have not been called for payment, without specifying numbers and without regard thereto, if the holders present them for payment; and he will at any time from now to that date pay that amount of those bonds without rebate of interest, if they are presented at your office."

According to Census Bulletin No. 302 there are 253,840 manufacturing establishments in the United States, with an invested capital of $2,790,223,506. They employ 2,025,279 males above sixteen years of age, 531,753 females above fifteen years of age, and 181,918 children and youths. The annual wages paid aggregate $947,919,674; the material cost $3,394,340,029, and the value of the products is $5,367,667,706.

The Imperial Bank of Canada will pay a dividend at the rate of eight per cent per annum for the current half year on and after January 2 next. The Banque d' Hochelaga will pay a dividend of three per cent for the current half year on and after January 2 next. The Banque de St. Jean will pay the same on same date.

The Post Office Savings Bank of Canada account for October is as follows: Balance in the hands of the Minister of Finance Sept. 30, 1882, $10,123,179.94; deposits in Post Office Savings Banks during month, $624,027; interest allowed to depositors on accounts closed during month, $2,091.82—total $10,749,298.76. Repayments of Post Office Savings Banks during month, $407,880.32; balance at the credit of depositors' accounts, $10,283,483.69; outstanding cheques held by depositors and not presented for payment, $57,934.75—total, as above, $10,749,298.76.

Montreal Saturday market closed with Montreal steady at 200½ asked, 200 bid. Closing prices for sellers and buyers were:—Ontario, 117½, 115¾; Peoples, 87, 85; Molsons, 126, 124; Toronto, 172½, 170; Jacques Cartier, 120 asked; Merchants, 122, 120½; Commerce, 134, 133½; Telegraph, 125½, 124¼; Richelieu, 72¾, 72¼; City Passenger, 127, 125; Gas, 180½, 180; St. Paul and Manitoba, 137, 136.

Morning Sales:—210 Montreal at 200¾; 65 at 200¼; 120 at 200; 4 Molsons at 126; 10 Merchants at 122; 10 Commerce at 133¾; 50 at 123¾; 100 at 133½; 100 at 134; 175 Telegraph at 124¾; 200 Richelieu at 72½; 50 Gas at 179¾;

350 at 180; 100 at 180; 250 St. Paul and Manitoba Railway at 137½ 50 at 137; 300 at 136; 20 at 136½; 50 Northwest Land Co. at 53; 100 at 52.

At the annual meeting of the shareholders of the Canadian Pacific Railway Company, held in Montreal on the 28th inst., it was resolved to increase the capital of the company from $15,000,000 to $100,000,000.

The following quotations of sales of railway and other securities, for the week, are in addition to those given elsewhere in our columns.

New York.—Boston and New York Air Line pref., 78½; Columbus, Chicago and Indiana Central 1st, Trust Co. certif., ass. sup., 116; Chicago, St. Paul and Minneapolis 1st, 110; Cedar Falls and Minnesota, 79; Chicago, St. Paul, Minn. and Omaha, 46¾; do. pref., 104¾; do. consol., 107¾; Central Iowa, 28½; do. 1st, 108½; Chesapeake and Ohio 1st, series A, 104½; do. cur. 6s, 52½; Chicago, Burlington and Quincy 8s, 103¼; do. Denver div, 4s, 83; Chicago, Milwaukee and St. Paul, Southwest div. 1st, 108⅝; do. Chicago and Pacific West div. 1st, 91½; Chicago and Northwestern S. F. 5s, 98¾; Chicago and Eastern Ill. 1st, 98; Dubuque and Sioux City, 87; Denver and Rio Grande, 46½; do. 1st, 107½; do. consol., 95½; Delaware and Hudson 1st, Penn. div., 120; East Tennessee, Virginia and Georgia, 10½; do. pref., 18½; do. 5s, 73½; do. inc., 40; Elizabethtown, Lexington and Big Sandy 6s, 95; Evansville and Terre Haute 1st, 97; Fort Worth and Denver, 38½; Green Bay, Winona and St. Paul, 7; do. 1st, 81; Gulf, Colorado and Santa Fe, 1st, 108; Indianapolis, Decatur and Springfield 1st, 100; Indiana Bloomington and Western, 33; do. 1st, 87; do. Eastern div. 6s, 96; International and Gt. Northern 1st, 102; do. coupon 6s, 82; Joliet and Chicago, 138½; Kansas Pacific 1st consol., 98⅞; do. 6s, 1895, 111; do. 6s, Denver div. ass., 105⅝; Keokuk and Des Moines 1st, 101½; Louisville, New Albany and Chicago, 68; do. 1st, 103½; Long Island, 60; do. consol. 5s, 98¾; Lake Erie and Western, 29¼; Louisville and Nashville, genl. mort. 6s, 99⅞; Manhattan Beach, 16½; Minneapolis and St. Louis, 28; do. pref., 65⅞; do. 2d, 119; Mobile and Ohio, 19¾; do. 1st deben., 80; do. 2d deben., 43½; Missouri, Kansas and Texas, 32; do. consol., 78, 105⅜; do. 2d, 56; do. genl mort. 6s, 85½; Missouri Pacific, 102¾; Memphis and Charleston, 47; Milwaukee, Lake Shore and Western pref., 47¾; do. 1st, 98½; do. inc., 80; Metropolitan Elevated 2d, 86½; New York and Texas Land scrip, 35; New York, Chicago and St. Louis, 14¾; do. pref., 31; do. 1st, 97; Nashville, Chattanooga and St. Louis, 53½; New York, Ontario and Western, 26⅞; Norfolk and Western pref., 52; do. genl. mort., 99½; Northern Pacific 1st, 104; New Orleans Pacific 1st, 85½; Ohio Central, 14; do. inc., 35; do. 1st, 95; Oregon Railway and Nav., 154; do. 1st, 107¾; Oregon Transcontinental, 85; Oregon Short Line 6s, 100; Ohio Southern, 14¼; do. 1st, 83; do. inc., 32; Peoria, Decatur and Evansville, 26¼; do. 1st, 104; Rome, Watertown and Ogdensburgh ext. 5s, 68; Rochester and Pittsburgh, 21¼; do. 1st, 104; Richmond and Alleghany, 17½; do. 1st, 81½; Richmond and Danville, 65; do. 1st, 94; do. deben., 62½; Richmond, Danville and West Point, 29; Rensselaer and Saratoga, 141; Southern Pacific of Cal. 1st, 102½; South Pacific of Mo. 1st, 103½; St. Louis and San Francisco 2d, class B, 89¾; do. C, 90; St. Louis, Kansas City and Northern, R. E. 7s, 105; do. Omaha div. 1st, 105¼; do. St. Charles Bridge 1st, 90; St. Paul and Duluth, 36¼; do. pref., 93; South Carolina 1st, 99; St. Paul, Minn. and Man., 141⅜; do. 1st, 109½; do. 2d, 109¼; do. Dakota ext. 1st, 106½; St. Louis and Iron Mt., 5s, 73; do. Cairo and Fulton 1st, 105¼; do. Ark. Branch 1st, 107½; St. Paul and Sioux City 1st, 111; Texas Central 1st, 104; Texas and Pacific, 38⅜; do. inc. L. G., 57; do. Rio Grande div. 1st, 80¾; Utah Southern ext. 1st, 101½; Wabash, St. Louis and Pacific genl. mort. 6s, 82½; do. Chicago div. 1st, 80¼; do. Toledo, Peoria and Western 1st, 105; Alabama Class A, 83; do. C, 85¼; Arkansas 7s, Central R. R., 11; do. L. R., P. B. and N. O., 22; Georgia 7s, 1886, 105½; do. 7s, new, 107; Louisiana consols., 68; Tennessee 6s, old, 43; do. compromise, 50; American Cable, 67½; Mutual Union Tel., 20; do. 6s, 67; Colorado Coal and Iron, 32¼; do. 6s, 84.

Boston.—Atlantic and Pacific, blocks, 103; do. inc., 20½; Boston Water Power, 3¾; Boston Land, 6¼; Burlington and Missouri River in Neb. 6s, non-exempt, 102; Boston, Revere Beach and Lynn, 116; Boston, Clinton, Fitchburg and New Bedford pref., 132; Chicago, Burlington and Quincy 4s, old, 83¼; do. Denver ext., 4s, 80½; Connotton Valley, 3¾; do. pref., 6; do. 5s, 30; Connecticut and Passumpsic Rivers, 90; Chicago, Milwaukee and St. Paul, Dubuque div. 1st, 101; Flint and Pere Marquette, 20¾; do. pref., 96¾; Iowa Falls and Sioux City, 86½; Kansas City, Fort Scott and Gulf, 74; do. 7s, 110; Kansas City, Topeka and Western, 7s, 118¾; Little Rock and Ft. Smith, 44½; do. 7s, 106; Mexican Central, 20¾; do. blocks No. 3, 89; do. 7s, 69⅞; Marquette, Houghton and Ontonagon, 62; do. pref., 112; Massachusetts Central, 3; do. 6s, 25½; New York and New England 6s, 104¾; New Mexico and Southern Pacific 7s, 112½; Ogdensburg and Lake Champlain, inc., 25; Oregon Short Line 6s, 97½; Republican Valley, 6s, 102; Rutland, 2½; do. pref., 20; do. 6s, 96; Sonora 7s, 103; Summit Branch, 8; Toledo, Cincinnati and St. Louis, 4½; do. 6s, 40; do. Branch inc., 9⅜; Toledo, Delphos and Burlington, Southeast div. 6s, 45; Wisconsin Central, 14; do. 1st, 2d series, 47; Allouez Mining Co., 2⅛; Brunswick Antimony, 10; Franklin, 13; Huron, 2; Napa consol. Quicksilver, 4; Osceola, 34; Pewabic, 10; Sullivan, 1⅛; Silver Islet, 6.

Philadelphia.—Allegheny Comp. 5s, 108⅛; Central Transp., 35; Nesquehoning Valley, 52; Philadelphia, Germantown and Norristown, 109; Pittsburg City 6s, 1913, 108; do. Comp. 5s, 108; Philadelphia and Reading R. R. consol. gold 6s, 114; do. scrip, 94; Pennsylvania and New York Canal 7s, 1896, 122¾; Philadelphia City 6s, 1895; 129¾; do. 6s, 1904, 136; Philadelphia, Wilmington and Baltimore 4s, 92¼; St. Paul and Duluth, 33; do. pref., 94 Texas and Pacific 1st 6s, 104¾; do. consol. mort. 6s, 95; Union and Titusville 7s, 92; Western Pennsylvania 6s, 106; Warren and Franklin 7s, 112. The latest quotations are: City 6s, 108@120; do. free of tax, 127@135; do. 4s, new, 106@114; Pennsylvania State 5s, new loan, 118@119; do. 4s, old, 112@114; do. 4s, new, 116@117; Philadelphia and Reading Railroad, 25⅝@25¾; do. consol. mort. 7s, reg., 122½@; do. gen'l mort. 6s, coupon, 92⅛@93; do. 7s, 1893, 118@119½; do. 7s, new conv., 65@70; United New Jersey R. R. and Canal, 188@189; Buffalo, Pittsburg and Western, 17¾@18; Pittsburgh, Titusville and Buffalo 7s, 95@96; Camden and Amboy mort. 6s, 1889, 111½@112¼; Pennsylvania R. R., 60@60¼; do. general mort. 6s, coupon, 125@125½; do. reg., 124@125; do. consol. mort. 6s, reg., 119@120; Little Schuylkill R. R., 58@59; Schuylkill Navigation pref., 11¼@12¼; do. 6s, 1882, 88@90: Elmira and Williamsport pref., 58@60; do. 5s, —@100; Lehigh Coal and Navigation, 39⅝@39¾; do. 6s, 1884, 103@103¼; do. R. R. loan, 114⅛@115½; do. Gold Loan, 111@112; do. consol. 7s, reg., 117@118; Northern Pacific, 44¼@44½; do. pref., 94¾@94⅞; North Pennsylvania, 64@64½; do. 6s, 106@106; do. 7s, 119@—; do. 7s, General mort. reg., 125@—; Philadelphia and Erie, 18¾@19¼; do. 7s, 114¼@115; do. 5s, 100¼@102; Minehill, 62¼@63; Catawissa, 21@21; do. pref., 53@53¼; do. new pref., 52@52¼; do. 7s, 1900, 118@120; Lehigh Valley, 63¾@64; do. 6s, coupon, 121½@123; do. reg., 119½; do. 7s, reg., 132@132½; do. consol. mort. reg., 119@120; Fifth and Sixth streets (horse), —@190; Second and Third, 110@115; Thirteenth and Fifteenth, 78@80; Spruce and Pine, 42½@44; Green and Coates, 87@88; Chestnut and Walnut, —@93; Germantown, 70@72; Union, 110@111; West Philadelphia, 120@—; People's, 9@10; Continental, 102@105.

Baltimore.—Atlantic Coal, 1.00; Atlanta and Charlotte, 62½; do. 1st, 106; Baltimore City 6s, 1890, 114¼; do. 6s, 1892, 114¼; do. 5s, 1916, 120⅜; do. 5s, 1894, 113; do. 5s, 1885, 109¾; Baltimore and Ohio, 2d pref., 123¾; Canton Co. 6s, 108; Charlotte, Columbia and Augusta, 35; do. 1st, 108; do. 2d, 97½ Columbia and Greenville, 2d, 75; Central Ohio, pref., 55; Louisville water bonds, 109; Maryland Defense 103¾; Ohio and Mississippi, Springfield div. 1st, 113¾; Parkersburg Branch, 9; Richmond and Danville gold 6s, 94; Virginia Midland 2d mort., 108; do. 5th mort., 93½; Virginia 10-40 coupons, 70; Virginia Peelers, 34½; Wilmington, Columbia and Augusta, 108½; Wilmington and Weldon, 117½. The latest quotations are: Atlanta and Charlotte 1st, 105¼@106; Baltimore and Ohio, 193@195; Baltimore City 6s, 1886, 108⅛@110; do. 6s, 1890, 114@114½; do. 5s, 1894.—@113½; do. 5s, 1916, 120¼@120½; Central Ohio 6s, 107@108; Canton Co. 6s, 107¼@110; Citizen's Pass., 18@19; Marietta and Cincinnati 7s, 1891, 127@128¾; do. 7s, 1896, 99½@100; do. 8s, 1890, 54¼@54¾; Northern Central, 56½@57; do. 6s, 1885, 105¼@106; do. 5s, Series B, —@98¼; Ohio and Mississippi, Springfield div. 1st, 113⅝@114½; Richmond and Danville gold 6s, 93@95; Pittsburg and Connellsville 7s, 120½@—; Virginia consol., 62⅝@63; do. 10-40s, 43⅛@43⅞; do. 3s, 45@47; Virginia Midland 5th mort. 5s, 92@94; Western Maryland 2d pref., 109@—.

The Coal Trade.

THE leading coal-carrying companies make the following reports of their tonnage for the week ending Nov. 18, and for the year to the same date, compared with their respective amounts carried to the same time last year:—

	Week.	1882.	1881.
Phil. and Reading R. R.	207,016	8,076,842	7,770,138
Schuylkill Canal	21,146	493,089	562,122
Lehigh Valley	161,933	6,050,233	5,575,374
Delaware, Lackawanna and Western	97,656	4,042,976	3,790,548
Shamokin	25,011	1,010,816	951,575
Central R. R. of New Jersey	101,116	3,911,828	3,911,499
United R. R. of New Jersey	37,321	1,516,467	1,385,728
Pennsylvania Coal	36,302	1,259,219	1,255,359
Delaware and Hudson Canal	87,423	3,155,330	3,185,699
Huntingdon and Broad Top Mountain	10,928	409,959	467,266
Penn. and New York	.....	1,364,452	1,437,851
Clearfield, Pa.	63,740	2,519,832	2,124,395

No report was received from the Pennsylvania and New York Road for the week ending November 18.

The total tonnage of anthracite coal from all the regions for the week ending Nov. 18, as reported by the several carrying companies, amounted to 698,148 tons, against 669,780 tons in the corresponding week last year, an increase of 28,368 tons. The total amount of anthracite mined for the year is 25,600,813 tons, against 24,688,949 tons for the same period last year, an increase of 911,864 tons. The quantity of bituminous coal sent to market for the week amounted to 118,157 tons, against 107,403 tons in the corresponding week last year, an increase of 10,754 tons. The total amount of bituminous mined for the year is 3,909,270 tons, against 4,356,608 tons for the corresponding period last year, a decrease of 447,338 tons. The total tonnage of all kinds of coal for the week is 816,305 tons, against 777,183 tons in corresponding week last year, an increase of 39,122 tons, and the total tonnage for the coal year is 29,510,083 tons, against 29,045,557 tons to same date last year, an increase of 464,526 tons. The quantity of coal and coke carried over the Pennsylvania Railroad for the week ending Nov. 18 was 246,204 tons, of which 179,077 tons were coal and 67,127 tons coke. The total tonnage for the year thus far has been 9,739,505 tons, of which 7,234,792 tons were coal and 2,504,713 tons coke. These figures embrace all the coal and coke carried over the road, east and west. The shipments of bituminous coal from the mines of the Cumberland coal region for the week ended Nov. 18 were 56,935 tons, and for the year to that date 1,221,231 tons, a decrease of 708,362 tons as compared with the corresponding period of last year. The shipments were: To the Baltimore and Ohio Railroad—For the week, 32,671 tons; year, 831,843 tons; decrease as compared with 1881, 395,760 tons. Chesapeake and Ohio Canal—Week, 17,622 tons; year, 235,787 tons; decrease as compared with 1881 213,911 tons. Pennsylvania Railroad — Week, 6,108 tons; year, 145,444 tons, decrease from last year, 104,136 tons. The Reading Railroad shipment for last week, ending November 25, was about 198,000 tons, of which 42,000 tons were sent to and 45,900 tons shipped from Port Richmond, and 23,000 tons sent to and 17,000 tons shipped from Elizabethport.—*Philadelphia Ledger, Nov.* 27.

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In effect October 23d, 1882, and subject to changes.

RAILROAD AND CANAL DIVIDEND STATEMENT.

Showing the amount of Stock Outstanding, the Dividend Periods and the date of last Dividend.

Marked thus(*)are leased roads.	Stock outstanding.	Divide'd Periods.	Last Dividend Payable.
Albany and Susq*...100	2,500,000	semi-an	July '82 2
Ashuelot.....100	210,000	q'arterly	Oct. '81 3½
Atch., Top. and S. Fe100	54,000,000	q'arterly	Nov. '82 1½
Atlanta and W. Point100	1,232 200	semi-an	Jan. '82 6
Atlantic and St. Law*100	5,840,000	semi-an	Mar. '82 3
Augusta and Savan'h100	1,022,900	semi-an	June'81 3½
Avon,Geneseo&MtM*100	225,000	semi-an	July '81 3
Baltimore and Ohio.100	14,792,566	semi-an	Nov. '82 5
" " pref.100	5,000,000	semi-an	July '82 3
Washington Br....100	1,650,000	semi-an	Nov. '82 5
Berkshire*.....100	600,000	q'arterly	Apl. '82 1¾
Boston and Albany..100	20,000,000	q'arterly	Dec. '82 2
Bos.&N.Y.AirLine pf.100	2,795,227	q'arterly	June'82 1
Bos.,Cl.,F.&N.B.pref.100	1,750,100	semi-an	Oct. '82 3½
Bos.,Conc.&Mont.pf*100	800,000	semi-an	Nov. '82 3
Boston and Lowell..500	3,940,000	semi-an	July '82 2
Boston and Maine...100	6,921,274	semi-an	Nov. '82 4
Boston & Providence100	4,000,000	semi-an	Nov. '82 4
Attleborough Br...100	131,700	semi-an	July '82 3½
Bos.,Revere B&Lynn100	419,400	semi-an	July '82 3¾
Buffalo,N. Y. & Erie*.100	950,000	semi-an	June'82 3
Camden & Atlantic.. 50	377,400	q'arterly	Nov. '82 3
" " pref. 50	880,650	q'arterly	Nov.'82 4
Camden & Burl. Co..100	381,925	semi-an	July '82 3
Canada Southern....100	15,000,000	.....	Feb. '81 2½
Cape May &Millville* 50	447,000	semi-an	June'81 3
Catawissa*..... 50	1,159,500	annual	Oct.'82$2½
" pref..... 20	2,200,000	semi-an	Nov. '82 3½
" new pref.. 50	1,000,000	semi-an	Nov. '82 3½
Cayuga and Susq.*.. 50	589,110	semi-an	July '81 4½
Cedar Rapids&Mo.R*100	6,850,400	q'arterly	Nov. '82 1½
" " pref.100	769,600	semi-an	Aug .'82 3½
Central of Georgia....100	7,500,000	semi-an	June '82 4
Central of New Jersey100	18,563,200	q'arterly	July '76 2½
Central Ohio*..... 50	2,437,950	semi-an	July '82 3
" pref.... 50	411,550	semi-an	July '82 3
Central Pacific 100	59,275,500	semi-an	Aug. '82 3
Chemung*.....100	380,000	q'arterly	July '81 1½
Cheshire preferred ..100	2,155,300	semi-an	July '82 1½
Chicago and Alton....100	11,181,741	semi-an	Sept. '82 4
" " pref 100	2,245,400	semi-an	Sept. '82 4
Chi., Burl. & Quincy.100	55,337,455	q'arterly	Dec. '82 2
Chi., Iowa & Nebras*.100	3,916,200	semi-an	July '82 4
Chi., Mil. & St. Paul.100	20,404,261	semi-an	Oct. '82 3½
" " pref 100	14,401,483	semi-an	Oct. '82 3½
Chi. & N. Western...100	14,988,257	semi-an	Dec. '82 3½
" pref.100	21,525,353	q'arterly	Dec. '82 2
Chi., R. I. & Pacific..100	41,960,000	q'arterly	Nov. '82 1¾
Chi. and West Mich .100	6,151,000	semi-an	Feb. '82 2½
Chi.,St.P.,M.&O.pref.100	10,390,000	q'arterly	Oct. '82 1¾
C., Ind., St. L. & Chi..100	6,000,000	q'arterly	July '82 1½
Cin., Sand. & Clev.pf. 50	429,037	semi-an	Nov. '82 3
Clev. and Mahoning* 50	3,759,200	semi-an	Nov. '81 3½
Clev. and Pittsburg* 50	11,244,336	q'arterly	Dec. '82 1¾
Columbus & Xenia*. 50	1,786,200	q'arterly	Sept.'82 2
Colum.&HockingVal.100	2,500,200	semi-an	Aug. '81 208
Concord 50	1,500,000	semi-an	Nov. '82 5
Concord and Ports.*..100	350,000	semi-an	July '82 3½
Conn.& Passump.Riv100	2,244,400	semi-an	Aug '82 3
Connecticut River ..100	2,100,000	semi-an	July '82 4
Cumberland Valley.. 50	1,292,950	q'arterly	Oct.' 82 2½
" 1st pref 50	241,900	semi-an	Apl. '82 4
" 2d pref. 50	243,000	semi-an	Apl. '82 4
Danbury & Norwalk. 50	600,000	.....	Oct. '82 2½
Dayton and Mich.*.. 50	2,402,573	semi-an	Apl. '82 1¾
" " pref. 50	1,211,250	q'arterly	July '82 2
Delaware*..... 25	1,468,940	semi-an	July '82 3
Del. & Bound Brook*.100	1,652,000	q'arterly	Nov. '82 1¾
Del., Lack.& Western 50	26,200,000	q'arterly	Oct., 82 2
Denver & Rio Grande.100	29,160,000	q'arterly	Jan '82 1½
Den.,South P. & Pac.100	3,500,000	.....	Aug.'80 4
Detroit, Lans. & Nor.100	1,825,600	semi-an	Aug.'80 2½
" " pref.100	2,503,380	semi-an	Aug. '82 3½
Dubuque&Sioux C'y*100	5,000,000	semi-an	Oct. '82 3
East Pennsylvania*.. 50	1,709 550	semi-an	July '82 3
East Mahanoy*..... 50	392,950	semi-an	July '82 3
Eastern (N. H.).....100	492,500	semi-an	June'82 2½
Eel River.....100	3,000,000	q'arterly	Sept. '82 $1
Elmira&Williamsp't* 50	500,000	semi-an	Nov. '82 1½
" " pref. 50	500,000	semi-an	July '82 3½
Erie and Pitsburg*.. 50	1,998,400	q'arterly	June '82 1¾
Evansville & Terre H.100	100,000	semi-an	Nov.'81 2
Fitchburg.....100	4,500,000	semi-an	July '82 3
F. & P. Marquette pf.100	6,500,000	semi-an	July '82 3
Ft.W. & Jackson pref.100	2,000,000	.....	May '82 2
Georgia. 100	4,200,000	q'arterly	July '82 2½
Granite 100	1,250,000	semi-an	July '82 3
Han. & St. Jo. pref .100	5,083,024	semi-an	Aug. '82 3½
Harrisbg&Lancaster 50	1,182,500	semi-an	July '82 3½
H'ford &Conn.West'n.100	.....	.....	Nov. '82 1½
Housatonic pref. ...100	1,180,000	q'arterly	Oct. '82 2
Illinois Central.....100	39,000,000	semi-an	Sept. '82 3½
Ia.Falls & Sioux City*100	4,623,500	q'arterly	Dec. '82 1¾
Iowa R. Land Co....100	7,620,000	q'arterly	Nov. '82 1
Jeffersonv. Mad.&Ind100	2,000,000	q'arterly	May '82 1¾
Joliet and Chicago*..100	1,500,000	q'arterly	June'82 1¾
Kan.C.,Ft.S.&Gulf...100	4,000,000	.....	Feb. '82 2
" " pref...100	2,750,000	semi-an	Aug. '82 4
Kentucky Central...100	500,000	semi-an	June'81 1
" " pref..100	5,583,500	semi-an	June'81 1
Lake Shore&Mich.So.100	49,466,500	q'arterly	Nov. '82 2
" (guar.)100	533,500	semi-an	Aug. '82 5
Lawrence*..... 50	450,000	q'arterly	July '82 2
Lehigh Valley..... 50	27,496,895	q'arterly	Oct. '82 2
" " pref. 50	106,200	q'arterly	Oct. 82 2

Marked thus(*)are leased roads.	Stock outstanding.	Divide'd Periods.	Last Dividend Payable.
Little Miami..... 50	4,637)300	q'arterly	Sept. '82 2
Little Rock & Ft. S..100	4,096,135	.....	July' 81 108
Little Schuylkill*.. 50	2,646,100	semi-an.	July '82 3½
Long Island..... 50	10,000,000	q'arterly	Nov. '82 1
Louisville & Nashv..100	19,130,913	semi-an.	Feb. '82 3
Lowell & Andover...100	500,000	semi-an.	Jan. '82 3½
Lykens Valley.....100	600,000	q'rterly.	Oct.' 81 2½
Manchester & Law..100	1,000,000	semi-an.	Nov. '82 5
Manhattan 100	13,000,000	.....	.....
" " 1st pref.100	6,500,000	q'rterly.	Oct. '82 1½
" " 2d pref.100	6,500,000	q'rterly.	Oct. '82 1½
Marietta& Cincinnati 50	1,386,350	.....	.....
" " 1st pref 50	8,105,600	semi-an.	Sep. '66 38
" " 2d pref 50	4,440,000	semi-an.	Sep. '66 38
Marq.Hout.&Ont.pf..100	2,259 026	.....	Aug. '82 4
Massawippi*..... 100	400,000	semi-an.	Aug. '82 3
Metropolitan 100	6,500,000	q'rterly.	Oct. '82 1½
Michigan Central....100	18,738,204	q'rterly.	Aug.'81 1
Middlesex Central...100	280,000	semi-an.	Aug.'82 3
Mill Creek&Minehill* 50	323,000	semi-an.	July '82 5
M.Hill& Schuyl.Hav* 50	4,022,500	semi-an.	July '82 3½
Missouri Pacific.....100	28,169,800	q'rterly.	Oct. '82 1¾
Mobile&Montgomery100	3,022,517	semi-an.	Feb. '80 2½
Morris and Essex.... 50	15,000,000	semi-an.	July '82 3½
Mt Carbon&PtCarbon 50	282,350	semi-an.	July '82 6
Nashua and Lowell..100	800,000	semi-an.	Nov. '82 4
Nashua & Rochester.100	1,305,800	semi-an.	Oct. '82 1½
Nashv. & Decatur...100	1,827,000	semi-an.	June'81 3
Nash.,Chat.&StLouis 25	6,670,325	semi-an.	Apl. '82 1½
Naugatuck.....100	2,000,000	semi-an.	July '82 5
Nesquehoning Val'y* 50	1,300,000	semi-an.	Sept.'82 3
N.Castle&Beaver Val* 50	600,000	q'rterly.	Oct. '81 —
NewLondonNorth'n*100	1,500,000	q'rterly.	July '82 1½
N. Y. Cen. & Hud. R.100	89,428,330	q'rterly.	Oct. '82 2
N. Y. and Harlem....100	7,950,000	q'rterly.	July '82 4
" " pref.100	1,500,000	q'rterly.	July '82 4
" City Line.. —	.....	annual	Apl. '82 3
N.Y.,LakeErie&West.100	77,583,700	.....	.....
" " pref.100	8,156,825	annual..	Jan. '83 6
N. Y., N. H. & Hart..100	15,500,000	semi-an.	July '82 5
N. Y., Prov. & Boston100	3,000,000	q'rterly.	Nov. '82 2
Niag.Bridg&Canand*100	1,000,000	semi-an.	July '81 3
North Carolina*.....100	3,000,000	semi-an.	Sep. '81 3
" " pref.100	1,000,000	semi-an.	Sep. '81 3
N. Eastern (S.C.) pref100	86,000	semi-an.	May '81 4
Norfolk & Western pref.	15,000,000	q'rterly.	Dec. '82 $1
North Pennsylvania. 50	4,527,150	q'rterly.	Nov. '82 1¾
Northern Central.... 50	6,142,000	semi-an.	July '82 3
Northern N. Hampsh100	3,068,400	semi-an.	Dec. '82 3
Northern Pacific pref100	42,312,589	.....	Jan. '83 11.1
Norwich&Worcester*100	2,604,400	semi-an.	July '82 5
Ohio and Miss. pref..100	4,030,000	semi-an.	Mar. '75 3½
Old Colony.....100	7,333,800	semi-an.	July '82 3½
Oregon R'way&Nav.100	6,000,000	q'rterly.	Nov. '82 2
Oswego & Syracuse..100	1,320,400	semi-an.	Aug.'81 4½
Panama..... 100	7,000,000	.....	July '82 6½
Paterson & Hudson*.100	630,000	semi-an.	July '82 4
Paterson & Ramapo.100	248,000	semi-an.	July '82 4
Pember.&Hightst'n*. 50	342,150	semi-an.	Jan. '82 3
Pennsylvania..... 50	83,786,570	semi-an.	Nov. '82 1½
Pennsylvania Co..... 50	20,000,000	semi-an.	June'81 2½
Peoria & Bureau Val*100	1,200,000	semi-an.	Feb. '82 4
Philadelphia & Erie*. 50	7,013,700	semi-an.	.....
" " pfd 50	2,400,000	semi-an.	Jan. '75 4
Phil,Ger.&Norrist'n* 50	2,231,900	q'rterly.	Sept.'82 3
Phil. and Reading... 50	32,726,375	q'rterly.	Jan. '76 2½
" " pref. 50	1,551,800	q'rterly.	July '76 3½
Phila. and Trenton..100	1,259,100	q'rterly.	Oct. '82 2½
Phila., Wil. and Balt. 50	11,585,750	semi-an.	July '82 4
Pittsb., Ft. W. & Chi.*100	19,714,285	q'rterly.	Oct. '82 1¾
" Special Imp..100	6,770,900	q'rterly.	Oct. '82 1¾
Pittsfield&N.Adams..100	450,000	semi-an.	July '82 2½
Portl., Saco & Portsm100	1,500,000	semi-an.	July '82 3
Providence & Worces.100	2,000,000	semi-an.	July '82 3
Rensselaer&Saratog.*100	7,000,000	semi-an.	July '82 4
Rhode Island& Mass..100	100,000	.....	Jan. '81 3
Richmond& Danv...100	3,866,000	q'rterly.	Aug. '82 2
Richmond & Petersb100	1,009,300	semi-an.	Jan. '81 3
Roch.&Geneses Val.*100	555,200	semi-an.	July '82 3
Rutland preferred.. 100	4,000,000	semi-an.	Sept. '82 1
St.L.,Alt. & T.Haute.100	2,300,000	.....	.....
" " pref.100	2,468,406	.....	May '82 3
St.L.&S.Fran.1st pref100	4,500,000	.....	Aug. '82 3½
St.L.,I.Mt.&South'n.100	21,459,921	semi-an.	Feb. '74 3
St.L.,Jac'ville & Chic.100	1,293,ccc	.....	Aug. '82 4½
" " " pref.100	1,034,ccc	.....	Aug. '82 4½
St. P. & Duluth pref.100	4,705,000	semi-an.	Jan. '83 3½
St. P., Minn. & Man..100	20,000,000	q'rterly.	Nov. '82 2
Schuylkill Valley*... 50	576,050	semi-an.	July '82 2½
Seaboard & Roanoke.100	1,229,600	semi-an.	Nov. '82 5
Shamokin V.&Pottsv 50	669,450	semi-an.	Feb. '82 3
Shore Line*.....100	1,000,000	semi-an.	July '82 4
Sioux C.&Pacific pref100	160,000	semi-an.	Oct. '82 3½
South Br. (N. J.)*....100	438,300	semi-an.	Jan. '82 3
South Western (Ga.)*100	3,892,300	semi-an.	Dec. '81 3½
Stockbridge&Pitts.*..100	448,700	semi-an.	Oct. '81 1½
Syr.,Bingham&N.Y.*100	2,500,000	semi-an.	Feb. '81 2
Terre Haute & Ind...100	1,988,150	semi-an.	Aug. '82 4
Troy and Boston....100	1,609,000	semi-an.	Feb. '80 2
Union Pacific.....100	61,000,000	q rterly.	Oct. '82 1¾
United Cos of N. J.*.100	20,490,000	q'rterly.	Oct. '82 2½
Utica, Shenango&S V100	4,000,000	semi-an.	Nov.'81 3
Utica and Black Riv.100	1,772,000	semi-an.	Mar. '82 2
Vermont and Mass..100	3,050,000	semi-an.	Oct .'82 3
Wab. St.L.&Pac.pref.100	22,615,100	q'rterly.	Nov.'81 1½

Markedthus(*)are leased roads.	Stock outstanding.	Divide'd Periods.	Last Dividend Payable.
Ware River*.....100	750,000	semi-an.	July '82 3½
Warren (N. J.).....100	1,800,000	semi-an.	Apl. '82 3½
Warwick Valley.....100	340,000	semi-an.	July '82 2½
Westchest&Phil.pref100	821,300	semi-an.	July '80 2
West Jersey.....100	1,359,750	semi-an.	Sept. '82 3
Wilmingt'n&Weld'n.100	1,456,200	semi-an.	July '82 3
Wil., Col., & Aug 100	960,000	semi-an.	July '82 3
Winchester&Poto'c.*100	180,000	semi-an.	July '82 3
Winchester&Strasb.*100	74,700	semi-an.	July '82 3
Worcester & Nashua. 75	1,789,800	semi-an.	July '82 1½
HORSE-POWER R. R.			
Albany City.....100	200,000	annual	.....'80 5½
Baltimore City..... 25	1,000,000	semi-an.	Oct. '82 3
Balt.,Cat.&El. Mills..100	....	semi-an.	July '82 2
BleeckerSt.&Ful.F'y.100	900,000	semi-an.	July '82 ¾
Boston&Chelsea pref. 50	110,000	semi-an.	Oct. '82 3
Broadway (Brooklyn)100	250,000	q'arterly	Oct. '82 6
B'way&7th Av,(N.Y.)100	2,100,000	q'arterly	Oct, '82 2
B'klyn&Hunter's Pt.100	400,000	semi-an.	Oct. '82 6
Brooklyn City.....100	2,000,000	q'arterly	Nov. '82 3½
Bushwick (Brooklyn)100	309,000	semi-an.	Oct. '82 6
Cambridge.....100	908,000	q'arterly	Oct. '82 4½
Cen.Park,N.& E.Riv.100	1,800,000	q'rterly.	Oct. '82 6
Christoph'r&TenthSt100	650,000	semi-an.	Aug. '82 2½
Citizens' (Phil.)..... 50	192,500	q'rterly.	Jan. '82 2½
Citizens' (Pbg.)..... 50	200,000	annual..	....'80 14½
Coney Island&Bklyn100	500,000	semi-an.	Oct. '80 5
Continental (Phil.).. 50	580,000	semi-an.	July '82 6
D.Dock,E.B'way&Bat100	1,200,000	q'arterly	Aug.'82 4
Eighth Av. (N. Y.)...100	1,000,000	q'rterly.	Oct. '82 3
42d St. & G. St. Ferry100	747,000	semi-an.	May '82 6
Frankf.&Southw (Ph) 50	600,000	q'rterly.	Oct. '82 6
Germantown, (Ph.).. 50	572,800	q'rterly.	Oct. '82 2½
Girard College (Ph.) . 50	500,000	semi-an.	July '71 3
Grand St. & Newton..100	170,091	semi-an.	July '81 2½
Green&Coates St.(Ph) 50	150,000	q'rterly.	Oct. '82 3
Heston,Mantau&F'm 50	299,381	semi-an.	Jan. '75 4
Highland.....100	600,000	semi-an.	July '82 4
Lomb.&SouthSts(Ph) 25	195,000	semi-an.	Oct. '75 4
Lynn and Boston....100	200,000	semi-an.	Nov.'82 4
Malden and Melrose.100	165,000	....	.....
Metropolitan (Bost.). 50	1,500,000	semi-an.	July '82 4
Middlesex (Boston)..100	650,000	semi-an.	Nov. '82 3½
N.Y.,Bay Ridge&Jam100	150,000	..... .	Oct. '78 7
Ninth Av. (N. Y.)....100	797,320	....	.....
Orange &Newark....100	282,555	....	.....
People's (Phila.) pref. 25	124,744	..... .	July '82 2
Philadelphia City... 50	475,000	semi-an.	July '82 4
Phila. and Darby.... 20	200,000	semi-an.	July '81 3½
Phila.&Grey's Ferry. 50	308,000	semi-an.	Jan. '82 6
Pbg,Alleg.&Manches. 50	300,000	q'rterly.	Oct. '81 3
Ridge Avenue (Ph.).. 50	420,000	semi-an.	Oct. '81 11
Second Avenue (N.Y.)100	1,199,500	semi-an.	July '82 4
Second&ThirdSt.(Ph) 50	771,076	q'rterly.	Jan. '82 4½
17th &19th sts (Ph.).. 50	250,000	semi-an.	July '81 3
Sixth Avenue (N. Y.)100	750,000	semi-an.	May '82 5
Somerville (Boston).100	113,000	semi-an.	Nov. '82 3
South Boston..... 50	600,000	semi-an.	July '82 4
Third Avenue, N. Y..100	2,000,000	q'rterly.	Aug '82 5
13th and 15th sts.,Ph 50	334,529	q'rterly.	Jan. '82 4
23d street, N. Y.....100	600,000	semi-an.	Aug.'82 4
Union, Boston.....100	374,300	semi-an.	Jan. '82 4
Union, Phila..... 50	1,005,000	semi-an.	Jan. '82 7
West Philadelphia... 50	750,000	semi-an.	July '77 10
CANALS.			
Chesapeake and Dela 50	2,078,038	semi-an.	June'75 2
Delaware Division... 50	1,633,350	semi-an.	Aug. '82 $1
Delawa. and Hudson100	20,000,000	q'rterly.	Dec. '82 1¾
Delaware & Raritan*.100	5,847,400	q'rterly.	Oct. '82 2½
Lehigh Coal and Nav 50	11,204,250	semi-an.	Jan. '82 2
Monongahela Nav... 50	1,004,500	semi-an.	July '82$3
Morris, consolidated.100	1,025,000	semi-an.	Aug. '82 2
" preferred....100	1,175,000	semi-an.	Aug. '82 5
Pennsylvania..... 50	4,501,200	....	.....
Schuyl. Nav., com.*. 50	859,100	annual..	Oct.'82 50c.
" " pref... 50	3,200,000	annual..	Oct. '82 $1
MISCELLANEOUS.			
Adams Express.....100	12,000,000	q'rterly.	Dec. '82 2
American Express... 50	18,000,000	semi-an.	Jan '83 3
Amoskeag Manuf.Co.100	3,000,000	semi-an.	June'81 5
Calumet&HeclaMin'g 25	100,000 8.	q'rterly.	Nov. '82 $5
Central Mining Co....100	.....	semi-an.	Feb.'82 2½
Consolidation Coal..100	10,250,000	semi-an.	Jan. '82 2
George's Creek C.&I.100	.....	semi-an.	Jan. '82 3
Maryland Coal.....100	4,400,000	semi-an.	Feb. '76 1½
Mariposa L. &Mining100	10,000,000	..... .	.....
" pref100	5,000,000	..... .	.....
Missouri Val.LandCo100	200,000	semi-an.	July '82 12
National Tube Works100	1,000,000	q'rterly.	Oct. '82 3
Pac. Mail Steamship.100	20,000,000	q'rterly.	Sept.'69 3
Pennsylvania Coal... 50	5,000,000	q'rterly.	Aug. '82 3
Pullman Palace Car..100	10,032,800	q'rterly.	Nov. '82 2
Quicksilver, com....100	5,708,700	..... .	May '82 0.4
" pref....100	4,291,300	..... .	May '82 6
Quincy Mining Co... 25	40,000 shs	semi-an.	Aug. '82 $5
Quincy R. R. Bridge.100	1,750,000	semi-an.	July '82 5
SiouxC.&I.F.L.&L.Co100	500,000	semi-an.	June'82 5
Spring Mt. Coal.....100	1,500,000	semi-an.	Dec. '82 3½
Topeka Equip'nt Co.100	255,500	semi-an.	Oct. '82 5
United States Ex....100	7,000,000	q'rterly	Nov. '82 1
Wells-Fargo & Co. Ex100	6,250,000	semi-an.	July '82 4
Western Union Tel..100	80,000,000	q'rterly.	Oct. '82 1½

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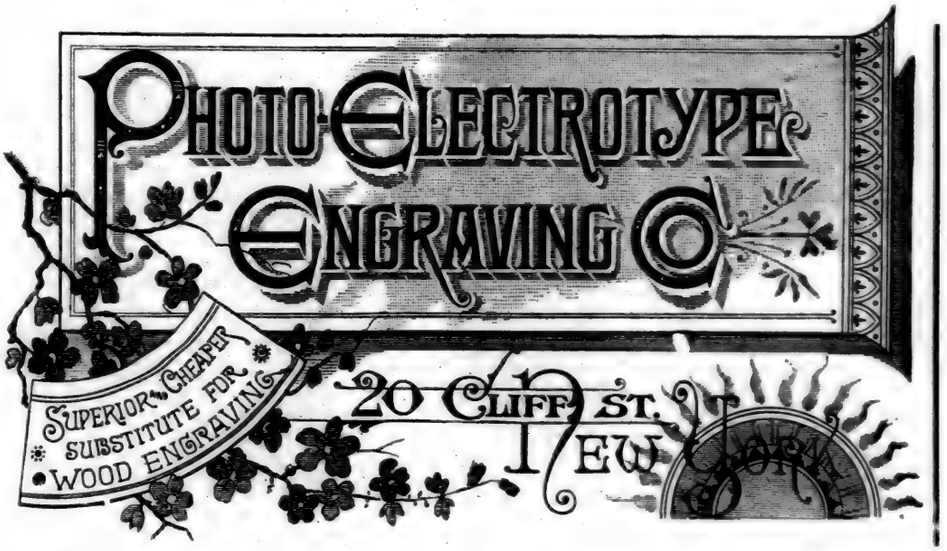
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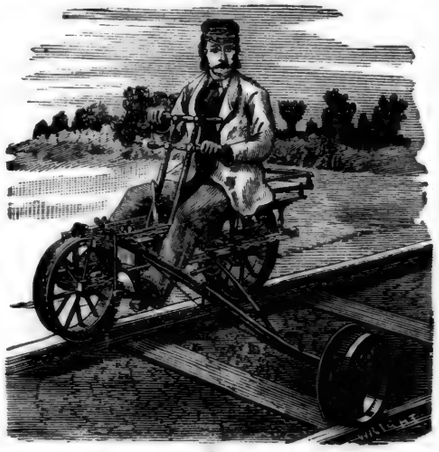
RAILROAD EARNINGS.—MONTHLY.

	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total.
Burl., Cedar Rap. & Northern:													
1880	184,316	165,170	188,325	141,652	149,504	153,378	143,432	160,160	179,804	204,991	189,330	193,419	2,053,484
1881	167,750	124,510	148,551	184,680	165,630	205,912	174,351	209,112	221,801	221,748	203,880	232,812	2,259,037
1882	252,823	225,631	224,107	178,304	199,278	211,257	198,276	224,921	261,439	300,155	.....	.....	.....
Central Pacific:													
1880	1,200,615	1,070,487	1,373,438	1,356,716	1,778,488	1,724,990	1,840,067	1,973,438	1,994,997	1,120,229	2,199,466	1,905,221	20,508,113
1881	1,602,907	1,454,218	1,709,638	1,872,370	2,091,411	2,159,382	1,899,346	2,088,519	2,185,303	2,507,857	2,297,971	2,225,179	24,094,101
1882	1,839,469	1,720,675	1,969.737	2,054,687	2,342,298	2,229,105	2,020,000	2,277,000	2,474,000	2,409 000	.....	.....	.....
Chesapeake and Ohio:													
1880	202,335	198,681	222,762	221,559	199,443	214,352	238,236	259,110	247,303	211,820	240,795	218,009	2,674,308
1881	162,540	184,389	228,479	227,343	252,235	241,135	225,096	262,858	247,144	236,396	235,585	203,562	2,702.762
1882	210,455	209,708	208,981	267,454	255,939	260,753	306,831	371,175	332,219	347,882	.....	.....	.....
Chicago and Alton:													
1880	534,054	497 013	626,473	542,961	616,128	617,524	708,906	761,120	767,349	785,199	696,776	574,695	7,718,198
1881	487,890	461,641	529,915	558,190	548,556	635,860	676,205	769,751	774.790	771,844	680,133	635,307	7,553,988
1882	579,447	530,480	584,483	561,787	553,412	613,886	671,537	800,624	881,109	812,032	.....	.....	.....
Chicago and Northwestern:													
1880	1,154,632	1,131,683	1,361,725	1,294,573	1,875,608	1,671,177	1,699,686	1,767,938	2,020,245	2,105,217	1,855,622	1,477,902	19,416,007
1881	1,240,664	963,204	1,178,795	1,474,612	1,879,006	2,306,440	1,983,032	2,315,164	2,292,676	2,341,098	2,019,038	1,855,477	21,849,209
1882	1,644,935	1,474,176	1,672,931	1,668,741	2,110,947	2,022,700	2,025,736	2,099,755	2,497,053	2,592,100	.....	.....	.....
Chicago, Burlington and Quincy:													
1880	1,432,740	1,411,870	1,732,518	1,489,894	1,909,627	1,682,956	1,773,643	1,834,321	1,862,285	1,934,762	1,837,860	1,552,018	20,454,494
1881	1,307,948	1,034,821	1,418,149	1,574,371	1,679,455	2,083,803	1,888,358	2,173,945	2,262,981	2,031,001	1,816,133	1,905,490	21,324,150
1882	1,658,834	1,457,300	1,566,217	1,530,838	1,505,261	1,437,164	1,625,006	2,086,858	2,186,400	.....	.....	.....	.....
Chicago, Milwaukee and St. Paul:													
1880	764,298	738,749	900,675	871,041	1,134,745	1,037,958	1,026,708	991,297	1,257,637	1,493,620	1,472,037	1 397,308	13,086,119
1881	990,847	682,717	916.989	1,259,946	1,538,491	1,729,811	1,568,706	1,678,361	1,644,670	1,591,052	1,569,000	1,855,000	17,025,462
1882	1,435,000	1,377,000	1,561,000	1,518,000	1,629,000	1,620,000	1,465,000	1,545,000	1,950,000	2,251,000	.....	.....	.....
Chicago, St. Paul, Minneapolis and Omaha:													
1880	193,827	173,078	259,783	259,208	232,146	218,093	236,995	251,013	300,833	342,052	342,894	312,173	3,122,097
1881	257,786	158,594	251,648	261,211	350,124	404,562	383,202	385,586	373,370	379,029	380,733	391,950	3,981,296
1882	307,498	315,100	405,779	356,558	406,420	363,109	331,480	394,555	482,997	546,671	.....	.....	.....
Cincinnati, Indianapolis, St. Louis and Chicago:													
1880	155,697	172,541	198,220	168,199	186,995	200,332	204,138	233,478	343,627	239,881	209,014	198,254	2,412,185
1881	182,523	171,511	191,005	183,710	191,056	192,299	177,161	229,858	228,653	221,320	194,805	192,623	2,296,916
1882	200,042	186,879	208,066	204,269	199,110	195,948	209,564	.....	259,379	.....	.....	.....	.....
Denver and Rio Grande:													
1880	124,759	126,922	160,883	164,882	193,925	295,455	373,132	400,133	406,583	473,318	408,562	349,196	3,478,007
1881	307,476	317,681	398,493	433,111	514,767	584,230	548,284	606,193	589,287	638,432	566,819	643,417	6,206,812
1882	491,914	412,987	535,055	559,917	614,298	537,462	495,797	574,040	595,306	630,598	.....	.....	.....
Hannibal and St. Joseph:													
1880	176,079	166,965	216,061	206,735	191,317	179,396	224,312	238,081	233,448	242,214	207,147	279,635	2,561,366
1881	154,401	122,874	176,356	190,812	172,950	190,740	201,899	210,240	215,103	231,913	201,782	180,376	2,230,961
1882	138,284	154,717	168,798	148,913	154,917	155,030	184,347	258,628	239,196	238,442	.....	.....	.....
Illinois Central:													
1880	595,212	613,806	613,008	535,732	665,120	681,736	724,095	732,755	806,836	880,211	783,120	673,182	8,304,812
1881	631,281	524,499	557,789	662,493	673,259	803,887	720,004	868,407	828,847	815,238	737 218	763,475	8,586,397
1882	728,173	689,387	695,371	674,603	674,749	663,746	752,251	813,600	828,238	865,325	.....	.....	.....
Indiana, Bloomington and Western:													
1880	80,498	89,690	116,185	90,374	85,733	106,954	103,438	116,732	110,622	121,343	96,621	104,619	1,233,079
1881	90,283	83,261	192,085	203,677	200,064	199,846	199,125	272,114	247,932	225,678	160,826	156,697	.....
1882	195,824	175,755	206,235	205,934	182,554	186,133	206,072	278,814	273,100	269,046	.....	.....	.....
Louisville and Nashville:													
1880	674,455	575,035	612,593	563,883	655,014	976,229	772,53	827,089	931,911	1,000,327	953,087	949,185	9,491,346
1881	812,118	805,124	947,959	855,704	828,726	1,227,885	817,135	876,192	951,566	1,002,950	1,065,223	1,153,779	11,344,361
1882	964,527	960,315	1,068,834	953,603	958,130	1,215,490	1,063,765	1,043,912	1,107,985	1,216,215	.....	.....	.....
Mobile and Ohio:													
1880	250,116	204,095	168,302	140,091	129,248	121,855	131,621	140,593	184,247	264,714	251,368	287,372	2,273,622
1881	224,347	216,768	230,916	163,551	145,803	136,517	135,549	160,789	210,262	256,924	262,986	258,812	2,403,224
1882	159,676	158,590	148,166	141,957	134,378	136,184	136,398	140,443	160,031	265,201	.....	.....	.....
Nashville, Chattanooga and St. Louis:													
1880	205,634	191,154	169,457	155,466	158,839	144,130	151,594	169,326	167,473	178,266	182,087	175,966	2,049,484
1881	178,143	190,866	207,710	183,525	104,430	154,549	150,430	168 317	179,979	172,121	152,059	173,127	2,075,256
1882	156,994	159,961	161,005	154,155	135,556	119,074	160,991	168,304	168,999	180,319	.....	.....	.....
New York and New England:													
1880	164,232	149,907	183,845	179,689	183,701	219,891	205,056	249,885	235,642	215,491	210,856	198 108	2,396,302
1881	189,749	173,614	212,019	216,913	217,185	231,518	246,821	280,524	299,573	261,200	242,412	237,729	2,809,255
1882	213,840	217,261	265,222	263,544	283,244	290,060	300,920	353,726	338,490	310,145	.....	.....	.....
New York, Lake Erie and Western:													
1879	1,147,173	1,207,391	1,356,780	1,372,755	1,350,574	1,230,419	1,273,533	1,450,223	1,492,497	1,713,697	1,515,835	1,398,224	16,509,127
1880	1,296,381	1,252,218	1,644,958	1,643,151	1,592,544	1,661,812	1,580,976	1,606,874	1,786,417	1,899,910	1,799,338	1,726,788	19,149,361
1881	1,443,437	1,425,765	1,847,261	1,709,057	1,776,891	1,794,982	1,787,081	1,772,895	1,734,200	.....	.....	.....	.....
Northern Central:													
1880	334,494	330,860	415,325	386,130	329,788	419,193	450,298	453,923	464,093	512,918	459,054	494,310	5,050,387
1881	386,157	382,657	452,906	487,273	465,588	487,287	440,811	498,008	429,565	449,664	487,160	476,622	5,443,697
1882	407,368	413,551	430,194	435,129	482,607	482,762	509,683	667,488	592,435	550,225	.....	.....	.....
Northern Pacific:													
1880	81,390	77,259	119,357	185,700	217,613	253,105	241,277	223,500	330,300	358,456	300,822	220,993	2,629,710
1881	116,508	78,803	162,984	216,210	312,705	412,024	393,260	434,085	534,363	583,555	428,903	434,331	4,044,576
1882	239,800	269,000	384,000	438,000	568,332	631,342	679,240	727,377	789,700	834,460	.....	.....	.....
Philadelphia and Erie:													
1880	224,307	245,372	327,678	334,947	311,470	331,024	308,699	347,532	322,737	367,082	324,966	281,919	3,727,733
1881	224,303	225,501	285,573	293,323	343,792	350,585	291,669	303,849	276,522	292,392	284,078	282,772	3,454,309
1882	252,727	246,246	265,311	277,851	341,415	347,614	377,206	420,329	386,455	397,164	.....	.....	.....
St. Louis and San Francisco:													
1880	198,091	195,948	193,146	176,164	167,664	173,607	213,297	259,995	280,873	328,194	290,329	226,063	2,698,371
1881	212,435	178,234	262,050	265,298	283,399	260,254	252,333	286,373	279,064	308,569	284,320	287,914	3,160,245
1882	256,784	244,654	274,959	242,806	253,419	240,177	318,613	381,637	336,805	360,900	.....	.....	.....
St. Louis, Alton and Terre Haute:													
1880	153,139	163,737	168,994	155,462	147,928	150,207	191,077	216,759	204,295	221,863	188,773	184,503	2,146,741
1881	175,725	166,012	201,137	197,447	172,177	165,896	165,393	189,180	196,368	204,338	162,544	153,852	2,112,801
1882	168,987	149,619	178,145	157,450	162,842	142,742	192,017	236,137	217,659	229,962	.....	.....	.....
St. Louis, Iron Mountain and Southern:													
1880	555,983	490,195	451,560	408,241	349,053	363,454	432,655	565,869	671,219	688,365	632,052	656,951	6,265,597
1881	570,957	560,791	704,002	548,300	479,075	474,302	533,512	644,386	708,325	719,239	687,280	709 498	7,319,744
1882	516,370	501,127	585,008	581,977	519,120	529,700	515,519	675,981	724,160	809,394	.....	.....	.....
St. Paul, Minneapolis and Manitoba:													
1880	180,239	137,645	261,798	333,014	281,899	243,407	272,089	232,579	274,188	345,057	300,675	297,641	3,160,231
1881	254,187	159,482	320,962	425,685	382,642	405,322	387,488	414,954	485,736	605,708	508,530	528,262	4,878,960
1882	395,461	418 358	531,004	570,890	858,902	856,417	853,296	801,759	832,776	979,057	.....	.....	.....
Texas and Pacific:													
1880	245,785	219.165	215,070	174,177	141,083	153,066	195,711	226,073	266,570	303,666	312,184	301,858	2,754,408
1881	281,176	260,781	319,928	295,066	281,782	285,405	328,063	381,331	345,790	419,203	357,724	381,218	3,921,569
1882	310,785	255,644	332,911	359,543	409,228	384,713	367,215	439,918	470,613	541,901	.....	.....	.....
Union Pacific Railway:													
1880	1,433,636	1,393,992	1,730,509	1,937,220	2,027,269	1,928,528	1,934,215	1,913.035	2,270,179	2,707,860	2,251,148	1,869,335	23,448,445
1881	1,339,799	1,374,740	1,674,860	1,766,894	2,319,238	2,884,774	2.528,826	2,638,659	2,844,357	3,169,530	2,773,608	2,267,004	27,451,831
1882	1,961,088	1,759,863	2,226,832	2,462,004	2,491,590	2,508,453	2,301,000	2,762,107	2,949,112	3,158,337	.....	.....	.....
Wabash, St. Louis and Pacific:													
1880	776,790	759,451	978,629	892,024	948,773	953,468	1,966,742	1,189,478	1,178,950	1,501,203	1,131,787	1,050,816	12,428,112
1881	811,617	818,922	1,121,592	1,023,482	1,144,660	1,308,993	1,131,752	1,542,838	1,490,027	1,397,781	1,399,555	1,328,278	14,461,570
1882	1,229,965	1,134,768	1,315,776	1,378,194	1,204,864	1,149,682	1,418,837	1,772,544	1,682,382	1,595,680	.....	.....	.....

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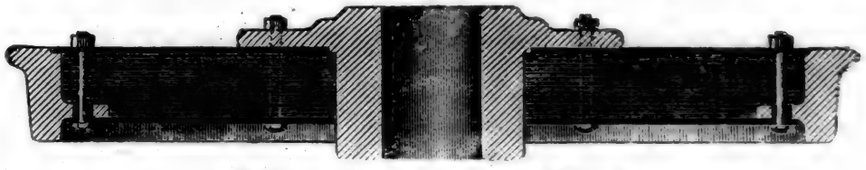
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Who Suggested the Pacific Railroad?

THE common idea that Benton first suggested a railroad across the continent to the Pacific was shown to be a fallacy by ex-Senator Armstrong at a recent meeting of the Historical Society in this city. As a matter of fact, the records prove that he opposed such a project, even after it had gone so far as the calling of a Convention at St. Louis. It was arranged that Stephen A. Douglas should preside over said Convention, and Benton did all he could to embarrass the proceedings until it became evident that the Convention was going to recommend a line by the way of Albuquerque—since practically adopted by the Atchison, Topeka and Santa Fe road—when he suddenly changed his views and made a vigorous speech in favor of the South Pass route, which he argued to be the most natural and most feasible route, as demonstrated by the pathway of the buffalo, and by the explorations of Colonel Fremont.

The credit of the first serious proposition for a railroad to the Pacific really belongs to Asa Whitney, a New York merchant, whose name is rarely mentioned in connection with the matter. He was at one time worth about $700,000, but the great New York fire of 1835 destroyed nearly all his possessions, and soon afterwards he went to China as a supercargo, and then to England and other parts of Europe. During this journey he made a systematic study of the problem of transportation, and the commercial relations of the United States to China, India, the islands of the ocean and the various European countries; and it was while returning home across the Atlantic that he evolved the scheme of a great national railway from Lake Michigan to the Pacific, which he had convinced himself was the comprehensive expedient that would enable his country to avail itself of its manifest advantages, and secure a vast and enriching foreign trade, while at the same time developing its own resources and promoting the general welfare.

So profoundly was Whitney impressed by this far-reaching conception that he went promptly to work at giving it practical shape, spending both time and money in efforts to justify his theory and enlist public sympathy with it. At his own expense he made a survey of some 700 miles of proposed route, crossing the Mississippi near Prairie du Chien and penetrating a considerable distance westward, and also descending the Missouri in a canoe, to study the topography of the country. Then he prepared a memorial to Congress, praying that a grant of land 60 miles in width, from Lake Michigan to the Pacific, be made and the sale thereof authorized, through commissioners appointed by the President, to furnish the means for constructing a railroad through said territory on the latitude of the South Pass. No bonds were asked for, and no guarantees of interest. The sale of the lands alone, it was urged, would meet the whole outlay, estimated at $50,000,000, with probably $15,000,000 more to operate the road until it should reach a self-sustaining basis.

The memorial went on to show, by a strong array of figures and inferences, that the construction of such a road would bring to our doors the commerce of 700,000,000 people, worth at least $10,000,000 a year, otherwise out of reach by reason of circuitous sea voyages and other natural hindrances. An argument, since grown familiar as the multiplication table—to the effect that the building of the road would attract immigration and make a market for the lands—was dwelt upon at some length, with the added suggestion that the settlers could pay a full share of the price of their farms by working on the road. The other argument, and the one which finally insured a Pacific railroad, was also employed, to wit: the political importance of such a medium of communication between widely separated portions of the country. The trip from coast to coast, then requiring six months, could be shortened, as the memorial pointed out, to eight days, as has since been verified. A cargo of tea from China, it proceeded, may then be delivered in any of our Atlantic cities in thirty days, and in London or Liverpool in less than forty-five days. And finally, Mr. Whitney insisted, the road must revolutionize the entire commerce of the world, placing us in the center of all nations, and be the means, morally, of civilizing and Christianizing all mankind.

In the light of things now accomplished, Mr. Whitney's madness does not appear so very unmethodical; but we may be sure that when his memorial was read in the Senate—in 1845, that was—the statesmen of the period listened with little other than an amused interest, with possibly a touch of pity for the dizzy enthusiast who soberly proposed an undertaking that must have been looked upon at that time about as we should now regard a proposition to build a railroad to the moon. We had then only 20,000,000 inhabitants, and but 5,000 miles of railroad all told, not a mile of it west of the Alleghanies; and the telegraph was just coming into operation. The whole wheat and corn product of the country was not greater then than is now furnished by the two States of Missouri and Kansas, one of which was then considered the jumping-off place of civilization, and the other was not taken into account at all except as an incumbrance and an obstacle. They courteously referred Mr. Whitney's memorial to the Committee on Public Lands, however, of which Sydney Breese, of Illinois, was Chairman, and Tom Corwin and Jesse D. Bright were members; and there it remained. Poor Whitney besought action upon it until his means were exhausted, and then gave up in despair. A friend of former days, whom he had aided in similar extremity, helped him to employment, and after a time he secured a small farm near what is now the Soldiers' Home, in the neighborhood of Washington, where he died at last, in obscurity and forgotten of the world, an old man of 76 years.—*St. Louis Globe-Democrat.*

Cars for the Brooklyn Bridge.

IT has been announced that the New York and Brooklyn Bridge will be opened for foot-passengers some time before vehicles and cars will be able to cross. The trustees recently, however, received proposals for constructing forty-eight passenger cars, half of which number will be 39 feet 3½ inches long in the body, and the other twenty-four 27 feet 8 inches. The cars will be propelled by an endless wire rope, and the machinery for hauling will be located in the arches under the approach between Main and Prospect streets, Brooklyn. The cars when loaded will run, with no more than three in one train, at a speed of about ten miles per hour. The gauge of the track is 4 feet 8½ inches. The cars will comfortably seat forty-six passengers. They will nearly correspond with the standard cars used upon the Manhattan Elevated Railroad, in this city, but will be wider and higher, and have wider doorways and platforms. Two cars have to be delivered on or before March 1 next, ten more by April 1 and the remaining twelve by May 1. The twenty-four smaller cars are to be of the same general character as those above described, but shorter in the body, namely, 27 feet 8 inches in length outside of sills, instead of 39 feet 3½ inches. They are to be of the same dimensions otherwise and made correspondingly strong, but reduced in weight as much as is consistent with the required strength.

The Rosy North.

WE had to wait for half an hour between Charleston and Savannah for the Waycross train, and during this time a black man came up to me and inquired:

"Say, boss, doan' you lib up Norf?"

"Yes."

"Dat's what I reckoned on. Kin I ax a few questions?"

"You can."

"Wall, sah, does ebery cull'd man up dar own a brick house wid a cupulo on top?"

"Oh, no."

"Does he walk aroun' wid a bag of gold in one han' an' a bag of silver in the odder?"

"I never saw any of them taking such a walk."

"Do dey all own hosses an' kerridges?"

"No."

"Do dey all have diamonds an' pearls an' welvets?"

"No."

"Say, boss, my name's Jones, an' I lib ober beyand dat pine woods. My ole woman am all de time stirrin' me up to go Norf, an' she really believes dat if we once get up dar we kin go out befo' breakfast an' pick up a pailful o' diamonds. Now, sah, tell me de solemn truf 'bout it! Could we do it?"

"No."

"Could we pick up a peck?"

"No."

"Fo' quarts?"

"No."

"Two quarts?'

"No."

"Dat's nuff, boss—dat settles me! I reckon if I axed 'bout one quart, you'd say yes, but if anybody 'spected I'ze gwine to fool aroun' wid any sich small 'taters as dat dey am sadly tooken in. I'ze kept house long 'nuff to know dat a quart o' diamonds a day wouldn't keep a fam'ly in co'n cake an' bacon half de time. 'Bleeged to ye, boss. Mebbe I'll git up dat way arter awhile, but I shan't 'spect to own no brick house wid a cupulo on top 'till I've bin dar a full week or longer."—*Detroit Free Press.*

AMERICAN Railroad Journal.

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We are amply justified in reducing the price from its old time rate of $5.00 per year to $3.00, on account of the numerous indications we are receiving of late of the increased interest that is being taken in the JOURNAL, which warrants us in believing that the sacrifice we make in price will be much more than compensated for by the promised liberal increase in the number of subscribers. It is gratifying to us to know that the alterations made in the Journal during the past year are meeting with such general favor as is expressed in the frequent words of commendation and congratulation sent to us from old and new readers, and we feel called upon to try in every way to merit their approval and to spare no pains to place the paper before as many as possible of those who might derive benefit and profit from it. During its fifty years' experience the JOURNAL has been highly favored by an especially choice class of readers, counting among its subscribers some of the most noted banking houses, commercial bodies, financiers, and railroad men of this country and Europe. Its aim in the future will be to prove itself of more value and interest than ever to its patrons of many years standing, while by its new features it makes itself of service and interest to a broader field and to more varied departments of life and business. We desire to make the JOURNAL as useful and welcome as possible to our readers and advertising patrons, and to this end we hope to have our columns of correspondence, communications and general information full and diversified. The columns we have devoted to general communications have proved especially interesting and popular of late, and we are pleased to have our readers favor this department with suitable contributions

We give on editorial page our new subscription rates, which are so changed in the belief that it will not only prove acceptable to many who desire to become regular readers of the paper, but that it will meet with the hearty approval of our advertising patrons, who are rapidly filling up the pages offered to them since the improvements in the JOURNAL have been started.

We will send you the "Journal" for three months for $1. Try it, and you will be glad to continue taking it.



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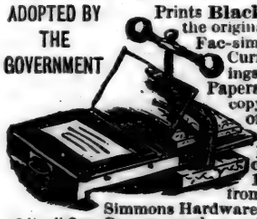
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Government Control of Railroads in Germany.

From an elaborate paper sent to the Department of State at Washington by Consul-General Vogeler, we learn that the total length of railroads in Germany is estimated at 32,000 kilometres—something over 21,000 miles, and their value is estimated at $2,500,000,000. Of the total number of miles 77½ per cent are now under the control of the different States. In Prussia 15,082 kilometres out of 19,302, or over 78 per cent, are under the control of the Prussian Government. The process of acquiring the remainder is constantly going on. During the year ending March 31, 1882, the number of workmen employed in operating the roads was 26,090; do. in constructing the roads, 20,528; do. in shops, 17,169—a total of 63,787. During the same time the officers employed were: regularly commissioned, 41,543; do. non-commissioned, 7,206—total, 48,659. And herein, it is claimed, lies the danger to the German people, viz., the tremendous increase of the power of the Government. The great revenues, it is argued, which the Government, having no competition, can obtain from the railroads, alone make it more and more independent of the legislative body, which votes on the appropriation of money; while the great army of railroad employés increases the already too powerful influence of the Government on popular elections, and enables it, by an appeal to fear and self-interest, to stifle the real sentiment of the people. Once in the possession of all the railroads and freed from all competition, it is argued further, not only will the voice of the people as to the manner of operating the roads, of adjusting freight rates and passenger fares, etc., remain unheeded, but the power of the Government will be still further extended. There being then only one purchaser in the market for locomotives, rails, rolling-stock, etc., the manufacturers of these articles are at the mercy of the Government. The next step therefore will be the acquisition by the State of these. The furnaces will follow next, and the mines last, and thus the most gigantic combination of industries will be in the hands of the State.

Origin of the American Flag.

Concerning the origin of the stars and stripes, it is a mistake to suppose that it was in any way connected with the coat of arms of Washington. Gen. Washington mentions a union flag in a letter dated Cambridge, Jan. 4, 1776, This is believed to have been the crosses of St. George and St. Andrew in a canton together with the thirteen stripes; but the first particular notice of it is in the British Annual Register for 1776, in a letter from the captain of a transport, dated Boston, January 17, 1776, in which he says: "I can see the rebels' camp very plain, whose colors, a little while ago. were entirely red; but, on the receipt of the King's speech (which they burnt), they have hoisted the Union Jack, which is here supposed to intimate the union of the provinces." The Annual Register adds, "They are said to have changed their colors from a plain red ground, which they had hitherto used, to a flag of thirteen stripes, as a symbol of the number and union of the colonies." The sailing of the first American fleet is thus described in the London *Ladies' Magazine* for 1776. "They sailed from Philadelphia * * * under the display of a Union flag with thirteen stripes in the field, emblematical of the thirteen united colonies." A few other flags were used until, on the 14th of June, 1777, the following resolution was passed by Congress: "*Resolved*—That the Flag of the thirteen United States be thirteen stripes, alternate red and white; that the union be thirteen stars, white in a blue field, representing a new constellation." This constellation was Lyra, which represented union, as the lyre was the symbol of harmony and union among men; and an early seal represents the eagle with the lyre on its breast and stars of the constellation. In 1794, it was enacted that the flag be fifteen stripes and the union fifteen stars, but in 1818 they returned to the thirteen stripes, and it was enacted that the flag be thirteen stripes and the union twenty stars, and that on the admission of a new State one star be added—and this law is still binding.

A Palace Sea Car.

A model of a Palace Sea Car, which shows decided novelty in construction, was recently on exhibition at Macomb's Dam, on the Harlem River, in the upper part of this city. It is described as a hull placed on a three-wheeled wagon, the wheels being hollow globes or spheroids of sheet iron or steel, with a row of buckets or flanges on each side of each sphere at the water line. These three hollow globes hold the bed of the ship or car entirely out of the reach of waves. They are both the propelling and supporting parts of the vessels, and are mounted on journals with propelling gear, and armed with paddle blades at right angles to their vertical circumference, arranged like a child's three-wheeled velocipede, the third wheel being foremost, and inclosed by a horizontal iron frame, which supports the journal boxes, and a light deck for the machinery, etc. The globes are claimed by the inventor, Mr. Fryer, to be as tight and strong in the water as a ship's iron hull; to be incapable of leakage unless from collision; to discharge at the axis by every revolution any water that may get into any of the compartments; to sit on the water with sufficient buoyancy to carry their load without sinking more than one-sixth of their diameter; hence, to walk water instead of plowing it; to make headway very nearly equivalent to the travel of their circumference; to make no wake or current astern, nor waves to right or left; to turn the whole as on a pivot to right or left by stopping one of the aft wheels; to dissipate the force of wave concussion by the spherical surfaces always presented in every direction; to carry the superstructure or car high and dry above water by one-third its diameter, and thus with an ocean car of sixty feet wheel, sheer above the caps of the highest waves; and by the great breadth of the vessel every way (which cannot affect the speed) secure it against the possibility of capsizing, or even rolling and pitching like an ordinary ship. Finally, in case of injury to a hull of this kind, the part can be turned up out of water and repaired at sea as readily and as thoroughly as in a dock-yard; while she can run upon a beach like a wagon, or cross an isthmus like a car, on a three-grooved railway. In a test of the model it was shown, says an eye-witness, that when in motion, whatever leakage of the globes there might be was discharged with every revolution at the axis of the wheel. There was an entire absence of wake and waves. The light and easy set of the vessel upon the water, too, was remarkable.

"Why, John, where have you been all night?" was the greeting, as he stumbled up stairs. "Comet party, my dear, zhat's all." "Comet party? Why, it ought not to take all night to see the comet." If you zhee as many comets ash I did, t'would take you, poor, weak woman, a whole week. Yesh it would."

The line of railroad from Keating into the Karthaus soft-coal region of Clearfield county, Penn., and projected by the Pennsylvania Railroad Company, is progressing rapidly.

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SUPERIOR TO EVERY OTHER

In Mechanical Construction, Security, and Durability.

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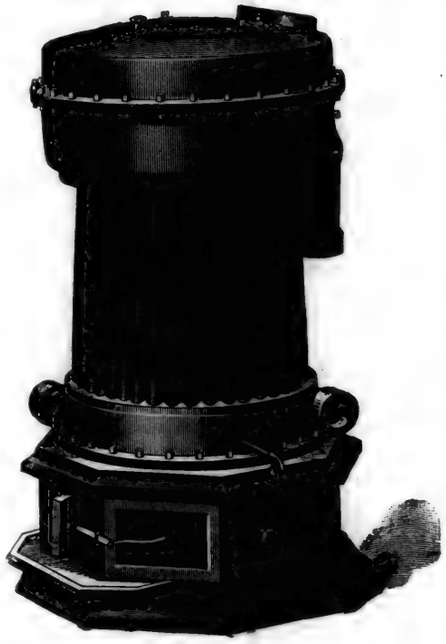
Every Padlock with a different Key and *Master Key* to unlock them all; or all Padlocks with same key if required.

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by using THE SALMON CAR HEATER.
It Insures Safety from Fire in case of Accident, Economy in Fuel and RAPID CIRCULATION. It heats quickly, is SELF-REGULATING, and can be used for either STEAM OR HOT WATER.

The Water Tubes do not come in contact with the Coals, but occupy the Smoke Flue in such a manner as to absorb the greatest amount of heat from Coal in a low state of combustion without danger of chilling the fire.

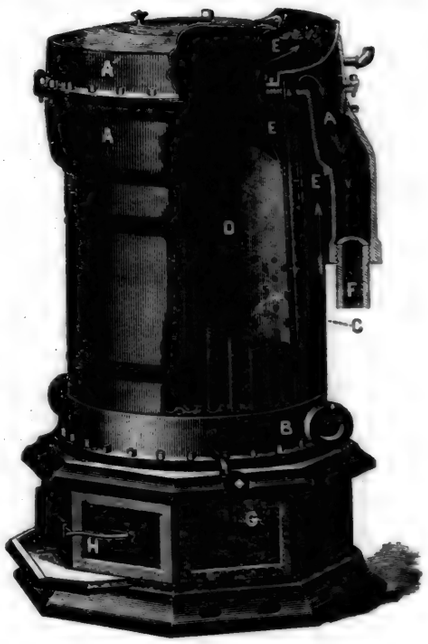
Once filled with coal the fire will last from 24 to 60 hours, according to weather, without replenishing, as proved by actual test.

At the last "Mechanics' Fair" it received the Silver Medal, being the highest award to heaters of any kind.

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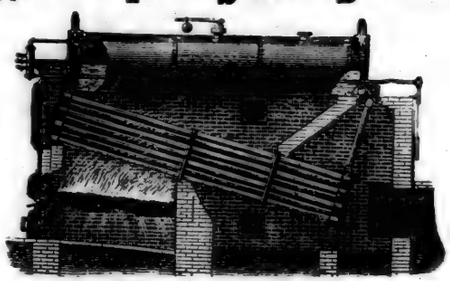
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CANADIAN DEPARTMENT.

MR. JAMES J. WHITE, Ottawa, Canada, writer of "Our Canadian Letter," acts as agent for the AMERICAN RAILROAD JOURNAL COMPANY, in Canada. He is authorized to receive, in behalf of the company, subscriptions and advertisements for this journal; also news of the character which he can utilize in the preparation of his Letter, or send to us for use elsewhere within these columns. He respectfully invites information concerning Railroad matters generally, Mining, Banking, Finance and Manufactures.

OUR CANADIAN LETTER.

[From our Special Correspondent.]

INCORPORATION.

THE following companies have given notice of application for incorporation:—

The Canada Southern Steamboat Company, the stock to be $150,000.

The Winnipeg Consolidated Gold Minlng Company, for the purpose of acquiring mineral lands in Canada, and to mine and develop the same in every possible way. The capital stock will be $1,000,000, with power to increase by five hundred thousand, and with headquarters at Winnipeg, Man.

The St. Cathrines Milling and Lumbering Company, with capital stock of $100,000.

The Gilbert Blasting and Dredging Company, with capital stock of $60,000.

The Dundee Scotland Investment Company, o transact business in Canada.

The Dominion Phosphate Company, to mine nd manufacture fertilizer, etc.

MANITOBA DISALLOWANCE.

The following is a copy of the letter of Sir ohn A. Macdonald addressed to Mr. Andrew J. impson, of West Lynne, Man., in reply to one eceived on the subject of disallowance of the Emerson and Northwestern Railway:—

OTTAWA, Nov. 9, 1882.

DEAR SIR:—I have to acklowledge the receipt f a letter signed by yourself and a number of esidents of West Lynne, objecting to the disallowance of the Emerson and Northwestern Railway Company's Act. You will have observed that since you wrote, the Canadian Government have felt it their duty to the Dominion to disallow the charter of that railway. No other course was open to them. With great difficulty we secured the aid of energetic capitalists to construct the Canadian Pacific Railway through Canadian territory, connecting he two oceans. This stupendous undertaking was entered into by the syndicate on the distinct pledge being given that the trade of the northwest should not be diverted from their line into American channels. The contract was hailed by all the people of Manitoba and he northwest as a great boon, and the one hing essential to its prosperity. It would be in the highest degree unfair, now that the syndicate have embarked their vast fortunes in the Canadian Pacific Railway, that either in letter or in spirit the contract should be broken, and doing so would give them a fair claim for the abandonment of that portion of their line which is the most difficult and most expensive, extending from Thunder Bay to Lake Nipissing. The Dominion Parliament would never have consented to vote the large sum of money and quantity of lands they did, except on the assurance that the line should be constructed from end to end through Canada.

I have no reason to doubt that the Manitoba and Southwestern Colonization Railway Company's line will be built in due time, and that the arrangement between the Canadian Pacific Railway and the town of Emerson will be fulfilled. On the contrary, I believe that both these enterprises will ultimately be completed. Everything cannot be done in one year. All that is required is a little patience, and I am satisfied that Manitoba and the northwest generally will obtain railway facilities equal to those enjoyed by the older Provinces.

I am, dear sir,

Your obedient servant,

(Signed), JOHN A. MACDONALD.

Andrew J. Simpson,
West Lynne, Man.

RAILROAD AND OTHER NOTES.

In consequence with some trouble between Armstrong & Co., and sub-contractors, work on the Pontiac and Pacific Railway has stopped for the season, and some four hundred men are clamoring for a month's pay.

The St. Catharine and Niagara Central Railroad will not be sold or leased to the Canada Southern.

The first locomotive over the Toronto and Ottawa Railway, arrived at Bridgewater to-day.

The Richelieu Navigation Company, have declared a dividend of six per cent for the year.

A company is organizing in Halifax to export fresh fish of all kinds to American and European markets, by a process for which they have secured the patent right in Canada. Fish, etc. can be kept perfectly fresh and sweet from four to six weeks.

Manning, McDonald & Shields, Canada Pacific contractors, have about quit work for the season.

Traffic between Rat Portage and Thunder Bay is still being carried on.

On Saturday evening last, Mayor Powderly, of Scranton, Pa., addressed a large attendance in the Academy of Music, on the labor question, in the interest of the "Knights of Labor." He spoke his conviction on the points in question, and did not incite hostility between capital and labor. He dwelt upon the number of hours of work per day and did not want a short day's labor. The strike of the miners, because the employers wanted them to work twelve hours instead of ten per day, and at a reduced wage, was referred to in regard to the high tariff. He complained of the growth of monopolies in the United States and the vast accumulation of wealth—the result of labor but unequally distributed, the outcome of a high tariff. The speaker struck a genuine Canadian question, when he mentioned that the Knights of Labor were opposed to granting public lands to railway companies and speculators. He showed how it worked in Kansas, where lands farthest west were settled up on first, in order that the labor of the settlers might enhance the value of the land further East, and held for speculation. Mr. Powderly also stated that the order does not admit of any person as a member who deals in or sells liquor in any way. Mayor Magill occupied the chair.

It is thought in Montreal that unless Mr. Vanderbilt makes certain concessions to the Grand Trunk, a war on rates eastward will be the result.

The Quebec Government will send a special agent to Europe to promote emigration to their Province.

The following quantities and value of lumber were shipped to the United States from Ottawa: In September, 17,692,000 feet, value $277,-267. In October, 21,480,000 feet, value $510,-873.

The Toronto *Globe* advocates the establishment of a Railway Commission in Canada, such as exists in Great Britain and in several of the States, for thereby railway managers could not be allowed out of mere caprice, to squander thousands of dollars on foolish "wars" about through rates, and then to make up their losses by imposing extortionate prices at points where they have no competition.

CANADIAN CANALS.

The Montreal *Shareholder* says:—

"The object of the New York policy is to carry all the freight trade, during the open season, to an American port. Ours should be to divert it into and through Canadian waters only. Each aim is perfectly legitimate, but if Canada is true to herself, and equal to meet the emergency with the necessary promptitude, the American policy cannot fail to be beaten, as it will be overmatched in a thoroughly unequal contest."

The Toronto *Telegram* says:—

Canada cannot afford to allow New York State to get the start of her on the canal carrying trade. New York has voted to throw off the canal tolls, and it has already been urged that Canada should follow suit. The loss of revenue to New York State will be about a million dollars per annum. The loss to Canada, if the canal tolls were thrown off the Welland and St. Lawrence canals would be a quarter of a million. As more than eighty-two per cent of the freights passing through the Welland canal last year came from United States ports, it is clear that Canada has a strong interest in keeping a hold of the freights that pass through the canals to the seaboard, the total amount of which in the year is about eight hundred thousand tons. If any of the freights were diverted into American waterways Canada would not only lose the handling of it but the revenue which would otherwise be derived from it. If the freights go, the revenue goes too.

The Halifax *Herald* says:—

Here the fact of the importance of the Canadian canals in building up trade at the expense of New York is frankly admitted. It remains to be seen what steps our Canadian Government will take to checkmate this new departure across the border. It has been suggested that this action on the part of the State of New York will necessitate a similar step on our part. Certainly, if the Government could see its way clear to make all Canadian canals free, it would be of immense benefit to the business of the whole Dominion.

The Toronto *Mail* says:—

Every argument that can be applied to a free canal would hold equally well in favor of a State railroad, is the admission of the New York

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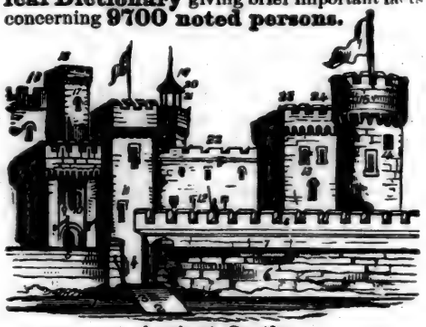
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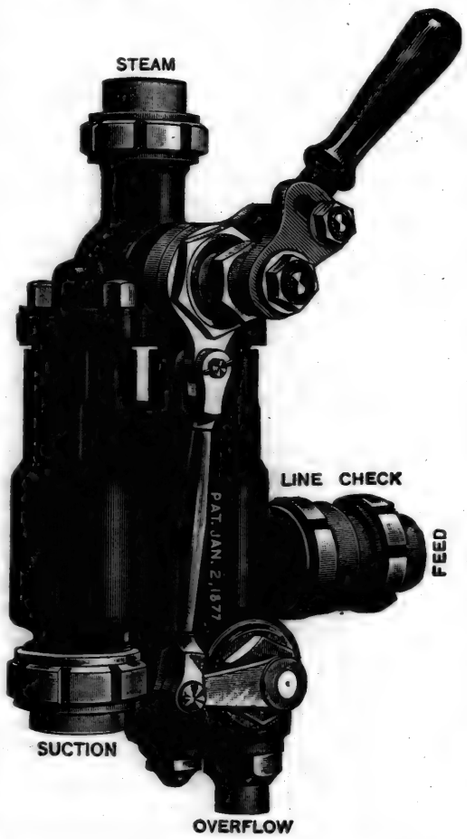
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Times, provided the latter were shown to be the more efficient and economical means of competition and regulation in the transportation business. The canal tolls prior to 1870 amounted to 6c. a bushel on grain brought from Buffalo to New York. They have been gradually reduced until for the last five years they have amounted to only 1c. a bushel. The process diminished the receipts of the State from over $4,000,000 in 1869 to about $800,000 in 1881. If the railroads were gradually grinding the canal business out of existence while the tolls were lowered from 6c. a bushel on grain to 1c. a bushel, will the process end now that the 1c. is gone? If not, are the American people going to turn the scale, and begin paying bounties for canal transportation, or going to take hold of the canal system and make it a strong competitor with the railroads and with rival water lines? This formidable question has yet to be faced, and it is one which cannot be answered off-hand.

The Canadian Government are determined to make the St. Lawrence Ship Canal still deeper in consequence of the rapidly increasing trade, and to enable the route to still more successfully compete with American routes.

MARITIME PROVINCES.

The Province of New Brunswick is urging the Dominion Government—through the very able champion of their rights, the St. John *Sun*—to give them the benefit of a portion of the Dominion expenditure for immigration purposes. The *Sun* says their claim is particularly strong in view of the fact that the Dominion policy in opening up the northwest is drawing population from New Brunswick, and that any extensive exodus may seriously disturb the political position of the Province in Parliament and the Confederation.

The tenders received by the department for old iron rails of the Intercolonial Railway are so low that it is decided not to sell them at present.

By order of the department of Marine and Fisheries, their agent, Mr. Gregory, has just concluded an inquiry into the wrecking of the steamer Arragon on the island of Anticosti, and the loss is attributed to error in judgment on the part of the master and officers, who were deceived by a mirage. The court of inquiry declares that no blame can be attached to any one, and that everything possible was done to save life and cargo. The report concludes with the following cautious advice:

"My assessors and myself again avail ourselves of this opportunity to call attention to the fact of the too small importance attached to the use of the lead in navigating the river and gulf of St. Lawrence. However safe a master may consider his position to be, in such treacherous localities he should occasionally cast his lead, and we have no doubt that if this were more frequently done much valuable life and property would be saved. This opinion is arrived at from the evidence given before us in investigations into several shipwrecks which have taken place in the river and gulf of St. Lawrence, where the treacherous nature of the currents and atmosphere, with deviations of the compass, are not sufficiently taken into consideration."

THE WINTER PORT AGAIN.

We have it from the highest authority that the Canadian Pacific Railroad Co. are not negotiating for the purchase of the Ogdensburg and Portland Railway with a view of making Portland the Eastern terminus or winter port of the Pacific Railway.

MARINE NOTES.

The coal shipments from Pictou this season amounted to 162,440 tons.

CROW HARBOR LIGHTHOUSE.

Notice is hereby given that a Lighthouse, erected by the Government of Canada on Rock or Harbor Island, Crow Harbor, in Chedabucto Bay, County of Guysboro', and Province of Nova Scotia, will be put in operation on the 25th of November, instant. Lat. N. 45 deg. 21' 5", Long. W. 61 deg. 16' 0".

The light will be fixed white, elevated fifty feet above high water mark, and should be visible twelve miles all around the horizon. The illuminating apparatus is dioptric, of the sixth order.

The building is of wood, painted white, and consists of a square tower forty feet high from its base to the vane on the lantern, with keeper's dwelling attached.

The lighthouse is built on the middle of the small island, and the light is for the purpose of indicating the entrance to Crow Harbor.

WM. SMITH,
Deputy of the Minister of
Marine and Fisheries.
"W."

OTTAWA, November 30, 1882.

American Railroad Shares not Wanted in England.

AN American railroad is almost invariably made with the money raised by means of mortgage bonds. The share capital is a bonus which the promoters of the line and others put into their pockets. In most cases this share capital is eventually doubled or trebled by the process known as "watering." America is so prosperous that most of its railroads would probably pay, not only on these mortgage debts, but on their share capital, were this latter intended. Such, however, is seldom the case. Mr. Vanderbilt the other day observed, "Damn the public," in speaking of the rights of the traveling public. He would have been more accurate had he also included that portion of the public which bought shares in railroads. They are generally defrauded by their directors, who first buy up rotten concerns, coal-fields, oil-wells, small by-railroads, and then lease them to the company over which they preside for fabulous amounts. Even allowing, however, for this, the shares of the large railroad companies might be worth buying were it not that the American railroad kings combine together to depress or elevate them in the market. If the shares are high, the kings agree to inaugurate a war of rates, and no dividend is paid until, in despair, the shareholders have parted with their property. No American in the possession of his senses ever dreams of holding the share of a railroad in his own country as a permanent investment. When the kings have depressed prices, the American buys speculatively, because he knows that it will pay these monarchs to force up prices. Four or five years ago there was a combination to bring about a general rise in prices. The English who held shares took advantage of this to accommodate the Americans with their holdings in these properties. Since then, vain and fruitless attempts have been made to induce us to buy at a high level. The fish have not taken the hook. I do not like seeing intelligent men wasting their time and intelligence in a hopeless task. It therefore may, perhaps, be only an act of kindness to inform American railroad speculators that there is not the remotest probability of any fish being caught here by means of a hook baited with an American railroad share. First mortgage bonds of good transatlantic railroads we are ready to take, but we do not contemplate absorbing paper issues of shares.—*London Truth.*

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THE New York and New England Railroad Co. has issued a circular to the following effect:

The Boston, Philadelphia and Washington trains will not commence running via Newburgh on Sunday, November 26, as stated in Circular No. 109, but will be resumed via the old route, viz: New York and New England Railroad, New York, New Haven and Hartford Railroad, transfer steamer "Maryland," and Pennsylvania Railroad, as soon as repairs on the Maryland are completed, due notice of which will be given. In the meantime no tickets will be sold, but passengers are recommended to go by the Norwich line.

THE Mexican Central Railroad has been completed to Lagos, twenty-seven miles north of Leon, and 269 miles from the city of Mexico.

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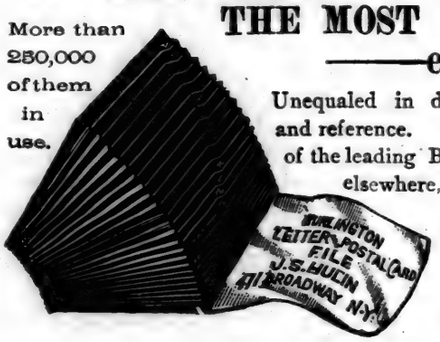
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IMPORTANT ANNOUNCEMENT TO INVENTORS.

THAT department of the AMERICAN RAILROAD JOURNAL which contains descriptions of new inventions properly coming within its range of subjects, is regarded with great notice and favor, particularly by those directly interested in learning what the latest applications of mechanical ingenuity in railroading are, and by those who have produced inventions which they desire to make as widely known as possible.

The large and widespread circulation of this paper, its prestige as the oldest railroad journal in the world, and the weight attached to its contents by the general consent of leading railroad men in all countries, give such value to its carefully prepared descriptions of new machinery and appliances as cannot be found outside of its columns.

The interest manifested by inventors in supplying us with information of their doings, and the eagerness with which this is received, encourage us to give an increased attention to that department of this paper treating of new inventions.

We therefore repeat our invitation to all persons who have produced what they regard as improvements coming within the range of railroad operations, to communicate with us promptly regarding the same.

All matter sent us will be thoroughly examined and considered, and no inventions in our opinion likely to be practicable and useful will be passed over without receiving due attention from us.

List of Patents for Inventions Relating to Railways, Manufacturing, Mining, Machinery, Etc.

BEARING DATE OF NOVEMBER 28, 1882.

268,000. Ballast Car: Thomas P. Cordrey, Massillon, Ohio. Filed Aug. 26, 1882.

268,017. Car-Coupling: Samuel A. Hauser, Winston, N. C. Filed May 20, 1882.

268,027. Head-Light for Locomotives: John Kirby, Jr., Ludlow, Ky., assignor to Post & Co., Cincinnati, Ohio. Filed Oct. 16, 1882.

268,042. Car-Coupling: Thomas H. Pegram, Winston, N. C. Filed May 4, 1882.

268,079. Nut Lock: James R. Carter, Anderson, S. C., assignor to M. L. Rose, same place. Filed April 4, 1882.

268,092. Brake Block: Upton M. Gordon, San Rafael, Cal. Filed Sept. 18, 1882.

268,107. Speed Indicator: William Lang, Brooklyn, N. Y. Filed Sept. 11, 1882.

268,117. Car-Coupling: Thomas H. Mebane, News Ferry, assignor of one-half to John W. Easley, South Boston, Va. Filed July 7, 1882.

268,134. Lamp for Railroad Cars and other Vehicles: Julius Schulke, Berlin, Germany. Filed June 30, 1882.

268,150. Feed Box for Stock: Alfred D. Tingley, New York, N. Y. Filed May 2, 1882.

268,163. Car-Coupling: Daniel Witt, Templeton, assignor of one-half to Andrew M. Holman, Baldwinsville, Mass. Filed Feb. 27, 1882.

268,219. Car-Coupling: Edward W. Grant, Ypsilanti, Mich. Filed March 30, 1882.

268,231. Locomotive: John C. Higdon, Kansas City, Mo. Filed April 26, 1882.

268,258. Car-Coupling: William McCubbin, Chatham, Ontario, Canada. Filed April 28, 1881.

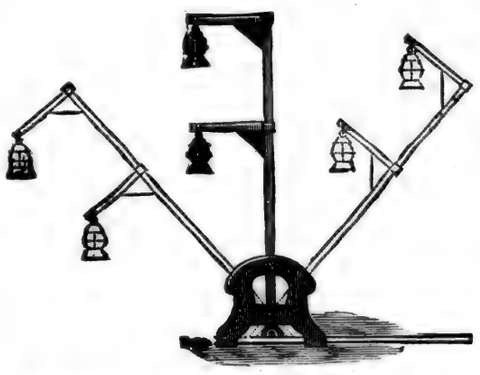
268,299. Dumping Car: Israel Shoudy, Jr., and Charles Atherton, Paw Paw Grove, Ill.; said Atherton assignor of one-third to said Shoudy. Filed Sept. 21, 1882.

268,315. Car-Coupling: Ezra Taylor and Asa Taylor, Indianapolis, Ind. Filed Sept. 28, 1882.

268,319. Balanced Slide-Valve: William B. Turman, Waldron, Ark. Filed April 10, 1882.

THE Mexican National Railway will be completed to Naravatio, 136 miles from the city of Mexico, on the 5th inst. Both this extension, and that of the Mexican Central Railroad, noted elsewhere, will be publicly opened on the 10th inst. A large building has been purchased in the city of Mexico for a permanent exposition of French goods.

Field's Switch Indicator and Railroad Signal.



THE above cut represents "Field's Switch Indicator, or Railroad Signal, for which a patent has recently been granted. This is claimed to be a *reliable* device by which the precise position of the switch can be seen by the engineer of an approaching train, thus giving him timely warning of a misplaced switch.

The relative position of the lamps shows the *exact* position of the switch (no matter how dark the night), as illustrated by the dotted lines in the cut. It is sure to do its work, as there is no machinery to get out of order; no electricity to be affected by atmospheric conditions; and it does not depend on the switch-tender's memory. This device is not only reliable, but also economical, as the ordinary hands of the car-shop can make and place the attachment. A simple method is devised for so locking the lamps as to prevent their being tampered with. The "targets," as represented, are of sheet metal, painted bright colors in order to show the position of the switch by day. As a railroad signal this device is excellent. By using various colored lamps, an extensive "Code of Signals" may be arranged to give orders to an approaching train. For instance: "Yellow lamp above, Red lamp below—Go on, no freight ready," may be one which would save the time of a stop, extra consumption of power, and the wear and tear attendant on stopping a train and getting under way again. Many other like advantages will present themselves to the practical railroad man. Parties desiring further information regarding the above can address W. R. FIELD, P. O. Box 2441, New York City.

Lewis Seitz's Car-Coupling.

IN the multiplicity of car-couplings, that of LEWIS SEITZ, of Bloomville, Ohio, has merits which distinguish it. His invention relates to that class of couplings in which provision is made for the automatic connection of two cars when brought together, with the link projecting from one of the draw-heads, and for disconnection of the same when one flies the track in case of accident. The objects of his improvements are: first, to provide car-couplings capable of releasing both ends of the link, to insure their disconnection when one car falls much below the level of the other, as in case of accident, such as the breaking of a wheel, axle, or rail; and second, to provide them with simple means by which the link can be released from the side or from the top of the car.

The specification of the invention forms part of the United States letters patent No. 266,537, dated October 24, 1882. Mr. Seitz, the inventor, is eighty years of age, and inquiries should be addressed to his son, Hon. John Seitz, Tiffin, Ohio, who has charge of his correspondence. Mr. John Seitz writes us that in addition to the simplicity and certainty of coupling and uncoupling the latter in case of "side ditch or precipice accident"—accomplish by means of his father's coupling, by the use of a link provided in it, an ordinary "stray" car can be coupled by means of a common pin.

Josef's Car Wheel.

THE advantages claimed for Josef's Car Wheel, upon which letters patent were granted in Washington on the seventeenth of October last, give it particular interest as an invention.

These are, that the new wheel possesses lightness combined with truth of balance, simplicity of construction and great strength. It weighs only from one-third to one-half as much as a cast-iron wheel of the same size. The Josef wheel is claimed to be non-vibrating, and therefore non-liable to breakage, and consequently safer than the ordinary wheel. Superior comfort to employés and passengers is insured by this non-vibrating quality, as a matter of course.

EDWARD E. JOSEF, of Buffalo, is the inventor of the new car wheel, some of the advantages claimed for which we have mentioned. It consists of a sectional hub, flanged disks and central separating and strengthening collar, fastened together by bolts or screws, with or without a ring, and all in combination with any suitable independent tire fastened around the periphery of the disks. The alleged non-vibrating quality of the wheel is communicated by the presence in the wheel, in combination with the hub and disks, of a washer made of rubber, leather, paper, or other non-vibrating material.

Finances of Ohio.

THE balance in the Treasury of the State of Ohio November 15, 1881, was $501,421.11. The receipts during the year were as follows: General revenue fund, $3,157,626.37; sinking fund, $1,021,078.49; common school fund, $1,580,270.25—total, $5,768,975.11. Including the balances on hand at the beginning of the year, the total receipts were $6,270,396.22. The disbursements during the year were: From the general revenue fund, $2,998,783.41; from the sinking fund, $1,130,451.38; from the common school fund, $1,600,984.50—total, $5,630,219.29. The balance in the Treasury November 15, the end of the fiscal year, was $644,176.93, credited to the three funds as follows: General revenue fund, $413,356.29; sinking fund, $208,892.70; common school fund, $17,927.94.

THE traffic agreement previously made between the Canada Southern Railway Company and the Michigan Central Railroad Company was consummated at a meeting of the shareholders of the former company, at St. Thomas, Ont., on the 30th ult.

American Railroad Journal.

ESTABLISHED 1831.

Steam Navigation, Commerce, Finance, Machinery, Mining, Manufactures.

SECOND QUARTO SERIES.—VOL. XXXVIII., No. 49.] NEW YORK, DECEMBER 9, 1882. [WHOLE No. 2,432.—VOL. LV.

CONSTRUCTION.

IT is authoritatively stated that the Naugatuck Railroad, between Waterbury and Bridgeport, Conn., will have a double-track next spring. The road-bed will be prepared at once.

THE new Swedesboro and Woodstown Railroad, in Gloucester and Salem counties, New Jersey, is expected to be completed by December 15, and will be operated by the West Jersey Railroad.

THE St. Louis and San Francisco Railroad Company has accepted the terms of the Choctaw Nation, in the Indian Territory, and will immediately begin the construction of its road through the Choctaw lands. The Indians, it is said, "are becoming reconciled to railroads."

THE track of the Northern Pacific Railroad Company has been laid as far west as Livingstone, Montana, which is the end of the Yellowstone division, and trains are now running to that point. The distance from St. Paul to Livingstone is 1,031 miles, and from Superior City, on Lake Superior, 1,011 miles.

A COMPANY is being organized in Toronto, Canada, to build a railway along the edge of the Niagara River from Horseshoe Falls to Queenston, and also a railway from the edge of the river through a tunnel to the top of a high bluff in the rear of the Museum, and to own a park at Niagara Falls and Queenston.

F. DE FUNIAK, former general manager of the Louisville and Nashville Railroad, in a recent interview, said: "The Pensacola and Atlantic will be completed by February 1; 130 miles are already completed. In a few days we will reach the Coctawachie River, where we will be delayed. By January 25 the bridge over the Apalachicola will be finished, and by February 1 through cars will be running from Savannah and Jacksonville to New Orleans. The Knoxville Branch will be finished by January 1, by which time we will reach the State line, and the East Tennessee, Virginia and Georgia will meet us there, as they have now only thirteen miles to lay."

THE Volga branch of the Chicago, Milwaukee and St. Paul Railway, from Turkey River Junction to Waudena, in Fayette county, Iowa, is being rapidly extended from Waudena to West Union. The grading is all done and ready for the rails. The track is laid within four miles of West Union, and the bridges are nearly all built. The trains will be running regularly by December 15. It is proposed to further extend this road next season from West Union to intersect with the road formerly known as the Davenport and Northwestern, but now owned by the Chicago, Milwaukee and St. Paul Railway Company. This extension will strike the old Davenport and Northwestern at Hawkeye, in Fayette county. This extension will give the West Union people another road besides the Burlington, Cedar Rapids and Northern, and bring to the St. Paul Company business that they have never had a share of before; and, besides, make their Volga branch a paying part of their system.

PERSONAL.

C. HUTCHINSON, of New Orleans, has been elected president of the Houston and Texas Central Railway Company, vice Charles A. Whitney, deceased.

THE directors of the Northern Central Railway Company have appointed W. H. Joyce to be freight superintendent of the Baltimore division, and Samuel L. Seymour to be freight superintendent of the divisions between Marysville and Canandaigua.

THERE were on the special train which passed through Louisville, Ky., on the 5th inst., en route for San Francisco, via the new Southern Pacific line through Memphis and New Orleans, C. P. Huntington and Gen. Butterfield, of New York; T. W. Pierce, of Boston, and Charles Crocker and W. E. Brown, of San Francisco.

THE President has appointed John S. Pillsbury, of St. Paul, Minn.; Waterman Smith, of Manchester, N. H.; and William H. Comstock, of Utica, N. Y., commissioners to examine four and three-fifth miles of the Northern Pacific Railroad, crossing the Missouri River from Bismarck to Mandan, Dakota.

H. STANLEY GOODWIN, assistant general superintendent and engineer of the Lehigh Valley Railroad, has been elected general superintendent, vice Robert H. Sayre, resigned. A. W. Steadman was elected chief engineer. The office of assistant superintendent has been discontinued.

ARRANGEMENTS have been completed for the reorganization of the banking house of Drexel & Co., which will go into effect January 1. The house will consist of nine partners, and will continue to be known as Drexel & Co. in Philadelphia, and Drexel, Morgan & Co. in New York. The five resident partners in Philadelphia are A. J. Drexel, F. A. Drexel, George D. Thomas, Edward T. Stotesbury and James W. Paul, Jr., and the four resident partners in New York, J. Pierrepont Morgan, E. T. Fabbri, J. Hood Wright and Charles H. Godfrey. These houses, with John H. Harjes and Eugene Winthrop, resident partners, compose the Paris firm of Drexel, Harjes & Co. The London correspondents are J. S. Morgan & Co.

ORGANIZATION.

AT a meeting of the directors of the New Orleans and Northeastern Railroad Co. held in New Orleans on the 6th inst., E. M. Johnson, of Cincinnati, was elected president; John Scott, vice-president and general manager; F. Halin, treasurer, and W. Dunstan, secretary.

AT the annual meeting of the stockholders of the Richmond and Petersburg Railroad Co., held in Richmond, Va., on the 5th inst., the following board of directors was elected: Fred. R. Scott, B. W. Haxall, Dr. D. W. Lassiter, H. K. Ellyson, W. T. Walters and R. R. Bridgers. President, Fred. R. Scott.

AT the annual election for directors of the Syracuse, Binghamton and New York Railroad Company, Samuel Sloan, William E. Dodge, George Bliss, Percy R. Pyne, N. A. Murdock, Edgar S. Auchincloss, E. F. Holden, F. H. Gibbons, B. G. Clark, W. K. Niver, M. T. Pyne, A. D. Chambers, and Fred. F. Chambers were elected.

AT the annual meeting of the Brooklyn Underground Railroad Company on the 29th ult., Eugene D. Berri, Henry Mumford, John French, James N. Balch, Samuel B. Duryea, Isaac H. Carey, J. M. Leavitt, George C. Barclay, Edward C. Freel, Benjamin T. Lynch, D. S. Baldwin, A. J. Nutting, and T. K. Horton were elected directors.

AT the adjourned meeting of the Chesapeake and Delaware Canal Co., held in Philadelphia on the 5th inst., the following directors were elected: Andrew C. Gray, Charles H. Hutchinson, John F. Gilpin, L. V. Williamson, Edwin Swift, Mahon P. Hutchinson, John R. Baker, Gustavus S. Benson, Henry C. Ford, Joseph E. Gillingham, Robert M. Lewis, W. Drayton, Charles Chauncey, Edwin N. Benson and H. Pratt McKean. President, Andrew C. Gray.

AT the annual meeting of the Great Northwestern Telegraph Company, held at Toronto, Canada, on the 29th ult., the following officers

and directors were re-elected for another year: President, Erastus Wiman; vice-president, William Gooderham; directors, O. S. Wood, Montreal; Hon. Wm. McDongall, C. B., Ottawa; D. H. Bates, New York; Adam Brown, Hamilton; James Hedly, Toronto; A. S. Irving, Toronto; Richard Fulier, Winnipeg and Hamilton.

At the annual election of the Iron Steamboat Company of New York, which is incorporated under the laws of the State of New Jersey, at the Central Hotel, Long Branch, N. J., on the 1st inst., the following board of directors was elected for the ensuing year: George S. Scott, Lewis May, George F. Baker, N. G. Miller, Charles E. Quincey, James D. Smith, Charles E. Loew, Samuel Carpenter, Washington E. Conner, R. M. Galloway, Rufus Hatch, G. P. Morosini and Amadee Vatable.

The directors of the New York and New England Railroad Company, elected on the 5th inst., are: James H. Wilson, William T. Hart, Henry L. Higginson, Jonas H. French and Eustace C. Fitz, of Boston; Le Grand B. Cannon, R. Suydam Grant, Jay Gould, Sidney Dillon, Cyrus W. Field, Hugh J. Jewett and Russell Sage, of New York; George B. Roberts, of Philadelphia; Jesse Metcalf, of Providence; W. F. Sales, of Saylesville, R. I.; F. J. Kingsbury, of Waterbury, Conn.; W. E. Barrows, of Willimantic; G. M. Landers, of New Britain, and William B. Franklin, superintendent of the Coats Manufacturing Company.

At the annual meeting of the Pittsburgh and Connellsville Railroad Company, held in Pittsburgh on the 4th inst., the following directors were elected: Robert Garrett, Mendes Cohen, Hugh Sisson, and Charles Webb, of Baltimore; W. J. Bissell, John D. Scully, George A. Berry, and C. L. Fitzhugh, of Pittsburgh; William Baldwin, of Connellsville; W. H. Markle, of Greensburg, Penn.; W. A. Koontz, of Somerset, Penn., and C. C. Markle, of West Newton, Penn. At a subsequent meeting of the directors Robert Garrett was chosen president and J. B. Washington secretary and treasurer.

INCORPORATION.

Articles of incorporation were filed on the 2d inst., in the office of the Secretary of State at Albany, N. Y., of the Delhi and Hudson River Railroad Company; capital, $475,000.

Articles of incorporation were filed with the Secretary of State of California on the 24th ult., by the Fresno Street Railway Company. Directors: Edwin A. Rowe, D. R. Shaffer, William F. Rowe, Lewis Davis, John A. Graham. Capital stock, $30,000, divided into 3,000 shares. Principal place of business, Fresno, California.

The Albia, Carmi and Shawneetown Railway Company filed articles of incorporation in Springfield, Ill., on the 2d inst. The principal business office is located at Carmi, and the purpose of the company is to build a road from Olney to Shawneetown. The capital, $1,000,000. The Effingham and Northwestern Railway Company, with a capital of $200,000, also filed articles of incorporation. It is proposed to construct a road from Effingham to connect with the Toledo, Cincinnati and St. Louis Railway in Shelby county, Illinois.

Statement of the Public Debt of the United States, December 1, 1882.

DEBT BEARING INTEREST.

	Amount Outstanding.	Accrued Interest.
5 per cent fuunded loan of 1881, continued at 3¼ per cent	$134,317,700 00	$391,759 96
3 per cent loan of July 12, 1882	280,394,750 00	700,986 88
4½ per cent funded loan of 1891	250,000,000 00	2,812,500 00
4 per cent funded loan of 1907	738,940,700 00	4,926,271 33
4 per cent refunding certificates	413,650 00	2,757 67
3 per cent navy pension fund	14,000,000 00	175,000 00
Aggregate of debt bear- interest	$1,418,066,800 00	$9,009,275 84
Interest due and unpaid		1,644,032 73

DEBT ON WHICH INTEREST HAS CEASED SINCE MATURITY

	Amount Outstanding.	Interest due and unpaid.
4½ to 6 per cent. old debt, 1837	$57,665 00	$64,174 81
5 per cent. Mexican indemnity stock, 1846-'52	1,104 91	85 74
6 per cent. bonds, 1847-'67	1,250 00	22 00
6 per cent. bounty land scrip, 1847-'49	3,275 00	213 06
5 per cent. Texas indemnity stock, 1850-'64	20,000 00	2,945 00
5 per cent. bonds, of 1858-'74	7,000 00	875 00
5 per cent. bonds, of 1860-'71	10,000 00	600 00
6 per cent. 5-20 bonds, 1862, called	365,550 00	7,707 03
6 per cent. 5-20 bonds, June 1864, called	50,400 00	994 40
6 per cent, 5-20 bonds, 1865, called	70,450 00	18,335 25
5 per cent. 10-40 bonds, 1864, called	289,850 00	42,815 67
6 per cent. Consol. bonds, 1865, called	368,900 00	12,131 61
6 per cent. Consol. bonds, 1867, called	817,300 00	109,874 01
6 per cent. Consol. bonds, 1868, called	250,500 00	20,822 24
6 per cent. loan, Feb. 8, 1861, matured Dec. 31, 1880	75,000 00	4,830 00
5 per cent. funded loan 1881, called	663,700 00	4,887 61
Oregon War Debt, March 2, 1861, matured July 1, 1881	8,800 00	1,558 50
6 per cent loan of July 17 and Aug. 5, 1861, matured June 30, 1881	505,500 00	9,982 50
6 per cent loan of July 17 and Aug. 5, 1861, continued at 3½ per cent, matured Dec. 24, 1881, called	3,007,300 00	38,074 39
6 per cent. loan of March 3, 1863, matured June 30, 1881	153,100 00	5,008 50
6 per cent loan of March 3, 1863, continued at 3½ per cent, matured August 1, 1882, called	2,266,200 00	21,383 51
1-10 to 6 per cent. Treasury notes, prior to 1846	82,525 35	2,668 06
1-10 to 6 per cent. Treasury notes, 1846	5,900 00	200 60
6 per ct. Treasury notes, 1847	950 00	57 00
3 to 6 per cent. Treasury notes, 1857	1,700 00	99 00
6 per ct. Treasury notes, 1861	3,000 00	364 50
7 3-10 per cent. 3 years' Treasury notes, 1861	16,300 00	1,104 43
5 per cent. 1 year notes, 1863	41,505 00	2,087 35
5 per cent. 2 year notes, 1863	32,500 00	1,612 30
9 per ct. compound interest notes, 1863-64	218,270 00	44,612 01
7 3-10 per cent. 3 years' Treasury notes, 1864-65	138,600 00	20,391 60
6 per cent. certificates of indebtedness, 1862-63	4,000 00	253 48
4 to 6 per cent. temporary loan, 1864	2,960 00	244 19
3 per cent. certificates, called	5,000 00	394 31
Aggregate of debt on which interest has ceased since maturity	$9,545,055 26	$441,409 66

DEBT BEARING NO INTEREST.

Demand notes, 1861-62	$59,330 00	
Legal tender notes, 1862-63	346,681,016 00	
Certificates of Deposit	9,845,000 00	
Gold certificates, 1863 and 1882	35,408,540 00	
Silver certificates, 1878	73,095,660 00	
Unclaimed interest		$5,339 96
Fractional currency, 1862, 1863 and 1864 $15,398,548 17		
Less amount estimated as lost or destroyed, act of June, 21, 1879 8,375,934 00		
	7,022,614 17	
Aggregate of debt bearing no interest	$472,112,160 17	$5,339 96

RECAPITULATION.

	Amount Outstanding.	Interest.
Debt bearing interest in coin, viz:		
Bonds at 5 per cent, continued at 3½ per cent.	$134,317,700 00	
Bonds at 4½ per cent	250,000,000 00	
Bonds at 4 per cent.	738,940,700 00	
Bonds at 3 per cent.	280,394,750 00	
Refunding certificates	423,650 00	
Navy pension fund, 3 p.c	14,000,000 00	
	$1,418,066,800 00	$10,653,308 57
Debt on which interest has ceased since maturity	9,545,055 26	441,409 66
Debt bearing no int., viz:		
Old demand and legal-tender notes	$346,740,346 00	
Certificates of deposit	9,845,000 00	
Gold & silver certificates	108,504,200 00	
Fractional currency	7,022,614 17	
	$472,112,160 17	
Unclaimed interest		5,339 96
	$1,890,724,015 43	$11,100,058 19
Total debt, principal and interest to date, including interest due and unpaid	$1,910,824,073 62	

AMOUNT IN TREASURY.

Interest due and unpaid	$1,644,032 73
Debt on which interest has ceased	9,545,055 26
Interest thereon	441,409 66
Gold and silver certificates	108,504,200 00
U. S. notes held for redemption of certificates of deposit	9,845,000 00
Cash balance available Dec. 1, 1882	157,887,476 28
	$287,867,173 93
Debt, less am't in Treas'y Dec. 1, 1882	$1,622,956,899 69
Debt, less am't in Treasury Nov. 1, 1882	1,628,491,042 58
Decrease of debt during the month	$5,534,142 89
Decrease of debt since June 30, 1882	$65,957,561 03

BONDS ISSUED TO THE PACIFIC RAILROAD COMPANIES, INTEREST PAYABLE IN LAWFUL MONEY.

	Amount Outstanding.	Accrued Interest not paid.
Central Pacific bonds, 1862-64	$25,885,120 00	$647,128 00
Kansas Pacific bonds, 1862-64	6,303,000 00	157,575 00
Union Pacific bonds, 1862-64	27,236,512 00	680,912 80
Cent. Branch Union Pacific bonds, 1862-64	1,600,000 00	40,000 00
West'n Pacific Bonds, 1862-64	1,970,560 00	49,264 00
Sioux City & Pacific bonds, 1862-64	1,628,320 00	40,708 00
Totals	$64,623,512 00	$1,615,587 80

Interest paid by the United States, $55,344,682.74; interest repaid by transportation of mails, &c., $15,409,850.96; interest repaid by cash payments: 5 per cent net earnings, $655,198.87; balance of interest paid by United States, $39,279,632.91.

The foregoing is a correct statement of the public debt, as appears from the books and Treasurer's returns in the Department at the close of business, November 30, 1882.

CHARLES J. FOLGER,
Secretary of the Treasury.

A Trap for John Bull.

It will be remembered that a few weeks ago the connection of an English official, Sir Charles Rivers Wilson, with the Galveston and Eagle Pass Air-Line Railway Company, was the subject of comment in the British Parliament, the effect of which was the withdrawal of Sir Charles from the affairs of that Company. *The News* at the time called attention to the proceedings and waited further developments. Yesterday an English-printed prospectus, setting forth advantages and inducements to investors in the enterprise, was handed *The News*, together with a map showing the route of the line in bold and vigorous relief. The English prospectus is decidedly refreshing at this end of the project, and show "what fools we mortals be." At the head of the prospectus are the names of the Right Hon. Robert Lowe, Viscount Sherbrooke, and Sir Charles Rivers Wilson, K. E. M. G., C. B., who "have agreed to act as trustees in London for the bondholders during the construction of the railway, and the whole proceeds of the bonds will be paid to their bankers in London, the London Pro-

visional Bank of England, limited." The late proceedings in Parliament show that the use of these names is genuine, at least as far as that of Sir Charles Rivers Wilson is concerned, and doubtless that of Viscount Sherbrooke appears in legitimate form. As the Right Hon. Robt. Lowe is an ex-chancellor of the exchequer, his standing in financial circles is of value, and hence the importance of such indorsement. The scheme may have been undertaken in perfect good faith by those who were working it up—as far as the names quoted are concerned, undoubtedly so—but this is a world of very large margins. "A deed of mortgage," says the prospectus, "has been executed between the Galveston and Eagle Pass Air-Line Railway Company and the Mercantile Trust Company of New York, whereby the bonds of this issue are charged as a first mortgage on the entire railroad as constructed, its equipment, revenues, franchises and other property, including the whole of the State land grant, to which the company will become entitled, amounting to 102,400 acres for every ten miles of road completed and put into good running order, or altogether to about 3,584,000 acres." As land is scarce in England figures like these would be apt to catch the public eye. If the party or parties in England working up the scheme knew nothing of it they certainly ought to have known that the land grant act of Texas has been practically annulled, and that there is no land in the State now remaining that can be given to any such enterprise. As the prospectus bears date of November 2, 1882, this information ought to have been at the command of the "engineers." This, in connection with the fact that the accompanying map shows a certain portion of the line, from Columbia to Wharton, "ready for permanent way," whatever that may mean, indicates crookedness in some quarter or another. If any work has ever been done upon this enterprise, *The News* is not aware of it. The whole route marked out is "ready for permanent way," for that matter, but the permanency of the plan is not well developed as far as heard from. It is understood that a party of Englishmen were recently in New York who came out to look into the project, and perhaps their observations on this side of the water may have inspired recent parliamentary comment on the subject, although Sir Charles Rivers Wilson retired from the concern declaring his belief in the entire solidity of the enterprise. How it is with the Right Hon. Robert Lowe *The News* has not yet learned. It is strange, however, how such names could be used in the furtherance of any project without first investigating every important detail. *The News* takes occasion to say that the Texas land grant law is practically abolished, in consequence of exhaustion of the landed domain of the State, and that not an acre of land is to be expected from this source. The public at large is entitled to this information, for the honor of the State and the protection of individuals. A couple of experts well known in Galveston in connection with "the art of railroading" are credited with the brain power in this paper railroad scheme. Viscount Sherbrooke and Sir Charles Rivers Wilson ought to hold themselves more thoroughly in reserve, for "what fools we mortals be!"—*Galveston News, Nov.* 28.

Boston and Maine Railroad.

THE receipts of the Boston and Maine Railroad Company for the years ending September 30, 1881 and 1882, were as follows:—

	1881.	1882.
From passengers	$1,489,534 49	$1,593,117 02
From freight	1,018,857 01	1,079,424 90
From mails	23,663 92	24,489 54
From express	69,159 98	71,294 28
From rents, etc.	66,030 51	65,715 74
From interest	20,270 07	16,688 74
	$2,687,515 98	$2,850,730 22
Expenses:		
Repairs of road	158,207 12	167,070 80
Repairs of bridges	30,397 46	37,700 81
Repairs of fences, etc.	11,384 64	11,026 40
Repairs of buildings	82,549 15	86,762 91
New buildings	16,061 91	10,803 55
Repairs of locomotives	74,388 76	47,631 79
New locomotives	36,280 07	36,926 01
Repairs of cars	83,511 98	96,224 35
New cars	83,343 49	69,514 48
Fuel and water	231,425 26	244,755 07
Oil and waste	12,914 75	14,566 87
Renewal of ties	22,415 48	51,778 51
Renewal of rails	41,607 29	57,689 18
Insurance	6,410 00	6,600 00
Taxes	96,589 84	133,492 43
Salaries of officers and clerks	47,686 22	49,282 48
Legal expenses	4,844 93	13,731 47
Stationery and printing	18,773 42	18,077 40
Outside agencies and advertising	14,974 55	18,286 79
Contingencies and miscellaneous	18,097 66	12,861 16
Dover and Winnipesecogee Railroad rent	29,000 00	29,000 00
West Amesbury Railroad rent	5,700 00	5,700 00
Lowell and Andover Railroad rent	52,500 00	52,500 00
Locomotive service	120,148 90	124,517 92
Passenger train service	65,403 65	66,580 78
Passenger train supplies	9,546 30	8,577 35
Freight train service	35,502 96	37,991 29
Freight train supplies	2,041 61	1,378 49
Freight train mileage	2,668 98	12,324 80
Telegraph	7,535 45	8,463 27
Loss and damage	3,099 84	3,224 97
Personal injuries	9,297 36	41,826 36
Agents and station service	301,134 07	347,235 31
Station supplies	14,323 43	27,777 82
Balance of improvement account charged to expenses above the sum reserved	64,433 03	68,576 72
	$1,814,289 56	$2,017,057 56
Leaving as net earnings	$873,226 42	$833,672 66
From which deduct—		
Interest on bonds	$246,632 59	$245,000 00
Dividend 4 per cent May	280,000 00	280,000 00
Dividend 4 per cent Nov.	280,000 00	280,000 00
Amount reserved for double track and other purposes	65,000 00	.....
	$871,632 59	$805,000 00
Surplus	$1,593 83	$28,672 66

Compared with the year 1881, the gross receipts of 1882 show an increase of $163,214.24, and the net balance applicable to dividends a decrease of $37,921.17. This decrease, the report says, is more than accounted for by the increased expenditures for steel rails, $16,081; ties, $29,363; taxes, $36,902; and personal injuries, $32,529 (including the accident of January 2)—making in these items alone an aggregate of $114,875 the present year over the previous year.

At the commencement of the year the company had 84 locomotives; during the year three new passenger locomotives were built in the company's shops, one of which took the place of an old one, and two were in addition to the former number, making the number at the close of the year 86. Another large and powerful locomotive for freight is in process of construction, and will be ready for service in a few weeks.

The company have also 182 passenger and baggage, and 1,949 merchandise and other cars, and 12 snow ploughs; of these 2 parlor, 5 first-class passenger, 2 combined passenger and baggage, and 47 freight cars have been built in the company's shops at Lawrence during the year. One parlor car has been purchased, and of 50 freight cars under contract 25 have been delivered.

The second track has been extended from East Kingston to Exeter, 4¾ miles, and from a point 4½ miles west of Portland to Scarborough, 2¼ miles. During the year 1,803 tons of steel rails and 32 tons of iron rails were laid down, of which 531 tons of the steel rails were laid in the new second track. There were also laid 141,405 ties in addition to those used in the new second track, being 77,429 in excess of last year.

New side tracks have been laid at Prison Point, Oak Grove, Edgeworth, Haverhill, Madbury, Wells, Biddeford, Old Orchard, and Portland, aggregating 4.064 miles.

The number of passengers carried during the year was 5,984,000, against 5,325,375 in 1881, an increase of 658,625; the number carried one mile was 81,641,541, against 74,968,911 in 1881, an increase of 6,672,630. The number of tons of merchandise carried was 904,966, against 842,604 in 1881, an increase of 62,362; the number carried one mile was 44,882,394, against 41,889,660 in 1881, an increase of 2,992,734. The number of miles run was 1,945,599, against 1,854,048 in 1881, an increase of 91,551.

TREASURER'S TRIAL BALANCE, SEPTEMBER 30, 1882.

	1881.	1882.
Construction	$9,508,753 96	$9,512,780 26
Equipment	1,242,230 00	1,242,230 00
Materials on hand	197,175 01	216,480 44
Cash	135,983 12	222,613 69
Notes receivable	172,219 75	86,200 43
Land and improvements Dover and Winnipiseogee Railroad	26,603 23	26,603 23
Dover and Winnipiseogee Railroad stock	263,144 48	263,144 48
Steamer Mt. Washington and wharves	60,260 24	69,260 24
Danvers Railroad bonds	125,000 00	125,000 00
Danvers Railroad account	27,430 00	27,430 00
Lowell and Andover Railroad betterments	58,624 42	58,774 42
Newburyport Railroad stock and bonds	302,001 95	302,001 95
Portland and Rochester Railroad	.....	118,919 75
Due from station agents	.....	80,764 98
Miller's River improvement	.....	17,976 34
Land near State Prison, Charlestown	.....	23,487 71
Total	$12,128,426 16	$12,393,667 92
Capital stock	$6,921,274 52	$6,921,274 52
Seven per cent bonds due 1893	1,500,000 00	1,500,000 00
Seven per cent bonds due 1894	2,000,000 00	2,000,000 00
Notes payable	500 00	100,000 00
Lowell and Andover Railroad improvement acc't.	5,268 03	4,434 43
Uncalled-for bond interest	8,855 00	7,087 50
Uncalled-for dividends	14,764 00	17,349 00
Accounts payable and pay rolls for September	.....	175,534 14
Ledger balances	3,935 14	30,486 20
Profit and loss	1,673,829 47	1,637,502 13
Total, as above	$12,128,426 16	$12,393,667 92

President.—GEORGE C. LORD.

Directors.—George C. Lord, Nathaniel G. White, Amos Paul, Nathaniel J. Bradlee, William S. Stevens, James R. Nichols, John Felt Osgood, Samuel E. Spring, Nathaniel W. Farwell.

Treasurer.—AMOS BLANCHARD.

Gen'l Sup't.—JAMES T. FURBER.

Auditor.—W. H. B. WIGHTMAN.

Clerk.—CHAUNCEY P. JUDD.

AMERICAN Railroad Journal. ESTABLISHED 1832.

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WE invite railroad officers to send us notice of elections, transfers, appointments, resignations, etc.; and all our readers would oblige us by furnishing for our columns any items of personal information, which may come to their knowledge, and are adapted to this department. We aim to record all new railway enterprises in the United States and Canada, and to note the progress of construction on all new roads and extensions; and we request all concerned in railway building to give us early information regarding the above, that our reports may be as complete as possible.

Subscribers are requested to report to our office any irregularity in receiving the JOURNAL.

Contributed articles relating to Railroad matters generally, Mining interests, Banking and Financial items, Agricultural development, and Manufacturing news, by those who are familiar with these subjects, are especially desired.

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COPIES of this JOURNAL are occasionally distributed as an advertisement, and should not be returned to the office. The proper use for them is their thorough examination, which will result in business to the publishers.

FROM THE CHESAPEAKE TO THE GULF AND PACIFIC.

THE far-reaching plans of the Southern Pacific Railroad managers are unfolding themselves to the public view. President LELAND STANFORD, of the Central Pacific, who is also one of the principal promoters of the Southern Pacific, recently arrived in New York, having made the trip from San Francisco by way of the Southern Pacific and Texas Pacific routes, was interviewed while in Louisville, and is reported to have stated that within a few months there will be a continuous line of railroad from San Francisco, the dominant harbor on the Pacific coast, to the mouth of the Chesapeake Bay, which offers a similar harbor on the Atlantic coast, all of which will be under control of the Southern Pacific California syndicate. Mr. STANFORD'S own trip did not follow the proposed line, but departed from it at Sierra Blanca, one hundred miles east of El Paso, and thence across Texas and Arkansas to St. Louis, from St. Louis to Louisville by the new "Air line," and thence over the Chesapeake and Ohio to Washington.

What may be called the "Huntington" lines from San Francisco eastward, will be over the Southern Pacific to El Paso, from El Paso to New Orleans by the way of San Antonio, and from New Orleans to Memphis over the Mississippi Valley Railroad, now under course of construction via Baton Rouge and Vicksburg, and to be completed by the end of 1883. At Memphis it intersects the completed Chesapeake and Ohio system, over which continuous trains are now running to Washington, Richmond and Fortress Monroe, at the entrance of Chesapeake Bay. This line via the Gulf coast will be somewhat longer than the other overland lines from New York and North-Atlantic cities; but it has the great advantage of being the shortest line on United States territory between the two oceans. The distance from San Francisco to New Orleans will be 2,450 miles, and from San Pedro Bay to Galveston 1,700 miles; and over the latter route it is expected that quantities of Oregon wheat, salmon and wool will be handled for shipment to Europe.

A short cut-off is now being surveyed from Vermillionville, in Louisiana, to the Mississippi at Baton Rouge, a distance of 50 miles. It is not certain which of the two roads from Vermillionville to New Orleans will be used, both being of about equal length, and running through an almost dead level country. But for business destined to points in Tennessee and eastward the Baton Rouge cut-off will save about 200 miles of carriage. As a through passenger route it will probably make the same time as the other southern routes by way of St. Louis and Kansas City, the grades being much lighter throughout, and it will enable the passenger to stop off at Washington, Louisville, Memphis, New Orleans or San Antonio, and to pass through the famous semi-tropical California country around Los Angeles. In winter particularly the line will be exempt from extreme cold weather, and snow blockades, and may be preferred on that account.

The Texas Pacific line between El Paso and New Orleans has been opened several weeks, and the "Sunset," or San Antonio line, is to be opened within a few days. Mr. CHARLES CROCKER, President of the Southern Pacific, and Mr. T. W. PEIRCE, President of the Galveston, Harrisburg and San Antonio Co., are to meet at the gap in West Texas to open the new line December 10th, and Mr. CROCKER will make a continuous trip from New Orleans to San Francisco over the road.

The prospects are, therefore, that the seemingly impossible dream of ambitious railroad men a few years ago, of a continuous line of railroad from the Atlantic to the Pacific (some 4,000 miles in length) is first to be realized by the daring and astute railroad managers of California. And it is a notable fact that by far a greater part of this line has been built under the direct management and supervision of these parties themselves; only a small portion of it being composed of fragments of older roads incorporated.

In this connection it is well to remember that the Southern Pacific will have a loop, or duplicating short line by way of St. Louis. The thirty-fifth parallel route, consisting of the Atlantic and Pacific and St. Louis and San Francisco railroads when completed, is also controlled by the Southern Pacific managers, as much as by any one, and the line from St. Louis eastward to Louisville is all that remains to be acquired to form a very direct line from the Chesapeake to San Francisco as direct as the pioneer line by way of Chicago and Salt Lake.

When the Northern Pacific Railroad shall be completed from St. Paul and the head of Lake Superior to Puget Sound in Washington Territory, it will present the spectacle of a line of 2,000 miles of railroad under one company and in one management; but this achievement, stupendous as it would have been regarded a few years ago, is dwarfed by the consummation of the Southern Pacific of 2,400 miles between

San Francisco and New Orleans, to say nothing of the extension east of the Mississippi 1,700 miles further from New Orleans to the Chesapeake.

It is understood that the Chesapeake and Ohio will have its freight terminus at Newport News or Hampton Roads (opposite Norfolk) and its northeastern passenger terminus at Washington, to which it will have its own line, if suitable running rights cannot be obtained over one of the two lines entering Washington from the South. From Washington City it is manifest there will soon be two competing parallel lines north to Baltimore, Philadelphia and New York, and over one of these two the through business of the Chesapeake and Ohio will be done. Already the application of this company to be admitted to the trunk line pool on passenger business between New York and Cincinnati, Louisville and St. Louis, has been conceded on the most favorable footing. The career of this new candidate for southwestern and far-western business begins to open up and show something of the greatness of its future possibilities.

RAILROAD CASUALTIES.

CAN nothing be done to check the slaughter of persons on railroads? Railroad accidents, as they are called, are increasing in frequency and in horror. Not a day but brings account of one or more dreadful collisions between trains, in which cars are overturned or smashed up, and in which numbers are injured or killed outright. The increase of casualties is out of all proportion to the increase in mileage operated; though perhaps not beyond the increase in railroad travel. A noticeable amount of accidents fatal to railroad employés has appeared of late. The bulk of these accidents are traceable to three causes: collisions, derailments, and break down of bridges or trestles. An element of human carelessness, either in construction, maintenance or management, lies, of course, at the bottom of these mishaps; excepting always that small proportion of railroad accidents which is due to malice, and which has become alarmingly frequent of late.

Obviously, where we have 100,000 miles or more of single-track railroad on this continent, collisions will sometimes occur even upon the best-managed roads, from the neglect, stupidity, drunkenness, or disobedience of orders by employés. It, however, happens that unpreventable accidents, such as the breaking of an axle or wheel, or the parting of the train, will sometimes so disturb and interfere with the theoretic regulation of the road as to induce a second and more serious disaster. These are among the risks that travelers by rail will have to incur for a long time. But there are other classes clearly of a preventable character which ought to receive more attention from railroad owners than they do. We say from owners with purpose, inasmuch as we distrust the efficiency of statutory and penal enactments. There is no precaution like that exercised by intelligent self-interest. It is not for the advantage of railroad owners or officers that accidents should occur, nor have they any direct interest in what may be called reckless or hazardous handling of their trains. It is for their benefit to do the best they can; but the inquiry arises why that best should not be still better than it is.

Two or three plans for a reform suggest themselves: first, as to the selection of superintendents and chief engineers. Good men are scarce; and it is possible that an indifferent officer may learn from his own mistakes, and afterward turn out to be a proficient. At present, however, a superintendent dismissed for incompetence or bad habits, usually has nothing to do but to apply to a neighbor, and perhaps a rival, railroad president, to secure employment of the same kind; and sometimes with larger responsibilities than in the position he had just vacated. The railroad superintendents themselves carry great responsibilities; and although it is the ambition of nearly all subordinates in the operating department to attain to that distinction, the superintendent or general manager of a railroad has no easy task, and none but able-bodied, clear-headed men should be appointed to it. The superintendents have recently, at a meeting in this city, adopted a regulation or understanding among themselves, that subordinates—such as trainmen, trackmen, machinery men, and purchasing and supply agents—should not be employed unless they can show that they have left their late position for good or honorable cause. Heretofore, the threat of discharge for misdemeanor had no terrors for the average employé—engineers, conductors, brakemen, and the like—as fresh places were to be had on neighboring roads with scarcely a delay, and sometimes with promotion. The result was demoralizing; it frequently happening that two roads situated in the same territory were hiring the discharged hands of each other without any betterment in the service of either. This power of giving or witholding a recommendation is an important one, which must be lodged somewhere, but like all other powers it is capable of being abused so as to become one of vast tyranny and oppression.

Another prolific cause for the large number of casualties on railroads may be attributed to the use of intoxicating liquors as a beverage. Most of the older roads in the East have a rule that none of the trainmen shall indulge in drinks of this kind during hours of service. This is only a sanitary provision, but it really is not broad enough to meet the case. It is often, and sometimes notoriously and openly, evaded without fear of evil consequences. A man may, however, abstain during his hours of labor, and be besotted in the interval, or a night's debauch may totally unfit him for a task requiring steady nerves, clear eyes, and calm brain the following day. Some premium should be put upon habitual sobriety, and some certain penalty should follow those who are addicted to the use of spiritous liquors to excess at any time. Railroad employés should be taught in this and other ways that those who are concerned in the transportation of passengers have a weight of responsibility resting upon them which is inconsistent with intemperate habits. Railroad and executive officers can render a great service to the community by themselves setting an example; and, by weeding out frequently, by admonitions, and if necessary suspensions and expulsions of the unsteady, make plain to them the gravity of the duty they are required to perform, and the enormity, under the circumstances, of their offense.

Taken at large, no doubt the railroad service of the country is fully equal, and even superior, to the labor employed in any other like industry of great magnitude. Railroad companies have less difficulty than other corporations in supplying themselves with needed help of all descriptions. The steadiness of the employment, the certainty and promptness of pay, and a fellow feeling akin to that which the soldier acquires for his old company and regiment, are more attractive to floating labor. Superintendents might take advantage of this to recruit their ranks from the better, and not from the worse, classes of society.

It has happened on some of our most prominent and most lucrative trunk lines, which are declaring large dividends to their owners, that inexperienced boys have been converted into trainmen, and superannuated signal men, who should be on the retired list, have been kept at responsible posts, upon very meagre wages, apparently on no other ground than economy. Of course inefficient help is not in the long run economical. Stockholders and presidents who insist upon, or abet their superintendents in cutting down the payrolls so as to deteriorate the force, are the reverse of economical. Good men should be chosen for weighty and trusty positions, and their pay should have some pro

portion to their responsibility, to their risk, and to their length of service.

As for the class of accidents caused by placing obstructions on the track, throwing missiles at cars, or train robberies, they are high crimes to be punished at any cost. Railroad and express companies should hunt these miscreants down as enemies of the human race, like pirates and highwaymen, whose trade must be broken up for the security of the public.

RAILROAD MEDICAL SERVICE.

[*Continuation of the French System.*]

BY S. S. HERRICK, M. D.

SECRETARY OF BOARD OF HEALTH, STATE OF LOUISIANA.

MEDICAL ATTENDANCE.

EVERY employé or workman in the company's service, including the females just mentioned, is entitled to medical relief (both attendance and medicines), in case of injury or sickness, except under circumstances hereafter to be mentioned.

When an employé or workman declares himself ill, or is reported absent by reason of sickness, his foreman gives to him, or sends to the physician, a ticket of attendance, detached from a record-stub, and joins to it a pass over the road in case the patient lives far from the physician's station. This ticket, without which no one, save in extreme emergency, can claim a physician's attendance, is handed to the latter, who fills and signs coupon A, detaches and sends it to the man's foreman. The latter copies the inscription of this coupon on the stub and gives it back to the patient when he is to return to the doctor, so that he may be recognized.

Every day, at a fixed hour, the physicians receive these patients at the station-house, if there is a suitable consulting-room there, otherwise at their own offices. The physicians record daily upon a case-book (form 1,356) the names, occupations and residences of the outpatients, the nature and cause of their sickness, the remedies prescribed, the expected duration, and, after cure, the actual duration of disability for work. Finally they add such observations as they deem useful to the patients and to the service in general. This record governs and facilitates any future reference by the administration. It is examined by the physician-in-chief at every tour of inspection.

When an employé, reported sick, is unable to leave the house, the ticket of attendance inscribed "at domicil," with its precise location, is immediately dispatched to the physician, who then attends the patient at his own residence. In case the physician decides that treatment in a hospital is advisable, the patient has the option of home attendance at his own expense. On admission to hospital, the physician, or in his absence the patient's foreman, sends to the hospital steward a ticket (form 1,355) stating simply the name, occupation and residence of the sick man.

On his discharge from treatment, the employé should have his condition authenticated by the company's physician, who sends directly and under seal to his foreman *coupon B* of the ticket of attendance, with the necessary particulars. Without this formality the cost of the sickness cannot be paid. Under no pretext must the company's physician give such a certificate directly to the employé.

Every explanatory certificate and medical report should be examined by the physician-in-chief, before forwarding the same to the foreman who requires it. In a case of severe illness or injury, a company's physician may ask the aid and counsel of his colleagues in the adjoining sections; or in emergency may call on a private physician; but an account of the same must be rendered to the physician-in-chief.

An employé has the option of attendance by a private physician at his own expense. In an emergency acknowledged and certified by the man's foreman, when the company's physician cannot attend, the private physician's bill should be approved and signed by the foreman and physician of the section, and then addressed to the physician-in-chief, who submits it to the administration. In any case all such claim for fees ceases from the moment the company's physician is ready to attend the patient.

Medical and pecuniary relief for sickness or injury is limited to three months. Beyond this the administration, on the motion of the directory, decides upon extending or discontinuing relief, or fixing a time beyond which the employé goes out of the company's service.

Every patient who exceeds his leave of absence, without his physician's authority, or who requires unnecessarily the physician's attendance at his domicil, or is not at home when visited, is regarded as absent without leave and subject to penalty. The following are not entitled to medical relief:

1. Employés whose annual salary is more than 2,500 francs.

2. Employés and workmen who, though not required by the nature of their employment, dwell more than two kilometres (about one and one-quarter miles) from the establishments to which they are attached; in which case they can only require of the company's physician an authentication of their illness.

3. Those who, after discharge from attendance and before resuming work, again fall sick.

4. Subjects of a chronic infirmity previous to entering the company's service.

5. Those whose illness results from their own misconduct (drunkenness, venereal affections, brawls, etc).

6. Day-laborers and those working for contractors.

ACCIDENTS.

When an accident occurs upon the line, the physician of that section, and, in his absence or in case of need, those of the neighboring sections, and even private physicians, are immediately summoned by telegraph, to render aid, and if necessary organize an ambulance service. The company's physicians should give attention to injured passengers until recovery, if they so desire. They draw up a circumstantial report of the accident, and transmit it directly, with the briefest possible delay, to the physician-in-chief, who forwards it to the General Manager. In an urgent case the foremen and employés are to follow the printed instructions concerning the first relief to be rendered while waiting for the doctor.

Whenever a physician, for satisfactory reasons, desires his place to be filled during absence by one of his colleagues or by a private physician, he is to obtain permission of the physician-in-chief. Every physician of a section is entitled to a free pass over the road, both in his own and in each of the adjoining sections.

MEDICAL STORES.

A relief chest, with an amputation case, a stretcher and, if thought advisable, a supply of medicines and surgical appliances, are deposited at the stations where workshops are located or locomotives are changed. Common relief chests are deposited at other stations and establishments, where they are thought necessary. These various articles are entered upon the inventories of the stations and workshops, and are put in charge of the foremen of these establishments, who are responsible for their damage or loss when not in actual use. In any case of deficiency in these chests, the company's physicians must be informed immediately, so that what is wanting may be replaced without delay.

Purveyors of the company, such as apothecaries, druggists, surgical instrument makers, etc., are required to agree to a written tariff of prices. They are also expected to sell to the employés of the company, by the same tariff, whatever articles they need for their personal use.

The apothecary of each section is nominated by the local physician and confirmed by the physician-in-chief. Medicines are supplied on orders written by the physician at the moment of his visit to a patient., Apothecaries are required to keep an itemized account of the drugs entering into prescriptions, with their prices. The company makes no allowance for bottles and gallipots; consequently these are loaned by the druggists, the price of the same being deposited to secure their return. Druggists are not allowed to furnish and charge for other medicines and articles than those specified in the tariff. Special apparatus and instruments may be supplied only upon orders previously approved by the physician-in-chief.

All bills in the medical department are to be presented quarterly to the district physicians, and, after approval by them, are transmitted to the physician-in-chief.

PRINTED FORMS OF THE MEDICAL SERVICE

are as follows:

1. Stub-record for tickets of attendance (form 1,351).

2. Record of medical consultations (form 1,356).

3. Tariff of medicines and surgical appliances (form 1,361).

4. Orders for medicines (form 1,353).

5. Blanks for monthly reports of physicians (form 1,357).

6. Nomenclature of diseases and injuries (form 1,358).

7. Stub-record of physical examinations (form 1,354).

8. Regulations of the medical service.

9. Instructions for personal hygiene and for first relief in absence of a physician (form 1,362).

10-11. Letter and note heads (forms 1,363 and 1,364).

12. Hospital tickets (form 1,355).

13. Orders for bath (form 1,352).

No printed forms can be used, except those adopted and supplied by the administration.

[TO BE CONTINUED.]

Pintsch's Patent Lighting System.

THE Pintsch Patent Lighting System pro vides for the lighting of railroad cars and locomotives, steamships and ferryboats, buoys for seashore, river and harbor lights, and for railroad depots, factories, hotels and other buildings. It is now in general use in Europe, and the Pintsch Lighting Company has been organized under the general statutory provisions of the State of New Jersey, for the purpose of introducing the Pintsch system of lighting throughout the United States. The office of the company is at No. 19 William street, New York City, where the particulars as to the peculiarities of the system are procurable at any time.

The uniform favor with which the system has been regarded wherever tried is the best argument for its superiority. It easily stands at the head of the numerous inventions of the kind produced during the last twenty-five years; and, judging from the testimony as to its merits received from many countries, the Pintsch system seems to be a practicable and efficient solution of the difficulty which every railroad and steamboat company, and every traveler, finds in providing and enjoying respectively, a steady and adequate light throughout a journey of considerable length, derived from a single source of supply made ready before its commencement. Want of space forbids more than the citation of a single instance of its successful adoption in this country. This is best given in the words of Mr. D. S. Babcock, president of the Providence and Stonington Steamship Company, in a letter addressed to the secretary of the Pintsch Lighting Company. He says: "The use of compressed gas, as applied on the Pintsch system to the steamers Stonington and Narragansett of the Stonington Line, is a perfect success. These steamers are not only better lighted, at a less cost, than ever before, but are relieved from the cumbersome, expensive and dangerous rubber bags which are unavoidable in the use of coal-gas. As applied to the above steamers, the compressed gas is carried in steel cylinders, with an aggregate capacity of 420 cubic feet. Into these cylinders gas is admitted at a pressure of about six atmospheres—say 2,500 cubic feet—with which quantity the round trip is made from Stonington to New York and return. Under the old system, gas was taken at each end of the route, and the consumption on the round trips was from 6,500 to 7,000 cubic feet, though we have now many more burners than before, and a much more brilliant light. I can confidently recommend the Pintsch system for lighting steamboats as the best, cheapest and safest yet devised." As before intimated, the unanimous opinion of railroad men who employ it is highly favorable. It is in use on sixty lines of railway throughout Europe, and on the New York, Lake Erie and Western Railroad, and the New York, Providence and Boston Railroad in the United States.

The gas for use in the Pintsch Patent Lighting system may be prepared from fat, petroleum refuse, parafine refuse, stale oil, axle grease or any similar substance, with new appliances and apparatus specially invented for the various purposes of its application by Mr. Julius Pintsch of Berlin, Germany. Gas is prepared in furnaces of a new and peculiar construction, also especially invented by Mr. Pintsch. The refuse of which it is made is fed into a system of cast iron retorts set in a furnace, while the tar produced flows off to a store tank for ordinary use; the gas passes from the retorts through condensed washers and purifiers successively to the meter, and thence to the gas-holder. Here it is temporarily stored, and from this engine it is pumped by an engine to tanks, where it is stored for use under a pressure of ten atmospheres, or 150 pounds per square inch. Notwithstanding this amount of compression, the gas retains its permanency, and is not found to condense, or to cause any deposit in the pipes. The compression pump has two cylinders, in the first of which the gas is compressed to sixty pounds per square inch, the final compression to 150 pounds being effected in the second cylinder. In railway carriage lighting the gas is carried from the stores-holders on the works, which are usually situated near the main station of a line, to filling posts placed conveniently for the trains. By means of hose the gas is supplied to cylindrical iron reservoirs fixed under the carriages, and where it is stored for use at a pressure of ninety pounds per square inch. From the cylinders—of which there are two under each carriage coupled together—the gas is conducted by iron pipes of small diameter to the lamps, passing on its way through a regulator, by means of which a perfectly even pressure is maintained at each burner in all circumstances. The lamps are different in form from those usually employed in carriage roofs, and are placed well out of the way. There are outside arrangements for turning all the lights in a carriage simultaneously down to a glimmer, while the train is traveling in the open, and for turning them up when entering a tunnel. This account, condensed from the London *Times* of April 8, 1879, concludes in the following words: "A considerable experience with this gas on foreign railways, and three years of its working on some of our own lines, including the Great Eastern and Metropolitan, has shown that it is perfectly safe in manufacture, storage and use. The gas is found to be permanent, and to possess a very high illuminating power. As regards its cost, it is stated that where an oil lamp costs three farthings, and ordinary coal gas one-third of a penny per hour per light, Pintsch's gas costs only one farthing per hour per light, interest on capital being included in all three cases. The system has the approval of the engineers on whose line it has been adopted, and its efficiency and stated economy commend it for use in other directions."

We refer the reader to the company above mentioned for further information, as we cannot find room in the present issue for such detailed description as may be procured in this way. In conclusion, we will say only that the descriptive pamphlet published by the Pintsch Lighting Company, is one of the most interesting and valuable works of the kind we have ever seen. Every railroad man of prominence should procure it and make himself acquainted with its contents.

Imports of Dry Goods at New York.

THE Imports of Foreign Dry Goods at New York for the month of November, were :—

ENTERED FOR CONSUMPTION.

	1880.	1881.	1882.
Manufs. of wool....	$514,355	$1,098,622	$1,146,256
Manufs. of cotton...	813,293	1,221,628	1,347,287
Manufs. of silk.....	1,280,109	2,395,428	2,221,643
Manufs. flax.....	694,007	999,445	1,073,187
Miscell. dry goods...	632,369	628,524	696,061
Total ent. for consumption.....	$3.934,133	$6,337,647	$6,484,434

WITHDRAWN FROM WAREHOUSE.

	1880.	1881.	1882.
Manufs. of wool.....	$601,109	$508,780	$639,060
Manufs. of cotton...	269,395	222,159	224,793
Manufs. of silk.....	460,407	418,119	451,467
Manufs. of flax.....	314,591	296,064	282,437
Miscell. dry goods..	224,311	284,306	201,442
Total withdr'n from warehouse.....	$1,869,813	$1,729,368	$1,799,199
Add ent. for con....	3,934,133	6,337,647	6,484,434
Total thrown on the market.....	$5,803,946	$8,067,015	$8,283,633

ENTERED FOR WAREHOUSING.

	1880.	1881.	1882.
Manufs. of wool....	$332,602	$412,723	$643,411
Manufs. of cotton..	261,117	228,982	368,966
Manufs. of silk.....	370,698	551,404	794,917
Manufs. of flax....	296,533	270,006	347,593
Mis. dry goods.....	382,544	223,726	264,713
Total ent. for warehouse	$1,643,494	$1,686,841	$2,419,600
Add entered for consumption	3,934,133	6,337,647	6,484,434
Total ent. at port....	$5,557,627	$8,024,488	$8,904,034

The Imports of Foreign Dry Goods at New York for eleven months from January 1, were:—

ENTERED FOR CONSUMPTION.

	1880.	1881.	1882.
Manufs. of wool...	$17,748,914	$16,819,710	$21,178,752
Manufs. of cotton	19,920,396	19,636,666	21,562,552
Manufs, of silk....	27,584,381	27,670,977	34,337,709
Manufs of flax....	12,243,545	11,573,195	12,945,765
Mis. dry goods....	8,029,784	7,818,957	8,422,848
Total entered for consumption ...	$85,527,030	$83,519,445	$98,447,626

WITHDRAWN FROM WAREHOUSE.

	1880.	1881.	1882.
Manufs. of wool..	$7,563,736	$7,894,343	$7,567,512
Manufs. of cotton.	3,746,395	4,116,223	3,541,021
Manufs. of silk....	5,654,203	5,030,665	5,691,507
Manufs. of flax...	4,169,674	4,662,850	3,762,856
Mis. dry goods....	1,920,716	2,340,806	2,173,989
Total withdrawn from warehouse.	$23,054,725	$24,044,888	$22,734,793
Add entered for consumption ...	85,527,030	83,519,445	98,447,626
Total thrown on the market.....	$108,581,755	$107,564,363	$121,182,419

ENTERED FOR WAREHOUSING.

	1880.	1881.	1882.
Manufs. of wool...	$9,558,204	$6,405,931	$8,253,330
Manufs. of cotton.	4,177,626	3,473,137	3,877,343
Manufs. of silk....	6,106,000	4,690,827	6,248,957
Manufs. of flax....	5,658,928	3,872,578	3,918,124
Mis. dry goods....	2,505,593	2,361,652	2,330,379
Total entered for warehouse	$27,981,351	$20,804,125	$24,628,133
Add entered for consumption ...	85,527,030	83,519,445	98,447,626
Total ent. at port.	$113,508,381	$104,323,570	$123,075,759

SUBSCRIBE for the RAILROAD JOURNAL.

The Stock Exchanges and Money Market.

New York Stock Exchange.

Closing Prices for the week ending Dec. 6.

	Th. 30.	F. 1.	Sat. 2.	M. 4.	Tu. 5.	W. 6.
Adams Express			137½			
Albany and Susq.						
1st mortgage						
2d mortgage		106				
American Express		95	94	94	95	95
Buri., C. R. & Nor.						
1st mortgage 5s				100		102
Canada Southern		66⅝	66¼	66⅝	66⅝	68
1st mortgage guar				94½	95	96
Central of N. Jersey		68⅞	68⅜	70¼	70¼	71¼
1st mort. 1890						
7s, consol. 2as				109¼	108	108
7s, convertible 2as			108			
7s, Income						
Adjustment		104				
Central Pacific		86⅛	86⅛	86	86⅝	87⅜
6s, gold		114¼			115	
1st M. (San Joaq)						
1st M. (Cal. & Or.)						
Land grant 6s						
Chesapeake & Ohio			23	22¾	23	
1st pref					33¾	34
2d pref			24½			
1st mort., series B		86	86	87	87	87
Chicago and Alton		132⅛	132½	132½	131½	132⅜
Preferred						
1st mortgage						120
Sinking Fund						
Chi., Bur. & Quincy		124½	124	124⅛	124¼	125
7s, Consol. 1903					129¾	
Chi., Mil. & St. Paul		100¾	99⅞	100	100¾	102¼
Preferred		119	118¾	118½	119	119¾
1st mortgage, 8s						
2d mort., 7 3-10s						
7s, gold						
1st M. (La. C. div)						
1st M. I. & M. div.)						128
1st M. (I. & D. ext.)						
1st M. (H. & D. div.)						119
1st M. (C. & M. div.)					122	
Consolidated S. F.				124¼		
Chi. & Northwestern		133¾	133¼	132½	133¼	132¾x
Preferred		151	151½		153¼	154¼x
1st mortgage		107¾				
Sinking Fund 6s					109⅛	
Consolidated 7s					133	
Consol. Gold bo'ds						
Do. reg		124¾x	124¾		125	
Chi., R. Isl. & Pac		126	125½	125	126	127
6s, 1917, c		128		127¾		
Clev., Col., Cin. & Ind.		75⅝	75	75½		
1st mortgage						
Clev. & Pittsburg gr.					138⅛	
7s, Consolidated						
4th mortgage						
Col., Chi., & Ind. Cent		5¾	5	5¾	5¼	5⅝
1st mortgage					120¼	
2d mortgage						
Del. & Hud Canal		107¼	106¾	107¼	106¾	107¾
Reg. 7s, 1891			116			
Reg. 7s, 1884						
7s, 1894			114			
Del., Lack. & Western		125¾	124¾	124¾	125	126⅛
2d mortgage 7s						
Consol. 1907						
Erie Railway						
1st mortgage						129
2d mort. 5s, ext.						
3d mortgage		102¼				102
4th mort. 5s, ext.						
5th mortgage						
7s, Consol. gold		126				128
Great West. 1st mort						
2d mortgage			97		96¾	
Hannibal & St. Jo.						
Preferred			72			
8s, Convertible						
Houston & Tex. Cen		73⅛	72½	75		
1st mortgage		110				
2d mortgage						
Illinois Central		143¼	142¾	143¾	144¾	147
Lake Shore & Mich So		113¾	113¾	113⅞	113⅞	115¼
Consol. 7s						
Consol. 7s, reg						
2d Consolidated				120		129
Leh. & W. B. con. 2as		100				
Long Dock bonds						
Louisville & Nash.		50¾	50¾	50¾	51⅛	51¾
7s, Consolidated						115
Manhattan		45½		42	42	
1st pref						87
Met. Elevated						
1st mortgage			99	98¾	99½	
Michigan Central		97	97	97½	98¼	99¼
7s, 1902		122¼				123
Morris & Essex						
1st mortgage						
2d mortgage						
7s of 1871				121½		
7s, Convertible						
7s, Consolidated					120¾	
N. Y. Cen. & Hud. R.		129½	129	129½	129¾	131
6s, S. F. 1883			100½		100½	100⅝
6s, S. F., 1887						
1st mortgage						
1st mortgage, reg.						
N. Y. Elevated						
1st mortgage				116		
N. Y. & Harlem						
Preferred						
1st mortgage						
1st mortgage, reg						
N. Y. Lake Erie & W		36⅜	35¾	36⅜	36¾	37
Preferred		84	84⅝	84¾	82¼	
2d Consolidated		95⅞x	96½	96⅞		96
New 2d 5s fund						
N. Y., N. Hav'n & Hart						
North Mo. 1st mort						
Northern Pacific		46¼	45⅝	45¾	45⅞	46⅜
Preferred		96¼	96¾	96⅞	97⅞	98
Ohio & Mississippi		34	33¾	32¾		34
Preferred						
2d mortgage		120		120½		121
Consolidated 7s						
Consol. S. Fund						
Pacific Mail S. S. Co		35¾	34⅛		35	35⅜
Pacific R. R. of Mo.						
1st mortgage						
2d mortgage						
Panama						
Phila. & Reading		50	50¾	50¾	50⅝	52
Pitts, Ft. W. & Chi. gtd			135			
1st mortgage						
2d mortgage						
3d mortgage						
Pullman Palace Car				123¾	123½	124
Quicksil'r Min'g Co						
Preferred						
St. Louis & San Fran						33
Preferred					52	
1st Preferred					94	94
St. L., Alt'n & T. H.						
Preferred		86	84½		86	87
1st mortgage						
2d mort. pref.						
Income bonds						
St. L., Iron Mt. & S.						
1st mortgage		115¼			115½	
2d mortgage		103½		103⅜		
Toledo and Wabash						
1st mortgage						
2d mortgage						
7s, Consolidated						
St. Louis Division			102	101		
Union Pacific		102½	101¾	100⅝	101⅜	102⅝
1st mortgage					115½	115⅝
Land Grant 7s						110⅝
Sinking Fund 8s						117¼
United States Ex		67	68¼	65		
Wabash, St. L. & Pac		30¾	30	30	31⅞	32½
Preferred		53⅜	51⅝	52⅜	53⅛	54⅜
New mort. 7s						
Wells-Fargo Ex		129		129		
Western Pacific b'ds						
Western Union Tel.		81	80½	80⅜	81⅜	82
7s., S. F conv., 1900						
Federal Stocks:—						
U. S. 4s, 1907, reg				119	119¾	
U. S. 4s, 1907, coup					120½	120
U. S. 4½s, 1891, reg					112⅞	
U. S. 4½s, 1891, coup				112⅞		
U. S. 5s, cont'd at 3½						
U. S. 3s, reg		101⅞	102	102	102½	102½
Dt. of Col. 3-65s, reg						
Dt. of Col. 3-65s, coup						

Boston Stock Exchange.

Closing Prices for the Week Ending Dec. 6.

	Th. 30.	F. 1.	Sat. 2.	M. 4.	Tu. 5.	W. 6.
Atch., Top. & San. Fe		85⅛	84⅞	85	85⅝	85⅜
1st mortgage			118⅞	119		
Land Grant 7s						
Boston & Albany		172x				173
Boston and Lowell		98		99		100
Boston & Maine			147		147	147
Boston & Providence						
Bos'n, Hart. & Erie 7s						
Burl. & Mo. R. L. G. 7s						
Burl. & Mo. R. in Neb						
6s, exempt						
4s						
Chi., Burl. & Quincy		124¾	124	124⅛	124⅛	125¾
Cin., Sand. & Clev ($50)						
Concord ($50)						
Connecticut River						
Eastern		31¾			32	32⅛
New 6s, Bond		109	109¾			110
Fitchburg				132⅛		130
N. Y. & New England		48	47	47⅞	47	47
7s					114¼	114¼
Northern N. H.					108	
Norwich & Worcester						
Ogden & Lake Cham						
Old Colony			136⅛	136⅛	135⅛	136⅛
Ph., Wil. & Balt. ($50)						
Portl'd, Saco & Ports						
Pueblo & Ark Val 7s						
Pullman Palace Car				124⅞		
Union Pacific		103¾	102⅛	101¾	101⅜	102⅜
6s						
Land Grant 7s						
Sinking Fund 8s				115	115	
Vermont & Mass						
Worcester & Nashua					58	
Cambridge (Horse)			97			
Metropolitan (Horse)			74⅞			
Middlesex (Horse)						
Cal. & Hecla Min'g Co			249	248	249	250
Quincy		60¾		60⅛	59¾	60

Philadelphia Stock Exchange.

Closing Prices for the Week Ending Dec. 5.

	W. 29.	Th. 30.	F. 1.	Sat. 2.	M. 4.	Tu 5.
Allegh'y Val. 7 3-10s						
7s, Income						
Buff., Pitts & West.		17⅞		17¾	18	17¾
Camd'n & Am. 6s, '83						
6s, 1889						
Mort. 6s, 1889						112
Camden & Atlantic						
Preferred						
1st mortgage						
2d mortgage						
Catawissa				21¼		21
Preferred						
2d pref						
7s, new						
Del. & Bound Brook						
7s						
Elmira & Williamsp't						
Preferred						
Hunt. & B. Top Mt.		15⅛		15¾		
Preferred		32⅞		33¾		
2d mortgage						
Lehigh Navigation		39¾		39½	39	37¾
6s, 1884						103¼
Gold Loan		112				
Railroad Loan						115
Conv. Gold Loan						
Consol. Mort, 7s					114¾x	
Lehigh Valley		64	64	64	64	64
1st mort. 6s, coup						
1st mort. 6s, reg						
2d mort. 7s		142				
Consol mort. 6s						
Consol. mtg. 6s, reg			120			
Little Schuylkill		58½		58½		
Minehill & Sch. Hav'n		62¾				62¾
North Pennsylvania		64		64	64	63¾
1st mortgage 6s						
2d mortgage 7s						
Genl. mtg. 7s, coup						
Genl. mtg. 7s, reg						
Northern Central		56½				56
5s				98½		98½
Northern Pacific		45¼		45⅞	45¾	45⅝
Preferred		96		96¼	98¼	96⅜
Pennsylvania R. R.		59¾		60½	60	59¾
1st mortgage						
Gen'l mort						
Gen'l mort reg		125				
Consol. mort. 6s		120				
Consol. mort. reg						
Pa. State 5s, new						
do 4s, new						
do 3½s, 1912						
Phila. & Reading		26		24⅞	25⅛	25¼
1st mortgage 6s						
7s of 1893					118½	118⅛
7s, new convert		66		67	66¼	
Consol. mort. 7s		126¼				
Consol. mort. reg				122¾x		122½
Gen'l mort. 6s		93		94⅛	95	93⅞
Def. Income bonds						
Philadelphia & Erie		21				20
1st mortgage 5s						102½
2d mortgage 7s					115	
Pittsb., Cin. & St. L. 7s						
Pitts., Tit. & Buff. 7s					94	
Schuylkill Navi't'n						
Preferred						
6s, 1897						105⅛
6s, 1907					89	
United Co. of N. J				188¾		188¾
Hestonville, (Horse)						
Chestnut & Walnut)						

Baltimore Stock Exchange.

Closing Prices for the Week Ending Dec. 5.

	W. 29.	Th. 30.	F. 1.	Sat. 2.	M. 4.	Tu. 5.
Baltimore & Ohio....	193⅛	.....	195	202	.....	.....
6s, 1885.....	.....	.....	.....	.....	104⅛	.....
Central Ohio ($50)...	.....	.....	.....	.....	.....	.....
1st mortgage.....	.....	.....	108	.....	108	.....
Marietta & Cincin'ti.	.....	.....	.....	.....	.....	.....
1st mortgage, 7s..	.....	.....	128	.....	128¼	.....
2d mortgage, 7s...	.....	.....	100⅛	.....	.....	.....
3d mortgage, 8s..	55⅛	.....	55	55¼	56	55⅞
Northern Cen. ($50).	56⅝	.....	.....	.....	.....	.....
2d mort. 6s, 1885..	.....	.....	.....	.....	106	106
3d mort. 6s, 1900..	.....	.....	.....	.....	.....	.....
6s, 1900, gold.....	.....	.....	116¾	.....	117	.....
6s, 1904, gold.....	.....	.....	.....	.....	.....	.....
Pitts. & Connelsv. 7s.	.....	.....	.....	.....	.....	123
Virginia 6s Consol..	62⅞	.....	63	63	63	62¾
Consol. coupons...	63⅛	.....	.....	.....	63	63⅛
10-40 bonds.....	43¾	.....	44	44	44⅝	43⅝
Def'd Certificates	.....	.....	.....	.....	.....	.....
New 3s.....	.....	.....	.....	.....	47	.....
Western Maryland..	.....	.....	.....	.....	.. ..	.....
1st M., end. by Balt	.....	.....	.....	.....	.....	.....
2d M., do.	.....	.....	.....	.....	.....	.. ..
3d M., do.	.....	.....	.....	.....	.....	.....
1st M., unendorsed	....	.....	.....	....	.....	.....
2d M., end. Wash Co	.....	.....	.....	.....	.....	.....
2d M., preferred...	.....	.....	.....	.....	.....	.....
City Passenger R. R.	.....	.....	.....	.....	.....	.....

London Stock Exchange.

	Closing Prices Nov. 17.	Nov. 24.
Baltimore and Ohio 5s, 1927.....	108	110	108	110
Central of N. J., $100 shares.....	80	85	80	85
Do. consol. mort.....	110	112	110	112
Do. Income Bonds.....	88	92	88	92
Central Pacific of Cal., $100 shs..	91½	92½	86	89
Do. 1st mort. 6s, 1895-'98.....117	119	117	119
Det., G'd Haven & Mil. Equip bds. 116	118	116	118
Do. Con. M. sp. c., till '83 after 6p. c. 115	117	115	117
Illinois Central $100 shares.....151½	153¼	148	150
Do. S. F. 5s, 1903.....	104	106	104	106
Lehigh Valley Cons. mort. 1923...	112	116	112	116
Louisville and Nashville mort. 6s	89	91	90	92
Do. capital stock $100 shares...	52	54	51	53
N. Y. Cen. & Hud. R. mort. bonds. 134½	135¼	132	136
Do. $100 shares.....	136	137	131	132
Do. mort. bonds (stg.).....	122	124	122	124
N. Y. Lake Erie & West. $100 shs.	39¾	40¼	36¼	36⅜
Do. 6 p. c, pref. $100 shares....	86	88	84	86
Do. 1st Con. Mort. bonds (Erie). 127	130	127	130
Do. do. Funded Coupon bonds. 124	127	124	127
Do. 2d Consol. Mort. bonds....	99	101	98	99
Do. do. Funded Coupon bonds.	97	99	96	98
N. Y., Pa. & Ohio 1st mort. bonds.	51	52	48	49½
Do. Prior Lien bonds (sterling).	100	105	100	105
Pennsylvania $50 shares.....	61⅞	62¼	60¼	60¾
General Mortgage.....	123	125	124	126
Phil. & Erie Gen. mort. 6s, 1920...	117	119	117	119
Philadelphia & Reading $50 shs..	29¼	29¾	25⅛	26⅛
General Consol Mortgage.	117	119	117	119
Do. Improvement Mortgage....	103	105	103	105
Do. Gen. Mtg. '74, ex-def'd coup.	96	98	96	98
St. L. Bridge 1st mort. gold bond.	121	123	121	123
Do. 1st. pref. stock.....	94	98	94	98
S. P'fic of Cal., 1st mort 6s, 1905-6.	106⅛	107¼	106⅛	107⅛
Union Pacific 1st mtg. 6s, 1896-9..	117	119	117	119
Wabash, St. L. & P. $100 shares..	33	36	30	32
Do. $100 pref shares...	60⅛	61⅛	55	56
Do. gen. mort. bonds.....	82	84	81	83

AMERICAN RAILROAD JOURNAL.

Financial and Commercial Review.

WEDNESDAY EVENING, December 7, 1882.

MONEY on call this morning was 5@6 per cent. Time loans were 4 per cent on Governments and 6 per cent on stocks. After 1 o'clock money loaned at 5 to 5¼ per cent; and after 2 o'clock at 3½ to 4 per cent. The loaning rates for stocks were from 2 to 4 per cent.

The posted rates for bankers' bills were 4.80½@4.84½. Sixty-day bills were 4.79¼ to ¾, demand 4.83¼ to ¾, cables 4.84¼ to ¾. Continental exchange was as follows: Francs, 5.23¾@5.20⅝. Reichmarks, 94⅛@⅜ and 95⅛@¼. Guilders, 39⅝ and 39⅞ to 40

The Treasurer of the United States in his annual report, says that the receipts of the Government during the last fiscal year show an increase over those of 1881 of $22,251,054.23 from customs, $11,233,209.94 from internal revenue, $2,551,377.20 from sales of public lands, and $6,707,416.34 from miscellaneous sources—making a total increase in the net revenue of $42,742,957.71. The total net revenue was $403,525,250,28. The net expenditures decreased from $260,712,887.59 to $257,981,440.20, a reduction of $2,731,447.39; which, added to the increase in receipts, makes an increase of $45,474,405.10 in the surplus revenues applicable to the reduction of the public debt. The expenditures on account of interest on the public debt show a reduction of $11,431,534.39, from $82,508,741.18 in 1881, to $71,077,206.79 in 1882. The excess of revenues over expenditures was $145,543,810.08, and the amount applied to the reduction of the debt $166,281,505.55. The amount on the books to the credit of disbursing officers at the close of the year was $36,067,872.48. The amount of currency outstanding at the close of the year was $362,464,582.10. There was redeemed $105,773,706.05, making the total redemptions since the first issue of currency of $2,405,914,779.41. The issues of silver certificates were $24,300,000 and the redemption $20,138,290, leaving the amount nominally outstanding at the close of the year $66,096,710. There were paid coupons from United States bonds amounting to $11,088,609.02, and $57,547,821.50 was paid for interest on registered bonds. United States bonds were redeemed to the amount of $165,204,450, of which $60,079,100 was applied to the sinking fund. The total amount of bonds retired from March 11, 1869, to June 30, 1882, is $2,149,549,250. Commenting on the statement of assets and liability of the Government on September 30 of the last four years, the Treasurer says:—

"The most noteworthy change in the last year is the decrease of the gold coin and bullion from $176,791,566.41 to $153,047,964.12, and the increase of the standard silver dollars from $65,949,279 to $92,025,350, a decrease in the gold of $23,743,602.29, and an increase in the silver dollars of $26,076,071. Deducting the amount held for the redemption of gold certificates, the gold belonging to the Government in the Treasury on the 30th of September was $154,987,371.29 in 1879, $128,160,085.77 in 1880, $169,552,746.41 in 1881 and $148,140,524.12 in 1882 Notwithstanding the decrease in the last year, the gold owned by the Government is nearly $20,000,090 more than two years ago, the amount held last year having been swelled by the deposit of gold coin for exchange on the west and south. Deducting in like manner the silver certificates actually outstanding, the standard silver dollars owned by the Government were $30,366,054 on September 30, 1879; $35,355,363 on the same date in 1880; $13,108,839 in 1881 and $28,699,970 in 1882.

"The fund for the redemption of notes of national banks increased from $31,152,713.60 to $38,507,029.10; the silver certificate actually outstanding, after deducting the amount held by the Treasury, from $52,840,440 to $63,325,380; the United States notes on hand, from $28,422,170 to $32,918,526, and the fractional silver coin held, from $26,343,455.17 to $27,429,246. The aggregate amount of gold and silver coin and bullion held by the Treasury increased from $269,706,998.76 in 1881 to $276,144,150.05 in 1882. The gross assets of the Treasury increased during the year from $331,981,210.11 to $346,552,990.39, although the balance remaining after deducting the moneys held for the redemption of gold, silver and currency certificates and for the payment of matured debt and interest and the amount to the credit of special or trust funds ran down from $151,336,116.73 to $143,964,893.79."

The excess of the cash assets of the Government over its net demand liabilities on the first day of November was $135,151,688.99.

The amount of silver certificates outstanding increased during the year from $51,166,530 to $66,096,710. The amount nominally outstanding is $73,607,710, of which $7,987,260 is held by the Treasury. Of the old issue of gold certificates there was redeemed $745,800,000, making the total redemption $976,097,760.46, and reducing the amount outstanding to $5,037,120. Of the recent issue $138,000,000 have been printed for the Assistant Treasurer in New York. Of these there has been issued 40 October 31, $21,790,000, of which $14,827,720 is held in the cash of the various Sub-Treasuries, leaving the amount actually outstanding $6,962,280.

The following quotations of sales of railway and other securities, for the week, are in addition to those given elsewhere in our columns.

New York.—Atlantic and Pacific 1st, 97; Albany and Susq. consol., 121½; Boston and New York Air Line pref., 80; Boston, Hartford and Erie 1st, 47½; Chicago, St. Paul, Minn. and Omaha, 47¾; do. pref., 105½; do. consol., 105; Chicago, St. Louis and New Orleans, 80; Chicago, Milwaukee and St. Paul, Chicago and Pacific West div. 1st, 92¼; do. Southern Minn. div. 1st, 107¼; Chesapeake and Ohio cur. 6s, 52¾; do. 1st, series A, 105; Chicago, Burlington and Quincy 8s, 103¾; Chicago and Northwestern S. F. 5s, 98⅞; Central Iowa 1st, 108; Columbus, Chicago and Indiana Central inc., 50; Denver and Rio Grande, 46; do. 1st, 108½; do. consol., 95½; Dubuque and Sioux City, 87; East Tennessee, Virginia and Georgia, 10; do. pref., 18¾; do. inc., 40; do. 5s, 73; Elizabethtown, Lexington and Big Sandy 6s, 94; Evansville and Terre Haute 1st, 97; Fort Worth and Denver, 35¾; Gulf, Colorado and Santa Fe, 1st, 109; Indiana, Bloomington and Western, 33; do. 1st, 87; do. consol. inc., 50; International and Gt. Northern coupon 6s, 82¾; Indianapolis, Decatur and Springfield 1st, 100¾; Kansas Pacific 6s, 1896, 107¾; do. 1st consol., 99; do. 6s, Denver div. ass., 105¾; Long Island, 57½; Lake Erie and Western, 29¾; Louisville, New Albany and Chicago 1st, 104; Louisville and Nashville, 2d, 99⅞; do. genl. mort. 6s, 86½; Marietta and Cincinnati 2d pref., 4; Minneapolis and St. Louis, 28½; do. pref., 65¼; Mobile and Ohio, 19¾; do. 1st deben., 80¾; do. 3d deben., 33; do. 4th deben., 30; do. new mort., 103½; Missouri, Kansas and Texas, 32¼; do. consol., 78, 105¾; do. 2d, 55½; Missouri Pacific, 102¾; do. 1st consol., 100; Milwaukee, Lake Shore and Western 1st, 98; do. pref., 47½; do. inc., 80½; Manhattan Beach, 17; Memphis and Charleston, 46¾; New York, Chicago and St. Louis, 14¾; do. pref., 31; do. 1st, 94¾; New York, Ontario and Western, 27½; Norfolk and Western pref., 51; do. genl. mort., 100½; Northern Pacific 1st, 104¾; New Orleans Pacific 1st, 87; Ohio Central, 13¾; do. 1st, 95; do. inc., 34¾; Oregon Transcontinental, 85½; Oregon Railway and Nav., 158; do. 1st, 108; Oregon Short Line 6s, 99¾; Peoria, Decatur and Evansville, 25¾; do. 1st, 104; Pittsburgh, Bradford and Buffalo 1st, 80; Rochester and Pittsburgh, 20¾; Rensselaer and Saratoga, 143; Richmond and Alleghany, 15¾; do. 1st, 81¾; Richmond and Danville, 60; do. deben., 62½; do. 1st, 94½; Richmond, Danville and West Point, 26; Rome, Watertown and Ogdensburgh inc., 42¾; do. ext. 5s, 70; St. Louis and San Francisco 2d, class B, 90; South Pacific of Mo. 1st, 104; St. Paul and Duluth, 36¾; St. Paul, Minn. and Man., 142; do. 1st, 111; do. Dakota ext. 1st, 106½; St. Louis, Kansas City and Northern, St. Charles Bridge 1st, 90, do. Omaha div. 1st, 108; South Carolina 1st, 99; do. 2d; 89; St. Paul and Sioux City 1st, 112; St. Louis and Iron Mt., 5s, 74; do. Ark. Branch 1st, 104½; do. Cairo and Fulton 1st, 103¾; Toledo, Delphos and Burlington, 9; do. 1st, 54; Texas and Pacific, 38¾; do. inc. L. G., 56; do. Rio Grande div. 1st, 79¾; Union Pacific col. trust, 107; Wabash, St. Louis and Pacific gen'l. mort. 6s, 79¾; do. Chicago div. 1st, 80¾; do. Toledo, Peoria and Western 1st, 107; Winona and St. Peter 1st, 108½; Missouri 6s, 1887, 110: do. 1888, 111½; Tennessee 6s, 39½; do. compromise, 47½; American Cable, 66⅞; Mutual Union Tel., 23; do. 6s, 65; Colorado Coal and Iron, 30¼; do. 6s, 83¾; Deadwood Mining, 4; Homestake, 17½; Ontario, 36.

Boston.—Atchison, Topeka and Santa Fe 5s, plain, 85; Atlantic and Pacific inc., 18¾; do. blocks, 103½; Boston Water Power, 2⅞; Boston Land, 6½; Burlington and Missouri River in Neb. 6s, non-exempt, 102½; Boston, Revere Beach and Lynn, 117; Chicago, Burlington and Quincy 5s, 1919, 102; do. 4s, old, 83½; do. Denver ext. 4s, 81½; do. Southwest div. 4s, 78; Central Iowa, 28; Chicago, Milwaukee and St. Paul, Dubuque div. 6s, 101½; Flint and Pere Marquette, 20; do. pref., 98; Iowa Falls and Sioux City, 87; Jackson, Lansing and Saginaw 8s, white, 105½; do. green, 112½; Kansas City, St. Joseph and Council Bluffs 7s, 113; Kansas City, Lawrence and Southern 5s, 103¾; Kansas City, Fort Scott and Gulf 7s, 110⅝; Little Rock and Ft. Smith, 46½; do. 7s, 106; Mexican Central, 19; do. 7s, 69¼; do. inc., 19; do. blocks No. 3, 89; Marquette, Houghton and Ontonagon, 60½; Massachusetts Central 6s, 26; New Mexico and Southern Pacific 7s, 112¾; New York and New England 6s, 105; Oregon Short Line 6s, 98; Rutland pref., 21; do. 6s, 65; Sonora 1st, 103¾; Summit Branch, 8; Toledo, Cincinnati and St. Louis, 4¼; do. 6s, 40; do. Southeastern div. 6s, 41¼; do. Dayton div. inc., 9; do. Branch inc., 8¾; Toledo, Delphos and Burlington, Branch inc., 9; Wisconsin Central, 14; do. 7s, 2d series, 47; Atlantic Mining Co., 16¼; Allouez, 2; Franklin, 14; Napa consol. Quicksilver, 3¾; Pewabic, 13½; Silver Islet, 7.

Philadelphia.—Am. Steamship Co. 6s, 105; Central Transp., 35; Elmira and Williamsport 1st, 117; Northern Pacific pref. scrip, 95; Nesquehoning Valley, 53; Perkiomen 6s, 103; Pennsylvania Canal 6s, 87; Philadelphia City 4s, 1884, 101; do. 6s, 1901, 131; Philadelphia and Reading deben. 6s, 57; do. scrip, 90; Philadelphia, Wilmington Baltimore 4s, 93; Pennsylvania R. R. scrip, 128¾; do. consol. 5s, 107; St. Paul and Duluth, 37; Texas and Pacific

1st, 105; do. consol. mort. 6s, 92½; Union and Titusville 7s, 91; West Jersey and Atlantic 6s, 108. The latest quotations are: City 6s, 108@120; do. free of tax, 125@133; do. 4s, new, 106@114; Pennsylvania State 5s, new loan, 118@119; do. 4s, old, 112@114; do. 4s, new, 116@117; Philadelphia and Reading Railroad, 25¼@25⅝; do. consol. mort. 7s, reg., 122½@123¼; do. gen'l mort. 6s, coupon, 93@94; do. 7s, 1893, 118@119; do. 7s, new conv., 65@67; United New Jersey R. R. and Canal, 188@189; Buffalo, Pittsburg and Western, 17⅛@17⅞; Pittsburgh, Titusville and Buffalo 7s, 94@96; Camden and Amboy mort. 6s, 1889, 111@112; Pennsylvania R. R., 59⅝@59⅝; do. general mort. 6s, coupon, 124@126; do. reg., 124@125; do. consol. mort. 6s, reg., 120@121; Little Schuylkill R. R., 58½@59; Schuylkill Navigation pref., 12@13; do. 6s, 1882, 88@90: Elmira and Williamsport pref., 58@60; do. 5s, —@100; Lehigh Coal and Navigation, 37⅜@35⅝; do. 6s, 1884, 103@103½; do. R. R. loan, 114½@115½; do. Gold Loan, 111½@112¼; do. consol. 7s, reg., 117@118; Northern Pacific, 46@46½; do. pref., 97⅛@97½; North Pennsylvania, 63½@64; do. 6s, 105@106; do. 7s,119@—; do. 7s, General mort. reg., 124@—; Philadelphia and Erie, 20½@21; do. 7s, 114½@115; do. 5s, 101⅛@102½; Minehill, 62½@63; Catawissa, 20¼@21; do. pref., 53@53¼; do. new pref., 52@52¼; do. 7s, 1900, 117@120; Lehigh Valley, 63½@63⅞; do. 6s, coupon, 121@123; do. reg., 118@120; do. 7s, reg., 132@132¼; do. consol. mort. reg., 119@—; Fifth and Sixth streets (horse), —@190; Second and Third, 114@116; Thirteenth and Fifteenth, 74@76; Spruce and Pine, 42@44; Green and Coates, 80@88; Chestnut and Walnut, —@93; Germantown, 70@72; Union, 110@—; West Philadelphia, 120@—; People's, 8⅛@9¼; Continental, 103@105.

Baltimore.—Atlantic Coal, 1.00; Atlanta and Charlotte, 64; do. 1st, 106¼; do. inc., 78; Baltimore and Ohio 1st pref., 128; do. 2d pref., 123½; Baltimore City 6s, 1886, 107; do. 6s, 1890, 114; do. 6s, 1900, 128; do. 5s, 1894, 112¼; do. 5s, 1916, 120¾; Columbia and Greenville 2d, 74; Charlotte, Columbia and Augusta, 36½; do. 2d, 99¼; Canton 6s, 110; Citizens Pass., 18; George's Creek Coal, 93½; Maryland Defense 6s, 104; Richmond and Danville bonds 1890, 105; Virginia Midland 2d mort., 108; do. 5th mort., 93½; Virginia 10-40 coupons 68; Wilmington, Columbia and Augusta, 105½; Wilmington and Weldon, 118. The latest quotations are: Atlanta and Charlotte 1st, 106⅛@106¼; Baltimore and Ohio, 196@210: do. 6s, 1885, 104@104½; Baltimore City Passenger R. R., 46@50; Baltimore City 6s, 1890, 114@114½; do. 5s, 1894,—@112⅜; do. 5s, 1916, 120½@—; Canton Co. 6s, 110@111; Columbia and Greenville 1st, 1916, 101½@103; Central Ohio 6s, 107⅝@108½; Marietta and Cincinnati 7s, 1891, 128¼@—; do. 7s, 1896, 100⅞@101½; do. 8s, 1890, 55⅞@56; Northern Central, 56@56¾; do. 6s, 1900, 116¾@—; do. 5s, Series A, 98¾@99½; do. B, 96@98¼, do. 6s, 1885, 106@—; do. 6s, 1904, gold, —@116; Ohio and Mississippi, Springfield div. 1st, 114@114½; Pittsburgh and Connellsville 7s, 122¼@—; Richmond and Danville 6s, gold, 93½@95; Virginia Midland 5th mort., 93@93¾; do. inc., 53@60; Virginia consol., 62¾@63; do. 10-40s, 43¼@44.

Thanksgiving Statistics.

Joseph Nimmo, Jr., Chief of the Bureau of Statistics of the Treasury Department at Washing, D. C., supplied by request, on the 29th ult., to the Rev. T. S. Wynkoop, D. D., pastor of the Western Presbyterian Church of that city, the subjoined data to be used by him in the preparation of his discourse to his hearers on the following day:—

The Department of Agriculture estimates the corn crop of this year at 1,680,000,000 bushels, as against 1,194,916,000 in 1881. The latest estimate of the wheat crop of the season of 1882 is 500,000,000, as against 380,280,000 bushels in 1881. The value of our domestic exports during the fiscal year ended June 30, 1882, was $733,239,732, as against $883,925,947 during 1881, a falling off of $150,686,215. This, however, was due almost entirely to the failure of the crops of the country during the season of 1881, a result attributable to the drought and other unfavorable meteorological influences which prevailed so extensively throughout the country during that season. In view of the fact that on the average about eighty per cent of our exports abroad consists of products of agriculture it is evident that an unfavorable season must very much diminish the value of our exports. But notwithstanding the fact that the season of 1881 was one of the most unfavorable ever known, we still had bread enough and to spare, and besides a large quantity of cotton for export. The value of our exports of bread and breadstuffs during the year ended June 30, 1882, the same being the product of the crop of 1881, amounted to $182,670,528. The value of our exports of cotton was $199,812,644. We also considerably increased the value of exports of manufactured articles.

Our imports during the year ended June 30, 1882, amounted to $724,639,574, being larger than during any previous year in the history of the country. Notwithstanding the decrease of our exports, owing to the cause above referred to, and the increase of our imports, the balance of our trade in our favor was nearly $26,000,000.

But the foreign commerce of the country is of small value in comparison with the value of our internal commerce. Railroads are now the principal highways of transportation in our internal trade. The number of tons transported on fifteen leading trunk railroads of the United States during the last fiscal year of which returns can be obtained amounted to 96,663,160 tons, as against 84,199,344 tons during the preceding fiscal year, an increase of nearly fifteen per cent. The railroad mileage of the United States on the 1st of January, 1882, was 104,813 miles. There were built in the United States during the year 1881, 9,386 miles of main line, or nearly twenty-six miles of railroad per day. Already we have two completed lines of railroad stretching across the continent. Under date of October 17, Mr. F. F. Oaks, vice-president of the Northern Pacific Railroad Company, informed me that it is expected that their line will be completed by the beginning of September, 1883; and C. P. Huntington, of the Southern Pacific Railroad Company, informed me, under date of October 3, that the line of the Atlantic and Pacific Railroad Company, intermediate between the Union Pacific and the Southern Pacific railroads, would be completed in about twelve months from that date. We shall then have four lines of railroad across the continent. The consumption of coal, the chief motive power of commerce and of industry, is one of the best indices of the condition of the country. The quantity of coal marketed during the year 1881, the latest year for which we have statistics, amounted to 79,905,000 tons, as against 69,200,934 tons during the preceding year.

The increase of the facilities for telegraphing constitutes another index of progress. The Western Union, the company which owns the principal part of the telegraph lines of the United States, increased its number of miles of wire from 233,534 in 1880 to 374,294 in 1882. The wires operated by that company would reach fifteen times around the world. The population of the United States was in 1870 38,558,371, and in 1880 50,155,783—an increase of 11,597,412.

In view of all the cheering evidences of development and of prosperity to which I have referred, every American whose heart swells with the spirit of thanksgiving may exclaim, "I have a goodly heritage."

My friend, Professor John Eaton, Commissioner of Education, states that the number of pupils enrolled in the public schools in 1880 was 9,782,520, constituting sixty-three per cent of the total school population of the United States in 1880. The total number of pupils enrolled in colored public schools in the recent Slave States in 1880 was 784,709 and constituted forty-four per cent of the total colored school population in those States. This is a pretty fair showing, I think, for a population which lately came out of slavery, with its absolute illiteracy, into freedom. It is also creditable to the States of which the enfranchised race are now citizens. I think there are many cheering evidences of the fact that the colored people in the Southern States are advancing as citizens and as workers.

Upright Automatic Freight Train Brake.

Information of an important character reaches us regarding the improved Upright Automatic Freight Train and other brakes, manufactured by the American Brake Company, of St. Louis, Mo. The company have seven hundred and eighty cars equipped with their brakes running upon the St. Louis and San Francisco Railway, of which, over two hundred are of the upright pattern. Thirty daily inspections recently ended show that during that period, a total of six hundred and fifty cars had come into the St. Louis depot and yards, and been examined by the company. Of these thirty-two were new, 139 had been running one month, 134 two months, 15 five months, 168 eight months, 123 nine months, 10 ten months, 11 twelve months, 10 fifteen months, and 8 twenty months. Of the total six hundred and fifty running on the lines specified, 601 were found to be in all respects perfect, needing no attention, while the balance of 49 required slight repairs and new pieces put on in the yard. The total cost of the new pieces needed was $13.88. Only four of the forty-nine repaired were upon the Upright Automatics.

Mr. D. H. Nichols, Springfield, Mo., master of transportation of the St. Louis and San Francisco Railway Company, has recently forwarded to the American Brake Company the following results of tests made of the Upright Automatic Freight Car Brake, on the St. Louis and San Francisco Railway, between Springfield and Strafford, October 29, 1882:—

Speed. Miles per hour.	Distance. Feet.	Time. Seconds.	Grade. Feet.
18	250	32	65—D
18	250	36	70—D
25	356	35	65—D
18	360	26	Level
30	420	41	"
30	412	43	"

Weight of train, 422½ tons. Engine and tender equipped with the American Brake Company's Steam Brake. Sixteen cars in train

equipped with the Improved Upright Automatic Brake.

We are informed the Steam Driver and Tender Brakes of this Company are now being used on over fifty different railroads. The price of these brakes is only $150.00, and the Company offer to send them to any Railroad Company upon approbation of sixty or ninety days, to be returned at their expense if not satisfactory.

These facts constitute strong testimony as to the economy of using the brakes manufactured by the American Brake Company, of St. Louis.

Dredging Machines for the Panama Canal.

THE largest dredging machine ever constructed will be launched in this city within a few weeks. This immense mud digger is one of the three being constructed by Slavan Bros., of California, at Petty's Island, for the Panama Canal Company, the aggregate cost of which will be over $400,000. The one now so near completion is 100 feet long, sixty feet wide, and twelve feet deep. When all the machinery is in place it will contain 350 tons of iron. On each of the three monster dredges there will be eight separate engines, the pair of high-pressure engines which run the dredge being of 250-horse power each. The dredges are of a new patent and with a series of buckets on an endless chain. There are eighteen of the buckets to each machine, which can dig and dispose of 1,620 cubic yards of dirt in an hour, or a combined capacity per hour for the three dredges of 4,860 cubic yards. Thus in four months, working twelve hours a day, they could dig out 9,290,000 cubic feet, or a canal eighty feet wide, twelve feet deep, and nearly fifty miles long. After the dirt is scooped up in the buckets it is run up the long arm of the dredger fifteen or twenty feet below. The hopper is made of iron, and weighs five and a half tons. From the hopper the dirt is forced by machinery into and through a huge pipe, three feet in diameter and 150 long, to its place of deposit. The pipe has a fall of eighteen feet, and to insure the easy passage of the dirt through it, a heavy stream of water is constantly forced through. The stoppage in the work of digging is never very long. The dredger rests upon a "spud" or pin, upon which it can be revolved without stopping the dredging buckets, thus enabling the operators to dig from side to side at will. The machinery for the first dredger, which was manufactured in California, is now here, and as soon as the hull is launched will be placed on board. Before taking the big digger to Aspinwall a number of preliminary tests will be made with it in the Delaware River. The second dredger will be commenced as soon as the first is launched, and work on the third will be started as soon as the second is finished.

The Canal Construction and Banking Company, of which the Messrs. Slaven are agents, in addition to the building of the dredges, have a contract with Panama Canal Company to dig out ten miles of the canal, for which they are to be paid $2,000,000. Mr. L. Ward, who is the superintendent of construction in connection with the building of the dredgers in this city, has just arrived here from the Isthmus of Panama, where he has put up sixty-eight buildings along the route of the proposed canal in connection with this $2,000,000 contract. He says the work preparatory to the commencement of digging out the great canal is about finished. The canal company has so far spent about $20,000,000, and he has no doubt that the canal will be completed within the ten years specified by the engineer. There are, he states, about 5,000 men at work.

It is not unlikely that the big dredger, the construction of which Mr. Ward is superintending, may be first experimented upon in starting the work of digging the proposed ship canal across the Delaware and Maryland peninsula. M. A. Slaven, who is president of the California Bank and Construction Company, and his brother, H. B. Slaven, will be in Philadelphia in a few days, having just completed an examination of the route of the proposed Delaware and Maryland Canal with the president of the company, Col. Horace B. Tibbetts, of New York. Col. Tibbetts will sail for Paris soon, where he says capital sufficient to build the canal without Government aid has been guaranteed. His company has charters from Delaware and Maryland to construct the canal by the Sassafras River route. It is proposed, however, to give the California capitalists an opportunity to invest there, and it is said that the Slavens are favorable to the Delaware and Maryland scheme and will put money in it.—*Philadelphia Record Nov.* 29.

The Coal Trade.

THE leading coal-carrying companies make the following reports of their tonnage for the week ending Nov. 25, and for the year to the same date, compared with their respective amounts carried to the same time last year:—

	Week.	1882.	1881.
Phil. and Reading R. R.....	203,018	8,279,861	7,952,888
Schuylkill Canal	19,186	512,275	587,094
Lehigh Valley	138,430	6,188,664	5,691,240
Delaware, Lackawanna and Western	160,516	4,143,193	3,878,186
Shamokin	25,727	1,136,545	971,675
Central R. R. of New Jersey..	.....	3,911,828	3,911,499
United R. R. of New Jersey...	38,470	1,554,928	1,417,875
Pennsylvania Coal..... ..	36,865	1,296,085	1,287,461
Delaware and Hudson Canal..	93,606	3,248,937	3,266,132
Huntingdon and Broad Top Mountain	8,975	418,935	472,815
Penn. and New York.....	32,289	1,429,229	1,505,276
Clearfield, Pa.....	59,887	2,579,809	2,171,278

The total tonnage of anthracite coal from all the regions for the week ending Nov. 25, as reported by the several carrying companies, amounted to 681,711 tons, against 606,195 tons in the corresponding week last year, an increase of 75,516 tons. The total amount of anthracite mined for the year is 26,282,638 tons, against 25,295,144 tons for the same period last year, an increase of 987,493 tons. The quantity of bituminous coal sent to market for the week amounted to 116,259 tons, against 99,655 tons in the corresponding week last year, an increase of 16,613 tons. The total amount of bituminous mined for the year is 4,025,523 tons, against 4,459,703 tons for the corresponding period last year, a decrease of 434,180 tons. The total tonnage of all kinds of coal for the week is 797,979 tons, against 705,850 tons in corresponding week last year, an increase of 92,129 tons, and the total tonnage for the coal year is 30,308,170 tons, against 29,754,847 tons to same date last year, an increase of 553,313 tons. The quantity of coal and coke carried over the Pennsylvania Railroad for the week ending Nov. 25 was 227,812 tons, of which 161,534 tons were coal and 66,278 tons coke. The total tonnage for the year thus far has been 9,967,317 tons, of which 7,396,326 tons were coal and 2,570,991 tons coke. These figures embrace all the coal and coke carried over the road, east and west. The shipments of bituminous coal from the mines of the Cumberland coal region for the week ended Nov. 25 were 60,880 tons, and for the year to that date 1,282,111 tons, a decrease of 700,079 tons as compared with the corresponding period of last year. The shipments were: To the Baltimore and Ohio Railroad—For the week, 37,507 tons; year, 869,531 tons; decrease as compared with 1881, 390,311 tons. Chesapeake and Ohio Canal—Week, 18,023 tons; year, 214,358 tons; decrease as compared with 1881, 214,358 tons. Pennsylvania Railroad — Week, 4,825 tons; year, 150,270 tons, decrease from last year, 101,174 tons. The Reading Railroad shipment for last week, ending December 2, was about 193,500 tons, of which 52,800 tons were sent to and 40,300 tons shipped from Port Richmond, and 15,800 tons sent to and 15,400 tons shipped from Elizabethport. The Lehigh Valley Railroad reports 68,510 tonnage for the last four days of November, making its aggregate coal tonnage for the fiscal year 6,257,159, compared with 5,791,376 for the previous yerr, an increase of 465,783 tons.—*Philadelphia Ledger, Nov.* 4.

FOR SALE.

Locomotives—Two Second-hand Narrow-Gauge Engines in good order.
One Second-hand "Tank" Narrow-Gauge Engine, 10 tons.
Several Second-hand Standard-Gauge Locomotives in good order, immediate delivery.
One new 3ft. Gauge Passenger Engine, 22 tons, prompt delivery.
Six new 4ft. 8½ Gauge Locomotives, cylinders 17x24, weight 35 tons. November and December delivery.
Two new 3ft. Gauge Locomotives, Cylinders 12x18, weight 20 tons. December and January delivery.
Cars—Passenger and Freight Cars of all descriptions for early delivery.
Rails—16lb., 20lb. 30lb. 35lb. and 56lb. Rails.
Car Wheels and Axles.
Narrow-Gauge Rolling-stock a specialty.

BARROWS & CO.,
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Manufacturers of Fine

RAILWAY VARNISHES,

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Fine Brushes adapted for Railroad use. All kinds of Artists' Materials. Colors for ready use, and all specialties for Railroad and Carriage purposes.

Railroad companies will save themselves great trouble in painting by allowing F. W. DEVOE & Co. to prepare their Passenger and Freight Car Colors. This will insure Durability, Uniformity and Economy. F. W. DEVOE & Co., manufacture from the crude materials, which are the component parts of any shade, and they understand better their chemical relationship, when in combination, than can be possible to those who simply buy their dry materials and then grind them.

SEND FOR SAMPLE CARD OF TINTS.

Cor. of Fulton and William Sts.
NEW YORK.

Continuous Automatic

FREIGHT BRAKES.

Requiring no other Connection between Cars than the ordinary Coupling-Link and Pin.

SIMPLE, DURABLE, AND EFFICIENT.

Brakes can be applied to every Car in the longest train, from the engine or cabose, or from any car in the train. It can be readily attached to any car, and adapted to ordinary brake beams, shoes, etc. There is no possibility of damaging wheels by "sliding."

PATENTED MAY 23, 1882.

☞Railroad and manufacturing companies, or parties able to co-operate with patentee in their manufactur and introduction, are invited to correspond with

WM. C. SCHULTZE,
Surgeon C., B. I. and P. Ry.
MARENGO, Iowa Co., Iowa.

RAILROAD AND CANAL DIVIDEND STATEMENT.

Showing the amount of Stock Outstanding, the Dividend Periods and the date of last Dividend.

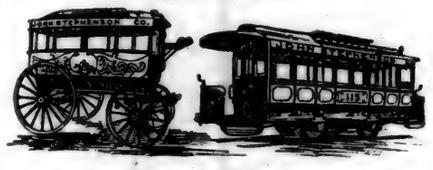
Marked thus(*)are leased roads.	Stock outstanding.	Divide'd Periods.	Last Dividend Payable.
Albany and Susq*...100	2,500,000	semi-an	July '82 2
Ashuelot.....100	210,000	q'arterly	Oct. '81 3½
Atch., Top. and S. Fe100	54,000,000	q'arterly	Nov. '82 1½
Atlanta and W. Point100	1,232 200	semi-an	Jan. '82 6
Atlantic and St. Law*100	5,840,000	semi-an	Mar. '82 3
Augusta and Savan'h100	1,022,900	semi-an	June'81 3½
Avon,Genesee&MtM*100	225,000	semi-an	July '81 3
Baltimore and Ohio. 100	14,793,566	semi-an	Nov. '82 5
" " pref.100	5,000,000	semi-an	July '82 3
Washington Br....100	1,650,000	semi-an	Nov. '82 5
Berkshire*.....100	600,000	q'arterly	Apl. '82 1¾
Boston and Albany..100	20,000,000	q'arterly	Dec. '82 2
Bos.&N.Y.AirLine pf.100	2,795,227	q'arterly	June'82 1
Bos.,Cl.,F.&N.B.pref.100	1,750,100	semi-an	Oct. '82 3½
Bos.,Conc.&Mont.pf*100	800,000	semi-an	Nov. '82 3
Boston and Lowell..500	3,940,000	semi-an	July '82 2
Boston and Maine...100	6,921,274	semi-an	Nov. '82 4
Boston & Providence100	4,000,000	semi-an	Nov. '82 4
Attleborough Br...100	131,700	semi-an	July '82 3½
Bos.,Revere B &Lynn100	419,400	semi-an	July '82 3½
Buffalo,N. Y. & Erie*.100	950,000	semi-an	June'82 3
Camden & Atlantic.. 50	377,400	q'arterly	Nov. '82 3
" " pref. 50	880,650	q'arterly	Nov.'82 4
Camden & Burl. Co..100	381,925	semi-an	July '82 3
Canada Southern....100	15,000,000	.....	Feb. '81 2½
Cape May &Millville* 50	447,000	semi-an	June'81 3
Catawissa*..... 50	1,159,500	annual	Oct.'82 $2½
" pref..... 50	2,200,000	semi-an	Nov. '82 3½
" new pref.. 50	1,000,000	semi-an	Nov. '82 3½
Cayuga and Susq.*.. 50	589,110	semi-an	July '81 4½
Cedar Rapids&Mo.R*100	6,850,400	q'arterly	Nov. '82 1½
" " pref.100	769,600	semi-an	Aug .'82 3½
Central of Georgia....100	7,500,000	semi-an	June '82 4
Central of New Jersey100	18,563,200	q'arterly	July '76 2½
Central Ohio*..... 50	2,437,950	semi-an	July '82 3
" pref.... 50	411,550	semi-an	July '82 3
Central Pacific 100	59,275,500	semi-an	Aug. '82 3
Chemung* 100	380,000	q'arterly	July '81 1½
Cheshire preferred ..100	2,155,300	semi-an	July '82 1½
Chicago and Alton...100	11,181,741	semi-an	Sept. '82 4
" " pref 100	2,245,400	semi-an	Sept. '82 4
Chi., Burl. & Quincy.100	55,337,455	q'arterly	Dec. '82 2
Chi., Iowa & Nebras*.100	3,916,200	semi-an	July '82 4
Chi., Mil. & St. Paul.100	20,404,261	semi-an	Oct. '82 3½
" " pref 100	14,401,483	semi-an	Oct. '82 3½
Chi. & N. Western....100	14,988,257	semi-an	Dec. '82 3½
" pref.100	21,525,353	q'arterly	Dec. '82 2
Chi., R. I. & Pacific..100	41,960,000	q'arterly	Nov. '82 1¾
Chi. and West Mich .100	6,151,000	semi-an	Feb. '82 2½
Chi.,St.P.,M.&O.pref.100	10,390,000	q'arterly	Oct. '82 1¾
C., Ind., St. L. & Chi..100	6,000,000	q'arterly	July '82 1½
Cin., Sand. & Clev.pf. 50	429,037	semi-an	Nov. '82 3
Clev. and Mahoning* 50	3,759,200	semi-an	Nov. '81 3½
Clev. and Pittsburg* 50	11,244,336	q'arterly	Dec. '82 1¾
Columbus & Xenia*. 50	1,786,200	q'arterly	Sept.'82 2
Colum.&HockingVal.100	2,500,200	semi-an	Aug. '81 208
Concord 50	1,500,000	semi-an	Nov. '82 5
Concord and Ports.*.100	350,000	semi-an	July '82 3½
Conn.& Passump.Riv100	2,244,400	semi-an	Aug '82 3
Connecticut River ..100	2,100,000	semi-an	July '82 4
Cumberland Valley.. 50	1,292,950	q'arterly	Oct.' 82 2½
" 1st pref 50	241,900	semi-an	Apl. '82 4
" 2d pref. 50	243,000	semi-an	Apl. '82 4
Danbury & Norwalk. 50	600,000	.....	Oct. '82 2½
Dayton and Mich.*.. 50	2,402,573	semi-an	Apl. '82 1¾
" " pref. 50	1,211,250	q'arterly	July '82 2
Delaware*..... 25	1,468,940	semi-an	July '82 3
Del. & Bound Brook*100	1,652,000	q'arterly	Nov. '82 1¾
Del., Lack.& Western 50	26,200,000	q'arterly	Oct.. 82 2
Denver & Rio Grande.100	29,160,000	q'arterly	Jan '82 1½
Detroit, Lans. & Nor.100	1,825,600	semi-an	Aug.'80 2½
" " pref.100	2,503,380	semi-an	Aug. '82 3½
Dubuque&Sioux C'y*100	5,000,000	semi-an	Oct. '82 3
East Pennsylvania*., 50	1,709.550	semi-an	Jan. '83 3
East Mahanoy*..... 50	392,950	semi-an	July '82 3
Eastern (N. H.).....100	492,500	semi-an	Dec. '82 2½
Eel River.....100	3,000,000	q'arterly	Dec. '82 $1
Elmira&Williamsp't* 50	500,000	semi-an	Nov. '82 1½
" " pref. 50	500,000	semi-an	July '82 3½
Erie and Pitsburg*.. 50	1,998,400	q'arterly	June'82 1¾
Evansville & Terre H.100	100,000	semi-an	Nov.'81 2
Fitchburg.....100	4,500,000	semi-an	Jan. '83 3
F. & P. Marquette pf.100	6,500,000	semi-an	July '82 3
Ft.W. & Jackson pref.100	2,000,000	.....	May '82 2
Georgia. 100	4,200,000	q'arterly	July '82 2½
Granite 100	1,250,000	semi-an	July '82 3
Greenw'h&JohnsonV.100	118,000	semi-an	July' 82 3
Han. & St. Jo. pref .100	5,083,024	semi-an	Aug. '82 3½
Harrisbg&Lancaster 50	1,182,500	semi-an	July '82 3½
H'ford &Conn.West'n.100	.....	Nov. '82 1½
Housatonic pref. ...100	1,180,000	q'arterly	Oct. '82 2
Illinois Central.....100	39,000,000	semi-an	Sept. '82 3½
Ia.Falls & Sioux City*100	4,623,500	q'arterly	Dec. '82 1¾
Iowa R. Land Co....100	7,620,000	q'arterly	Nov. '82 1
Jeffersonv. Mad.&Ind100	2,000,000	q'arterly	May '82 1¾
Joliet and Chicago*..100	1,500,000	q'arterly	June'82 1¾
Kan.C.,Ft.S.&Gulf...100	4,000,000	.....	Feb. '82 2
" " pref...100	2,750,000	semi-an	Aug. '82 4
Kentucky Central...100	500,000	semi-an	June'81 1
" " pref..100	5,583,500	semi-an	June'81 1
Lake Shore&Mich.So.100	49,466,300	q'arterly	Nov. '82 2
" (guar.)100	533,500	semi-an	Aug. '82 5
Lawrence*..... 50	450,000	q'arterly	July '82 2
Lehigh Valley..... 50	27,496,895	q'arterly	Oct. '82 2
" " pref. 50	106,300	q'arterly	Oct. 82 2

Marked thus(*)are leased roads.	Stock outstanding.	Divide'd Periods.	Last Dividend Payable.
Little Miami..... 50	4,637)300	q'arterly	Sept. '82 2
Little Rock & Ft. S..100	4,096,135	.....	July '81 108
Little Schuylkill*.. . 50	2,646,100	semi-an.	July '82 3½
Long Island..... 50	10,000,000	q'arterly	Nov. '82 1
Louisville & Nashv...100	19,130,913	semi-an.	Feb. '82 3
Lowell & Andover...100	500,000	semi-an.	Jan. '82 3½
Lykens Valley 100	600,000	q'rterly.	Oct.' 81 2½
Manchester & Law..."00	1,000,000	semi-an.	Nov. '82 5
Manhattan 100	13,000,000	.....	.....
" " 1st pref.100	6,500,000	q'rterly.	Oct. '82 1½
" " 2d pref.100	6,500,000	q'rterly.	Oct. '82 1½
Marietta& Cincinnati 50	1,386,350	.....	.....
" " 1st pref 50	8,105,600	semi-an.	Sep. '66 38
" " 2d pref 50	4,440,000	semi-an.	Sep. '66 38
Marq.Hout.&Ont.pf...100	2,259.026	.....	Aug. '82 4
Massawippi*.....100	400,000	semi-an.	Aug. '82 3
Metropolitan 100	6,500,000	q'rterly.	Oct. '82 1½
Michigan Central....100	18,738,204	q'rterly.	Aug. '81 1
Middlesex Central...100	280,000	semi-an.	Aug. '82 3
Mill Creek&Minehill* 50	323,000	semi-an.	July '82 5
M.Hill& Schuyl.Hav* 50	4,022,500	semi-an.	July '82 3½
Missouri Pacific.....100	28,169,800	q'rterly.	Oct. '82 1¾
Mobile&Montgomery100	3,022,517	semi-an.	Feb. '80 2½
Morris and Essex.... 50	15,000,000	semi-an.	July '82 3½
Mt Carbon&PtCarbon 50	282,350	semi-an.	July '82 6
Nashua and Lowell..100	800,000	semi-an.	Nov. '82 4
Nashua & Rochester.100	1,305,800	semi-an.	Oct. '82 1½
Nashv. & Decatur...100	1,827,000	semi-an.	June'81 3
Nash.,Chat.&StLouis 25	6,670,325	semi-an.	Apl. '82 1½
Naugatuck.....100	2,000,000	semi-an.	July '82 5
Nesquehoning Val'y* 50	1,300,000	semi-an.	Sept.'82 3
N.Castle&Beaver Val* 50	600,000	q'rterly.	Oct. '81 —
NewLondonNorth'n*100	1,500,000	q'rterly.	July '82 1½
N. Y. Cen. & Hud. R.100	89,428,330	q'rterly.	Oct. '82 2
N. Y. and Harlem....100	7,950,000	q'rterly.	July '82 4
" " pref.100	1,500,000	q'rterly.	July '82 4
" City Line.. —	.....	annual	Apl. '82 3
N.Y.,LakeErie&West.100	77,087,600	.....	.....
" " pref.100	7,987,500	annual..	Jan. '83 6
N. Y., N. H. & Hart..100	15,500,000	semi-an.	July '82 5
N. Y., Prov. & Boston100	3,000,000	q'rterly.	Nov. '82 2
Niag.Bridg&Canand*100	1,000,000	semi-an.	July '81 3
North Carolina*.....100	3,000,000	semi-an.	Sep. '81 3
" " pref.100	1,000,000	semi-an.	Sep. '81 3
N. Eastern (S.C.) pref100	86,000	semi-an.	May '81 4
Norfolk & Western pref.	15,000,000	q'rterly.	Dec. '82 $1
North Pennsylvania. 50	4,527,150	q'rterly.	Nov. '82 1¾
Northern Central.... 50	6,142,000	semi-an.	July '82 3
Northern N. Hampsh100	3,068,400	semi-an.	Dec. '82 3
Northern Pacific pref100	42,312,589	.....	Jan. '83 11.1
Norwich&Worcester*100	2,604,400	semi-an.	Jan. '83 5
Ohio and Miss. pref..100	4,030,000	semi-an.	Mar. '75 3½
Old Colony.....100	7,333,800	semi-an.	July '82 3½
Oregon R'way&Nav.100	6,000,000	q'rterly.	Nov. '82 2
Oswego & Syracuse..100	1,320,400	semi-an.	Aug. '81 4½
Panama..... 100	7,000,000	.....	July '82 6½
Paterson & Hudson*.100	630,000	semi-an.	July '82 4
Paterson & Ramapo.100	248,000	semi-an.	July '82 4
Pember.&Hightst'n*. 50	342,150	semi-an.	Jan. '82 3
Pennsylvania..... 50	83,786,570	semi-an.	Nov. '82 4½
Pennsylvania Co..... 50	20,000,000	semi-an.	June'81 2½
Peoria & Bureau Val*100	1,200,000	semi-an.	Feb. '82 4
Philadelphia & Erie*. 50	7,013,700	semi-an.	.....
" " pfd 50	2,400,000	semi-an.	Jan. '75 4
Phil,Ger.&Norrist'n* 50	2,231,900	q'rterly.	Sept.'82 3
Phil. and Reading... 50	32,726,375	q'rterly.	Jan. '76 2½
" " pref. 50	1,551,800	q'rterly.	July '76 3½
Phila. and Trenton...100	1,259,100	q'rterly.	Jan. '83 2½
Phila., Wil. and Balt. 50	11,585,750	semi-an.	July '82 4
Pittsb.,Ft. W. & Chi.*100	19,714,285	q'rterly.	Oct. '82 1¾
" Special Imp.100	6,770,900	q'rterly.	Oct. '82 1¾
Pittsfield&N.Adams..100	450,000	semi-an.	July '82 2½
Portl., Saco & Portsm100	1,500,000	semi-an.	July '82 3
Providence & Worces.100	2,000,000	semi-an.	July '82 3
Rensselaer&Saratog.*100	7,000,000	semi-an.	July '82 4
Rhode Island& Mass.100	100,000	.....	Jan. '81 3
Richmond& Danv...100	3,866,000	q'rterly.	Aug. '82 2
Richmond & Petersb100	1,009,300	semi-an.	Jan. '81 3
Roch.&Genesee Val.*100	555,200	semi-an.	July '82 3
Rutland preferred.. 100	4,000,000	semi-an.	Sept. '82 1
St.L.,Alt. & T.Haute.100	2,300,000	.....	.....
" " pref.100	2,468,406	.....	May '82 3
St.L.&S.Fran.1st pref100	4,500,000	.....	Aug. '82 3½
St.L.,I.Mt.&South'n.100	21,459,921	semi-an.	Feb. '74 3
St.L.,Jac'ville & Chic.100	1,293,000	.....	Aug. '82 4½
" " " pref.100	1,034,000	.....	Aug. '82 4½
St. P. & Duluth pref.100	4,705,000	semi-an.	Jan. '83 3½
St. P., Minn. & Man..100	20,000,000	q'rterly.	Nov. '82 2
Schuylkill Valley*... 50	576,050	semi-an.	July '82 2½
Seaboard & Roanoke.100	1,229,600	semi-an.	Nov. '82 5
Shamokin V.&Pottsv 50	669,450	semi-an.	Feb. '82 3
Shore Line*.....100	1,000,000	semi-an.	July '82 4
Sioux C.&Pacific pref100	160,000	semi-an.	Oct. '82 3½
South Br. (N. J.)*....100	438,300	semi-an.	Jan. '82 3
South Western (Ga.)*100	3,892,300	semi-an.	Dec. '81 3½
Stockbridge&Pitts.*. 100	448,700	semi-an.	Oct. '81 1½
Syr.,Bingham&N.Y.*100	2,500,000	semi-an.	Feb. '81 2
Terre Haute & Ind...100	1,988,150	semi-an.	Aug. '82 4
Troy and Boston....100	1,609,000	semi-an.	Feb. '80 2
Union Pacific. 100	61,000,000	q rterly.	Jan. '83 1¾
United Cos of N. J.*.100	20,490,000	q'rterly.	Jan. '83 2½
Utica, Shenango&S V100	4,000,000	semi-an.	Nov.'81 3
Utica and Black Riv.100	1,772,000	semi-an.	Mar.'82 2
Vermont and Mass..100	3,050,000	semi-an.	Oct .'82 3
Wab. St.L.&Pac.pref.100	22,615,100	q'rterly.	Nov.'81 1¾

Markedthus(*)are leased roads.	Stock outstanding.	Divide'd Periods.	Last Dividend Payable.
Ware River*.....100	750,000	semi-an.	July '82 3½
Warren (N. J.).....100	1,800,000	semi-an.	Apl. '82 3½
Warwick Valley.....100	340,000	semi-an.	July '82 2½
Westchest&Phil.pref100	821,300	semi-an.	July '80 2
West Jersey 100	1,359,750	semi-an.	Sept. '82 3
Wilmingt'n&Weld'n.100	1,456,200	semi-an.	July '82 3
Wil., Col., & Aug 100	960,000	semi-an.	July '82 3
Winchester&Poto'c.*100	180,000	semi-an.	July '82 3
Winchester&Strasb.*100	74,700	semi-an.	July '82 3
Worcester & Nashua. 75	1,789,800	semi-an.	July '82 1½
HORSE-POWER R. R.			
Albany City.....100	200,000	annual	.....'80 5½
Baltimore City..... 25	1,000,000	semi-an.	Oct. '82 3
Balt.,Cat.&El. Mills..100	....	semi-an.	July '82 2
BleeckerSt.&Ful.F'y.100	900,000	semi-an.	July '82 3½
Boston&Chelsea pref. 50	110,000	semi-an.	Oct. '82 3
Broadway (Brooklyn)100	250,000	q'arterly	Oct. '82 6
B'way&7th Av,(N.Y.)100	2,100,000	q'arterly	Oct, '82 2
B'klyn&Hunter's Pt.100	400,000	semi-an.	Oct. '82 6
Brooklyn City.....100	2,000,000	q'arterly	Nov. '82 3½
Bushwick (Brooklyn)100	309,000	semi-an.	Oct. '82 6
Cambridge.....100	908,000	q'arterly	Oct. '82 4½
Cen.Park,N.& E.Riv.100	1,800,000	q'rterly.	Oct. '82 6
Christoph'r&TenthSt100	650,000	semi-an.	Aug. '82 2½
Citizens' (Phil.)..... 50	192,500	q'rterly.	Jan. '82 2½
Citizens' (Pbg.)..... 50	200,000	annual..	....'80 14½
Coney Island&Bklyn100	500,000	semi-an.	Oct. '80 5
Continental (Phil.) .. 50	580,000	semi-an.	Jan. '83 6
D.Dock,E.B'way&Bat100	1,200,000	q'arterly	Aug. '82 4
Eighth Av. (N. Y.)....100	1,000,000	q'rterly.	Oct. '82 3
42d St. & G. St. Ferry100	747,000	semi-an.	May '82 6
Frankf.&Southw (Ph) 50	600,000	q'rterly.	Oct. '82 6
Germantown, (Ph.).. 50	572,800	q'rterly.	Oct. '82 2½
Girard College (Ph.) . 50	500,000	semi-an.	July '71 3
Grand St. & Newton....100	170,091	semi-an.	July '81 2½
Green&Coates St.(Ph) 50	150,000	q'rterly.	Oct. '82 3
Heston,Mantau&F'm 50	299,381	semi-an.	Jan. '75 4
Highland.....100	600,000	semi-an.	July '82 4
Lomb.&SouthSts(Ph) 25	195,000	semi-an.	Oct. '75 4
Lynn and Boston....100	200,000	semi-an.	Nov.'82 4
Malden and Melrose.100	165,000	....	.....
Metropolitan (Bost.). 50	1,500,000	semi-an.	July '82 4
Middlesex (Boston)..100	650,000	semi-an.	Nov. '82 3½
N.Y.,Bay Ridge&Jam100	150,000	..... .	Oct. '78 7
Ninth Av. (N. Y.)....100	797,320	....	.....
Orange &Newark....100	282,555	....	.....
People's (Phila.) pref. 25	124,744	..... .	July '82 2
Philadelphia City... 50	475,000	semi-an.	July '82 4
Phila. and Darby.... 20	200,000	semi-an.	July '81 3½
Phila.&Grey's Ferry. 50	308,000	semi-an.	Jan. '82 6
Pbg,Alleg.&Manches. 50	300,000	q'rterly.	Oct. '81 3
Ridge Avenue (Ph.).. 50	420,000	semi-an.	Oct. '81 11
Second Avenue (N.Y.)100	1,199,500	semi-an.	July '82 4
Second&ThirdSt.(Ph) 50	771,076	q'rterly.	Jan. '82 4½
17th &19th sts (Ph.).. 50	250,000	semi-an.	July '81 3
Sixth Avenue (N. Y.)100	750,000	semi-an.	May '82 5
Somerville (Boston).100	113,000	semi-an.	Nov. '82 3
South Boston..... 50	600,000	semi-an.	July '82 4
Third Avenue, N. Y..100	2,000,000	q'rterly.	Aug '82 5
13th and 15th sts.,Ph 50	334,529	q'rterly.	Jan. '82 4
23d street, N. Y.....100	600,000	semi-an.	Aug.'82 4
Union, Boston.....100	374,300	semi-an.	Jan. '82 4
Union, Phila..... 50	1,005,000	semi-an.	Jan. '82 7
West Philadelphia... 50	750,000	semi-an.	July '77 10
CANALS.			
Chesapeake and Dela 50	2,078,038	semi-an.	June'75 2
Delaware Division... 50	1,633,350	semi-an.	Aug. '82 $1
Delawa. and Hudson100	20,000,000	q'rterly.	Dec. '82 1¾
Delaware & Raritan*.100	5,847,400	q'rterly.	Jan. '83 2½
Lehigh Coal and Nav 50	11,204,250	semi-an.	Dec. '82 2
Monongahela Nav... 50	1,004,500	semi-an.	July '82 $3
Morris, consolidated.100	1,025,000	semi-an.	Aug. '82 2
" preferred....100	1,175,000	semi-an.	Aug.'82 5
Pennsylvania..... 50	4,501,200	....	.....
Schuyl. Nav., com.*. 50	859,100	annual..	Oct.'82 50c.
" " pref... 50	3,200,000	annual..	Oct. '82 $1
MISCELLANEOUS.			
Adams Express.....100	12,000,000	q'rterly.	Dec. '82 2
American Express... 50	18,000,000	semi-an.	Jan '83 3
Amoskeag Manuf.Co.100	3,000,000	semi-an.	June'81 5
Calumet&HeclaMin'g 25	100,000 S.	q'rterly.	Nov. '82 $5
Central Mining Co...100	.....	semi-an.	Feb.'82 2½
Consolidation Coal..100	10,250,000	semi-an.	Jan. '82 2
George's Creek C.&I.100	.....	semi-an.	Jan. '82 3
Maryland Coal.....100	4,400,000	semi-an.	Feb. '76 1½
Mariposa L. &Mining100	10,000,000	..... .	.....
" pref100	5,000,000	..... .	.....
Missouri Val.LandCo100	200,000	semi-an.	July '82 12
National Tube Works100	1,000,000	q'rterly.	Oct. '82 3
Pac. Mail Steamship.100	20,000,000	q'rterly.	Sept.'69 3
Pennsylvania Coal... 50	5,000,000	q'rterly.	Aug. '82 3
Pullman Palace Car...100	10,032,800	q'rterly.	Nov. '82 2
Quicksilver, com....100	5,708,700	..... .	May '82 0.4
" pref....100	4,291,300	..... .	May '82 6
Quincy Mining Co... 25	40,000 shs	semi-an.	Aug. '82 $5
Quincy R. R. Bridge.100	1,750,000	semi-an.	July '82 5
SiouxC.&I.F.L.&L.Co100	500,000	semi-an.	June'82 5
Spring Mt. Coal.....100	1,500,000	semi-an.	Dec. '82 3½
Topeka Equip'nt Co.100	255,500	semi-an.	Oct. '82 5
United States Ex....100	7,000,000	q'rterly	Nov. '82 1
Wells-Fargo & Co. Ex100	6,250,000	semi-an.	July '82 4
Western Union Tel..100	80,000,000	q'rterly.	Oct. '82 1¾

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NEW YORK, LAKE ERIE AND WESTERN RAILWAY.

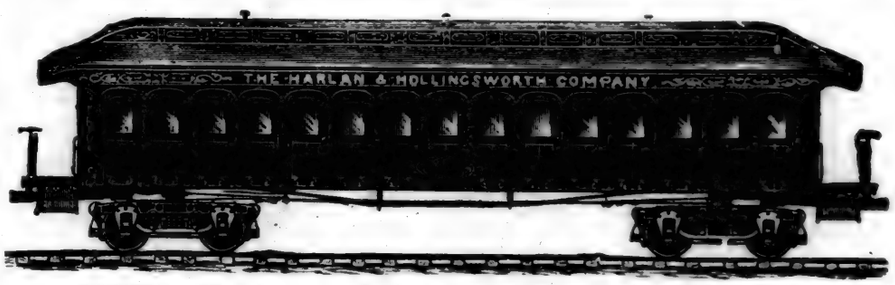
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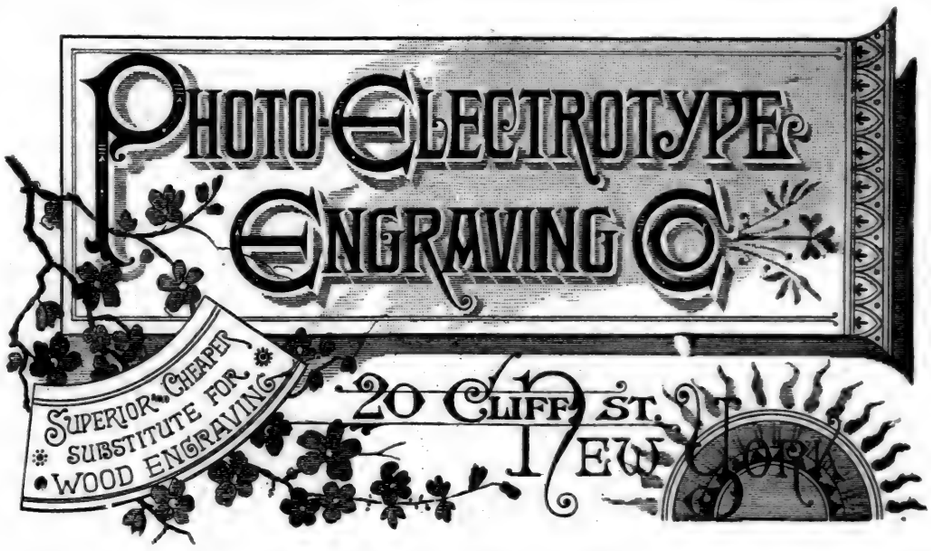
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Letters respecting the financial affairs of the Company should be addressed—

H. F. WORRALL, Treasurer, 8 Exchange Place, Boston, Mass.

RAILROAD EARNINGS.—MONTHLY.

	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total.
Burl., Cedar Rap. & Northern:													
1880	184,316	165,170	188,325	141,652	149,504	153,378	143,432	160,160	179,804	204,991	189,330	193,419	2,053,484
1881	167,750	124,510	148,551	184,680	165,630	205,912	174,351	209,112	221,801	221,748	203,880	232,812	2,259,037
1882	252,823	225,631	224,107	178,304	199,278	211,257	198,476	224,921	261,439	300,155	.....	.....	.....
Central Pacific:													
1880	1,200,615	1,070,487	1,373,438	1,356,716	1,778,488	1,724,930	1,840,067	1,973,438	1,994,997	1,120,229	2,199,466	1,905,221	20,508,113
1881	1,602,907	1,454,218	1,709,638	1,872,370	2,091,411	2,159,382	1,899,346	2,088,519	2,185,303	2,507,857	2,297,971	2,225,179	24,094,101
1882	1,839,469	1,720,675	1,969,737	2,054,687	2,342,298	2,229,105	2,020,000	2,277,000	2,474,000	2,409 000	.....	.....	.....
Chesapeake and Ohio:													
1880	202,335	198,681	222,762	221,559	199,443	214,352	238,236	259,110	247,303	211,820	240,795	218,009	2,674,308
1881	162,540	184,389	228,479	227,343	252,235	241,135	225,096	262,858	247,144	236,396	235,585	203,562	2,702,762
1882	210,455	209,708	208,981	267,454	255,939	260,753	306,831	371,175	332,219	347,882	.....	.....	.....
Chicago and Alton:													
1880	534,054	497 013	626,473	542,961	616,128	617,524	708,906	761,120	767,349	785,199	696,776	574,695	7,718,198
1881	487,890	461,641	529,915	558,190	548,556	635,860	676,205	769,751	774,790	771,844	680,133	635,307	7,553,988
1882	579,447	530,480	584,483	561,787	553,412	613,886	671,537	800,624	881,109	812,032	.....	.....	.....
Chicago and Northwestern:													
1880	1,154,632	1,131,683	1,361,725	1,294,573	1,875,608	1,671,177	1,699,686	1,767,938	2,020,245	2,105,217	1,855,622	1,477,902	19,416,007
1881	1,240,664	963,204	1,178,795	1,474,612	1,879,006	2,306,440	1,983,032	2,315,164	2,292,676	2,341,098	2,019,038	1,855,477	21,849,209
1882	1,644,935	1,474,176	1,672,931	1,668,741	2,110,947	2,022,700	2,025,736	2,099,755	2,497,053	2,532,100	2,069,500	.....	.....
Chicago, Burlington and Quincy:													
1880	1,432,740	1,411,870	1,732,518	1,489,894	1,909,627	1,682,956	1,773,643	1,834,321	1,862,285	1,934,762	1,837,860	1,552,018	20,454,494
1881	1,307,948	1,034,821	1,418,149	1,574,371	1,679,455	2,083,803	1,888,358	2,173,945	2,262,981	2,031,003	1,816,133	1,905,490	21,324,150
1882	1,658,834	1,457,300	1,566,217	1,530,838	1,505,261	1,437,164	1,625,006	2,086,858	2,186,400	.....	.....	.....	.....
Chicago, Milwaukee and St. Paul:													
1880	764,298	738,749	900,675	871,041	1,134,745	1,037,958	1,026,708	991,297	1,257,677	1,493,620	1,472,037	1 397,308	13,086,119
1881	990,847	682,717	916,989	1,259,946	1,538,491	1,729,811	1,568,706	1,678,361	1,644,67c	1,591,052	1,569.597	1,855,000	17,025,462
1882	1,435,000	1,377,000	1,561,000	1,518,000	1,629,000	1,620,000	1,465,000	1,545,000	1,950,000	2,251,000	2,072,000	.....	.....
Chicago, St. Paul, Minneapolis and Omaha:													
1880	193,827	173,078	259,783	259,208	232,146	218,093	236,995	251,013	300,833	342,052	342,894	312,173	3,122,097
1881	257,786	158,594	251,648	261,211	350,124	404,562	383,202	385,586	373,370	379,029	380,733	391,950	3,981,296
1882	307,498	315,100	405,779	356,558	406,420	363,109	331,480	394,555	482,997	546,671	.....	.....	.....
Cincinnati, Indianapolis, St. Louis and Chicago:													
1880	155,697	172,541	198,220	168,199	186,995	200,332	204,138	233,478	343,627	239,881	209,014	198,254	2,412,185
1881	182,523	171,511	191,005	183,710	191,096	192,299	177,161	229,858	228,653	221,320	194,805	192,623	2,296,916
1882	200,042	186,879	208,066	204,269	199,110	195,948	209,564	.....	259,379	.....	.....	.....	.....
Denver and Rio Grande:													
1880	124,759	126,922	160,883	164,882	193,925	295,455	373,132	400,133	406,583	473,318	408,562	349,196	3,478,007
1881	307,476	317,681	398,493	433,111	514,767	584,230	548,284	606,193	589,287	638,432	512,965	643,417	6,206,812
1882	491,914	412,987	535,055	559,917	614,298	537,462	495,797	574,040	595,306	630,598	547,055	.....	.....
Hannibal and St. Joseph:													
1880	176,079	166,965	216,061	206,735	191,317	179,396	224,312	238,081	233,448	242,214	207,147	279,635	2,561,366
1881	154,401	122,874	176,356	190,812	172,950	190,740	201,899	210,240	215,103	231,913	195,619	180,376	2,230,961
1882	138,284	154,717	168,798	148,913	154,917	155,030	184,347	258,628	239,196	238,442	249 225	.....	.....
Illinois Central:													
1880	595,212	613,806	613,008	535,732	665,120	681,736	724,095	732,755	806,836	880,211	783,120	673.182	8,304,812
1881	631,281	524.499	557.789	662,493	673,259	803,887	720,004	868,407	828,847	815,238	737 218	763,475	8,586,397
1882	728,173	689,387	695,371	674,603	674,749	663,746	752,251	813,600	828,238	865,325	.....	.....	.....
Indiana, Bloomington and Western:													
1880	80,498	89,690	116,185	90,374	85,733	106,954	103,438	116,732	110,622	121,343	96,621	104,619	1,233,079
1881	90,283	83,261	192,085	203,677	200,064	199,846	199,125	272,114	247,332	225,678	200,450	156,697	.....
1882	195,824	175,755	206,235	205,934	182,554	186,133	206,072	278,814	273,100	269,046	256,998	.....	.....
Louisville and Nashville:													
1880	674,455	575,035	612,593	563,883	655,014	976,229	772,538	827,089	931,911	1,000,327	953,087	949,185	9,491,346
1881	812,118	805,124	947,959	855,704	828,726	1,227,885	817,135	876,192	951,566	1,002,950	1,065,223	1,153,779	11,344,361
1882	964,527	960,315	1,068,834	953,603	958,130	1,215,490	1,063,765	1,043,912	1,107,985	1,216,215	.....	.....	.....
Mobile and Ohio:													
1880	250,116	204,095	168,302	140,091	129,248	121,855	131,621	140,593	184,247	264,714	251,368	287,372	2,273,622
1881	224,347	216,768	230,916	163,551	145,803	136,517	135,549	160,789	210,262	256,924	262,986	258,812	2,403,224
1882	159,676	158,590	148,166	141,957	134,378	136,184	136,398	140,443	160,031	265,201	295,110	.....	.....
Nashville, Chattanooga and St. Louis:													
1880	205,634	191,154	169,457	155,466	158,839	144,130	151,594	169,326	167,473	178,266	182,087	175,966	2,049,484
1881	178,143	190,866	207,710	183,525	104,430	154,549	150,430	168.317	179,979	172,121	152,059	173,127	2,075,256
1882	156,994	159,961	161,005	154,155	135,556	119,074	160,991	168,304	168,999	180,319	.....	.....	.....
New York and New England:													
1880	164,232	149,907	183,845	179,689	183,701	219,891	205,056	249,885	235,642	215,491	210,856	198 108	2,396,302
1881	189,749	173,614	212,019	216,913	217,185	231,518	246,821	280,524	299,573	261,20c	240,764	237,729	2,809,255
1882	213,840	217,261	265,222	263,544	283,244	290,060	300,920	353,726	338,490	310,145	276,183	.....	.....
New York, Lake Erie and Western:													
1879	1,147,173	1,207,391	1,356,780	1,372,755	1,350,574	1,230,419	1,273,533	1,450,223	1,492,497	1,713,697	1,515,835	1,398,224	16,509,127
1880	1,296,381	1,252,218	1,644,958	1,643,151	1,592,544	1,661,812	1,580,976	1,606,874	1,786,417	1,899,910	1,799,338	1,726,788	19,149,361
1881	1,443,437	1,425,765	1,847,261	1,709,057	1,776,891	1,794,982	1,787,081	1,772,895	1,734,200	.....	.....	.....	.....
Northern Central:													
1880	334.494	330.860	415,325	386,130	329,788	419,193	450,298	453,923	464,093	512,918	459,054	494,310	5,050,387
1881	386,157	382,657	452,906	487,273	465,588	487,287	440,811	498,008	429,565	449,664	487,160	476,622	5,443,697
1882	407,368	413,551	430,194	435,129	482,607	482,752	509,683	667,488	592,435	550,225	.....	.....	.....
Northern Pacific:													
1880	81,390	77,259	119,357	185,700	217,613	253,105	241,277	223,500	330,300	358,456	300,822	220,993	2,629,710
1881	116,508	78,803	162,984	216,210	312,705	412,024	393,260	434,085	534,363	583,955	475,610	434,331	4,044,576
1882	239,800	269,000	384,000	438,000	568,332	631,342	679,240	727,377	789,700	834,460	761,321	.....	.....
Philadelphia and Erie:													
1880	224,307	245,372	327,678	334,947	311,470	331,024	308,699	347,532	322,737	367,082	324,966	281,919	3,727,733
1881	224,303	225,501	285,573	293,323	343,792	350,585	291,669	303,849	276,522	292,392	284,078	282,772	3,454,309
1882	252,727	246,246	265,311	277,851	341,415	347,614	377,206	420,329	386,455	397,164	.....	.....	.....
St. Louis and San Francisco:													
1880	198,091	195,948	193,146	176,164	167,664	173,607	213,297	259,995	280,873	328,194	290,329	226,063	2,698,371
1881	212,435	178,234	262,050	265,298	283,399	260,254	252,333	286,373	279,064	308,569	284,320	287,914	3,160,245
1882	256,784	244,654	274,959	242,806	253,419	240,177	318,613	381,637	336,805	360,900	331,300	.....	.....
St. Louis, Alton and Terre Haute:													
1880	153,139	163,737	168,994	155,462	147,928	150,207	191,077	216,759	204,295	221,863	188,773	184,503	2,146,741
1881	175,725	166,012	201,137	197,447	172,177	165,896	165,393	189,180	196,368	204,338	162,544	153,852	2,112,801
1882	168,987	149,619	178,145	157,450	162,842	142,742	192,017	236,137	217,659	229,962	.....	.....	.....
St. Louis, Iron Mountain and Southern:													
1880	555,983	490,195	451,560	408,241	349,053	363,454	432,655	565,869	671,219	688,365	632,052	656,951	6,265,597
1881	570,957	560,791	704,002	548,300	479,075	474,302	533,512	644,386	708,325	719,239	687,280	709.498	7,319,744
1882	516,370	501,127	585,008	581,977	519,120	529,700	515,519	675,981	724,160	809,394	.....	.....	.....
St. Paul, Minneapolis and Manitoba:													
1880	180,239	137,645	261,798	333,014	281,899	243,407	272,089	232,579	274,188	345,057	300,675	297,641	3,160,231
1881	254,187	159,482	320,962	425,685	382,642	405,322	387,488	414,954	485,736	605,708	508,530	528,262	4,878,960
1882	395,461	418 358	531,004	570,890	858,902	856,417	853,296	801,759	832,776	979,057	913,335	.....	.....
Texas and Pacific:													
1880	245,785	219.165	215,070	174,177	141,083	153,066	195,711	226,073	266,570	303,666	312,184	301,858	2,754,408
1881	281,176	260,781	319,928	295,066	281,782	285,405	328,063	381,331	345,790	419,203	357,724	381,218	3,921,569
1882	310,785	255,644	332,911	359,543	409,228	384,713	367,215	439,918	470,613	541,901	.....	.....	.....
Union Pacific Railway:													
1880	1,433,636	1,393,992	1,730,509	1,937,220	2,027,269	1,928,528	1,934,215	1,913.035	2,270,179	2,707,860	2,251,148	1,869,335	23,448,445
1881	1,339,799	1,374,740	1,674,860	1,766,894	2,319,238	2,884,774	2,528,826	2,638,659	2,844,357	3,169,530	2,723,428	2,267,004	27,451,831
1882	1,961,088	1,759,863	2,226,832	2,462,004	2,491,590	2,508,453	2,301,000	2,762,107	2,949,112	3,158,337	2,821,070	.....	.....
Wabash, St. Louis and Pacific:													
1880	776,790	759,451	978,629	892,024	948,773	953,468	1,966,742	1,189,478	1,178,950	1,501,203	1,131,787	1,050,816	12,428,112
1881	811,617	818,922	1,121,592	1,023,482	1,144,660	1,308,993	1,131,752	1,542,838	1,490,027	1,397,781	1,343,556	1,328,278	14,461,570
1882	1,220,965	1,134,768	1,315,776	1,378,194	1,204,864	1,149,632	1,418,837	1,772,544	1,682,382	1,595,680	1,525,714	.....	.....

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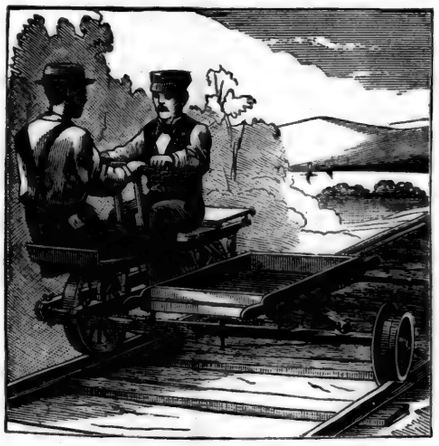
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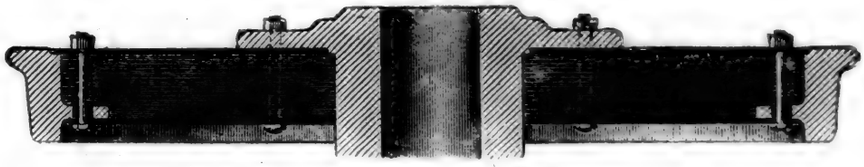
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CANADIAN DEPARTMENT.

MR. JAMES J. WHITE, Ottawa, Canada, writer of "Our Canadian Letter," acts as agent for the AMERICAN RAILROAD JOURNAL COMPANY, in Canada. He is authorized to receive, in behalf of the company, subscriptions and advertisements for this journal: also news of the character which he can utilize in the preparation of his Letter, or send to us for use elsewhere within these columns. He respectfully invites information concerning Railroad matters generally, Mining, Banking, Finance and Manufactures.

OUR CANADIAN LETTER.

[From our Special Correspondent.]

A MEETING of the Canada Southern Railroad shareholders was held in St. Thomas Thursday last, to confirm the arrangement with the Michigan Central—James H. Tillinghast, Esq., representing the Vanderbilt interest; General Manager W. P. Taylor and other officers of the Canada Southern Railroad. The Michigan Central representatives and Hon. Adam Crooks were present. Mr. Tillinghast, in reply to a St. Thomas delegation, assured them that the interests of St. Thomas would not suffer from the new arrangements. The audit and mileage offices might be removed, but a large additional number of trainmen would be engaged, and the workshops increased. What the city lost in offices would be made up by the increase in other departments. After the delegation withdrew, a vote was taken upon the object for which they had met, and the arrangements were almost unanimously agreed to. The traffic agreements, etc. between the Michigan Central Railroad and Canada Southern Railway, will form with the New York Central an uninterrupted through line between Chicago and New York. The shareholders also gave their consent to an agreement being made to form a connectien with the London Junction and Credit Valley.

Representatives of the Hudson Bay Railroad Company, the Winnipeg and Hudson Bay Railroad and Steamship Company, and the railroad from the Forks of the Saskatchewan and Fort Churchill, have been interviewing the Government to secure a land grant subsidy for their respective roads.

The following Order in Council comes into immediate operation:—

Whereas by Order in Council of 19th day of May, 1881, it is ordered that all importations of spirits in casks containing one hundred gallons or over made by railway shall be and they are hereby excepted from the operation of the 82nd section of the Act 40 Vict., chap. 10.

The Honorable the Deputy of His Excellency the Governor-General in Council has been pleased to order, and it is hereby ordered, that the said regulation be amended, and that importations of spirits in casks of not less than thirty-five (35) imperial gallons capacity, when for the purpose of being manufactured into other articles under regulations and surveillance of the Department of Inland Revenue, may also be excepted from the operation of said Act.

The Vaudreuil and Prescott Railroad has applied for incorporation. Also the Niagara Falls Double-track Bridge Company to construct and maintain a bridge across the Niagara River at some point between Suspension Bridge and Niagara. Also the Gooderham and Worts Distilling Company, of Toronto, with capital of $2,000,000. Also for an Act to incorporate a company for the purpose of laying a cable and building a telegraph line from some point on the west coast of Ireland or Scot'and, by way of Greenland, Hudson's Straits, Hudson Bay, Fort Churchill, Athabasca Lake and the Peace River, to some point on the coast of the Pacific Ocean, in the vicinity of Fort Simpson, with power to extend thence northwesterly to a point of junction with the Russian telegraph system.

INDUSTRIAL AND OTHER NOTES.

Lieutenant Gordon, R. N., and F. L. Blake, D. L. S., have completed arrangements at Ottawa, for taking observations of the transit of Venus on the 6th of December.

The North Shore Railway will apply to the Quebec Legislature for power to increase their capital by five millions.

The Waterloo and Magog Railway will extend their line from Magog to Sherbrook, and have advertised for tenders for present construction.

The axe factory at Belleville, Ontario, is employing ninety men, and is over-run with orders.

The lumber mills of the Ottawa Valley, including Ottawa, are now shut down. During the past season, which has been very brisk, it is estimated that 800,000,000 feet were cut.

A serious fire took place in Quebec Thursday morning last. The loss will reach $150,000. The asbestos factory of A. Joseph & Sons was entirely destroyed, and the loss very heavy, about $80,000 insurance on different properties, divided among Canadian and English companies.

Montreal has commenced a crusade against the factories for "the smoke nuisance." Pillow, Hersey & Co., iron founders, were fined $5 or eight days; but they have appealed on the ground of unconstitutionality of the Act and the by-law under which the decision was given.

The schooner "Henry Folger" went ashore on Salmon Point Reef, Thursday night. All hands, eight in number, were lost. She was owned at Clayton, a "canaler," cost $12,000, and insured in Ætna for $10,000; cargo of coal from Cleveland to Brockville also insured. Salmon Bay is sixty miles from Kingston and a life-saving station should be established there.

At a special meeting of the shareholders of the Canadian Pacific Railway held in Montreal Tuesday, November 28, it was resolved to increase the capital of the company from $15,000,000 to $100,000,000. Messrs Kennedy and Bliss, of New York, were among those present.

A telegraph line of forty-five miles has just been completed between Chatham, Ont., and Detroit, Mich.

MANITOBA NOTES.

Argentiferous galena and coal have been discovered at Battleford, N. W. T. The Winnipeg *Sun* in commenting upon the statement made by General Manager Hickson, of the Grand Trunk Railway, that he would have the Grand Trunk Railway in Manitoba within two months says: "But for the difficulties created by disallowance, he could no doubt accomplish the enterprise in less than time than that, and the sooner it is done the better it will be for Manitoba, Montreal, and the Dominion generally, and the worse for those American railroads and cities that are now preying upon us. If the anxious desire professed in many quarters to prevent the United States eating us up alive were sincere, it would show itself by some practicable measure being taken to extricate us from the worst railroad monopoly under the sun—a monopoly whose despotic sway and supercilious impositions are the more intolerable because they redound to the advantage of a foreign country, instead of having at least the redeeming feature, that they help to build up Canadian interests.

The Canadian Pacific Railway has track laid 585 miles west of Winnipeg, and is laying rails at the rate of two and one-half miles a day, although it is very cold.

The Canadian Pacific Railway, it is said, will build a line from Emerson through West Lynne to connect with the Southwestern at Buffalo Junction.

MARITIME PROVINCES.

Efforts are being made to complete the New Brunswick Railway from Edmundston to Riviere du Loup. A leading New York capitalist is interested in the matter.

The steamship Cedar Grove was lost off Cape Canso, N. S., on Thursday last. Thirteen persons are missing. She was built near Sunderland, England, and was launched last September. The Cedar Grove was bark rigged, 275 feet long, 36 feet beam: depth, 23 feet; gross tonnage, 1,281.

The Halifax and Cape Breton Railway matter in dispute between the Nova Scotia Government and Dominion Government, has been settled to the satisfaction of all concerned.

The Intercolonial Railway Commission are now considering Mr. McGreery's claim of $750,000 for extra work in Section 18.

Sheriffs' officers who were on the way to the Salmon River Gold mines, to enforce an injunction in a matter in dispute between the Lockport and Mott party, were waylaid, severely beaten, thrown into the river, and barely escaped with their lives.

The Allan Steamship Company have entered a suit in the Vice Admiralty Court at Halifax, for $10,000 damages, civil and maritime, against the steamship Clandon, which ran into the Polynesian at the railway wharf, on Monday last.

In the Vice Admiralty Court at St. Johns, N. B., in the case of the Buenin vs. the Arklow, a decision was given against the latter, decreeing to the owners of the Buenin $25,000, on the ground that whether her lights were properly exhibited or not, she was seen in sufficient time for the Arklow to have avoided a collision, and had the Arklow been properly managed, the collision would not have occurred.

It is said that the Spring Hill and Parrsboro Coal and Railway Company has been purchased by a Montreal syndicate.

It is said on good authority, that no negotiations have been going on, for the transfer of the St. Johns and Maine Railway, to the New

(*Continued on page* 990).

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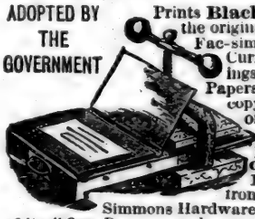
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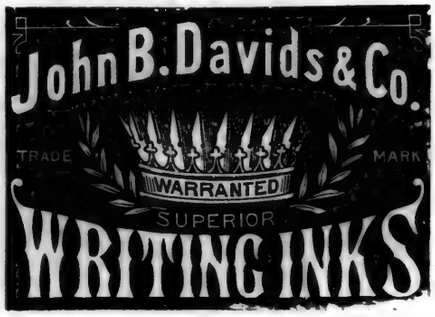
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RAILROAD, MINING, AND MILL SUPPLIES.

No. 21 Park Place,

NEW YORK.

(*Continued from page* 988).

Brunswick Railway syndicate, notwithstanding the numerous reports to the contrary.

Large quantities of Nova Scotia coal are being shipped over the Intercolonial, for Quebec and Ontario.

The Marine Department received on Friday the following telegrams from North Sidney, C. B: "The schooner Parole, of St. Johns, N. B., was sunk off Canso yesterday, by the steamer Liddendale, of England. The Parole had on board the mails, and ten men of the wrecked steamship Cedar Grove. Both crews are destitute and will require clothing and forwarding." The department telegraphed immediately to provide clothing and transportation to Halifax.

The Dominion Salvage and Wrecking Company's steamer Reiief, has gone to Canso to raise the Cedar Grove.

A VALUABLE WORK.

Mr. N. S. Garland, Esq., clerk of statistics in the Finance Department of Canada, has compiled the numerous Acts passed by the Dominion Government and Local Legislatures of Canada, relating to building societies in the Provinces of Upper and Lower Canada—now Ontario and Quebec—New Brunswick, Nova Scotia, Prince Edward Island, Manitoba, British Columbia, and all Acts relating thereto passed by the Dominion Parliament; also, the Joint Stock Company Act of 1877, and an Act authorizing corporations and institutions without the limits of Canada to lend and invest moneys in Canada; an Act relating to interest on moneys secured by mortgages on real estate; a complete and accurate table of all companies authorized by Private Act—with the amendments thereto, if any—alphabetically arranged; the Ontario Joint Stock Company's Act; an Act to confer additional powers upon Joint Stock companies, and also the Joint Stock companies' Amended Ordinance of British Columbia; the Credit Foncier Franco-Canadian; the Credit Foncier of the Dominion of Canada; an Act to repeal the duty on promissory notes, drafts bills of exchange (with the original Act retained for reference); The Canada Pacific Railway Act; with other Acts and Amendments that have been passed during the last Session of the Dominion Parliament relating to above companies; together with a brief review of the progress of Building societies and Loan companies in Canada for the past eighteen years. To which has been added Acts relating to banks and banking, compiled by Wm. Wilson, Esq., assistant law clerk, House of Commons. This work will be found valuable as a book of reference by monetary institutions, lawyers and others. Mr. Garland's address is Ottawa, Canada.

"W."

OTTAWA, December 7, 1882.

The Canadian Pacific Railway.

FEW persons, even in Winnipeg, have any idea of the magnitude of the work of the Canadian Pacific Railway. Its property at and around the Winnipeg station is worth $800,000. Fifteen millions of dollars have been spent since the syndicate took hold of the road, a year and a half ago. Five millions of this sum have been spent directly in Manitoba and the northwest, and ten millions in bringing up rolling-stock and making other preparations for constructing and operating the road. During the past season the payments, not counting the money spent in buying rails and rolling-stock, averaged $56,000 a day. Machine shops and blacksmiths' shops are being put up at Winnipeg with all haste, and the erection of a roundhouse, with forty stalls, will be begun forthwith. By the end of next year it is believed the company will have 2,000 men in its employment in Winnipeg alone. These 2,000 men will represent a population of at least 8,000 souls. The storehouse in the western yard here contains supplies which cost $200,000. These supplies embrace everything from a tin tallow bucket to a smoke-stack. Twenty-five thousand dollars have been spent this year in buying tents for the surveying parties and other officials. The rolling-stock of the company is of a very superior character, the engines and passenger-coaches being of the best and most improved workmanship and material. The surveys on the division between the Landing and Nipissing are being pushed forward with the utmost expedition. The work will be extremely heavy, but the syndicate will pursue it with all their energy and resources. There is an impression in eastern Canada, which reform journals have done their best to cultivate, that American officials are preferred to Canadians. This is not the case. The company having assumed a stupendous task, had to obtain the most efficient men to carry it on. Few Canadians were familiar with what may be called frontier railroading, and Americans, accustomed to it in the western and northwestern States, had, of course, an advantage over them. The company could hardly be expected to waste a year in training a Canadian staff. Yet to-day not one in forty of the employés is an American. All other things being equal, Canadians are preferred. This rule is never departed from.

Some merchants and settlers hailing from eastern Canada complain of the Canadian Pacific Railway rates as being higher than those of the old-established roads down below. This is, to put it mildly, unreasonable. Virtually there are no return freights on this road. Everthing is going in, and only empty cars coming out. Moreover, the cost of operating a road in a new region like this is much higher than the cost of running a line like the Grand Trunk. Take, for example, the item of coal. The Canadian Pacific Railway Company pays $40,000 a month for coal. On the Grand Trunk coal costs $15 per 100 miles; here it costs $38. Altogether, operating expenses here are not less than 100 per cent higher than in the east; and rates must of necessity be higher. But it is the policy, it is in fact the interest, of the company to encourage the settlement of the country by encouraging the settler; and the rates are fixed at the lowest living figure.

On the whole, the syndicate is carrying on its great work with extraordinary enterprise and ability, and evidently with a determination to make the road a source of gain and profit to itself and to the country, Reform journals may paint it as a "hideous monopoly," but Mr. Stephen and his associates are far too shrewd to treat the merchant and settler, on whose prosperity the road is dependent for its success as a financial venture, otherwise than justly and generously.—*Winnipeg Times.*

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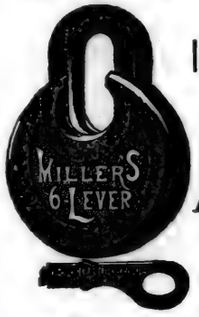
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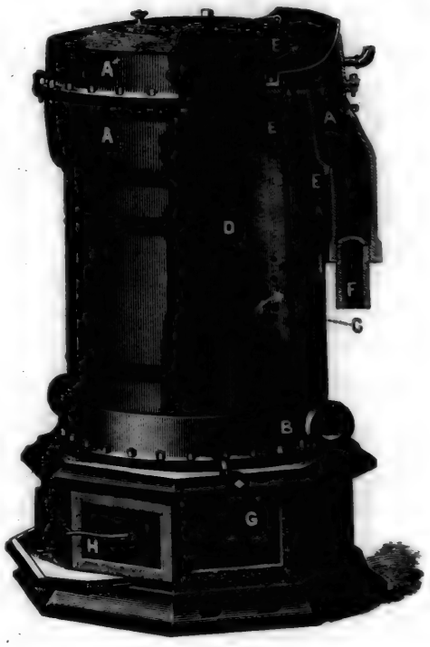
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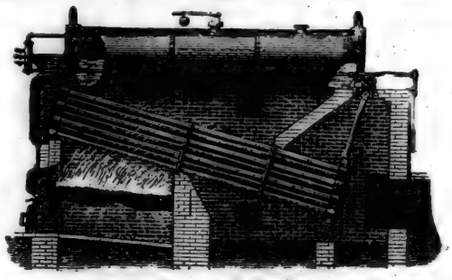
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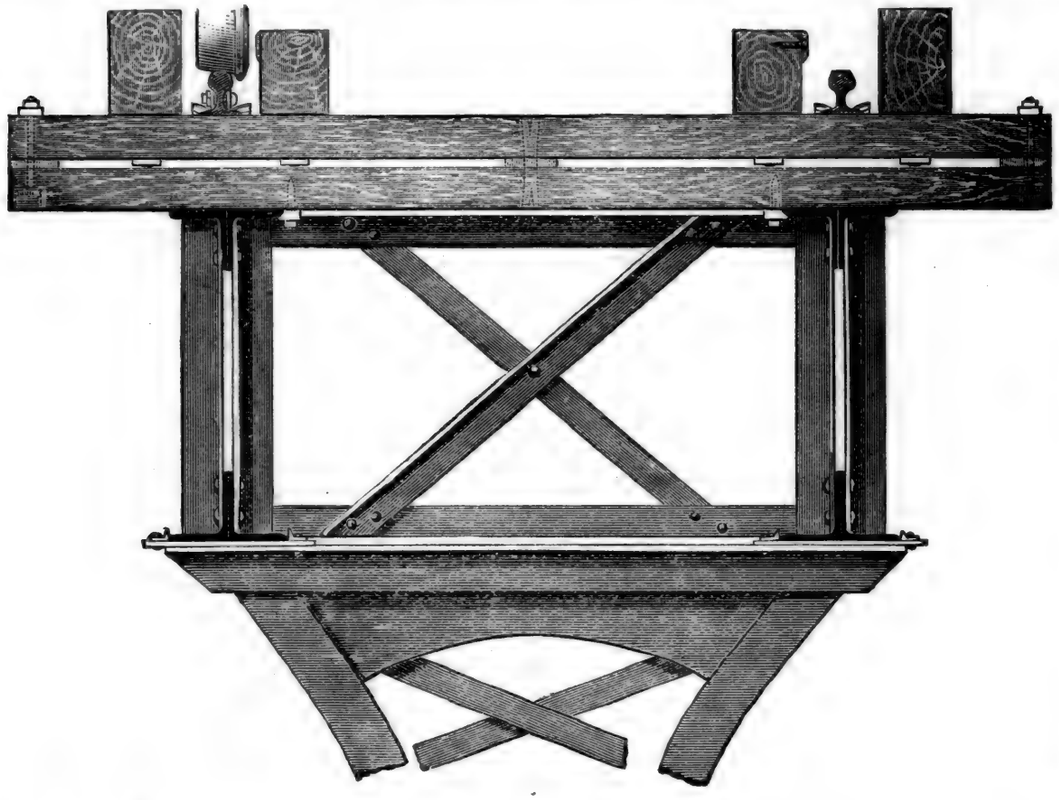
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Elevated Roads and their Construction.

During the public demonstration in opposition to the proposed elevated railroads in 1877, an Irishman was heard to say: "If iver they build an elevayted ralerode on Sixth avynoo, it would be underground." When we stop a moment to consider the business done to-day by these same elevated roads, it is not an easy matter to fully realize the magnitude of the undertaking, nor the extent of the opposition that manifested itself at the time of its conception, or rather at the time of its inception, so far as the public was concerned.

Few people know that for years prior to the digging up of Sixth and Ninth avenues, there had been large moneys expended and much time spent planing and surveying—surveying, not only the different routes, but also whether the expenditure of so much money as the plans and specifications called for, was warranted in the face of a large expected opposition and the present traveling facilities.

Two great problems were proposed for solution: the first was, "The best means of rapid transit for passengers;" and the second was, "The best and cheapest methods of delivering, storing, and distributing goods and freight in and about the city of New York."

The first problem was short and easy to give, but long and difficult to answer.

There was the question of volume of travel to be expected each day that could be relied upon. It was thought that unless the fares were as low as upon street railroads the volume of travel would not be sufficiently large to pay an elevated road system, and even at the same price per head the volume of business was problematical.

In 1873 the horse railroads and omnibusses running north and south carried altogether about 150,000,000 passengers, but there was reason to believe that with better facilities for travel, together with rapid transit, an elevated railroad system would largely increase the travel.

That belief has been amply justified, for to-day the four lines of elevated road are averaging 280,000 passengers per day, equal to 102,200,000 per year, and yet the horse cars and omnibusses are filled; still this could not be foreseen in 1875, when the above problems were being energetically solved.

The cost of transportation depends upon the cost of actual operation, together with the capital invested; and to satisfy rapid transit, it was necessary to afford a cheaper mode of propulsion, a greatly increased speed, more comfort for each passenger, and the same rate of fare, or about the same rate that the street-car offers. Whereas the street-car road will cost only about $90,000 per mile of double-track, and the cars be propelled by horses, and each passenger to run his own chances for locomotion.

It is not an infrequent saying that "the elevated roads should not have been built in the street, but that property should have been bought through the blocks, upon which to erect the road." This is very pleasing and patriotic and all that, but it wont stand the test, for rapid transit in New York is so nicely balanced between financial success and failure that it cannot afford to pay for *mistakes*, either in principle, policy *or material detail.*

Quoting from a report on rapid transit by a committee appointed by the Society of Civil Engineers, in 1875, it says, "A comparative examination of the cost of many plans has convinced your committee that the only class of elevated road likely to prove profitable is an iron structure, sixteen to twenty-five feet high, built over streets, the right of way being free, and the line being operated by light locomotives."

The report and opinion of this committee, which was composed of some of the best engineers in the country, could not be lightly received, for they went exhaustively into the subject in all its phases, and have thus had great weight in molding the present elevated railroad system.

A very large part of the recommendations of the above committee was accepted and carried out in the construction of the different lines of elevated roads now built, and it is fair to presume, that had it not been for the careful and thorough manner in which these gentlemen made their report, rapid transit would not have been sprung, as it were, upon the public in such a systematic and perfect state as it was two and a half years ago.

During the construction and early operation of these roads, there were many plans conceived to improve it, which had not been presented to the committee of civil engineers, but which seemed, on subsequent examination, to embody sufficient merit to warrant a trial, and accordingly certain sections on the different lines was appropriated for these improvements.

In all, there were about six individual plans adopted for trial, each one of which was intended to accomplish some beneficial result.

Plans known as the Walton, Woolson, and Baird were perhaps the most prominent, and a little sketch of each may not be uninteresting.

The Walton plan consisted of forming a channel directly underneath the steel rails and between the cross-ties, and filling this space with cotton and sand. It is doubtful whether the cotton was employed, but the sand was, being molding sand, and was tamped into this channel with sufficient force to lift the steel rail up off the cross-ties, and hard up against the heads of the spikes. Over the top of this sand (which extended up nearly to the head of the rail) there was spread a cement of some asphalt or tar preparation to preserve the sand in place and from water. It was soon found that the cement kept the water out of the sand perfectly, for the first rain filled in over the steel rail, and at night froze up and caused inconvenient slipping of the trucks. This was soon remedied by boring holes through the guard-rails, thus permitting the water to run off. The object of this sand filling was to deaden the sound of the wheels on the rails, and so long as the rails could be supported upon the sand and off the cross-ties, it accomplished the purpose to an appreciable extent, but the constant passage of trains over it soon settled the sand down away from the steel rails, and then the effect was lost.

The Woolson plan consisted in making the cross-ties out of two pieces of timber, with a space formed between them, and so held together as to afford a slight spring, or yielding, for the trucks as they passed over. The object of this plan was to form a road-bed analagous to a surface steam road, which is sufficiently yielding to prevent the excessive jars and vibrations being transmitted to the rolling-stock, etc.

(Continued on page 994).

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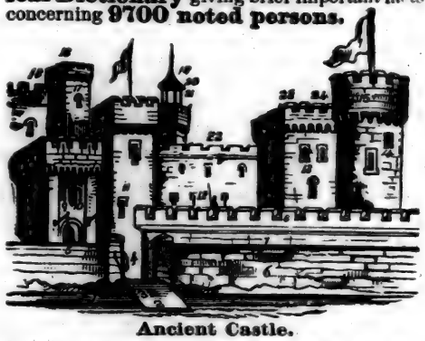
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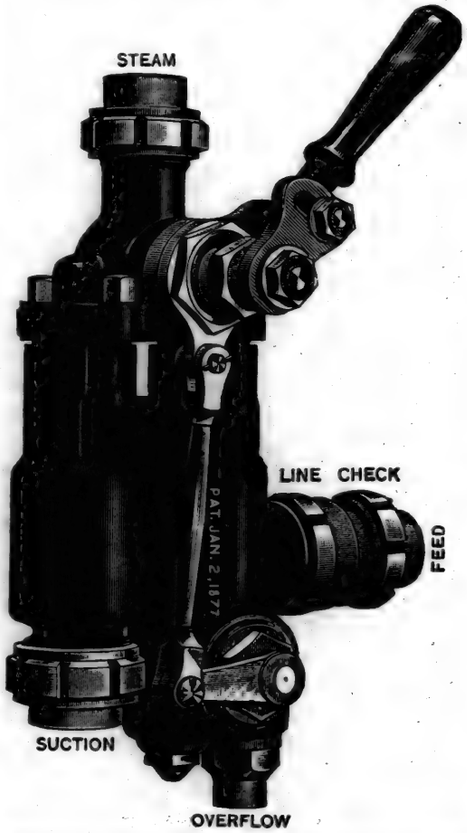
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(Continued from page 992).

The Baird plan consisted in filling in solid between the cross-ties up to their top surface, thereby forming a continuous bearing directly under the rail. Over this continuous bearing there was placed, first an oak plank one and one-half inches thick by five inches wide; upon this plank was put a composition pile one and one-quarter inches thick by four inches wide. This pile was composed of a layer of tar felt at the bottom, then a thick layer of gum-rubber, upon that a thick strip of lead, and this was topped off with a quarter inch strip of leather. This pile was presumed to form the jar-absorbing and flexible part of the arrangement, and upon this was laid the track-rail, composed of a two-inch strap of iron four inches wide, slightly beveled to conform to tread of wheel, the ends of each rail being cut beveling to afford a lap sufficient to prevent the click and thump incident to the present square joint. This whole structure of rail, composition pile and plank, was held down by a through taper-head bolt, let into the face of the rail, with the nut on under side. One desirable feature was accomplished with this plan, that of preventing the thump of the wheels at the joints, but the load applied by passing trains soon destroyed the composition pile, and the lead oozed out and dropped to the street below; but even had the composition stood the test, it was found that the four-inch width of rail was impractical on account of the excessive slip it offered to the wheels.

The other plans put on trial it is not necessary to explain, as they were similar to the Walton or Baird plans; it is a fact that all, with the single exception of the Woolson system, have either worn themselves out or have been entirely removed from the roads.

The fact of the Woolson road-bed system being so well sustained, and having heard it so highly spoken of, prompted a further investigation and a more extended explanation of this system. The accompanying cut will be of interest.

It is very apparent that most of the patent devices applying to the elevated roads are not devised by practical or railroad men; consequently they labor under a disadvantage that is fatal to them. Mr. Woolson, who is a thorough-going, practical mechanic, has undoubtedly given the road-bed subject a great deal of time and careful thought, as would be quite natural from the fact that his father was one of the earliest locomotive engineers in this country, and a thorough mechanic of high standing, as was his father before him. Mr. Woolson, while connected with the New York Elevated Railroad, decided, in his own mind, that it was a fatal mistake, both theoretically and practically, not to afford some relief to the riveted iron structure, and also some relief to the rolling-stock from the constant hammering and vibrations incident to the passage of trains, whether slow or rapid, loaded or empty. The more he watched the structure, the more convinced he became, until finally he consulted his chief engineer, Walter Katté, and then brought the subject before Mr. Charles E. Emery, and subsequently had a long discussion with the late Alex. L. Holley, who had given a great deal of thought to the subject, which will be found published in that gentleman's large and valuable work on "American and European Railroad Practice," in which he had had this very subject under review; and finally Mr. Woolson's attention was called to a paragraph in the report of the committee of engineers to the Society of Civil Engineers, in which they expressly suggest that in addition to the adoption of paper wheels for the car-trucks, there should also be *introduced elastic bearings under the rails*, which would afford the necessary flexibility to the road-bed, and thus absorb the shocks and vibrations.

Another good effect on the elevated structure secured by Mr. Woolson's system of road-bed is the greatly increased distribution of load. This is arrived at by his peculiar method of bolting the members together. For instance, it will be noticed, by reference to the cut, that the guard rails, which, in his case become guard *beams*, lie along each side of the steel rail in the ordinary way, but yet come directly over the opening formed in the compound tie. These guards are bolted to the *upper member of the tie only*, having no bearing or connection with the lower member. The result is that as the load is applied to the track at any given point, it necessarily deflects the upper member of the tie accordingly, but, as said member is bolted fast to the four guard-beams, it can only deflect in exact proportion to the said guards, and, by their so deflecting, they must necessarily bring a load to bear upon contiguous cross-tie members and thus in turn distribute the load still further through the guard-beams; and as Mr. Wm. Shunk, late chief engineer of the Metropolitan Elevated Railroad, was heard to say, the action on Mr. Woolson's road-bed system is just the difference between a deer's foot and a snow-shoe. In other words, with the Woolson system there does not begin to be that concentrated load on the structure that the old system must necessarily permit.

Another feature in the construction of the Woolson road-bed that is thoroughly practical, and is not apparent at first glance, is this: On the old system one of the primary functions of cross-tie and longitudinal guard-rails is to tie the whole top of the structure together. This is very necessary, especially in tall column and single-track construction.

As Mr. Woolson is as familiar with laying the old track as with laying his own, what he says will have weight. He explains, first, that it is utterly impossible to get timber for cross-ties cut exactly of the same thickness; neither is it possible to have the top chord of the trusses perfectly level and true. That being the *fact*, it is necessary in laying the old system of road-bed, to adz such ties as are too thick down to the thinest; *this in itself is a very bad thing to do*, aside from the extra labor of adzing, because it opens up checks in top of the timber to rot it out; and secondly, it is not possible to adz a lot of ties down perfectly true, even in the length of a twelve or fourteen foot straight edge. Consequently when the ties are bolted down upon the truss, their top faces are not so true but what the steel rail will rest upon some and not upon others; then what is worse, the bolting on of the guard timber lifts the scant ties up off the truss, so that instead of having a road-bed that is thoroughly tieing the structure together, it has a large proportion of the road-bed in actual suspension between the guard timber above and the truss chord below. Whereas, with the Woolson road-bed the result is diametrically different, as will be seen without much explanation. The cross-ties being formed of two pieces, placed one above the other, with an intervening space or slots, if the ties should not be of uniform thickness (and they are not any more than the ordinary tie) it makes no difference whatever, and there is no adzing necessary, because the shallow ties will be *expanded by the guard beam bolt* sufficient to bring its upper face snug up to the under side of the guard timber. This timber, it is readily understood, is very true in all cases; hence the steel rail has a perfectly level and true bed to rest upon, and there are *no ties held in suspension*, consequently the whole top structure is tied together thoroughly and perfectly.

The section that Mr. Woolson put up two years ago, although erected in great haste, stands the racket like a veteran and has enabled him to perfect the system for future work.

There are many who can remember the different attempts made, both in this country and in Europe, in years past, to lay a road-bed on solid rock or built up masonry, but in every individual case it has failed of being a practical road over which to lay a steel rail; hence at the present time a yielding ballasted bed is looked upon as the only satisfactory construction, and Mr. Woolson claims, with the best of reason, that the builders of the elevated roads have repeated the very same error in not affording a flexible bed in accordance with the dictates of good practical knowledge, and agreeably to the recommendations of the committee of civil engineers above referred to.

It must cost more to build the Woolson road-bed at first, but it certainly will more than pay in the long run, and if it should be applied to any of the elevated roads in this city, it should be upon the Third avenue and Bowery line, which requires some relief at once, even at this early day of its existence.

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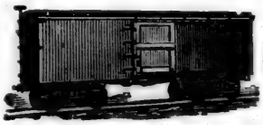
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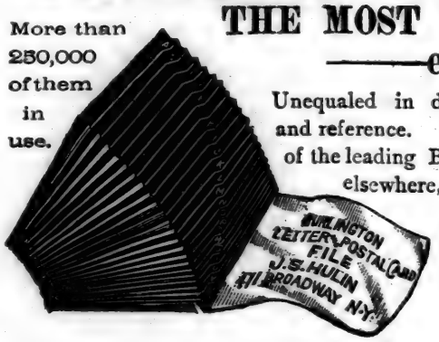
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The interest manifested by inventors in supplying us with information of their doings, and the eagerness with which this is received, encourage us to give an increased attention to that department of this paper treating of new inventions.

We therefore repeat our invitation to all persons who have produced what they regard as improvements coming within the range of railroad operations, to communicate with us promptly regarding the same.

All matter sent us will be thoroughly examined and considered, and no inventions in our opinion likely to be practicable and useful will be passed over without receiving due attention from us.

Lists of Patents for Invention Relating to Railways, Manufacturing, Mining, Machinery, Etc.

BEARING DATE OF DECEMBER 5, 1882.

268,383. Recording Pressure-Gage: Harris Bernstein, Titusville, Pa. Filed Mar. 16, 1882.

268,385. Pile of Iron: Henry W. Bohntraeger, Pittsburg, Pa., assignor to Carnegie Brothers & Company, (Limited,) same place. Filed May 3, 1882.

268,386. Car-Coupling: George W. Butler, Knoxville, Tenn., assignor of one-half to William B. Shoemaker, same place. Filed July 15, 1882.

268,396. Car-Coupling: Thomas C. Garlington, Dadeville, Ala. Filed July 14, 1882.

268,412. Smoke-Consumer for Furnaces: Thomas Kirkwood, Chicago, Ill. Filed Aug. 16, 1882.

268,415. Pile-Driver: Daniel Knowles, Norfolk, Va. Filed July 16, 1882.

268,419. Utilizing Exhaust-Steam: Harvey T. Litchfield, Hull, and David Renshaw, Cohasset, Mass. Filed Aug. 1, 1881.

268,423. Feeding Air to Furnaces: Charles McWilliam and Emile Loiseau, Montreal, Quebec, Canada, assignors to William Alexander Campbell and George Hutton Patterson, both of same place. Filed September 15, 1882.

268,446. Furnace for the Manufacture of Iron and Steel: Charles Adams, Cleveland, Ohio. Filed Apr. 22, 1881.

268,457. Railroad-Track Bolt: William C. Brown, Logan, assignor of one-half to J. F. Wheeler, Monday, Ohio. Filed Aug. 10, 1881.

268,463. Friction-Clutch: Francis O. Deschamps, Philadelphia, Pa. Filed May 1, 1882.

268,476. Traveling Contact for Electric Railways: Joseph R. Finney, Pittsburg, assignor to himself and Thomas B. Kerr, Allegheny City, Pa. Filed Aug. 26, 1882.

268,477. Single-Trunk Compound Engine: John Fish, Summit, N. J. Filed Feb. 24, 1882.

268,484. Wheel-Fender for Railway Cars: Aiken Haman, San Francisco, Cal. Filed Sept. 4, 1882.

268,498. Car Basket-Rack: John Kirby, Jr., Ludlow, Ky., assignor to Post & Co., Cleveland, Ohio. Filed July 11, 1882.

268,501. Freight-Car: Pierre Lacroix, Chicago, Ill., assignor of one-half to David Bourgeois, same place. Filed Oct. 8, 1882.

268,504. Boiler-Scraping Attachment: James M. Lakenan, Grass Valley, Cal. Filed Oct. 2, 1882.

268,522. Rotary Steam-Engine: Friederich Muller, Elizabeth, N. J. assignor of one-half to Mathew Macdougall, same place. Filed Oct. 5, 1882.

268,523. Electric Device for Operating the Throttle-Valves of Steam-Engines: Josiah Nesbitt, Toronto, Ontario, Canada. Filed Aug. 29, 1882.

268,545. Car-Starter: George P. Salisbury, New Haven, Conn. Filed Aug. 18, 1882.

268,571. Leak-Stopper for Boiler-Tubes: William F. Thompson, San Francisco, Cal. Filed Aug. 15, 1882.

268,579. Car-Axle Box: Isaac P. Wendell, Philadelphia, Pa. Filed Apr. 3, 1882.

268,586. Method of Propelling Cars: Adam Wingard, San Francisco, Cal. Filed Oct. 21, 1881.

268,591. Baggage-Check: Thomas Abbott, New York, N. Y. Filed May 3, 1881.

268,592. Sectional Steam-Boiler: Daniel L. Adams, Pottsville, Pa. Filed May 15, 1882.

268,603. Device for Feeding and Watering Cattle in Cars: Hugh Baines, Toronto, Ontario, Canada. Filed Nov. 7, 1882.

268,604. Cattle-Car: Hugh Baines, Toronto, Ontario, Canada. Filed Nov. 7, 1882.

268,607. Bolt and Nut Lock: Charles E. Bell, Greenfield, Ohio. Filed Oct. 11, 1882.

268,610. Car-Brake: George F. Bond, Troy, N. Y. Filed Sept. 15, 1882.

268,625. Lid for Car-Axle Boxes: Charles Coller, Hannibal, Mo., assignor of two-thirds to Willard T. Block, same place. Filed May 16, 1882.

268,631. Air-Brake Pump for Locomotives: David J. Dampman, Philadelphia, Pa., assignor of two-thirds to William H. Bilyeu and John Ambler, both of same place. Filed Feb. 13, 1882.

268,633. Car-Coupling: Stephen L. Davidson and Chester L. Davidson, Virden, Ill. Filed May 13, 1882.

268,660. Car-Coupling: Grexshon V. Greer, Wilmington, Del. Filed Sept. 7, 1882.

268,677. Stock-Car: James Howard and Hugh Baines, Toronto, Ontario, Canada. Filed Nov. 7, 1882.

298,680. Car-Truck: Joseph Huson, Rochester, Ky., assignor of one-half to William F. Shrum, same place. Filed Aug. 18, 1882.

268,683. Car-Brake: Will R. Johns, Rockford, Ill. Filed May 19, 1882.

268,715. Pneumatic Railway and Car Therefor: Elias P. Needham, New York, N. Y. Filed Feb. 24, 1882.

268,726. Car-Brake: William B. Quigley, Boston, Mass. Filed Sept. 26, 1882.

268,735. Car-Signal: Louis H. Seel and Jesse M. Smith, Anderson Court-House, S. C. Filed May 31, 1882.

268,739. Car-Coupling: John T. Sibley, St. Louis, Mo. Filed Aug. 16, 1882.

268,754. Momentum Car-Brake: William B. Turner, New York, N. Y. Filed Aug. 2, 1882.

268,758. Car-Roof: John C. Wands, Nashville, Tenn. Filed Sept. 9, 1882.

268,761. Railway-Switch: Charles H. White, Boston, Mass. Filed May 24, 1882.

268,766. Car-Coupling: William Zaehringer, New Orleans, La. Filed Oct. 13, 1882.

Woodwork that will not Burn.

IN a London paper is published a letter from Mr. F. H. Gossage, who makes some very important statements. He says:—"I find that painting woodwork of any kind with several coats of solution of silicate of soda, and finishing off with a mixture of this solution and sufficient common whiting to make it about as thick as ordinary paint, is a most excellent protection against fire. Wood treated in this way will not take fire from mere contract with flame; it requires to be heated till destructive distillation begins. Then, of course, gases are given out which ignite, and the wood is gradually converted into charcoal, but until destructive distillation takes place the coated wood will not support combustion. A few years since I had some screens made like ordinary doors, some prepared as I have described, and some not. They were then placed over a fire of shavings, which was kept constantly renewed. In ten minutes the unprepared screens were blazing away, and so nearly consumed that they had to be supported by an iron bar. The flames continued to lick the prepared screens for 30 minutes before the distillation commenced. After forty-five minutes the coated screens were still intact, and able to support themselves; and an hour, although pierced in many places with holes, they held together, and when the fire was removed they did not continue to burn. This was a splendid success, and I still have the remains of the screens. The experiments were made at my suggestion, for the managers of the Liverpool Philharmonic Society, and the woodwork of their splendid hall at Liverpool was treated in this manner. I am sure a good deal might be done with this simple and inexpensive process to reduce the possibility of fires, especially in public buildings, theatres, etc., for, if the woodwork was thus treated, draperies and scenery would burn away before the heavy timberwork of the structure would take fire."

The Unchanging Mineral.

FOR centuries there has been known a curious mineral that seemed half wool, half stone. It was found in all parts of the known world, even before the Christian era, and it was found in the new Americas, but in spite of all its widespread fame it was merely curiosity until within the present century. The ancients picked small pieces of it out of the rocks, and even succeeded in spinning it into threads and weaving the threads into garments that would neither decay nor burn. It remained for an American to bring this mineral wool, this unchaning Asbestos, into new uses and new forms.

The commercial value of any product now depends wholly on its ability to meet certain scientific requirements. Coal will make steam, and steam makes light, heat and power. So Asbestos meets certain requirements in the arts that have to do with heat. Asbestos is the great heat register. It is indifferent to temperatures in which the metals melt like wax. It is unchanged at a white heat, and yet it can be made into a thread or a tissue-paper. It is a refactory mineral that can be felted, that can be made into mill-board, into fabrics, into paints, cements and ropes. The moment you know what a thing can do, or, better, how it behaves under certain circumstances, you see its uses. The ancients made fabrics of Asbestos and then threw them into the fire, where they would not burn, and thus they played on the ignorance of the people. To-day we take this same indestructible mineral and use it to cover our roofs, as a lining for steam cylinders, as a protection lagging for steam pipes and boilers, as a fire-proof paint, and for a hundred other things where it is important that heat should be saved or made use of. With a few exceptions, all the modern uses of Asbestos are the inventions of Mr. H. W. Johns of this city. The larger part of all the different Asbestos materials and applications of Asbestos used in this country are made by the H. W. Johns Manufacturing Company, of New York. So it happens, as with many other materials, that the curiosity of one century becomes the useful thing of this.

ADVERTISE in the RAILROAD JOURNAL.

AMERICAN Railroad Journal.

ESTABLISHED 1831.

Steam Navigation, Commerce, Finance, Machinery, Mining, Manufactures, New Inventions.

SECOND QUARTO SERIES.—VOL. XXXVIII., No. 50.] NEW YORK, DECEMBER 16, 1882. [WHOLE No. 2,433.—VOL. LV.

THE editor of the RAILROAD JOURNAL is pleased to receive information of railroad enterprises already entered upon or projected, items regarding the business done on the roads, such as relate to persons employed in the railroad and kindred interests; in short, about all matters which the readers of such a paper as this are gratified to find within its columns.

CONSTRUCTION.

THE first regular coal train to pass over the Lehigh and Hudson River Railroad since its completion was made up in the Belvidere-Delaware yard at Phillipsburg, N. J., on the 11th inst.

THE last spike was driven on the Milwaukee and Winnebago Railroad, on the 11th inst., giving the Wisconsin Central Railroad an independent outlet from Milwaukee. The first through train will be run on Monday next.

THE Richmond and Mecklenburg Railroad is now running its freight trains regularly to Chase City.

THE Lebanon and Cornwall Railroad, which is to connect Lebanon with the Pennsylvania Railroad, will be completed by the 1st of May.

A SECTION of fourteen kilometres of completed roadway, recently constructed between Monterey and Santa Caterina, on the Coahuila division of the Mexican National Railway, was examined by the official inspector on the 12th inst., and accepted on behalf of the Mexican Government. The inspector expressed satisfaction with the thoroughly substantial manner in which the road is built. Under the terms of the concession granting $7,000 per kilometre of accepted road the company will receive immediately $98,000. Track is already laid for sixteen kilometres south of Santa Caterina. The Company has now 284 kilometres open for traffic in northern Mexico, making a total on the northern division, from the port of Corpus Christi, Texas, to Santa Caterina, of 500 kilometres of completed road.

THE last rail on the Chicago and Atlantic Railway between Rochester and Huntington, Ind., was laid on the 9th inst. Trains are now running between Lima and Marion.

THE Shamokin, Sunbury and Lewisburg Railroad, an extension of the Philadelphia and Reading Railroad, is expected to be finished during the coming spring. This new branch will extend a distance of thirty-two miles, and will be used in connection with the Pine Creek Railroad, which is in a forward state of construction.

GROUND was broken for the Baja, California and Sonora Railroad on the 7th inst., in the Pia Juana Valley, on the Mexican side of the line. The contract for the first section of twenty miles has been let, and grading will be pushed rapidly. The road will run through Lower California, crossing the Colorado River near its mouth, thence through to Calabazas in Arizona.

DOUBLE-TRACK has been put down on the Baltimore and Potomac Railroad, a distance of twenty-five miles. The remaining fifteen miles will be completed by next spring.

WORK on the Cleveland, Youngstown and Pittsburgh Railroad in Jefferson county, Ohio, is progressing rapidly. At Nebo, seventy hands are employed.

THE Texas and St. Louis Narrow-Gauge has only forty miles of track to lay to complete the line from Cairo to Gatesville, a distance of 750 miles.

PRIVATE advices just received from Antofagasta, contain interesting information of railroad operations. The railway from that place is a narrow-gauge line of two feet six inches. Its length at present is eighty-five miles, but in all probability it will be extended some 350 miles further, to the silver mines of Huanchaca, in the heart of Bolivia. The road has a daily traffic of 750 tons, grades up to three, and has curves of eight hundred.

THE Columbus (Ga.) *Dispatch* says that the Columbus division of the Georgia Pacific Railroad will certainly be completed to Fayette Court House by January 1, and probably by December 20.

THE surveyors on the new line of the Buffalo, Pittsburgh and Western Railroad, from Brocton to Toledo, have reached the Ohio border.

A THIRD track is being laid by the Pennsylvania Railroad Company from Cooper's Creek, Camden, to the Burlington Junction, to avoid delay caused by the increasing freight business.

THE new branch of the West Jersey Railroad from Swedesboro to Salem, via Woodstown, was formally opened on the 13th inst.

THE Salamanca division of the Buffalo, Pittsburgh and Western Railroad has been completed to Salamanca, where connections will probably be made with the New York, Lake Erie and Western, Rochester and Pittsburgh, and New York, Pennsylvania and Ohio railroads.

THE New York, Pittsburgh and Chicago Railway Company are about to commence work upon a line which will extend from Pittsburgh to Marion, connecting at Marion with the Chicago and Atlantic Railway, now almost completed, and under control of the New York, Lake Erie and Western Railway Company. The company also contemplates a direct line to Driftwood, Pa., and Salamanca, N. Y., thereby securing a short line with the Philadelphia and New York. Five thousand men are *en route* to construct the road between Wampum, Pa., and New London, Ohio.

THE Pittsburgh, Bradford and Buffalo Narrow-Gauge Railroad is ballasted to Sheffield Junction, fourteen miles north of Marionville. The bridge at Foxburg is nearly completed. This line will give a through route to Pittsburgh over the Kane City and Butler and Pittsburgh and Western roads.

ORGANIZATION.

THE managers of the Plymouth Railroad Company, one of the leased lines of the Philadelphia and Reading Railroad Company, elected to serve for the ensuing term, are: John Boyd, I. V. Williamson, Edwin Swift, Winfield S. Wilson, John Slingluff and Christopher Heebner.

AT the annual meeting of the stockholders of the Edison Electric Illuminating Company, of New York, on the 12th inst., the following directors were elected: Norvin Green, S. B. Eaton, Thomas A. Edison, E. P. Fabri, James H. Banker, Henry Villard, R. M. Gallaway, G. P. Lowrey, J. F. De Navarro, Calvin Goddard, W. H. Meadowcroft, J. H. Wright and E. G. Fabbri.

AT the annual meeting of the stockholders of the Alleghany Central Railroad, held in this city on the 6th inst., the following gentlemen were elected directors for the coming year: D. N. Martin, F. B. Jenkins, H. A. V. Post, C. E. Kimball, C. C. Pomeroy, M. G. Post, H. L. Larned, A. J. Wellman, A. H. Mines, F. W.

Higgins, M. F. Blair, Frank Smith and George D. Chapman. The following officers were also elected: Frank Smith, president; D. N. Martin, vice-president, and Charles E. Kimball, treasurer and secretary.

At the annual meeting of the stockholders of the Connecticut Valley Railroad Company, held at Hartford on the 12th inst., the following directors were elected: Samuel Babcock, of Middletown; George H. Watrous and E. H. Trowbridge, of New Haven; Richard D. Hubbard, H. C. Robinson and C. M. Pond, of Hartford; William D. Bishop and Nathaniel Wheeler, of Bridgeport; and D. C. Spencer, of Saybrook. The directors are the same as agreed upon when the road was leased to the New York, New Haven and Hartford Railroad Company.

INCORPORATION.

The National Steamship Construction Company of New York was incorporated on the 11th inst., with a capital of $2,000,000. The officers are Waldo Adams, of Boston, president; William B. Dinsmore, Jr., of New York, vice-president; Samuel Little, Irving A. Evans and Waldo Adams, of Boston, and Edward P. Kennard and George H. Houghton, of New York, executive committee of directors. The company has been organized under the laws of this State for the purpose of constructing and repairing steam and sailing craft, and of building the dome-covered steamers under the patents of the American Quick Transit Steamship Company. It has purchased twenty-seven acres on the water-front of Bay Ridge for piers, dry-docks, basins, marine, railways, etc.

The Collinwood Belt Railway Company, Cuyahoga county, Ohio, was incorporated on the 7th inst. Capital $200,000.

PERSONAL.

J. F. Goddard, for years general freight agent of the Atchison, Topeka and Santa Fé, has been promoted to the position of general traffic manager of the same road.

Ex-Mayor James Howell, of Brooklyn, has been appointed a trustee of the New York and Brooklyn Bridge, to fill the vacancy occasioned by the death of Henry C. Murphy.

George S. Griscom, late general manager of the Chicago and Western Indiana Railroad, has been appointed general superintendent of the Cincinnati, Hamilton and Dayton Railroad.

The officers of the Buffalo and Southwestern Railroad Company, elected on the 12th inst., are: President, John F. Moulton, vice-president, James Adams; secretary and treasurer, Wilson S. Bissell.

Mr. Allport, of London, has declined the post of fifth voting trustee of the New York, Pennsylvania and Ohio Railroad, on the ground that he considers the policy of the trustees radically different from the policy of himself and Mr. Swarbrick.

At a meeting of the directors of the Washington and Western Railroad Company, in this city on the 8th inst., Edward Quintard, of New York, formerly vice-president of the Delaware, Lackawanna and Western Railroad, was chosen president in place of W. J. Best.

The directors of the Albion, Carmi and Shawneetown Railway Company of Illinois, have elected the following officers: C. E. McDowell, Carmi, president; Charles Churchill, Albion, first vice-president; William Inman, New Haven, second vice-president; J. D. Richerson, Shawneetown, treasurer; C. P. Berry, Carmi, secretary.

Troy and Greenfield Railroad and Hoosac Tunnel.

The following report of the manager as made to the Massachusetts Railroad Commissioners exhibits the operations of the Troy and Greenfield Railroad and Hoosac Tunnel for the year ending Sept. 30, 1882, in comparison with the previous year of 1881:—

	1882.	1881.
Miles operated	44	43½
Double track	24	7
Sidings	27	22
Total	95	72½
Total income	$236,149	$245,457
Total expenses	171,065	183,296
Net earnings	$65,084	$62,161
New construction for year	$275,359	$345,584
Total train mileage	599,691	571,630
Number local passengers	148,359	132,706
Number through passengers	79,791	47,744
Total number passengers	228,150	180,450
Total passenger mileage	5,221,490	3,638,782
Tons local freight	223,579	168,946
Tons through freight	819,471	759,602
Tons free freight	10,459	6,088
Total freight tons	1,053,509	934,036
Total freight mileage	32,641,889	36,057,193

From the above statement it will be seen that, while there has been a gratifying increase in the development of traffic over the State's railroad, both for passengers and freight, the net returns are not commensurate with the increase of business. This condition of affairs is easily enough accounted for, if it is remembered that for nine months of the year the through business, the principal traffic of the road, was carried at ruinous rates, so far as the railroads themselves were concerned.

At the present time rates are good, and the traffic over the road is limited only by the ability of the immediate western connections of the Tunnel to handle it. More business is offering in the West than the lines between the Tunnel and Hudson River can now take care of, while the Fitchburg Railroad is in a condition to handle a much larger traffic from the Tunnel than it is now getting. That portion of the manager's report which deals with the abitrations of the Railroad Commissioners with the previous year's business makes sad havoc with the net earnings of 1881, and we fear that no more favorable showing will be made upon the last year's operations, when the toll rate for that year shall have been arbitrated upon, as it will be within a short time.

Under the seven years' contract between the Commonwealth and the several roads running upon the State railway it is provided that the operating railways shall reserve fifty per cent of the gross earnings, paying over to the manager the other half. This percentage, however, is subject to arbitration before the Railroad Commissioners, should either party to the contract demand it. The railroads demanded an arbitration upon the business of 1881, with the result that the Commissioners awarded them 5.58 additional to the 50 per cent reserved by them, leaving the State 44.32 per cent of the gross earnings of the operating roads collected upon the State's forty-four miles. Consequently we find that the manager has paid back, out of the net earnings of 1881, to the Fitchburg Railroad for this arbitration, switching, fuel, etc., $55,058; the Troy and Boston, $2,709.12; Boston, Hoosac Tunnel and Western, $1,829.52; New Haven and Northampton Railroad, $213.18—making the total sum paid to these four operating roads, $59,810.65. This, of course, takes almost the entire net earnings of 1881, which, as appears above, were only $62,161, leaving net only $2,350 for that year.

The Pacific Railroads.

The annual report of W. H. Armstrong, Government Commissioner of Railroads, for the fiscal year ending June 30, 1882, has just been completed. The Commissioner says:—

As a rule the accounts of the roads are kept in a thoroughly comprehensive and business-like manner. Properly authorized members of the bureau, in conformity with the law, have made extensive trips this year to inspect the vast properties of the numerous bonded and land grant railroads coming within its jurisdiction. A decidedly healthy improvement in construction, operation and business has been manifest. Steel rails are being substituted for iron as rapidly as practicable; more ties to the mile and of superior quality, better fastenings and good ballast, are being used. Bridges and buildings are not only being repaired and renewed, but generally improved or replaced by better ones. Embankments and cuts are being widened, grades and curvatures reduced and general improvements made as far as practicable. The best pattern, as to service, of locomotives is being used, and improved passenger and freight cars purchased or built. Where the financial condition of the companies admits of it, new machinery of the most improved kind is being obtained; shops, round-houses, station buildings, section and tool houses are being constructed of a much improved and superior character.

The unprecedented construction of railroads during the present year deserves very thoughtful consideration. The Pacific companies are rapidly extending their lines, some through sections of country which are and will remain for years to come of little value, but which extensions are for the most part necessary to secure the trade of rapidly developing sections or to make through connections with important distributing points, which will ultimately be of great value to the main lines.

ACCOUNTS OF THE RAILROADS.

The amount of money applicable to repayment of interest "five per cent of net earnings" and sinking fund requirements derived from transportation receipts is $16,804,044.

The total cash payments to December 31, 1881, which have been required from the companies, in addition to the retention of the entire compensation for services, are as follows:—

Central Pacific	$1,282,264
Central Branch Union Pacific	1,953
Union Pacific	901,837
Total	$2,186,055

The Central Pacific Railroad Company has deposited the above amount of $1,282,264 in the Treasury, but the balance of $901,837 due from the Union Pacific, which owns and operates the Kansas Pacific Railway as one of its divisions, has not been finally adjusted, owing

to items for new construction and new equipment being in dispute.

A table in the report relating to mileage shows that the average number of miles traveled per passenger on the Union Pacific Railroad in 1881 was 511, at a cost of 3.27 cents per mile; on the Central Pacific the average mileage per passenger was 30, at a cost of 3.07 cents per mile.

INDEBTEDNESS.

The total indebtedness of the subsidized Pacific railroads to the United States on June 30, 1882, was as follows:—

Union Pacific:—		
Principal	$33,539,512	
Accrued interest	30,080,998	
		$63,620,510
Central Pacific:—		
Principal	$27,855,680	
Accrued interest	24,285,133	
		$52,140,813
Sioux City and Pacific:—		
Principal	$1,628,320	
Accrued interest	1,415,447	
		$3,043,767
Central Branch Union Pacific:—		
Principal	$1,600,000	
Accrued interest	1,501,808	
		$3,101,808
Total		$121,906,900

Total credit transportation services performed and money paid into the Treasury:—

Union Pacific	$12,360,603
Central Pacific	6,004,665
Sioux City and Pacific	95,278
Central Branch Union Pacific	131,566
Total	$18,592,113

Balance in favor of the United States, but not due until maturity of the principal, 1895, 1899, $103,314,786.

SINKING FUND ACCOUNTS.

In treating of the subject of sinking fund accounts (which amounted on June 30 last to $2,716,221), the Commissioner says that it was not foreseen at the date of passage of the act that the premium on United States bonds would rise to the degree that it has, nor were the late conversions of bonds expected. The last investment was made April 6, 1881, at a premium as high as thirty-five per cent, and on June 30 last there remained uninvested $935,328, which amount has since been largely increased. The fund has evidently not accomplished the result anticipated, and since April, 1881, may be regarded as having practically failed for want of suitable investment. In view of the low rate of interest returned from the investments made by the Secretary of the Treasury, the Commissioner says:—

I deem it my duty to recommend that section 3 of the act of May 7, 1878, be so amended as to authorize the Secretary of the Treasury to invest the sinking funds in the first mortgage bonds of the companies, or such bonds as have been issued to them by the United States, or in other good and sufficient securities, and to convert the bonds now held by the Treasurer of the United States in said sinking funds into money at the market rates and reinvest the same in like securities. As many doubts have been expressed as to the ability of the companies to meet their indebtedness at maturity, and as to the efficiency of the provisions for a sinking fund, I deem it proper to suggest whether it may not be practicable and highly desirable, with the consent of the companies, to change the form of their indebtedness from a running book account into a settlement and actual delivery of interest bearing bonds for the amount found to be due on a convenient day, say July 1, 1883, at which time one-half of the interest will have been paid by the United States. Let the ascertained amount be divided into, say one hundred semi-annual instalments, each to be represented by a redemption bond, one payable each six months, together with interest upon the whole unpaid remainder of the debt, the lien to remain as it is.

The proposition is strongly supported by an elaborate argument, in the course of which it is stated that an approximation of the results of the present sinking fund method shows that at the maturity of the bonds the balance due the United States by the Central Pacific and Union Pacific railways would be $45,995,904 and $25,261,233 respectively. The Commissioner says:—

It is manifest that when the bonds mature at the close of the present century the present sinking fund will not be sufficient to meet them, and if left to be dealt with then as a mere book account, with the risk of possible diminution of income from the rapidly increasing competition which they must surely encounter, adjustment may then be more difficult and embarrassing than now.

It is respectfully submitted that it is worthy of careful consideration whether it would not be wisest and best for Congress now to commute the present mode of payment into one of fixed amount not dependent upon the fluctuations of net earnings or the contingencies of competition, which might cause net earnings to disappear.

With a view to devise the best possible security for the advance made by the government I have ventured to make the suggestion—

First—That if the sinking fund is to be continued the discretion of the Secretary of the Treasury should be enlarged as to the investments of the fund.

Second—That Congress consider the practicability of commuting the present book account indebtedness for securities having the same lien and of fixed amount and payable at fixed periods.

RAILROAD RATES.

Upon the topic of railroad rates, which is treated at length, the report says:—

The adjustment of railroad rates is one of the most difficult and delicate questions of modern times, and is specially complicated in the United States, where every trunk line runs through several States, each independent within its own jurisdiction and jealous of all interference by the general government. The enormous extent of this interest and the rapidity of its growth, both in the increase of mileage and tonnage, demand that its relations to the public shall be under some judicious legal control. What it shall be and to what extent are questions upon which the most experienced experts differ, and as to which there is much popular misapprehension.

It is estimated by Mr. Henry V. Poor that there are now in the United States not less than 104,813 miles of railroad, which, at the low estimate of $25,000 per mile, have cost over $2,600,000,000. They have transported within the last year 350,000,000 tons, of an estimated value of $12,000,000,000. Their gross receipts were $725,325,119. They paid for wages and material $449,565,071; for interest on funded debts, $128,887,002; for dividends, $93,344,200. They employed in operating the roads 1,200,000 persons, besides 400,000 in construction, or a total of 1,600,000 employés, or about 1 32 part of our population, estimated at 53,200,000. Interests so vast and so necessarily and vitally bound up in the prosperity of the people can only be dealt with with the utmost caution and upon the fullest information. Rates and discriminations are not entirely within the arbitrary determination of railroad companies. They are subject to competitions which they cannot control, upon the ocean, upon the lakes and upon the rivers. The great lakes and rivers, so peculiarly advantageously located as to trade, with their numerous, far reaching and widely extended navigable tributaries, carry water competition into almost every portion of the country, with the effect of so reducing the general rates that the United States enjoys the cheapest railroad transportation in the world. As yet no just basis of general application for the adjustment of rates and discriminations has been found, and it is undeniable that there are hardships neither few nor small arising from existing discriminations, often arbitrarily imposed, which affect disastrously local trade at non-competing points. There is a growing and clamorous demand among the people that railroad management shall be subjected to the restraints of law; nor is railroad management adverse to reasonable control. On the contrary, as I believe, judicious law would be most acceptable. It has become a necessity that "wars" of rates shall be controlled in the interests of both the people and the roads. Such "wars" for the time unsettle within their operation commercial values, affording sudden and unreasonable profits to a few and entailing heavy losses upon others.

[TO BE CONTINUED.]

Timber for Railroad Use.

THE moisture of the soils in the South, says the *National Car Builder*, is very destructive to woods employed as the bed for railway track, and managers have been troubled to know what is the most economical method for obviating loss resulting from this cause. Creosoting has been resorted to. Several works with large capital have been established in St. Louis for the treatment of wood by the creosote process, and in Texas the treatment has been applied along the lines as construction was pushed forward. This method, however, is considered rather too expensive. Some railway men have concluded that the ailantus and catalpa will prove to be the cheapest and most durable wood for tie and bridge timbers. One company, whose road extends chiefly over prairie lands, is having a large plantation seeded for these trees in equal proportions. Both the catalpa and ailantus are readily propagated from the seed, and bear seed pods abundantly. Another company, whose road enters Texas, is arranging to plant several hundred acres of these trees in that State. Even the Iron Mountain Company, that probably owns more heavily timbered land than any other in the country, has contracted for the cultivation of a catalpa farm near one of its stations in Missouri. On this road are catalpa ties that were laid nearly fifteen years ago and are apparently as sound as ever. It is authenticated that in southern Ohio, where one species of catalpa is indigenous, there are posts and timbers of this wood that have been in the ground a full century and yet show no signs of decay. Although the ailantus is an importation from China, still it and the catalpa seem to find in soils of Missouri, Arkansas, and Texas just what they require to thrive upon.

THE eleventh annual meeting of the National Board of Steam Navigation will be held at St. Louis, Mo., on the 18th of January, 1883, instead of December 1, 1882, as originally announced. The Executive Committee of the Board, of which General James S. Negley, of Pittsburgh, Pa., is Chairman, will present to Congress, as soon as assembled, a steamboat bill prepared by the committee. Delegations will be sent from Portland, Boston, New York, Philadelphia, Baltimore, Norfolk, all the lake ports, the Pacific, east, and ports along the western rivers. Over $1,250,000 of steam tonnage will be represented.

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WE invite railroad officers to send us notice of elections, transfers, appointments, resignations, etc.; and all our readers would oblige us by furnishing for our columns any items of personal information, which may come to their knowledge, and are adapted to this department. We aim to record all new railway enterprises in the United States and Canada, and to note the progress of construction on all new roads and extensions; and we request all concerned in railway building to give us early information regarding the above, that our reports may be as complete as possible.

Subscribers are requested to report to our office any irregularity in receiving the JOURNAL.

Contributed articles relating to Railroad matters generally, Mining interests, Banking and Financial items, Agricultural development, and Manufacturing news, by those who are familiar with these subjects, are especially desired.

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COPIES of this JOURNAL are occasionally distributed as an advertisement, and should not be returned to the office. The proper use for them is their thorough examination, which will result in business to the publishers.

A RETROSPECT.

THE AMERICAN RAILROAD JOURNAL was the beginning of railroad literature. As such it started with ways of its own, as a matter of necessity. Owing nothing to precedent, example or experience of others, its contents were of such a character and put into such form as seemed to its promoters best for the purpose of informing the public upon the developments of that means of distribution which may be said, without exaggeration, to have revolutionized the manner of life of the people. The differences between now and previously to the year 1831, when this paper made its bow to the public, are owing more to the use of the steam locomotive than to any other cause. With a sagacity to which all honor should be rendered, the more especially as those who displayed it have all passed away, the originators of the JOURNAL not only apprehended the vast importance of the industry they represented, but adopted such plans of making its operations known as are still found to be the best to follow. The resemblances between the first issue and that of to-day are more striking than the differences. Compared with the present, the interests faithfully and intelligently recorded by the chroniclers whom we succeed, are as the giant child to the giant full-grown; but the portrait of the young monster is a good likeness. The lineaments, parts, and proportions are as exactly given as conscientious care, industry, competent scholarship, and what somebody happily calls "the journalistic instinct," enabled them to be; and while we do our best, we should be rash as well as immodest to claim that our portrayal of the huge subject we treat is, the improved conditions under which we work being taken into account, superior to that of the pioneers in railroad journalism who so worthily founded this newspaper, and who laid out methods which long experience teaches us are the best to continue.

Brevity as well as completeness have always characterized the contents of this paper. Its statements of financial returns, particularly, are and have been so compactly given—the result of persistent and heavy labor--that the necessity of the reader's troublesome use of reports, of which they present the esssential parts in a brief and convenient form, is avoided. That men of business should set a high value upon these compilations is, therefore, a perfectly natural thing, as much so as that competitive journals should follow or imitate them.

National Exposition of Railway Appliances.

OFFICE OF THE COMMISSIONERS,
GRAND PACIFIC HOTEL,
CHICAGO, ILLS., Dec. 4, 1882.

ALMOST a year ago the feasibility of organizing and conducting a national exposition of railway appliances at some favorable point in the United States and in the near future began to be discussed by prominent parties deeply interested in the growth and prosperity of this interest. A very thorough expression of the sentiment of railway men and inventors and manufacturers of and dealers in railway appliances has during this period been obtained; the universal tone of which has been enthusiastically in favor of the proposition.

Accepting this as a safe indication that an exposition can be organized which will reflect credit upon and result in great good to the railway and manufacturing interests of this country and of the world, and believing that the magnitude of these interests and their wonderful growth in the past few years make the present a most auspicious time in which to accomplish this, a board of commissioners, whose names are attached to this circular, has been organized to arrange for and conduct such an exposition.

The Inter-state Exposition buildings, located near the business center of the city of Chicago, on the shore of Lake Michigan and convenient to the depots of the various railways, have been secured. These are the largest exposition buildings in this country and are especially adapted to the purpose in question. The main building is 800 feet long and 200 wide, has a capacious gallery one-third of a mile in length, and is provided with an abundance of steam power for operating machinery. Railway tracks will be laid the entire length of this building, for the accommodation of cars and locomotives and for use in making tests, which will be connected with the tracks of the Baltimore and Ohio, Illinois Central, and Michigan Central roads, running within a few feet of its eastern wall.

Most favorable rates will be given by the railways of the country for the transportation of articles intended for exhibition and excursion parties desiring to attend.

A series of scientific and practical tests, to be made by well-known scientists and carefully selected committees, extending to every article and every description of material susceptible of reliable test, will constitute one of the most interesting as well as most valuable features of the exposition. An official record of these tests and of every exhibit, including a list of prizes awarded, will be made and published under direction of the commissioners.

Exhibitors will be required to pay a reasonable fee for themselves and for employés in charge of exhibits, and an extra sum for each class in which they may desire to compete for a prize (the amounts to be hereafter fixed, to defray the expense of conducting tests and examinations and of providing medals.

Every dollar of the proceeds of the exposition, after defraying necessary expenses, will be devoted to benevolent purposes connected with the railway service, to be hereafter designated by the commissioners.

A large guarantee fund has been raised in Chicago, sufficient to insure beyond peradventure the financial stability of the exposition.

No officer or commissioner will receive any salary or compensation for his services as such, the good of the great interests named and of the army of employés connected with them being the only incentive to the labor which he shall perform.

The exposition will open on or about Thursday, May 31, and close on or about July 7, 1883; and the time for preparation being thus limited it is important that all who intend making exhibits shall begin necessary preparations at once.

It is requested that each person or firm receiving this circular (No. 1) will, at the earliest possible moment, indicate, as nearly as may be, his or their intentions with reference to being represented at this exposition, the probable extent and character of the exhibit, the least amount of space that could be used to properly present it, and the greatest amount that could be advantageously used provided it could be had. As soon as these replies have been received a diagram of the Exposition buildings, showing amount and character of space to be assigned will be sent to all parties desiring to exhibit, together with necessary blanks on which to make application.

An admission fee will be charged visitors, thus relieving exhibitors of the necessity of providing for the expenses of the exposition.

It is believed that an exhibit can be organized which, in its benefits to the more intelligent masses, and especially to officers and employés in the railway service, and all who are interested in the manufacture of railway appliances, and as a contribution to the world's store of technical and practical knowledge, has never been equaled.

To this end it is earnestly hoped that every one who is directly or indirectly interested in supplying railways either with material or manufactured articles will interest himself in this matter, and that every deserving article properly coming under the head of "railway appliances" may be creditably represented at this exposition.

All correspondence should be addressed to the secretary.

COMMISSIONERS.

Lucius Fairchild, ex-governor of Wisconsin and late minister to Madrid, Spain.

George M. Pullman, president Pullman's Palace Car Company, Chicago.

Aaron French, Pittsburgh Car Spring Company, Pittsburgh.

J. McGregor Adams, Adams & Westlake Manufacturing Company, etc., Chicago.

E. V. Cherry, vice-president Post & Co., railway supplies, Cincinnati.

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EXECUTIVE COMMITTEE.

Hon. Lucius Fairchild, H. E. Sargent, A. G. Darwin, J. McGregor Adams, E. V. Cherry, E. H. Talbott.

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RAILROAD MEDICAL SERVICE.

[*Continuation of the French System.*]

BY S. S. HERRICK, M. D.

SECRETARY OF BOARD OF HEALTH, STATE OF LOUISIANA.

PRINTED INSTRUCTIONS TO EMPLOYÉS.

THE Paris, Lyons and Mediterranean Railway has issued, for general circulation, simple, precise and minute rules applying to those engaged in every grade of service. These relate: 1. To the principal hygienic precautions which should be observed by individuals to avert preventable diseases and accidents; 2. To the chief measures which are to be used on the spot and while waiting for the doctor, in case of the most common accidents and maladies; 3. To the mode of employing the contents of the relief-chests, and of the medicine chests at the station-houses, especially those which are in daily use or can be obtained without a physician's prescription. It is understood, however, that these instructions are not intended to dispense with the attendance of a physician, but to be followed in an emergency or until a medical man can be on the spot.

There is no question that the hygienic counsels have much greater weight with Frenchmen than they would have with the average American, who would rather have his own way and take the chances than be bothered by a set of rules, however much they might conduce to health and comfort. It is to be noted that some of the instructions for first aid to the sick and wounded, while waiting for the doctor, are antiquated, and would not now be approved in the light of to-day's experience. On the whole, however, they are greatly to be commended, and doubtless they might, with some modifications, be found applicable to a similarly organized medical service in this country.

THE EASTERN RAILWAY OF FRANCE.

The medical regulations upon this road are so similar to those already described that only the different features need be noted. Express mention is made of arrangements entered into with the managers of local hospitals along the lines, for the reception and attendance of sick and wounded men.

Two kinds of sick-tickets are issued: 1. To those whose sickness or injury grew directly out of the performance of duty. These tickets are marked "Service." 2. To those whose sickness or injury is not due to performance of duty, and their tickets are marked "Outside of duty." The former are entitled, without reserve, to medical attendance, medicines and all necessary appliances for three months (in case the disability last so long); the latter have no such privilege, unless they be subscribers to the Provident Fund. Orders for medicines, etc. on this account bear the inscription "Provident Fund," and are on pink paper. (As no allusion is made to a Provident Fund in the regulations of the other railroad companies, it is to be presumed that they have not adopted this feature.)

All trains on the Eastern Railway are provided with relief-chests, containing medicines and surgical appliances for use in case of accidental injuries to any persons traveling thereon.

Sick employés continue to receive full pay during illness not exceeding eight days; from this time up to two months of disability for work they are allowed half pay. Beyond two months the allowance is at the discretion of the administration. In case of death, the company grants to the widow or orphans a sum equal to two months' pay, and assumes the expense of burial. In special cases further pecuniary relief to the family may be granted by the administration.

The above allowances by the company are made only to permanent employés. Day laborers are entitled to medical attendance and medicines, together with half pay, during two weeks of disability. In case the disability arose strictly in the line of duty, the relief may be extended at the discretion of the management.

A PROVIDENT FUND

has been organized upon the Eastern Railway, for the purpose of supplementing the relief granted to employés in case of sickness or injury, or to their families in case of death. Its benefits accrue only to the contributors, and they receive half pay for two months after the company's allowance has expired by limitation. In case of death, the burial expenses are defrayed by the Provident Fund, when not borne by the railroad company. In addition the family receive from the fund a sum equal to that allowed by the company.

In case of permanent disability, besides allowances already mentioned the invalid will recover all sums previously contributed by him to this relief fund, otherwise the relief is limited to one year's contributions.

When it appears that the disability has arisen from intemperance, venereal disease or brawls, relief from this fund can be refused. When employés leave the company's service, whether by resignation or dismissal, they have no claim for reimbursement of contributions made to the fund.

In case the Provident Fund proves insufficient to meet all demands, the administration of the company advance the needed sum, and provide for its repayment by an increased assessment upon the contributors. The accounts of this fund are balanced annually. Any surplus goes to the Pension Fund; provided that the capital of the Provident Fund must not be allowed to fall below its standard of January 1, 1862. The investment of its disposable funds must be made in obligations of the company or in Government securities.

[TO BE CONTINUED].

The "Tramway" Association.

AT the meeting of the Tramway presidents and superintendents in Boston, on the 13th inst., the committee appointed to present a constitution and by-laws reported a draft, which was adopted, stating that the objects of the association were to cultivate a spirit of fraternity among those connected with street railroad management and to promote progress and improvement in the methods of operation. The name chosen is the Street Railway Association of America.

The following officers were nominated for the ensuing year: President, H. H. Littell, of Louisville; vice-presidents, W. H. Hazard, of Brooklyn, Calvin A. Richards, of Boston, and B. F. Kloper, Cincinnati; secretary and treasurer, J. W. Richardson, of Brooklyn; executive committee, Julius Walsh, of St. Louis; Charles Clementshaw, of Troy; Thomas Lowery, of Minneapolis; and J. R. Lake, of Chicago.

THE branch railroad built by the St. Louis and San Francisco Railroad to the famous invalid resort, Eureka Springs, Arkansas, has proved very remunerative as well as a very great blessing to invalid travelers. It is now in running order almost the entire length, which is much more convenient than the tiresome stage-coach route, attended as it was with so many dangers in this wild, mountain country and so much fatigue to the health seeker. This road renders these wonderful springs accessible to all—no matter how great their infirmity.

IN noticing the perfection of any modern in vention did any orator ever omit to state that it is yet in its infancy? The Esterbrook Steel Pen, however, is no infant, having been introduced twenty-two years ago, and you cannot go anywhere without finding it.

BOWERS, DURÉ & CO., of Wilmington, Del., shipped seven cars to the Manhattan Elevated Railway of New York, on the 9th inst.

Journal of Railroad Law.

SUPREME COURT OF PENNSYLVANIA.

THE NORTHERN CENTRAL RAILROAD COMPANY vs. HUSSON.

Negligence—Suit for death of brakeman when coupling railroad cars, whose loading projected over the bumpers—One of the risks assumed when engaging in the business—Contributory negligence.

The question of extraordinary risk to the deceased on the part of the defendant and ordinary care by the deceased does not arise merely because the injury in a particular case might *possibly* have been prevented by some different service. If the risk is an ordinary one the employer is not liable, even if the employee did use ordinary care.

The risk which occasioned the injury in this case was not of an unusual and extraordinary character, but was one ordinarily incident to the employment in which the deceased was engaged, and hence there was no liability in defendant. The fact that the cars were loaded beyond the bumpers was a very usual occurrence, and cars thus loaded could be successfully and safely coupled. It was the duty of the plaintiff to show that the loading of the cars complained of was an unusual occurrence which created an extraordinary risk; and upon his failure to do so, a direction to find for the defendant should have been given.

Error to the Court of Common Pleas of York county.

This was an action on the case brought by Lizzie Husson, widow of John Husson, deceased, against the Northern Central Railway Co., to recover damages for the death of the said John Husson, occasioned by the negligence of the defendant.

John Husson, the deceased, was one of the hands employed on a gravel train on the Northern Central Railway, and while in the act of coupling cars, his head was caught and crushed between the loading of the two cars, which consisted of bridge irons projecting over the ends of each car. The cars had arrived in York on the 12th and 13th days of July, 1880, two cars on each said days, and were being shifted together by the aid of a locomotive on the morning of the 14th, in order to be taken by the gravel train, on which the deceased was employed, to their destination. The two sets of cars were more than fifty yards apart when the engine commenced moving them together. The deceased was on the south side of the track. At first he was by the cars not connected with the locomotive, standing still; then he walked up and met the cars coming, and walked back with them and took hold of the coupling. He walked ahead of the cars that were moving to get the pin ready to make the coupling. As the cars came together he stooped down with one foot on the rail, and reached with his left hand for the link, and entered it to make the coupling. He had the pin set up standing so it would drop in.

Ten minutes after the accident, and the deceased was killed, the cars were coupled together again without accident. They were Pennsylvania Railroad gondola cars, brought by the defendant from Marysville, where they had been brought from Pittsburgh by the Pennsylvania Railroad, and from Marysville had been brought on the Northern Central Railway to York. They had passed the regular routine of inspection. The two sets of two cars each came to Marysville separately; that is, in separate trains, and came to York in separate trains, and the two sets of cars had not been coupled together anywhere along the route; but when they came to York, it was necessary to couple the four cars together. According to the testimony, the entire height, from the ground or cross ties to the loading on the cars, was four feet four and a half inches. The deceased was a tall, slender man, and, in stooping, his head would be probably higher than the average of men. He completed the coupling, and it was in getting away his head was caught. When the cars were coupled, the loading came so close together that unless the coupler stooped entirely under the car, they could not be coupled without accident.

Conductors and employés of the defendant testified that instructions were given to the men how to couple cars, and illustrations were given of the manner of doing it, by stooping or crouching down and reaching under the deadwood, and taking hold of the link and entering it, the pin having been previously fixed so that the jar of the cars meeting would cause it to drop into its place.

It was also in evidence that these instructions were given with regard to the construction of the cars and danger of injury to head and arm, and not to avoid projecting loads. A large number of the employés or former employés of the company, testified that cars with projecting loads frequently pass over the road, and are handled and coupled together with safety. That such cars may be coupled with safety, and that, in their opinion, cars loaded as these were with bridge irons, with the limited space of five inches between them, could be coupled with safety by the exercise of ordinary care and judgment.

The verdict was for the plaintiff for $4,500, and a writ of error was taken.

Opinion by GREEN, J. October 5, 1882.

The chief difficulty we encounter in this case, is in discovering any evidence of negligence on the part of the defendant, such as would subject it to liability for the injury in question. The deceased, John Husson, was an employé of the defendant, whose duty it was, amongst other things, to couple cars at the time and place of the accident. While in the performance of his duty, his head was caught between the projecting ends of certain bridge irons, loaded upon the cars he was coupling, in consequence of which he was killed. It is not claimed that there was any defect in the roadbed or in the cars, or in the coupling apparatus. The injury was not the result of any defect in any of the appliances furnished by the defendant; on the contrary, it was the result of the manner in which the act of coupling was performed. The same cars, with the same loading upon them, were, immediately after the accident, successfully coupled by another person in perfect safety. The only difference in the two acts of coupling was in the manner in which they were respectively done. Husson's head was raised high enough to be caught by material loaded on top of the cars, and Gaul, who made the second coupling, kept his head below the material, and was not caught. Husson's head was above the level of the floor of the car or it would not have been caught. The act of coupling was necessarily to be performed below the bottom of the cars, as the apparatus by which it was to be done was there located. It was testified by a number of witnesses, and contradicted by none, that, in

order to make the coupling properly and with safety, the head of the coupler must be below the car. Common prudence would seem to indicate the necessity of such a precaution, and the mere fact and character of the accident would appear to demonstrate that it was due to a want of ordinary care by the deceased. But however that may be, we are unable to discover anywhere in the testimony the slightest evidence of negligence on the part of the defendant. The case was left to the jury by the learned judge of the court below on the question of extraordinary risk to the deceased on the part of defendant, and ordinary care by the deceased. Thus in the charge the court said: "If you believe that the deceased was, under the circumstances of this case, subjected to such extraordinary risk which the company could have avoided, the company is liable. But if you believe it was an ordinary risk, and that the deceased did not take ordinary care, in other words, was careless in the performance of the act which resulted in his death, the company is not liable." We cannot agree that the risk to which an employer subjects his employé suffices to impose liability upon the former, as being extraordinary in character, merely because the injury in a particular case might *possibly* have been prevented by some different device. Almost all accidents could be avoided if the special manner of their occurrence could be foreseen. Nor can we assent to the idea that it requires a combination of ordinary risks on the part of the employer, and want of ordinary care on the part of the employé, to relieve the employer from liability. If the risk is an ordinary one, the employer is not liable, even if the employé did use ordinary care. In all such cases, the risk of injury is one of the hazards which the employé assumes when he engages in the service to which it is incident. This has always been the law. There can be no doubt that the coupling of railway cars is a hazardous business, and requires the exercise of a commensurate degree of care on the part of those who engage in it. But it by no means follows that, because of an accident to such an employé while performing his duty, the employer is liable simply for the reason that the particular accident might have been prevented by some special device or precaution not in common use. There was no evidence that the method of loading the cars in question was an unusual occurrence, and no proof that the risk resulting therefrom was an extraordinary risk. It is manifestly apparent from the entire body of the testimony that the risk under consideration was one of the ordinary risks of the business in which the deceased was engaged, and hence there was no liability for an injury resulting from it.

In Patterson v. Pittsburgh and Connellsville R. R. Co., 26 P. F. S., we said on page 393: "It is true the master is not responsible for accidents occurring to his servant from the ordinary risks and dangers which are incident to the business in which he is engaged; for, in such case, the contract is presumed to be made with reference to such risks." The same doctrine was repeated in Pittsburgh and Connellsville R. R. Co. v. Sentmeyer, 11 Norr. 270; and in Baker v. Allegheny Valley R. R. 38 Legal Intell. Sharswood, C. J., on page 240 said: "A servant assumes all the ordinary risks of his employment. He cannot hold the master responsible for an injury which cannot be traced directly to his negligence." The case of Day v. Toledo, Canada Southern and Detroit Railway Co., 42 Mich. Rep. 523, is quite similar to the present. Day sued the company for injuries received in having his fingers caught in coupling cars on a train of which he was brakeman. A car loaded with lumber was to be attached to the train. It was claimed that the lumber projected forward more than usual, and that plaintiff's fingers were caught in the coupling link and hurt. The court took the case from the jury, saying: "The injury was from one of the risks incident to the occupation of plaintiff, and he knew better than the conductor or any one else the precise difficulty to be guarded against." In the case of Atchison, Topeka and Santa Fé R. R. Co. v. Plunkett, decided by the Supreme Court of Kansas, and reported in 2 Amer. and Eng. Railway Cases, 128, the circumstances were still more analogous. The cars in that case were loaded with material which projected beyond the ends of the cars. The person attempting to couple them was caught between the ends of the loading and killed. The action was brought against the company for negligence in causing the death of the decedent. It was held that it was not negligence for the company to receive and handle cars so loaded, nor to order or permit an employé to attempt to couple them. Upon the whole case, we think the jury should have been directed to render a verdict for the defendant.

Judgment reversed.

Railroads in Iowa.

THE total number of miles of railroad in Iowa, as reported to the Board of Railroad Commissioners by the various companies, is 18,548.64. The Commissioners' estimate of the stock of these roads representing the parts of them in Iowa, added to the stock of the roads entirely in Iowa, amounted to $121,160,-084.81, or $19,117.54 per mile. The total debt of the roads in Iowa, as reported and estimated by the Commissioners, is $118,057,183.16, or $18,628.40 per mile. Of this amount $112,637,-966.05 is funded debt—$5,419,217.11 is unfunded or floating debt. The stock and debt of the roads in Iowa amount to $230,267.97, or $37,-745.94 per mile. The following table shows the amount of stock and the amount of debt per mile of each company, as returned by them:—

	Stock per mile.	Debt per mile.
Burlington, Cedar Rapids and Northern	$8,696 20	$15,628 55
Chicago, Burlington and Kansas City	.....	32,304 97
Central Iowa	20,236 44	19,954 79
Chicago, Burlington and Quincy	17,956 00	16,960 00
Kansas City, St. Joseph and Council Bluffs	18,354 10	18,486 95
Chicago, Milwaukee and St. Paul	8,357 00	20,061 00
Chicago and Northwestern	21,325 48	34,396 94
Chicago, Iowa and Nebraska	47,851 90	4,621 51
Cedar Rapids and Missouri River	27,809 20	13,556 22
Des Moines and Minneapolis	15,805 72	10,600 02
Maple River	8,122 34	8,281 12
Chicago, Rock Island and Pacific	37,182 10	15,507 31
Keokuk and Des Moines	25,431 50	16,954 50
Chicago, St. Paul, Minneapolis and Omaha	29,275 49	19,508 24
Crooked Creek	8,411 76	2,835 68
Des Moines and Fort Dodge	45,444 74	29,489 72
Dubuque and Dakota	8,936 84	9,968 51
Cedar Falls and Minnesota	20,991 00	20,,947 62
Dubuque and Sioux City	35,039 90	6,110 72
Iowa Falls and Sioux City	25,170 12	16,833 57
Minneapolis and St. Louis	27,396 00	21,514 99
Sioux City and Pacific	19,255 26	52,533 11
St. Louis, Keokuk and Northwestern	18,688 52	18,570 45
Wabash, St. Louis and Pacific	20,054 47	30,130 40
Narrow-Gauge roads—		
Burlington and Northwestern	4,364 08	5,908 26
Des Moines, Osceola and Southern	5,000 00	7,000 06
Fort Madison and Northwestern	7,633 00	5,070 09
Cedar Rapids and Marion	12,000 00	.....

Thirteen roads report an excess after deducting expenses, interest and rental. This excess amounts to $8,434,176.64. Seven roads show a deficit of $577,487.70, leaving the net income $7,850,688.94, which would give an average of net earnings for all the roads in the State of $1,239.81 per mile. The cost of operating the Chicago, Burlington and Kansas City Railroad was $17,858.88 more than its entire earnings, that of the St. Louis, Keokuk and Northwestern $63,013.80. The Iowa Central earned 7.54 per cent on its indebtedness, the Des Moines and Fort Dodge 6.61, the Minneapolis and St. Louis 3.7, the Sioux City and Pacific, 7, the Wabash, St. Louis and Pacific 3.31.

The property accounts of the roads reporting have been increased during the year $45,575,-581.89. This amount covers the addition in other States as well as Iowa. Of this amount the Commissioners estimate, as properly belonging to the roads in Iowa, an increase in property of $20,372,206.01, or for the 911 additional miles of road reported for the year $22,-337.92 per mile.

The amount of taxes paid by the railroads in the State is $707,660.31, which is 9 per cent of the income to the stockholders. The taxes paid in 1878 were $594,912.65; in 1879, $584,-169.79; in 1880, $591,843.08; in 1881, $628,611.-51. The Chicago, Rock Island and Pacific paid $162,629.16 of this amount, the Chicago and Northwestern, $126,378.50; Chicago, Milwaukee and St. Paul, $94,166.23; Illinois Central, $60,624.16.

Of the entire mileage of the State 5,182.73 miles are owned by the companies operating them and 1,154.27 are leased. The Rock Island leases 162.20 miles; the Northwestern, 486.10; Illinois Central, 402.16; Wabash, 87.90; Burlington and Northwestern, 15.91.

There are 700.73 miles of side-track reported, a trifle more than 11 per cent of the length of the roads. The Commissioners consider this amount small, and claim that it is often a source of serious embarrassment in moving trains. There are but 47.06 miles of double-track, of which the Chicago, Burlington and Quincy reports 43.06 and the Rock Island 4. There are 2,937.24 miles of steel rails and 3,-024.71 miles of iron rails.

Number miles run by passenger trains	18,575,194
Number miles run by freight trains	39,106,906
Number miles run by switching trains	14,005,754
Number miles run by construction trains	6,744,011
Total train mileage	78,431,865
Number passengers carried	2c,927,126
Number passengers carried one mile	787,c21,962
Number tons freight carried	31,062,765
Number tons freight carried one mile	4,631,564,735

The average distance traveled by each passenger is forty-five miles, indicating that little effort has yet been made to develop local travel. The passenger rates charged are generally the maximum fixed by statute.

The total freight car mileage is 591,616,101.

The rate of freight charges per ton per mile varies from 9 cents on the Crooked Creek road, 4.24 on the Burlington and Northwestern, 3.08 on the Des Moines and Fort Dodge, to 1.60 on the Milwaukee and St. Paul, 1.47 on the Northwestern, 1.24 on the Rock Island and 0.95 on the Wabash. The average rates are a little higher than last year.

The total number of locomotives is reported at 2,652; weight varying from 28 to 67 tons. Number of cars, 85,206; of these 1,031 are passenger cars, 601 baggage, mail and express, 125 parlor, sleeping and dining cars, 49,864 box freight cars, 7,846 stock cars, 18,240 platform or coal cars and 7,497 other cars.

THE Chicago *Tribune* says there is the best authority for the statement that the West Division Street Railway Company are seriously considering the idea of running their cars by electricity. Elmer A. Sperry, of Cortland, N. Y., is the projector of the system. It is understood that the system will, besides running cars, furnish light therefor, and will light the track for a third of a mile ahead of the car.

The Stock Exchanges and Money Market.

New York Stock Exchange.

Closing Prices for the week ending Dec. 13.

	Th.7.	F.8.	Sat.9.	M.11.	Tu.12.	W.13.
Adams Express			135	134	134	133
Albany and Susq						
1st mortgage						
2d mortgage		106¼				
American Express		95	95		91	92
Burl., C. R. & Nor					81	
1st mortgage 5s	100		140¾	100		
Canada Southern	66¾	67¾	67¼	67¾	68¾	69¾
1st mortgage guar	96¼	96¼	98¾	99¾	99	
Central of N. Jersey	70¼	70¼	70¼	70⅛	71¼	72
1st mort. 1890						
7s, consol. ass	103¼		110	107¾		
7s, convertible ass			108			107½
7s, Income				82	84	85
Adjustment						
Central Pacific	86⅛	87⅛	86¾	86⅛	87⅜	87½
6s, gold						116¼
1st M. (San Joaq)						
1st M. (Cal. & Or.)						
Land grant 6s				104		
Chesapeake & Ohio	23		23			23¼
1st pref	34				35	35
2d pref						
1st mort., series B	87¼	87½	87½		88	
Chicago and Alton		132	132½	132¼	132¼	134
Preferred						
1st mortgage						
Sinking Fund	112¾					
Chi., Bur. & Quincy	124¾	125	125¾	126⅛	128	128⅛
7s, Consol. 1903					128½	
Chi., Mil. & St. Paul	100¾	101⅞	102¼	104¾	106⅞	108½
Preferred	118⅜	120⅜	120⅞	121	124	123⅛
1st mortgage, 8s						
2d mort., 7 3-10s						
7s, gold						
1st M. (La. C. div)						123
1st M. I. & M. div.)						
1st M. (I. & D. ext.)	122					
1st M. (H.&D. div.)		120			120	
1st M.(C. & M.div.)						
Consolidated S. F.	124½			122¾		
Chi. & Northwestern	130¾	132½	133½	137¾	138¾	139
Preferred	151	152¼	153¼	156	156¼	156¼
1st mortgage						108
Sinking Fund 6s						
Consolidated 7s			134			
Consol. Gold bo'ds	125	125		125		
Do. reg					125	
Chi., R. Isl. & Pac.	126¾	128	128¼	129¼	130	130¾
6s, 1917, c				127¾		
Clev.,Col.,Cin.&Ind.	75¾					78
1st mortgage						
Clev. & Pittsburg gr.	138¾	139			138	138¾
7s, Consolidated						
4th mortgage						
Col.,Chi.,& Ind. Cent			5¾	5	5⅛	5
1st mortgage						
2d mortgage						
Del. & Hud Canal.	107	107	107¾	108	108¾	109
Reg. 7s, 1891						
Reg. 7s, 1884						
7s, 1894			115	114¾		
Del.,Lack.& Western	125⅜	126	126¼	126½	128	128⅜
2d mortgage 7s						
Consol. 1907					127	
Erie Railway						
1st mortgage						
2d mort. 5s, ext		109				
3d mortgage						
4th mort. 5s, ext				107½		
5th mortgage						
7s, Consol. gold					128	
Great West. 1st mort		106				
2d mortgage						
Hannibal & St. Jo						
Preferred		78	76	80	80	82½
8s, Convertible						
Houston & Tex. Cen					75⅛	76
1st mortgage			111			
2d mortgage						
Illinois Central	144	144	144¼	145	145	145
LakeShore&MichSo	114¾	115⅜	115¼	116	116⅜	117⅜
Consol. 7s						
Consol. 7s, reg						
2d Consolidated						
Lsh. & W. B. con.ass				101	101	101
Long Dock bonds						
Louisville & Nash.	51	51⅜	51⅛	51⅜	52¼	52¾
7s, Consolidated			114½			
Manhattan	42	46⅜	44		45	
1st pref		82	83¾			85
Met. Elevated	83	82½				
1st mortgage				100½		99¼
Michigan Central	98⅛	99	99¼	99½	100⅞	101
7s, 1909		121	122½		123	
Morris & Essex		125		122		122
1st mortgage						
2d mortgage	115					
7s of 1871					120¾	121
7s, Convertible						
7s, Consolidated	121			121½		
N. Y. Cen. & Hud. R.	130½	130⅞	130¾	131¾	132¼	132¾
6s, S. F. 1883						
6s, S. F., 1887						
1st mortgage		134	134		133⅛	
1st mortgage, reg						134
N. Y. Elevated						
1st mortgage						117
N. Y. & Harlem						
Preferred						
1st mortgage						
1st mortgage, reg						
N. Y. Lake Erie & W	36¼	36¾	36⅜	36⅞	37⅜	37⅛
Preferred	84	85			84	85
2d Consolidated	96¼	96½		96¼	96⅜	97
New 2d 5s fund						
N.Y.,N.Hav'n&Hart	184		184			
North Mo. 1st mort						
Northern Pacific	44⅜	43⅜	42⅞	43⅞	44⅜	44⅛
Preferred	96¼	96¼	83¼x	83⅜	83⅜	84¼
Ohio & Mississippi		32½				34⅛
Preferred			94¼			
2d mortgage	121¼					
Consolidated 7s						
Consol. S. Fund					118	
Pacific Mail S. S. Co	35			36	39⅜	39⅝
Pacific R. R. of Mo.						
1st mortgage						
2d mortgage						
Panama						
Phila. & Reading	51⅛	51⅝	51⅛	51⅜	52¼	52⅞
Pitts,Ft.W.&Chi.gtd	134½					135
1st mortgage						
2d mortgage						
3d mortgage						
Pullman Palace Car	123		123		124½	125⅜
Quicksil'r Min'g Co						9¼
Preferred						
St. Louis & San Fran				32½		
Preferred					52	53
1st Preferred	93½				95	96¼
St. L., Alt'n & T. H.			42½	40	45¾	46¼
Preferred					90	91½
1st mortgage						
2d mort. pref						108
Income bonds						98
St. L., Iron Mt.& S.						
1st mortgage						
2d mortgage			103¾			
Toledo and Wabash						
1st mortgage						
2d mortgage		96	96¾			
7s, Consolidated						
St. Louis Division						
Union Pacific	101¾	102¾	99X	98¾	101½	102
1st mortgage	115⅛		115½	115¾	115	116⅜
Land Grant 7s		110⅝	110¾	111		111⅛
Sinking Fund 8s		117			117¼	
United States Ex	67		65			
Wabash, St. L.& Pac	33⅜	33¼	32⅞	33¼	33⅞	34⅜
Preferred	53	53⅛	53⅛	53¾	54⅜	54⅜
New mort. 7s						
Wells-Fargo Ex					130	129½
Western Pacific b'ds						121½
Western Union Tel.	81⅛	81⅛	80⅛	80¾	82¼	83
7s., S.F conv., 1900						
FEDERAL STOCKS:—						
U. S. 4s, 1907, reg		119¼			120	
U. S. 4s, 1907, coup	120½				120¾	
U. S. 4½s, 1891, reg		113¾			113⅝	113½
U. S. 4½s, 1891, coup			113¾		113½	
U. S. 5s, cont'd at 3½			102¾			103
U. S. 3s, reg				103¼		
Dt. of Col. 3-65s, reg						
Dt. of Col.3-65s,coup						

Boston Stock Exchange.

Closing Prices for the Week Ending Dec. 13.

	Th.7.	F.8.	Sat.9.	M.11.	Tu.12.	W.13.
Atch.,Top.&San.Fe.	85⅜	85¾	86¼	85⅞	86¾	87½
1st mortgage	119¼	119¼				120
Land Grant 7s						
Boston & Albany			174	173	173½	173¾
Boston and Lowell		100				
Boston & Maine	147½	147¾	147½		148	
Boston& Providence	161		160¾	160¼	160¼	160¼
Bos'n,Hart.& Erie7s						
Burl.& Mo.R.L.G.7s			115			
Burl.& Mo.R.in Neb						
6s, exempt						
4s						
Chi.,Burl. & Quincy	124¾	124½	125¼	126	127¾	128¾
Cin.,Sand&Clev($50)	24					
Concord ($50)						
Connecticut River						
Eastern	32½		33	34	33½	
New 6s, Bond	109	109¾		110¾	110¾	110
Fitchburg						
N.Y. & New England	47½	46⅜	46⅝	46⅜	47⅜	48
7s	114½		114¼			115
Northern N. H		108	107¾			108
Norwich&Worcester						
Ogden & Lake Cham						
Old Colony		136	136¼		136½	137
Ph.,Wil.&Balt.($50)		64				
Portl'd,Saco & Ports						
Pueblo & Ark Val 7s		113			112¼	113
Pullman Palace Car				122½		
Union Pacific	101½	102	102	98¼	100¾	102¼
6s			112¾	112¾		
Land Grant 7s						
Sinking Fund 8s						
Vermont & Mass						
Worcester & Nashua						
Cambridge (Horse)				95		90
Metropolitan(Horse)	75			75	75	
Middlesex (Horse)						
Cal.&Hecla Min'gCo		250	250	250½	251	250½
Quincy		61		62	62	62½

Philadelphia Stock Exchange.

Closing Prices for the Week Ending Dec. 12.

	W.6.	Th.7.	F.8.	Sat.9.	M.11.	Tu 12,
Allegh'y Val. 7 3-10s					123	
7s, Income	47	48½	47⅜			
Buff., Pitts & West.	18	17¾		17⅛	17¾	17¾
Camd'n & Am. 6s, '83						
6s, 1889				106		
Mort. 6s, 1889	111¾					
Camden & Atlantic						
Preferred						
1st mortgage						
2d mortgage						
Catawissa						
Preferred				53		
2d pref						
7s, new						
Del. & Bound Brook						
7s						
Elmira&Williamsp't						
Preferred						
Hunt. & B. Top Mt.		15		15		16
Preferred						
2d mortgage						
Lehigh Navigation	38¼	37⅞	37¾	38	38	38¼
6s, 1884			103			
Gold Loan			113	112⅛		
Railroad Loan						115
Conv. Gold Loan						
Consol. Mort, 7s						
Lehigh Valley	64	63⅞	64	64¼	64¼	64¼
1st mort. 6s, coup						
1st mort. 6s, reg					119	
2d mort. 7s		132				132½
Consol mort. 6s						
Consol.mtg.6s,reg			120	118½	119¼	
Little Schuylkill						
Minehill&Sch.Hav'n				63		
North Pennsylvania				63½	63¾	64
1st mortgage 6s						
2d mortgage 7s						
Genl. mtg.7s,coup						
Genl. mtg. 7s, reg						
Northern Central	55¾	56¾			56¼	57⅜
5s					100	100½
Northern Pacific	46¾	44½	43¾	43¾	43¾	44¼
Preferred	93	57	96¼	83½x	83½	83½
Pennsylvania R. R.	59¾	59¾	59¾	59¾	59¾	60
1st mortgage						
Gen'l mort			124	124	124	
Gen'l mort reg						
Consol. mort. 6s						
Consol. mort. reg						
Pa. State 5s, new		118				
do 4s, new						
do 3½s, 1912						
Phila. & Reading	26	25½	25⅝		25⅞	26⅛
1st mortgage 6s						
7s of 1893						
7s, new convert		66	69	69		
Consol. mort. 7s			122½x			
Consol. mort. reg						123
Gen'l mort. 6s	93¾	94				93⅞
Def. Income bonds						
Philadelphia & Erie	21¼	21				20
1st mortgage 5s		102½		102¾		
2d mortgage 7s						
Pittsb.,Cin.&St.L.7s	119¼	119¼	119¼			
Pitts.,Tit.&Buff. 7s		95				
Schuylkill Navi't'n						
Preferred						
6s, 1897	106½					
6s, 1907			89¾			
United Co. of N. J.	188	188			188	188
Hestonville, (Horse)	16				16	
Ch tnut&Walnut)						

Baltimore Stock Exchange.

Closing Prices for the Week Ending Dec. 12.

	W.6.	Th.7.	F.8.	Sat.9.	M.11.	Tu.12.
Baltimore & Ohio	.....	.....	.....	200	.....	.....
6s, 1885	.....	.....	.....	.....	.....	.....
Central Ohio ($5c)	.....	.....	.....	.....	.....	.....
1st mortgage	.....	.....	.....	.....	.....	.....
Marietta & Cincin'ti.	.....	.....	.....	.....	.....	.....
1st mortgage, 7s	.....	.....	.....	128	.....	.....
2d mortgage, 7s	101	101	.....	101	100	100½
3d mortgage, 8s	56	55⅛	55¾	55¾	56¼	55¾
Northern Cen. ($5c)	56¾	.....	56½	56¾	56½	.....
2d mort. 6s, 1885	105⅝	.....	.....	.....	.....	.....
3d mort. 6s, 1900	.....	.....	116¾	.....	.....	.....
6s, 1900, gold	117⅛	.....	117¼	.....	117¼	.....
6s, 1904, gold	.....	.....	.....	.....	.....	.....
Pitts. & Connelsv. 7s	.....	.....	.....	.....	.....	.....
Virginia 6s Consol.	62¾	.....	63	.....	.....	63
Consol. coupons	63⅛	.....	.....	.....	.....	63
10-40 bonds	.....	.....	.....	.....	.....	.....
Def'd Certificates	10¾	.....	.....	.....	.....	46⅜
New 3s	.....	.....	.....	.....	.....	.....
Western Maryland	.....	.....	.....	.....	.. ..	.....
1st M., end. by Balt	.....	.....	111¼	.....	.....	.....
2d M., do.	.....	.....	.....	.....	.....	.. ..
3d M., do.	.....	.....	.....	.....	.....	.....
1st M., unendorsed	....	.....	.....	....	.....	.....
2d M., end. Wash Co	.....	.....	.....	.....	.....	.....
2d M., preferred	.....	.....	.....	.....	.....	.....
City Passenger R. R.	.....	.....	.....	.....	.....	.....

London Stock Exchange.

	Closing Prices—Nov. 17.	Nov. 24.
Baltimore and Ohio 5s, 1927	108	110	108	110
Central of N. J., $100 shares	80	85	80	85
Do. consol. mort	110	112	110	112
Do. Income Bonds	88	92	88	92
Central Pacific of Cal., $100 shs	91¼	92½	86	89
Do. 1st mort. 6s, 1895-'98	117	119	117	119
Det., G'd Haven & Mil. Equip bds.	116	118	116	118
Do. Con. M. 5p.c., till '83 after 6p.c.	115	117	115	117
Illinois Central $100 shares	151½	153⅛	148	150
Do. S. F. 5s, 1903	104	106	104	106
Lehigh Valley Cons. mort. 1923	112	116	112	116
Louisville and Nashville mort. 6s	89	91	90	92
Do. capital stock $100 shares	52	54	51	53
N. Y. Cen. & Hud. R. mort. bonds.	134⅛	135½	132	136
Do. $100 shares	136	137	131	132
Do. mort. bonds (stg.)	122	124	122	124
N. Y. Lake Erie & West. $100 shs.	39¾	40¼	36⅛	36¾
Do. 6 p. c, pref. $100 shares	36	88	84	86
Do. 1st Con. Mort. bonds (Erie)	127	130	127	130
Do. do. Funded Coupon bonds	124	127	124	127
Do. 2d Consol. Mort. bonds	99	101	98	99
Do. do. Funded Coupon bonds	97	99	96	98
N. Y., Pa. & Ohio 1st mort. bonds	51	52	48	49½
Do. Prior Lien bonds (sterling)	100	105	100	105
Pennsylvania $50 shares	61¾	62¼	60¼	60¾
General Mortgage	123	125	124	126
Phil. & Erie Gen. mort. 6s, 1920	117	119	117	119
Philadelphia & Reading $50 shs.	29¼	29¾	25⅛	26⅛
General Consol Mortgage	117	119	117	119
Do. Improvement Mortgage	103	105	103	105
Do. Gen. Mtg. '74, ex-def'd coup.	96	98	96	98
St. L. Bridge 1st mort. gold bond.	121	123	121	123
Do. 1st. pref. stock	94	98	94	98
S. P'fic of Cal., 1st mort 6s, 1905-6.	106⅛	107⅛	106⅛	107¼
Union Pacific 1st mtg. 6s, 1896-9	117	119	117	119
Wabash, St. L. & P. $100 shares	33	30	30	32
Do. $100 pref shares	60¼	61⅛	55	56
Do. gen. mort. bonds	82	84	81	83

AMERICAN RAILROAD JOURNAL

Financial and Commercial Review.

WEDNESDAY EVENING, December 14, 1882.

THE rate for call loans on stocks at 12 o'clock was 5 per cent. Time money was 5 to 6 per cent, and mercantile paper 6 to 8 per cent. At 2 o'clock 4½ per cent was the ruling rate, and between 2 and 3 o'clock 3 to 3½ per cent.

The posted rates for foreign exchange were 4.81½ and 4.85½. Sixty-day bills were 4.80½. Demand was 4.84½ and 4.85. Cables were 4.85¼ and 4.85¾. Commercial bills were 4.79@4.79¼. Continental exchange was as follows: Francs, 5.23¾@5.23⅛ and 5.20⅝@5.20; Reichmarks, 94¼@⅜ and 95¼@⅜; Guilders, 39⅝@¾.

As previously stated by us the capital stock of the Canadian Pacific Railway Co. was increased from $25,000,000 to $100,000,000 at a meeting of the shareholders held for that purpose in Montreal on the 27th ult., at which there were present R. B. Angus, George Stephen, D. A. Smith and J. J. Hill, of St. Paul, and Geo. Bliss and J. S. Kennedy of New York. This increase is not out of proportion to the magnitude of the system, nor too large to enable the company to pay a dividend upon it. after the line shall have been completed and fairly in operation.

Owing to the alleged excessive tolls charged to the Grand Trunk Railway Company of Canada over the International Bridge between Fort Erie and Buffalo and the Suspension Bridge, the Canada Southern Railway Company has found it convenient to close a contract for the construction of a new suspension bridge over the Niagara River about a quarter of a mile south of the old Suspension Bridge. It is proposed to have the new bridge completed and ready for traffic by the 1st of September, 1883. The right of way, together with ample yard-room, has been secured on both sides of the river. This means a close business connection with the New York Central and Hudson River Railroad, now that the traffic arrangement between the Michigan Central and Canada Southern has been ratified by the stockholders of both companies.

Referring to the St. Paul and Duluth Railroad, the Philadelphia *Record* says that it has been managed for the benefit of the shareholders entirely, and not for the sake of speculation. It is about 200 miles long, has a debt of only $1,000,000 at 5 per cent, has 50,000 shares of preferred stock and 40,000 shares of common stock. The company has the right to redeem the preferred shares from the proceeds of the land sales, and as it has about 1,600,000 acres of land which will average over $5 per acre it can readily be seen that the road will in time belong entirely to the common stockholders. It is paying regular dividends on the preferred stock at the rate of 7 per cent per annum, and is earning considerably more than sufficient for that purpose.

The Buffalo and Southwestern Railroad was leased to the New York, Lake Erie and Western Railroad Company August 1, 1880, and at that time the Buffalo and Southwestern Railroad Co, agreed to pay its lessees $120,000 for improvements, and that amount, in addition to the interest on its bonds, was paid on the 1st of July. The business has increased from $180,000 the first year to $750,000 the past year. The first dividend ever paid will be paid January 1, 1883.

The directors of the Philadelphia and Reading Railroad Co. met on the 11th inst. and approved of the traffic agreement between the Philadelphia and Reading Railroad and Coal and Iron Company, the Pittsburgh, McKeesport and Youghiogheny, the Pittsburgh and Erie the Lake Shore and Michigan Southern, and the South Pennsylvania railroad companies. A mortgage of $20,000,000 is to be created to build the South Pennsylvania, each of the companies named agreeing to set apart 20 per cent of the gross earnings accruing from the new business to meet the interest on the mortgage.

The total receipts for tolls on the New York canals for the season of 1882, up to December 1, were $655,155.51; for the whole season of 1881, $631,621.11; showing a gain in favor of this year of $23,574.40. Last year there were 211 days of navigation and this year 241 days.

The late committee of consolidated first mortgage bondholders of the Columbus, Chicago and Indiana Central Railway Company will pay a cash dividend of $25.13 on each certificate for a bond of $1,000 deposited under the agreements of May 17 and Aug. 22, 1879, on presentation at the Union Trust Company.

Articles of agreement have been perfected between the Norfolk and Western Railroad, the New River Railroad of Virginia, the New River Railroad of West Virginia, and the East River companies, confirming the consolidation and merging of those roads, and the papers have been deposited with the proper State authorities.

The New York, Pennsylvania and Ohio Railroad Company reports to the State Engineer for the year ending September 30, its passenger earnings as $1,314,514.32; total earnings, $5,659,182.20; total charges against earnings, $5,429,563.53.

The lessee of the Albany and Susquehanna, the Rensalaer and Saratoga, and the New York and Canada railroads reports to the State Engineer for the year ended September 30, as follows: The passenger earnings of the Albany and Susquehanna Railroad Company were $359,013.01; total earnings, $2,274,014.55; charges against earnings, $1,188,982.06. The passenger earnings of the Rensselaer and Saratoga Railroad Company were $784,489.15; total earnings, $2,114,141.42; charges against earnings, $2,042,970.71. The passenger earnings of the New York and Canada Railroad Company were $230,275.26; total earnings, $765,556.58; charge against earnings, $806,859.81.

The Legislature of Alabama has vacated the charter of the City of Selma, the third municipality of the State The city owes a debt of $380,900, all incurred through issuing bonds in aid of railroads and all bearing eight per cent interest. For some years the city has failed to meet the interest, and the charter was abolished to rid the city of the debt. The bondholders will now be forced to such terms as the *people* choose to make. The *citizens* offered at one time to refund dollar for dollar at a lower rate of interest, but the bondholders refused. The tax levied to meet the interest has been one per cent.

The Brazilian Government's new duty on foreign products went into effect on the 9th inst. A general duty of 10 per cent has been fixed on all imports, and in certain specially designated cases 50 and 60 per cent has been added. Hardware and agricultural implements, principally manufactured here, are included in the latter class.

The surface railways and omnibuses of New York City carried in 1877 over 114,492,831 passengers, and in 1880 102,420,047 passengers. The elevated railways in Sixth and Third avenues, carried in 1880, 54,414,457 passengers. The total number of passengers carried by the surface and elevated railways and omnibuses, not including the elevated railways in Ninth and Second avenues, in 1880 was 46,241,667 more than in 1877.

The trustees of the Atlantic and Great Western Railway Company announce a dividend of £2.1cs. in cash next January upon the first mortgage bonds.

The Governor of South Carolina, in his recent message shows that the securities of that State are sold upon the market above par; that there is no floating debt; that the current expenses, as they accrue, are met with current receipts; and that there is a balance of $98,017 in the State treasury awaiting disposition by the Legislature. Great progress is being made in improving the educational system, which promises soon to compare favorably with the best of the other States. The revenues of the State for current expenditures are derived from the net earnings of the penitentiary, which amounted to over $40,000 last year, from the phosphate royalty, and from the general tax. Last year the phosphate royalty amounted to $138,254, an increase of $17,000 compared with last year, and this resource promises to be a steadily increasing one. The usual and ordinary expenses of the State Government not defrayed by the royalty and the surplus in the treasury can be met by a levy of one-half of a mill upon the dollar of taxable values; that is, five cents on every hundred dollars of taxable property of the State. The levy for the interest on the public debt amounts to 3.1 mills, making the general State levy 3.6, against 4⅜ mills last year.

The Commissioner of Pensions, in his annual report, says in relation to the "Pension population" of the country that he regrets that no provision was made in the tenth census for its enumeration. After confessing his inability to procure accurate data on the subject, he says that the best approximation that can be made shows that of the 2,063,391 soldiers who enlisted during the war pensions have been applied for by or on account of only 26 per cent. The report concludes with the statement that from the best available information it appears that there is a surviving soldier population of a little over 1,000,000, out of which claims for pension in the future may be made by those who incurred pensionable disabilities.

The report of the President of the Richmond and Petersburg Railroad Company for the year ending September 30, 1882, shows that the gross receipts were $174,378.20, the expenses $117,881.57 and the net receipts $56,596.63; interest on debt, $116,954.31; net revenue, $39,642.32. The usual semi-annual dividend of 3 per cent was paid on the 1st of January, 1882; $25,000 of the old 8 per cent bonds, maturing on the 1st of April, were paid off. No dividend was paid on the 1st of July, and the earnings were used in repairing and roofing the James River Bridge. This structure was burned on the 26th of last March, and the present trestle bridge, nearly three-fourths of a mile long, was ready for use two months after. Credit is given to J. R. Kenly, the superintendent, formerly of the Union Railroad, Baltimore, for the prompt manner in which the work was done. The direct loss to the company from the fire was about $60,000. It is proposed to cross the James River by an iron bridge, a part to be built next year and the remainder in 1884.

The following quotations of sales of railway and other securities, for the week, are in addition to those given elsewhere in our columns.

New York.—Atlantic and Pacific 1st, 96; Albany and

Susq. consol., 125; Boston and New York Air Line pref. 79½; Chicago, Burlington and Quincy, Iowa div. 4s, 84½; do. 8s, 103½; Cedar Falls and Minnesota, 16; Chicago, St. Paul, Minn. and Omaha, 55⅞; do. pref., 115½; do. consol., 107; Chicago, St. Louis and New O leans, 80; Chicago, Milwaukee and St. Paul, Chicago and Pacific 1st, 112; do. Chicago and Pacific West div. 1st, 93⅜; do. Southern Minn. div. 1st, 107¼; Chicago and Northwestern S. F. 5s, 99½; Chicago, St. Paul and Minneapolis 1st, 111; Central Iowa 1st, 108½; Columbus, Chicago and Indiana Central inc., 51; Chesapeake and Ohio cur. 6s, 53¾; Denver and Rio Grande, 45¾; do. 1st, 109; do. consol., 96½; Danbury and Norwalk, 75; Dubuque and Sioux City, 88; East Tennessee, Virginia and Georgia, 10½; do. pref., 18½; do. inc., 40¼; do. 5s, 75; Elizabethtown, Lexington and Big Sandy 6s, 95; Evansville and Terre Haute 1st, 98¼; do. 1st consol., 97½; Fort Worth and Denver, 30; Gulf, Colorado and Santa Fe, 1st, 110½; Green Bay, Winona and St. Paul 1st, 80½; Indiana, Bloomington and Western, 35¼; do. 1st, 87½; do. Eastern div. 1st, 93; do. consol. inc., 50; International and Gt. Northern 1st, 104; do. coupon 6s, 82½; Keokuk and Des Moines 1st, 101; Kansas Pacific consol., 100; do. 6s, Denver div. ass., 106; Louisville, New Albany and Chicago 1st, 104¾; Lake Erie and Western, 31½; Long Island, 59⅞; do. consol. 5s, 98½; Louisville and Nashville genl. mort. 6s, 88; do. New Orleans and Mobile div. 1st, 90; do. Cecilian Branch 1st, 102; do. 2d, 99¾; Lehigh and Wilkesbarre inc., 42½; Minneapolis and St. Louis, 32¾; do. pref., 70¾; do. Iowa ext. 1st, 115; Mobile and Ohio, 19; do. 1st mort., 104⅞; do. 1st deben., 81¼; Missouri, Kansas and Texas, 34¼; do. Gen'l mort. 6s, 83; do. consol., 78, 106¼; do. 2d, 57; Missouri Pacific, 104¾; do. 1st consol., 104¼; do. 3d, 109½; Milwaukee, Lake Shore and Western pref., 49; do. inc. 80½; do. 1st, 95¾; Metropolitan Elevated 2d, 86; New York, Chicago and St. Louis, 14⅝; do. pref., 31¾; do. 1st, 94½; Nashville, Chattanooga and St. Louis, 53; do. 1st, 115; New York, Ontario and Western, 27¼; Norfolk and Western pref., 51; do. genl. mort., 100½; New Orleans Pacific 1st, 87; Northern Pacific 1st, 104⅞; Ohio Central, 13⅞; do. 1st, 95; Ohio Southern 1st, 81; Oregon Transcontinental, 85; Ohio and Mississippi, Springfield div. 1st, 114; Oregon Short Line 6s, 99¾; Peoria, Decatur and Evansville, 26½; do. 1st, 104; Rensselaer and Saratoga, 143¾; Rochester and Pittsburgh, 21; do. inc., 40; Richmond and Alleghany, 17; do. 1st, 81; Richmond and Danville, 6c; do. deben., 62½; do. 1st, 94¾; Richmond, Danville and West Point, 25½; Rome, Watertown and Ogdensburgh ext. 5s, 73; do. inc., 43; St. Paul and Duluth, 38; do. pref., 97; St. Paul, Minn. and Man., 144½; do. 1st, 111; do. 2d, 109; do. Dakota ext. 1st, 106½; St. Paul and Sioux City 1st, 111; St. Louis and Iron Mt., Cairo, Arkansas and Texas 1st, 105; do. 5s, 74; do. Cairo and Fulton 1st, 109; Southern Pacific of Cal. 1st, 103; South Carolina 1st, 99; do. 2d; 89; do. inc., 59; South Pacific of Mo. 1st, 105; St. Louis and San Francisco 2d, class A, 95; do. B, 90¾; do. C, 90; St. Louis, Kansas City and Northern, R. E. 7s, 105½; do. Omaha div. 1st, 108; Toledo, Delphos and Burlington, 8½; do. 1st Main Line, 54; Texas and Pacific, 40¼; do. inc. L. G., 58½; do. Rio Grande div. 1st, 80⅞; Warren 2d, 114; Winona and St. Peter 1st, 110; Wabash, St. Louis and Pacific gen'l. mort. 6s, 79¼; do. Chicago div. 1st, 81¾; Arkansas 7s, L. R., P. B. and N. O., 23; Georgia 6s, 1886, 110; Louisiana consol., 69; Tennessee 6s, old, 42½; do. compromise, 47½; Virginia 6s, def., 12; American Cable, 66¾; Mutual Union Tel., 23½; do. 6s, 68½; Canton Co., 59½; Colorado Coal and Iron, 32; do. 6s, 82½; New Central Coal, 16; Ontario Mining, 36; Standard, 6¼.

Boston.—Atlantic and Pacific blocks, 102; Atchison, Topeka and Santa Fe 4½s, 80¼; do. 5s, plain, 85; Burlington and Missouri River in Neb. 6s, non-exempt, 102; Boston Land, 6¼; Boston and Albany 7s, 123; Chicago, Burlington and Quincy 4s, plain, 80; do. 4s, Denver ext., 82⅝; do. 4s, old, 83¾; do. 7s, 125; Central Iowa, 31; Chicago, Milwaukee and St. Paul, Dubuque div. 6s, 101¼; Cheshire, 63; Cedar Rapids and Missouri River R. R., 103; Flint and Pere Marquette, 22½; do. pref., 102; Iowa Falls and Sioux City, 88; Kansas City, Fort Scott and Gulf, 75; do, 7s, 110¾; Kansas City, Lawrence and Southern 5s, 104; Little Rock and Ft. Smith, 47; do. 7s, 107; Marquette, Houghton and Ontonagon, 65; do. pref., 117; do. 6s, 103; Mexican Central, 19; do. 7s, 70½; do. inc., 20; Maine Central, 76; Massachusetts Central, 3¼; New York and New England 6s, 105; New Mexico and Southern Pacific 7s, 112½; Oregon Short Line 6s, 98⅜; Rutland pref., 21; do. 5s, 67; do. 6s, 96; Republican Valley 6s, 102¾; Sonora 7s, 104½; Toledo, Cincinnati and St. Louis 4½; do. 6s, 38; Toledo, Delphos and Burlington, Southeastern div. 6s, 45½; do. Branch inc., 9¼; do. Dayton div. 6s, 45; do. inc., 9¾; Wisconsin Central, 14⅜; Atlantic Mining, 16¼; Franklin, 14; Huron, 2; Napa Consol. Quicksilver, 3½; Osceola, 32; Pewabic, 11; Sullivan, 1; Silver Islet, 7.

Philadelphia.—Central Transp., 35½; Elmira and Williamsport 5s, 99¾; Huntingdon and Broad Top Mt. consol. mort. 5s, 89; Morris Canal, 72; Nesquehoning Valley, 53; Northern Pacific pref. scrip, 95; Philadelphia and Reading R. R. scrip, 95@100; Philadelphia, Wilmington Baltimore 4s, 93½; Pittsburgh Av. Imp. 7s, 1885, 106¾; Philadelphia City 4s, 1889, 112; do. 6s, 1892, 122; do. 6s, 1903, 132; do. 4s, 1896, 110; Pennsylvania R. R. scrip, 118¼; Pennsylvania Canal 6s, 87; St. Paul and Duluth, 36¼; do. pref., 93¾; Texas and Pacific 1st, 104; do. consol. mort. 6s, 92; Western Pennsylvania 6s, 106; West Jersey and Atlantic 6s, 108; Warren and Franklin 7s, 112¼; West Chester and Philadelphia 7s, 118. The latest quotations are: City 6s, 108@120; do. free of tax, 127@132; do. 4s, new, 106@113; Pennsylvania State 5s, new loan, 118@118¾; do. 4s, old, 112@114; do. 4s, new, 116@117; Philadelphia and Reading Railroad, 26⅛@26¼; do. consol. mort. 7s, reg., 122@123; do. gen'l mort. 6s, coupon, 93@94; do. 7s, 1893, 118½@119; do. 7s, new conv., 69@72; United New Jersey R. R. and Canal, 187½@188¼; Buffalo, Pittsburg and Western, 17¾@18; Pittsburgh, Titusville and Buffalo 7s, 94@95; Camden and Amboy mort. 6s, 1889, 111½@112¼; Pennsylvania R. R., 59⅞@60; do. general mort. 6s, coupon, 125@126; do. reg., 123@125; do. consol. mort. 6s, reg., 119@12c; Little Schuylkill R. R., 58½@6c; Schuylkill Navigation pref., 12@13; do. 6s, 1882, 89@90: Elmira and Williamsport pref., 58@6o; do. 5s, 99@100; Lehigh Coal and Navigation, 38@38¼; do. 6s, 1884, 103@103½; do. R. R. loan, 115@116; do. Gold Loan, 112@113; do. consol. 7s, reg., 115@116; Northern Pacific, 44⅜@44½; do. pref., 83½@83¾; North Pennsylvania, 63¾@64¼; do. 6s, 105@106; do. 7s, 119@—; do. 7s, General mort. reg., 124@—; Philadelphia and Erie, 19¾@20¼; do. 7s, 114½@115; do. 5s, 102@103; Minehill, 62½@63¼; Catawissa, 20@21; do. pref., 53@53¼; do. new pref., 52@52½; do. 7s, 1900, 118@120; Lehigh Valley, 64¼@65; do. 6s, coupon, 118@120; do. reg., 121½@—; do. 7s, reg., 132@133; do. consol. mort. reg., 119½@120; Fifth and Sixth streets (horse), —@190; Second and Third, 114@116; Thirteenth and Fifteenth, 7c@8c; Spruce and Pine, 44@—; Green and Coates. 80@88; Chestnut and Walnut, —@93; Germantown, 70@71; Union, 110@—; West Philadelphia, 125@—; People's, 8@8½; Continental, 103@105.

Baltimore.—Atlanta and Charlotte 1st, 107; do. 1st pref., 110 Baltimore City 6s, 1890, 114¼; do. 6s, 1886, 109; do. 6s, 1900, 123; do. 5s, 1894, 113¼; Baltimore and Ohio 1st pref., 108½; Columbia and Greenville 1st, 103½; do. 2d, 74; Central Ohio pref., 54⅞; Charlotte, Columbia and Augusta, 37½; Canton Co., 60; do. 6s, 111½; Citizens Pass. R. R., 18½; George's Creek Coal, 93¾; Maryland Defenses, 104¼; do. Hospital 6s, 105¾; do. 6s, 1890, 108¼; Northern Central 5s, Series A, 100¼; do. B, 98¼; Virginia and Tennessee 8s, 125; Virginia Midland 1st mort., 112; do. 2d mort., 108½; do. 5th mort., 93½; Virginia, Black scrip, 33; Wilmington, Columbia and Augusta, 106. The latest quotations are: Atlanta and Charlotte 1st, 107@107½; Baltimore and Ohio, 199@200: Baltimore City 6s, 1886, 105½@—; do. 6s, 1890, 112½@—; do. 6s 1900, 123@125; do. 6s, 1900, 118@119; do. 5s, 1916, 120½@122 Columbia and Greenville 1st, 1916, 103@105; Canton Co. 6s, 110@112; Marietta and Cin. 7s, 1891, 127¾@129; do. 7s 1896, 100½@100¾; do. 8s, 1890, 55⅝@55⅞: Northern Central, —@56¾; do. 6s, 1904, gold, 115@115½; do. 1900, gold, 117@917½; do. 5s, Series A, 100@—; do. B, 97¾@98¾; Ohio and Mississippi, Springfield div. 1st, 114@114½; Richmond and Danville bonds 1890, 94@100; Virginia Midland 5th mort., 93¼@93⅜; do. inc., 53@60 Virginia consol., 62⅞@63; do. 10-40s, 43¼@43¾; do. 3s, —@46½: Western Maryland 2d pref., 109@—.

THE Harlan & Hollingsworth Company, of Wilmington, Del., have lately completed six handsome passenger and two baggage cars for the Pittsburgh and Western Railroad.

ADVERTISE in the RAILROAD JOURNAL.

From the Railroad Employes' Point of View.

PERTINENT to the subject of discharging trainmen, and the despotic power to be wielded by railroad superintendents, recently discussed in this JOURNAL, the Indianapolis *Journal* has the following remarks from the standpoint of the subordinates:—

"The resolution passed at the recent session of American Railway Superintendents, recommending members not to employ discharged employés unless they present letters from the superintendent of the road which they have left, stating the cause of discharge, is exciting considerable comment in railroad circles, and is not looked upon with special favor, so common has it become for superintendents to discharge men for some trivial cause. Almost invariably when a new superintendent is appointed he has friends to provide for, and often a wholesale slaughtering of employés follows the coming of a new superintendent. A case right to the point is that of the Cincinnati, Hamilton and Dayton. Of the old force there preceding the appointment of the recent superintendent by E. B. Thomas, the then general manager, there is hardly a corporal's guard left. That there are roads where new superintendents take hold, as on the Indianapolis and St. Louis Railroad, where the men have been negligent of duty and reckless, and need a thinning out, cannot be questioned, but special pains should be taken to retain old, tried and reliable men. That a radical and sweeping reform in the matter of employing and discharging subordinates is badly needed, all are ready to admit; and it is creditable to the superintendents that they recognize the fact. The problem, however, is one of the most difficult that railway officers have to deal with, and so far no satisfactory solution of the trouble is offered. It is not a secret that there are unworthy superintendents, who sometimes discharge the best men in the service of their respective companies to gratify a spirit of personal revenge, or because of a feeling of hate, engendered by the consciousness that their employés are better railroad men than themselves, or for some even more detestable reason; and that men discharged under such circumstances should be cast out as worthless railroaders is not only unjust but outrageous."

THE Henry Bill Publishing Company, Norwich, Conn., has published an engraved portrait of the late President Garfield, in a large size and properly mounted for framing. As a portrait, this picture is life-like. It is well executed and deserves a large sale. In common with all the best portraits of the lamented president, it has been produced somewhat late, but the intelligent purchaser readily understands that to make a good engraving requires a long time.

LARGE type is not necessary in advertising—blink folks don't read newspapers.

THIS PAPER may be found on file at Geo. P. Rowell & Co's Newspaper Advertising Bureau (10 Spruce St.), where advertising contracts may be made for it IN NEW YORK.

The Coal Trade.

THE leading coal-carrying companies make the following reports of their tonnage for the week ending Dec. 2, and for the year to the same date, compared with their respective amounts carried to the same time last year:—

	Week.	1882.	1881.
Phil. and Reading R. R.	47,750	47,750	75,921
Schuylkill Canal	1,264	1,264	9,722
Lehigh Valley	68,510	6,257,159	5,791,376
Delaware, Lackawanna and Western	81,743	4,225,236	3,980,652
Shamokin	20,672	1,057,168	995,535
Central R. R. of New Jersey	159,965	4,071,701	4,052,692
United R. R. of New Jersey	34,987	1,589,915	1,462,479
Pennsylvania Coal	32,058	1,328,141	1,319,565
Delaware and Hudson Canal	88,035	3,336,973	3,347,302
Huntingdon and Broad Top Mountain	10,034	428,969	482,032
Penn. and New York	18,172	1,447,972	1,527,607
Clearfield, Pa.	56,388	2,636,097	2,226,413

The reports of the Reading Railroad and the Schuylkill Canal are for the two days ending December 2, and of the Lehigh Valley Railroad and the Pennsylvania and New York Canal and Railroad for the four days ending November 30. That of the Lehigh and Susquehanna Division of the Central Railroad of New Jersey is for the eleven days ending November 30, and finishes its fiscal year. The Reading's coal tonnage for the entire fiscal year ended November 30 is officially reported at 8,953,922 tons, against 8,672,589 for the previous year.

The total tonnage of anthracite coal from all the regions for the week ending Dec. 2, as reported by the several carrying companies, amounted to 520,895 tons, against 530,976 tons in the corresponding week last year, a decrease of 10,081 tons. The total amount of anthracite mined for the year is 26,803,582 tons, against 25,826,120 tons for the same period last year, an increase of 977,412 tons. The quantity of bituminous coal sent to market for the week amounted to 66,436 tons, against 64,063 tons in the corresponding week last year, an increase of 2,373 tons. The total amount of bituminous mined for the year is 4,091,959 tons, against 4,523,766 tons for the corresponding period last year, a decrease of 431,807 tons. The total tonnage of all kinds of coal for the week is 587,331 tons, against 595,031 tons in corresponding week last year, a decrease of 7,708 tons, and the total tonnage for the coal year is 30,895,431 tons, against 30,349,886 tons to same date last year, an increase of 545,605 tons. The quantity of coal and coke carried over the Pennsylvania Railroad for the week ending Dec. 2 was 230,544 tons, of which 165,844 tons were coal and 64,700 tons coke. The total tonnage for the year thus far has been 10,197,861 tons, of which 7,562,170 tons were coal and 2,635,691 tons coke. These figures embrace all the coal and coke carried over the road, east and west. The shipments of bituminous coal from the mines of the Cumberland coal region for the week ended Dec. 2 were 60,292 tons, and for the year to that date 1,342,403 tons, a decrease of 698,841 tons as compared with the corresponding period of last year. The shipments were: To the Baltimore and Ohio Railroad—For the week, 39,925 tons; year, 909,277 tons; decrease as compared with 1881, 386,713 tons. Chesapeake and Ohio Canal—Week, 13,459 tons; year, 267,278 tons; decrease as compared with 1881, 218,382 tons. Pennsylvania Railroad — Week, 6,340 tons; year, 156,609 tons, decrease from last year, 99,912 tons. The Reading Railroad shipment for last week, ending December 9, was about 178,000 tons, of which 43,000 tons were sent to and 39,500 tons shipped from Port Richmond, and 16,300 tons sent to and 17,000 tons shipped from Elizabethport.—*Philadelphia Ledger, Dec.* 11.

Curious Patents.

SOME investigating person has furnished the New York *Times* with a brief list of patents on small things, which in many instances have proved great mines of wealth to the lucky discoverer. The list might be extended to a much larger number, but we only state those given in the *Times*. Among these trifles is the favorite toy—the "return ball"—a wooden ball with an elastic string attached, selling for ten cents each, yielding to its patentee an income equal to $50,000 a year. The rubber tip on the end of lead pencils affords the owner of the royalty an independent fortune. The inventor of the gummed newspaper wrapper is also a rich man. The gimlet-pointed screw has evolved more wealth than most silver mines, and the man who first thought of putting copper tips to children's shoes is as well off as if his father had left him $2,000,000 in United States bonds. Although roller skates are not so much used in countries where ice is abundant, in South America, especially in Brazil, they are very highly esteemed, and have yielded over $1,000,000 to their inventor. But he had to spend fully $125,000 in England alone fighting infringements. The "dancing Jim Crow," a toy, provides an annual income of $75,000 to its inventor, and the common needle threader is worth $10,000 a year to the man who thought of it. The "drive well" was an idea of Colonel Green, whose troops, during the war, were in want of water. He conceived the notion of driving a two-inch tube into the ground until water was reached and then attaching a pump. This simple contrivance was patented after the war, and the tens of thousands of farmers who have adopted it have been obliged to pay him a royalty, a moderate estimate of which is placed at $3,000,000. The spring window shade yields an income of $100,000 a year; the stylographic pen also brings in $100,000 yearly; the marking pen for shading in different colors, $100,000; rubber stamps the same. A very large fortune has been reaped by a western miner, who, ten years since, invented a metal rivet or eyelet at each end of the mouth of coat and pants pockets to resist the strain caused by the carriage of pieces of ore and heavy tools.—*Scientific American.*

Jacksonville and Southeastern Railroad.

THE junction of the St. Louis, Vandalia and Terre Haute Railroad with the Jacksonville and Southeastern Railroad, now being built, is somewhat changed from the first survey. It has been ascertained that the former route, through Henderson station, passing as it did, through the brakes and bottom lands of the Okan River, could only be constructed at an immense cost. The company have therefore concluded to run a parallel line with the St. Louis and Vandalia, for a few miles, to the city of Greenville, and from that point cross over and, passing through a bottom section, intersect the Ohio and Mississippi some twenty miles distant at Carlyle. This route, besides being so much less expensive, is thought to be more desirable for freighting interests. Cars are expected to be running as far as Henderson station inside of thirty days.

A FIRST-CLASS STENOGRAPHER

and TYPE-WRITER, who also understands Book-keeping, wants a position as Stenographer to a Railroad official in New York City. Has been stenographer to a railroad president, and lately with a superintendent of construction. Address "STENOGRAPHER,"
Care of AMERICAN RAILROAD JOURNAL,
284 Pearl street, New York City.

NOTICE.

H. W. JOHNS' ASBESTOS AIR CHAMBER COVERING, consisting of Asbestos Sheathing or Lining Felt, combined with Hair Felt, for Steam Pipe and other heated surfaces, is patented, and infringers will be prosecuted to the full extent of the law. H. W. JOHNS M'F'G Co.,
87 Maiden Lane, N. Y.

FOR SALE.

Locomotives—Two Second-hand Narrow-Gauge Engines in good order.
One Second-hand "Tank" Narrow-Gauge Engine, 10 tons.
Several Second-hand Standard-Gauge Locomotives in good order, immediate delivery.
One new 3ft. Gauge Passenger Engine, 22 tons, prompt delivery.
Six new 4ft. 8½ Gauge Locomotives, cylinders 17x24, weight 35 tons. November and December delivery.
Two new 3ft. Gauge Locomotives, Cylinders 12x18, weight 20 tons. December and January delivery.
Cars—Passenger and Freight Cars of all descriptions for early delivery.
Rails—16lb., 20lb. 30lb. 35lb. and 56lb. Rails.
Car Wheels and Axles.
Narrow-Gauge Rolling-stock a specialty.

BARROWS & CO.,
64 Broadway,
NEW YORK.

F. W. DEVOE & CO.

Manufacturers of Fine

RAILWAY VARNISHES,

COACH AND CAR COLORS,

Ground in Oil and Japan,

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Fine Brushes adapted for Railroad use. All kinds of Artists' Materials. Colors for ready use, and all specialties for Railroad and Carriage purposes.

Railroad companies will save themselves great trouble in painting by allowing F. W. DEVOE & CO. to prepare their Passenger and Freight Car Colors. This will insure Durability, Uniformity and Economy. F. W. DEVOE & Co., manufacture from the crude materials, which are the component parts of any shade, and they understand better their chemical relationship, when in combination, than can be possible to those who simply buy their dry materials and then grind them.

SEND FOR SAMPLE CARD OF TINTS.

Cor. of Fulton and William Sts.
NEW YORK.

Continuous Automatic

FREIGHT BRAKES.

Requiring no other Connection between Cars than the ordinary Coupling-Link and Pin.

SIMPLE, DURABLE, AND EFFICIENT.

Brakes can be applied to every Car in the longest train, from the engine or cabose, or from any car in the train. It can be readily attached to any car, and adapted to ordinary brake beams, shoes, etc. There is no possibility of damaging wheels by "sliding."

PATENTED MAY 23, 1882.

☞Railroad and manufacturing companies, or parties able to co-operate with patentee in their manufactur and introduction, are invited to correspond with

WM. C. SCHULTZE,
Surgeon C., R. I. and P. Ry.
MARENGO, Iowa Co., Iowa.

RAILROAD AND CANAL DIVIDEND STATEMENT.

Showing the amount of Stock Outstanding, the Dividend Periods and the date of last Dividend.

Marked thus(*)are leased roads.	Stock out-standing.	Divide'd Periods.	Last Dividend Payable.
Albany and Susq*...100	2,500,000	semi-an	July '82 2
Ashuelot.....100	210,000	q'arterly	Oct. '81 3½
Atch., Top. and S. Fe100	54,000,000	q'arterly	Nov. '82 1¼
Atlanta and W. Point100	1,232 200	semi-an	Jan. '82 6
Atlantic and St. Law*100	5,840,000	semi-an	Mar.'82 3
Augusta and Savan'h100	1,022,900	semi-an	June'81 3½
Avon, Geneseo & Mt M*100	225,000	semi-an	July '81 3
Baltimore and Ohio.100	14,792,566	semi-an	Nov. '82 5
" " pref.100	5,000,000	semi-an	July '82 3
Washington Br....100	1,650,000	semi-an	Nov.'82 5
Berkshire*.....100	600,000	q'arterly	Apl. '82 1¾
Boston and Albany..100	20,000,000	q'arterly	Dec. '82 2
Bos. & N.Y. Air Line pf.100	2,795,227	q'arterly	June'82 1
Bos., Cl., F. & N. B. pref.100	1,750,100	semi-an	Oct. '82 3½
Bos., Conc. & Mont. pf*100	800,000	semi-an	Nov. '82 3
Boston and Lowell..500	3,940,000	semi-an	Jan. '83 2½
Boston and Maine...100	6,921,274	semi-an	Nov. '82 4
Boston & Providence100	4,000,000	semi-an	Nov. '82 4
Attleborough Br...100	131,700	semi-an	July '82 3½
Bos., Revere B & Lynn100	419,400	semi-an	July '82 3½
Buffalo, N. Y. & Erie*.100	950,000	semi-an	June'82 3
Camden & Atlantic.. 50	377,400	q'arterly	Nov. '82 3
" " pref. 50	880,650	q'arterly	Nov.'82 4
Camden & Burl. Co...100	381,925	semi-an	July '82 3
Canada Southern....100	15,000,000	.....	Feb. '81 2½
Cape May & Millville* 50	447,000	semi-an	June'81 3
Catawissa*..... 50	1,159,500	annual	Oct.'82 $2½
" pref..... 20	2,200,000	semi-an	Nov. '82 3½
" new pref.. 50	1,000,000	semi-an	Nov. '82 3½
Cayuga and Susq.*.. 50	589,110	semi-an	July '81 4½
Cedar Rapids & Mo. R*100	6,850,400	q'arterly	Nov. '82 1½
" " pref.100	769,600	semi-an	Aug .'82 3½
Central of Georgia...100	7,500,000	semi-an	June '82 4
Central of New Jersey100	18,563,200	q'arterly	July '76 2½
Central Ohio*..... 50	2,437,950	semi-an	July '82 3
" pref.... 50	411,550	semi-an	July '82 3
Central Pacific 100	59,275,500	semi-an	Aug. '82 3
Chemung*.....100	380,000	q'arterly	July '81 1½
Cheshire preferred ..100	2,155,300	semi-an	July '82 1½
Chicago and Alton...100	11,181,741	semi-an	Sept. '82 4
" " pref 100	2,245,400	semi-an	Sept. '82 4
Chi., Burl. & Quincy.100	55,337,455	q'arterly	Dec. '82 2
Chi., Iowa & Nebras*.100	3,916,200	semi-an	July '82 4
Chi., Mil. & St. Paul.100	20,404,261	semi-an	Oct. '82 3½
" " pref 100	14,401,483	semi-an	Oct. '82 3½
Chi. & N. Western...100	14,988,257	semi-an	Dec. '82 3½
" pref.100	21,525,353	q'arterly	Dec. '82 2
Chi., R. I. & Pacific..100	41,960,000	q'arterly	Nov. '82 1¾
Chi. and West Mich .100	6,151,000	semi-an	Feb. '82 2½
Chi., St. P., M. & O. pref.100	10,390,000	q'arterly	Oct. '82 1¾
C., Ind., St. L. & Chi...100	6,000,000	q'arterly	July '82 1½
Cin., Sand. & Clev. pf. 50	429,037	semi-an	Nov. '82 3
Clev. and Mahoning* 50	3,759,200	semi-an	Nov. '81 3½
Clev. and Pittsburg* 50	11,244,336	q'arterly	Dec. '82 1¾
Columbus & Xenia*. 50	1,786,200	q'arterly	Dec. '82 2
Colum. & Hocking Val.100	2,500,200	semi-an	Aug. '81 208
Concord 50	1,500,000	semi-an	Nov. '82 5
Concord and Ports.*..100	350,000	semi-an	July '82 3½
Conn. & Passump. Riv100	2,244,400	semi-an	Aug '82 3
Connecticut River ..100	2,100,000	semi-an	Jan. '83 4
Cumberland Valley.. 50	1,292,950	q'arterly	Oct.' 82 2½
" 1st pref 50	241,900	semi-an	Apl. '82 4
" 2d pref. 50	243,000	semi-an	Apl. '82 4
Danbury & Norwalk. 50	600,000	.....	Oct. '82 2½
Dayton and Mich.*.. 50	2,402,573	semi-an	Apl. '82 1¾
" " pref. 50	1,211,250	q'arterly	July '82 2
Delaware*..... 25	1,468,940	semi-an	July '82 3
Del. & Bound Brook*100	1,652,000	q'arterly	Nov. '82 1¾
Del., Lack. & Western 50	26,200,000	q'arterly	Oct., 82 2
Denver & Rio Grande.100	29,160,000	j'arterly	Jan '82 1½
Detroit, Lans. & Nor.100	1,825,600	semi-an	Aug.'80 2½
" " pref.100	2,508,380	semi-an	Aug. '82 3½
Dubuque & Sioux C'y*100	5,000,000	semi-an	Oct. '82 3
East Pennsylvania*., 50	1,709 550	semi-an	Jan. '83 3
East Mahanoy*..... 50	392,950	semi-an	July '82 3
Eastern (N. H.).....100	492,500	semi-an	Dec. '82 2¼
Eel River.....	3,000,000	q'arterly	Dec. '82 $1
Elmira & Williamsp't* 50	500,000	semi-an	Nov. '82 1½
" " pref. 50	500,000	semi-an	July '82 3½
Erie and Pitsburg*.. 50	1,998,400	q'arterly	June '82 1¾
Evansville & Terre H.100	100,000	semi-an	Nov.'81 2
Fitchburg.....100	4,500,000	semi-an	Jan. '83 3
F. & P. Marquette pf.100	6,500,000	semi-an	July '82 3
Ft. W. & Jackson pref.100	2,000,000	.....	May '82 2
Georgia. 100	4,200,000	q'arterly	July '82 2½
Granite 100	1,250.000	semi-an	July '82 3
Green w'h & Johnsonv.100	118,000	semi-an	July' 82 3
Han. & St. Jo. pref .100	5,083,024	semi-an	Aug. '82 3½
Harrisbg & Lancaster 50	1,182,500	semi-an	July '82 3½
H'ford & Conn. West'n.100	.....	.....	Nov. '82 1½
Housatonic pref. ...100	1,180,000	q'arterly	Oct. '82 2
Illinois Central.....100	39,000,000	semi-an	Sept. '82 3½
Ia. Falls & Sioux City*100	4,623,500	q'arterly	Dec. '82 1¾
Iowa R. Land Co....100	7,620,000	q'arterly	Nov. '82 1
Jeffersonv. Mad. & Ind.100	2,000,000	q'arterly	May '82 1¾
Joliet and Chicago*..100	1,500,000	q'arterly	June'82 1¾
Kan. C., Ft. S. & Gulf...100	4,000,000	.....	Feb. '82 2
" " pref..100	2,750,000	semi-an	Aug. '82 4
Kentucky Central...100	500,000	semi-an	June'81 1
" " pref. 100	5,583,500	semi-an	June'81 1
Lake Shore & Mich. So.100	49,466,500	q'arterly	Nov. '82 2
" (guar.)100	533,500	semi-an	Aug. '82 5
Lawrence*..... 50	450,000	q'arterly	Oct. '82 2
Lehigh Valley..... 50	27,496,895	q'arterly	Jan. '83 2
" " pref. 50	106,300	q'arterly	Jan. 83 2

Marked thus(*)are leased roads.	Stock out-standing.	Divide'd Periods.	Last Dividend Payable.
Little Miami..... 50	4,637)300	q'arterly	Dec. '82 2
Little Rock & Ft. S..100	4,096,135	.....	July' 81 108
Little Schuylkill*..' 50	2,646,100	semi-an.	July '82 3½
Long Island..... 50	10,000,000	q'arterly	Nov. '82 1
Louisville & Nashv..100	19,130,913	semi-an.	Feb. '82 3
Lowell & Andover...100	500,000	semi-an.	Jan. '82 3½
Lykens Valley 100	600,000	q'rterly.	Oct.' 81 2½
Manchester & Law..' 00	1,000,000	semi-an.	Nov. '82 5
Manhattan 100	13,000,000	.....	.....
" " 1st pref.100	6,500,000	q'rterly.	Jan. '83 1½
" " 2d pref.100	6,500,000	q'rterly.	Jan. '83 1½
Marietta & Cincinnati 50	1,386,350	.....	.....
" " 1st pref 50	8,105,600	semi-an.	Sep. '66 38
" " 2d pref 50	4,440,000	semi-an.	Sep. '66 38
Marq. Hout. & Ont. pf...100	2,259 026	.....	Aug. '82 4
Massawippi*..... 100	400,000	semi-an.	Aug. '82 3
Metropolitan 100	6,500,000	q'rterly-	Oct. '82 1½
Michigan Central....100	18,738,204	q'rterly.	Aug. '81 1
Middlesex Central....100	280,000	semi-an.	Aug. '82 3
Mill Creek & Minehill* 50	323,000	semi-an.	July '82 5
M. Hill & Schuyl. Hav* 50	4,022,500	semi-an.	July '82 3½
Missouri Pacific.....100	28,169,800	q'rterly.	Jan. '83 1¾
Mobile & Montgomery100	3,022,517	semi-an.	Feb. '80 2½
Morris and Essex.... 50	15,000,000	semi-an.	July '82 3½
Mt Carbon & Pt Carbon 50	282,350	semi-an.	July '82 6
Nashua and Lowell..100	800,000	semi-an.	Nov. '82 4
Nashua & Rochester.100	1,305,800	semi-an.	Oct. '82 1½
Nashv. & Decatur....100	1,827,000	semi-an.	June'81 3
Nash., Chat. & St Louis 25	6,670,325	semi-an.	Apl. '82 1½
Naugatuck 100	2,000,000	semi-an.	July '82 5
Nesquehoning Val'y* 50	1,300,000	semi-an.	Sept. '82 3
N. Castle & Beaver Val* 50	600,000	q'rterly.	Oct. '81 —
New London North'n*100	1,500,000	q'rterly.	Oct. '82 1½
N. Y. Cen. & Hud. R.100	89,428,330	q'rterly.	Jan. '83 2
N. Y. and Harlem....100	7,950,000	q'rterly.	Jan. '83 4
" " pref.100	1,500,000	q'rterly.	Jan. '83 4
" City Line.. —	.....	annual	Apl. '82 3
N.Y., Lake Erie & West.100	77,087,600	.....	.....
" " pref.100	7,987,500	annual..	Jan. '83 6
N. Y., N. H. & Hart...100	15,500,000	semi-an.	July '82 5
N. Y., Prov. & Boston100	3,000,000	q'rterly.	Nov. '82 2
Niag. Bridg & Canand*100	1,000,000	semi-an.	July '81 3
North Carolina*.....100	3,000,000	semi-an.	Sep. '81 3
" " pref.100	1,000,000	semi-an.	Sep. '81 3
N. Eastern (S.C.) pref100	86,000	semi-an.	May '81 4
Norfolk & Western pref. 50	15,000,000	q'rterly.	Dec. '82 $1
North Pennsylvania. 50	4,527,150	q'rterly.	Nov. '82 1¾
Northern Central.... 50	6,142,000	semi-an.	July '82 3
Northern N. Hampsh100	3,068,400	semi-an.	Dec. '82 3
Northern Pacific pref100	42,312,589	.....	Jan. '83 11.1
Norwich & Worcester*100	2,604,400	semi-an.	Jan. '83 5
Oregon & Transcont'l.100	40,000,000	q'rterly.	Jan. '83 1½
Old Colony 100	7,333,800	semi-an.	Jan '83 3½
Oregon R'way & Nav.100	6,000,000	q'rterly.	Nov. '82 2
Oswego & Syracuse...100	1,320,400	semi-an.	Aug. '81 4½
Panama 100	7,000,000	.....	July '82 6½
Paterson & Hudson*.100	630,000	semi-an.	July '82 4
Paterson & Ramapo.100	248,000	semi-an.	July '82 4
Pember. & Hightst'n*. 50	342,150	semi-an.	Jan. '82 3
Pennsylvania..... 50	83,786,570	semi-an.	Nov. '82 4½
Pennsylvania Co..... 50	20,000,000	semi-an.	June'81 2½
Peoria & Bureau Val*100	1,200,000	semi-an.	Feb. '82 4
Philadelphia & Erie*. 50	7,013,700	semi-an.	.....
" " pfd 50	2,400,000	semi-an.	Jan. '75 4
Phil, Ger. & Norrist'n* 50	2,231,900	q'rterly.	Sept. '82 3
Phil. and Reading... 50	32,726,375	q'rterly.	Jan. '76 2½
" " pref. 50	1,551,800	q'rterly.	July '76 3½
Phila. and Trenton..100	1,259,100	q'rterly.	Jan. '83 2½
Phila., Wil. and Balt. 50	11,585,750	semi-an.	July '82 4
Pittsb., Ft. W. & Chi.*100	19,714,285	q'rterly.	Oct. '82 1¾
" Special Imp.100	6,770,900	q'rterly.	Oct. '82 1¾
Pittsfield & N. Adams..100	450,000	semi-an.	July '82 2½
Portl., Saco & Portsm100	1,500,000	semi-an.	July '82 3
Providence & Worces.100	2,000,000	semi-an.	July '82 3
Rensselaer & Saratog.*100	7,000,000	semi-an.	July '82 4
Rhode Island & Mass.100	100,000	.....	Jan. '81 3
Richmond & Danv....100	3,866,000	q'rterly.	Aug. '82 2
Richmond & Petersb100	1,009,300	semi-an.	Jan. '82 3
Roch. & Genesee Val.*100	555,200	semi-an.	July '82 3
Rutland preferred.. 100	4,000,000	semi-an.	Sept. '82 1
St. L., Alt. & T. Haute.100	2,300,000	.....	.....
" " pref.100	2,468,406	.....	May '82 3
St. L. & S. Fran. 1st pref100	4,500,000	.....	Aug. '82 3½
St. L., I. Mt. & South'n.100	21,459,921	semi-an.	Feb. '74 3
St. L., Jac'ville & Chic.100	1,293,ccc	.....	Aug. '82 4½
" " " pref.100	1,c34,ccc	.....	Aug. '82 4½
St. P. & Duluth pref.100	4,705,000	semi-an.	Jan. '83 3½
St. P., Minn. & Man..100	20,000,000	q'rterly.	Nov. '82 2
Schuylkill Valley*... 50	576,050	semi-an.	July '82 2½
Seaboard & Roanoke.100	1,229,600	semi-an.	Nov. '82 5
Shamokin V. & Pottsv 50	669,450	semi-an.	Feb. '82 3
Shore Line*.....100	1,000,000	semi-an.	July '82 4
Sioux C. & Pacific pref100	169,000	semi-an.	Oct. '82 3½
South Br. (N. J.)*....100	438,300	semi-an.	Jan. '82 3
South Western (Ga.)*100	3,892,300	semi-an.	Dec. '81 3½
Stockbridge & Pitts.*.100	448,700	semi-an.	Oct. '81 1½
Syr., Bingham & N.Y.*100	2,500,000	semi-an.	Feb. '81 2
Terre Haute & Ind....100	1,988,150	semi-an.	Aug. '82 4
Troy and Boston.....100	1,609,000	semi-an.	Feb. '80 2
Union Pacific. 100	61,000,000	q rterly.	Jan. '83 1¾
United Cos of N. J.*.100	20,490,000	q'rterly.	Jan. '83 2½
Utica, Shenango & S V100	4,000,000	semi-an.	Nov.'81 3
Utica and Black Riv.100	1,772,000	semi-an.	Mar. '82 2
Vermont and Mass...100	3,050,000	semi-an.	Oct. '82 3
Wab. St. L. & Pac. pref.100	22,615,100	q'rterly.	Nov.'81 1½

Marked thus(*)are leased roads.	Stock out-standing.	Divide'd Periods.	Last Dividend Payable.
Ware River*.....100	750,000	semi-an.	July '82 3½
Warren (N. J.).....100	1,800,000	semi-an.	Apl. '82 3½
Warwick Valley.....100	340,000	semi-an.	July '82 2½
Westchest & Phil. pref100	821,300	semi-an.	July '80 2
West Jersey.....100	1,359,750	semi-an.	Sept. '82 3
Wilmingt'n & Weld'n.100	1,456,200	semi-an.	July '82 3
Wil., Col., & Aug 100	960,000	semi-an.	July '82 3
Winchester & Poto'c.*100	180,000	semi-an.	July '82 3
Winchester & Strasb.*100	74,700	semi-an.	July '82 3
Worcester & Nashua. 75	1,789,800	semi-an.	July '82 1½
HORSE-POWER R. R.			
Albany City.....100	200,000	annual	.....'80 5½
Baltimore City..... 25	1,000,000	semi-an.	Oct. '82 3
Balt., Cat. & El. Mills..100	....	semi-an.	July '82 2
Bleecker St. & Ful. F'y.100	900,000	semi-an.	July '82 ¾
Boston & Chelsea pref. 50	110,000	semi-an.	Oct. '82 3
Broadway (Brooklyn)100	250,000	q'arterly	Oct. '82 6
B'way & 7th Av, (N.Y.)100	2,100,000	q'arterly	Oct, '82 2
B'klyn & Hunter's Pt.100	400,000	semi-an.	Oct. '82 6
Brooklyn City.....100	2,000,000	q'arterly	Nov. '82 3½
Bushwick (Brooklyn)100	309,000	semi-an.	Oct. '82 6
Cambridge.....100	908,000	q'arterly	Oct. '82 4½
Cen. Park, N. & E. Riv.100	1,800,000	q'rterly.	Oct. '82 6
Christoph'r & Tenth St100	650,000	semi-an.	Aug. '82 2½
Citizens' (Phil.)..... 50	192,500	q'rterly.	Jan. '82 2½
Citizens' (Pbg.)..... 50	200,000	annual..	....'80 14½
Coney Island & Bklyn100	500,000	semi-an.	Oct. '80 5
Continental (Phil.).. 50	580,000	semi-an.	Jan. 83 6
D. Dock, E. B'way & Bat100	1,200,000	q'arterly	Aug. '82 4
Eighth Av. (N. Y.)....100	1,000,000	q'rterly.	Oct. '82 3
42d St. & G. St. Ferry100	747,000	semi-an.	May '82 6
Frankf. & Southw (Ph) 50	600,000	q'rterly.	Oct. '82 6
Germantown, (Ph.).. 50	572,800	q'rterly.	Oct. '82 2½
Girard College (Ph.) . 50	500,000	semi-an.	July '71 3
Grand St. & Newton..100	170,091	semi-an.	July '81 2½
Green & Coates St. (Ph) 50	150,000	q'rterly.	Oct. '82 3
Heston, Mantau & F'm 50	299,381	semi-an.	Jan. '75 4
Highland.....100	600,000	semi-an.	July '82 4
Lomb. & South Sts (Ph) 25	195,000	semi-an.	Oct. '75 4
Lynn and Boston....100	200,000	semi-an.	Nov.'82 4
Malden and Melrose.100	165,000	....	.....
Metropolitan (Bost.). 50	1,500,000	semi-an.	July '82 4
Middlesex (Boston)..100	650,000	semi-an.	Nov. '82 3½
N.Y., Bay Ridge & Jam100	150,000	..... .	Oct. '78 7
Ninth Av. (N. Y.)....100	797,320	....	.....
Orange & Newark....100	282,555	....	.....
People's (Phila.) pref. 25	124,744	..... .	July '82 2
Philadelphia City.... 50	475,000	semi-an.	July '82 4
Phila. and Darby..... 20	200,000	semi-an.	July '81 3½
Phila. & Grey's Ferry. 50	308,000	semi-an.	Jan. '82 6
Pbg, Alleg. & Manches. 50	300,000	q'rterly.	Oct. '81 3
Ridge Avenue (Ph.).. 50	420,000	semi-an.	Oct. '81 11
Second Avenue (N.Y.)100	1,199,500	semi-an.	July '82 4
Second & Third St. (Ph) 50	771,076	q'rterly.	Jan. '82 4½
17th & 19th sts (Ph.).. 50	350,000	semi-an.	July '81 3
Sixth Avenue (N. Y.)100	750,000	semi-an.	May '82 5
Somerville (Boston).100	173,000	semi-an.	Nov. '82 3
South Boston..... 50	600,000	semi-an.	July '82 4
Third Avenue, N. Y..100	2,000,000	q'rterly.	Aug '82 5
13th and 15th sts., Ph 50	334,529	q'rterly.	Jan. '82 4
23d street, N. Y.....100	600,000	semi-an.	Aug. '82 4
Union, Boston.....100	374,300	semi-an.	Jan '82 4
Union, Phila..... 50	1,005,000	semi-an.	Jan. '82 7
West Philadelphia... 50	750,000	semi-an.	July '77 10
CANALS.			
Chesapeake and Dela 50	2,078,038	semi-an.	June'75 2
Delaware Division.... 50	1,633,350	semi-an.	Aug. '82 $1
Delawa. and Hudson100	20,000,000	q'rterly.	Dec. '82 1¾
Delaware & Raritan*.100	5,847,400	q'rterly.	Jan. '83 2½
Lehigh Coal and Nav 50	11,204,250	semi-an.	Dec. '82 2
Monongahela Nav... 50	1,004,500	semi-an.	July '82 $3
Morris, consolidated.100	1,025,000	semi-an.	Aug. '82 2
" preferred....100	1,175,000	semi-an.	Aug. '82 5
Pennsylvania..... 50	4,501,200	.....	.....
Schuyl. Nav., com.*. 50	859,100	annual..	Oct. '82 50c.
" " pref... 50	3,200,000	annual..	Oct. '82 $1
MISCELLANEOUS.			
Adams Express.....100	12,000,000	q'rterly.	Dec. '82 2
American Express... 50	18,000,000	semi-an.	Jan '83 3
Amoskeag Manuf. Co.100	3,000,000	semi-an.	June'81 5
Calumet & Hecla Min'g 25	100,000 S.	q'rterly.	Nov. '82 $5
Central Mining Co...100	.....	semi-an.	Feb. '82 2½
Consolidation Coal..100	10,250,000	semi-an.	Jan. '82 2
George's Creek C. & I..100	.....	semi-an.	Jan. '82 3
Maryland Coal.....100	4,400,000	semi-an.	Feb. '76 1½
Mariposa L. & Mining100	10,000,000	..... .	.....
" pref100	5,000,000	.....	.....
Missouri Val. Land Co100	200,000	semi-an.	July '82 12
National Tube Works100	1,000,000	q'rterly.	Oct. '82 3
Pac. Mail Steamship.100	20,000,000	q'rterly.	Sept. '69 3
Pennsylvania Coal... 50	5,000,000	q'rterly.	Aug. '82 3
Pullman Palace Car...100	10,032,800	q'rterly.	Nov. '82 2
Quicksilver, com.....100	5,708,700	..... .	May '82 0.4
" pref.....100	4,291,300	..... .	May '82 6
Quincy Mining Co... 25	40,000 shs	semi-an.	Aug. '82 $5
Quincy R. R. Bridge.100	1,750,000	semi-an.	July '82 5
Sioux C. & I. F. L. & L. Co100	500,000	semi-an.	June '82 5
Spring Mt. Coal.....100	1,500,000	semi-an.	Dec. '82 3½
Topeka Equip'nt Co.100	255,500	semi-an.	Oct. '82 5
United States Ex.....100	7,000,000	q'rterly	Nov. '82 1
Wells-Fargo & Co. Ex100	6,250,000	semi-an.	July '82 4
Western Union Tel..100	80,000,000	q'rterly.	Jan. '83 1½

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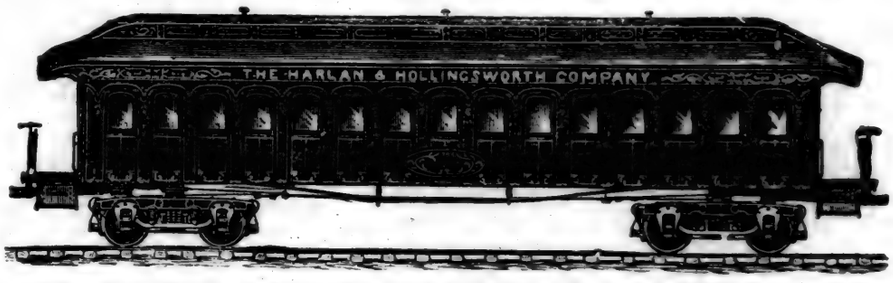
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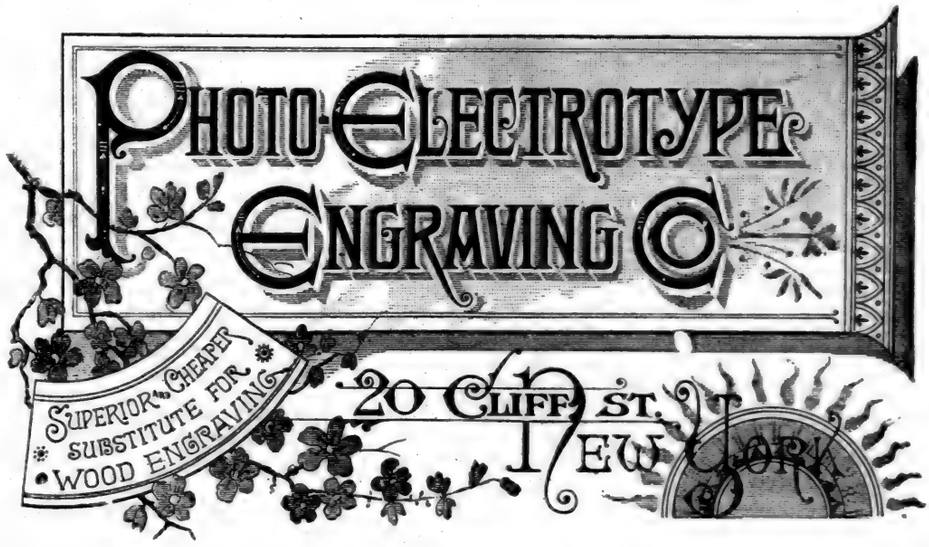
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H. F. WORRALL, Treasurer, 8 Exchange Place, Boston, Mass.

RAILROAD EARNINGS.—MONTHLY.

	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total.
Burl., Cedar Rap. & Northern:													
1880	184,316	165,170	188,325	141,652	149,504	153,378	143,432	160,160	179,804	204,991	189,330	193,419	2,053,484
1881	167,750	124,510	148,551	184,680	165,630	205,912	174,351	209,112	221,801	221,748	202,180	232,812	2,259,037
1882	252,823	225,631	224,107	178,304	199,278	211,257	198,476	224,921	261,439	300,155	278,439	.....	.....
Central Pacific:													
1880	1,200,615	1,070,487	1,373,438	1,356,716	1,778,488	1,724,950	1,840,067	1,973,438	1,994,997	1,120,229	2,199,466	1,905,221	20,508,113
1881	1,602,907	1,454,218	1,709,658	1,872,370	2,091,411	2,159,382	1,899,346	2,088,519	2,185,303	2,507,857	2,297,971	2,225,179	24,094,101
1882	1,839,469	1,720,675	1,969,737	2,054,687	2,342,298	2,229,105	2,020 000	2,277,000	2,474,000	2,409 000	2,242,000	.....	.....
Chesapeake and Ohio:													
1880	202,335	198,681	222,762	221,559	199,443	214,352	238,236	259,110	247,303	211,820	240,795	218,009	2,674,308
1881	162,540	184,389	228,479	227,343	252,235	241,135	225,096	262,858	247,144	236,396	230,622	203,562	2,702,762
1882	210,455	209,708	208,981	267,454	255,939	260,753	306,831	371,175	332,219	347,882	287,850	.....	.....
Chicago and Alton:													
1880	534,054	497 013	626,473	542,961	616,128	617,524	708,906	761,120	767,349	785,199	696,776	574,695	7,718,198
1881	487,890	461,641	529,915	558,190	548,556	635,860	676,205	769,751	774,790	771,844	672,380	635,307	7,553,988
1882	579,447	530,480	584,483	561,787	553,412	613,886	671,537	800,624	881,109	812,032	748,151	.....	.....
Chicago and Northwestern:													
1880	1,154,632	1,131,683	1,361,725	1,294,573	1,875,608	1,671,177	1,699,686	1,767,938	2,020,245	2,105,217	1,855,622	1,477,902	19,416,007
1881	1,240,664	963,204	1,178,795	1,474,612	1,879,006	2,306,440	1,983,032	2,315,164	2,292,676	2,341,098	2,019,038	1,855,477	21,849,209
1882	1,644,935	1,474,176	1,672,931	1,668,741	2,110,947	2,022,700	2,025,736	2,099,755	2,497,053	2,532,100	2,069,287	.....	.....
Chicago, Burlington and Quincy:													
1880	1,432,740	1,411,870	1,732,518	1,489,894	1,909,627	1,682,956	1,773,643	1,834,321	1,862,285	1,934,762	1,837,860	1,552,018	20,454,494
1881	1,307,948	1,034,821	1,418,149	1,574,371	1,679,455	2,083,803	1,888,358	2,173,945	2,262,981	2,031,001	1,816,133	1,905,490	21,324,150
1882	1,658,834	1,457,300	1,866,217	1,530,838	1,505,261	1,437,164	1,625,006	2,086,858	2,186,400	2,270,444	.....	.....	.....
Chicago, Milwaukee and St. Paul:													
1880	764,298	738,749	900,675	871,041	1,134,745	1,037,958	1,026,708	991,297	1,257,677	1,493,620	1,472,037	1 397,308	13,086,119
1881	990,847	682,717	916,989	1,259,946	1,538,491	1,729,811	1,568,706	1,678,361	1,644,676	1,591,052	1,560.597	1,855,000	17,025,462
1882	1,435,000	1,377,000	1,561,000	1,518,000	1,629,000	1,620,000	1,465,000	1,545,000	1,950,000	2,251,000	2,072,000	.....	.....
Chicago, St. Paul, Minneapolis and Omaha:													
1880	193,827	173,078	259,783	259,208	232,146	218,093	236,995	251,013	300,833	342,052	342,894	312,173	3,122,097
1881	257,786	158,594	251,648	261,211	350,124	404,562	383,202	385,586	373,370	379,029	392,921	391,950	3,981,296
1882	307,498	315,100	405,779	356,558	406,420	363,109	331,480	394,555	482,997	546,671	517,595	.....	.....
Cincinnati, Indianapolis, St. Louis and Chicago:													
1880	155,697	172,541	198,220	168,199	186,995	200,332	204,138	233,478	343,627	239,881	209,014	198,254	2,412,185
1881	182,523	171,511	191,005	183,710	191,096	192,299	177,161	229,858	228,653	221,320	194,805	192,623	2,296,916
1882	200,042	186,879	208,066	204,269	199,110	195,948	209,564	.....	259,379	.....	.....	.....	.....
Denver and Rio Grande:													
1880	124,759	126,922	160,883	164,882	193,925	295,455	373,132	400,133	406,583	473,318	408,562	349,196	3,478,007
1881	307,476	317,681	398,493	433,111	514,767	584,230	548,284	606,193	589,287	638,432	547,055	643,417	6,206,812
1882	491,914	412,987	535,055	559,917	614,298	537,462	495,797	574,040	595,306	630,598	512,965	.....	.....
Hannibal and St. Joseph:													
1880	176,079	166,965	216,061	206,735	191,317	179,396	224,312	238,081	233,448	242,214	207,147	279,635	2,561,366
1881	154,401	122,874	176,356	190,812	172,950	190,740	201,899	210,240	215,103	231,913	195,607	180,376	2,230,961
1882	138,284	154,717	168,798	148,913	154,917	155,030	184,347	258,628	239,196	238,442	249 252	.....	.....
Illinois Central:													
1880	595,312	613,806	613,008	535,732	665,120	681,736	724,095	732,755	806,836	880,211	783,120	673 182	8,304,812
1881	631,281	524,499	557,789	662,493	673,259	803,887	720,004	868,407	828,847	815,238	737 218	763,475	8,586,397
1882	728,173	689,387	695,371	674,603	674,749	663,746	752,251	813,600	828,238	865,325	752,144	.....	.....
Indiana, Bloomington and Western:													
1880	80,498	89,690	116,185	90,374	85,733	106,954	103,438	116,732	110,622	121,343	95,621	104,619	1,233,079
1881	90,283	83,261	102,085	203,677	200,064	199,846	190,125	272,114	247,932	225,678	200,450	156,697	.....
1882	195,824	175,755	206,235	205,934	182,554	186,133	206,072	278,814	273,100	269,046	256,998	.....	.....
Louisville and Nashville:													
1880	674,455	575,035	612,593	563,883	655,014	976,229	772,538	827,089	931,911	1,000,327	953,087	949,185	9,491,346
1881	812,118	805,124	947,959	855,704	828,726	1,227,885	817,135	876,192	951,566	1,002,950	1,065,223	1,153,779	11,344,361
1882	964,527	960,315	1,068,834	953,603	958,130	1,215,490	1,063,765	1,043,912	1,107,985	1,216,215	1,192.390	.....	.....
Mobile and Ohio:													
1880	250,116	204,095	168,302	140,091	129,248	121,855	131,621	140,593	184,247	264,714	251,368	287,372	2,273,622
1881	224,347	216,768	230,916	163,551	145,803	136,517	135,549	160,789	210,262	256,924	262,986	258,812	2,403,224
1882	159,676	158,590	148,166	141,957	134,378	136,184	136,398	140,443	160,031	265,201	295,110	.....	.....
Nashville, Chattanooga and St. Louis:													
1880	205,634	191,154	169,457	155,466	158,839	144,130	151,594	169,326	167,473	178,266	182,087	175,966	2,049,484
1881	178,143	190,866	207,710	183,525	104,430	154,549	150,430	168,317	179,979	172,121	152,059	173,127	2,075,256
1882	156,994	159,961	161,005	154,155	135,556	119,074	160,991	168,304	168,999	180,319	.....	.....	.....
New York and New England:													
1880	164,232	149,907	183,845	179,689	183,701	219,891	205,056	249,885	235,642	215,491	210,856	198 108	2,396,302
1881	189,749	173,614	212,019	216,913	217,185	231,518	246,821	280,524	299,573	261,200	240,764	237,729	2,809,255
1882	213,840	217,261	265,222	263,544	283,244	290,060	300,920	353,726	338,490	310,145	276,183	.....	.....
New York, Lake Erie and Western:													
1879	1,147,173	1,207,391	1,356,780	1,372,755	1,350,574	1,230,419	1,273,533	1,450,223	1,492,497	1,713,697	1,515,835	1,398,224	16,509,127
1880	1,296,381	1,252,218	1,644,958	1,643,151	1,592,544	1,661,812	1,580,976	1,606,874	1,786,417	1,899,910	1,799,338	1,726,788	19,149,361
1881	1,443,437	1,425,765	1,847,261	1,709,057	1,776,891	1,794,982	1,787,081	1,772,895	1,734,200	.....	.....	.....	.....
Northern Central:													
1880	334,494	330,860	415,325	386,130	320,788	419,193	450,298	453,923	464,093	512,918	459,054	494,310	5,050,387
1881	386,157	382,657	452,906	487,273	465,588	487,287	440,811	498,008	429,565	449,664	487,160	476,622	5,443,697
1882	407,368	413,551	430,194	435,129	482,607	482,762	509,683	667,488	592,435	550,225	.....	.....	.....
Northern Pacific:													
1880	81,390	77,259	119,357	185,700	217,613	253,105	241,277	223,500	330,300	358,456	300,822	220,993	2,629,710
1881	116,508	78,803	162,984	216,210	312,705	412,024	393,260	434,085	534,363	583,555	475,610	434,331	4,044,576
1882	239,800	269,000	384,000	438,000	568,332	631,342	679,240	727,377	789,700	834,460	761,324	.....	.....
Philadelphia and Erie:													
1880	224,307	245,372	327,678	334,947	311,470	331,024	308,699	347,532	322,737	367,082	324,966	281,919	3,727,733
1881	224,303	225,501	285,573	293,323	343,792	350,585	291,669	303,849	276,522	292,392	284,078	282,772	3,454,309
1882	252,727	246,246	265,311	277,851	341,415	347,614	377,206	420,329	386,455	397,164	.....	.....	.....
St. Louis and San Francisco:													
1880	198,091	195,948	193,146	176,164	167,664	173,607	213,297	259,995	280,873	328,194	290,329	226,063	2,698,371
1881	212,435	178,234	262,050	265,298	283,399	260,254	252,333	286,373	279,064	308,569	284,320	287,914	3,160,245
1882	256,784	244,654	274,959	242,806	253,419	240,177	318,613	381,637	336,805	360,900	331,490	.....	.....
St. Louis, Alton and Terre Haute:													
1880	153,139	163,737	168,994	155,462	147,928	150,207	191,077	216,759	204,295	221,863	188,773	184,503	2,146,741
1881	175,725	166,012	201,137	197,447	172,177	165,896	165,393	189,180	196,368	204,338	169,795	153,852	2,112,801
1882	168,987	149,619	178,145	157,450	162,842	142,742	192,017	236,137	217,659	229,962	206,040	.....	.....
St. Louis [illegible]on Mountain and Southern:													
1880	555,983	490,195	451,560	408,241	349,053	363,454	432,655	565,869	671,219	688,365	632,052	656,951	6,265,597
1881	570,957	560,791	704,002	548,300	479,075	474,302	533,512	644,386	708,325	719,239	687,271	709 498	7,319,744
1882	516,370	501,127	585,008	581,977	519,120	529,760	515,519	675,981	724,160	809,394	843,973	.....	.....
St. Paul, Minneapolis and Manitoba:													
1880	180,239	137,645	261,798	333,014	281,899	243,407	272,089	232,579	274,188	345,057	300,675	297,641	3,160,231
1881	254,187	159,482	320,962	425,685	382,642	405,322	387,488	414,954	485,736	605,708	508,530	528,262	4,878,960
1882	395,461	418 358	531,004	570,890	858,902	856,417	853,296	801,759	832,776	979,057	913,335	.....	.....
Texas and Pacific:													
1880	245,785	219.165	215,070	174,177	141,083	153,066	195,711	226,073	266,570	303,666	312,184	301,858	2,754,408
1881	281,176	260,781	319,928	295,066	281,782	285,405	328,063	381,331	345,790	419,203	369,521	381,218	3,921,569
1882	310,785	255,644	332,911	359,543	409,228	384,713	367,215	439,918	470,613	541,901	619,655	.....	.....
Union Pacific Railway:													
1880	1,433,636	1,393,992	1,730,509	1,937,220	2,027,269	1,028,528	1,934,215	1,913,035	2,270,179	2,707,860	2,251,148	1,869,335	23,448,445
1881	1,339,799	1,374,740	1,674,860	1,766,894	2,319,238	2,884,774	2,528,826	2,638,659	2,844,357	3,169,530	2,723,608	2,267,004	27,451,831
1882	1,961,088	1,759,863	2,226,832	2,462,004	2,491,590	2,508,453	2,301,000	2,762,107	2,949,112	3,158,337	2,821,070	.....	.....
Wabash, St. Louis and Pacific:													
1880	776,790	759,451	978,629	892,024	948,773	953,468	1,966,742	1,189,478	1,178,950	1,501,203	1,131,787	1,050,816	12,428,112
1881	811,617	818,922	1,121,592	1,023,482	1,144,660	1,308,993	1,131,752	1,543,838	1,490,027	1,397,781	1,343,556	1,328,278	14,461,579
1882	1,220,965	1,134,768	1,315,776	1,378,194	1,204,864	1,149,632	1,418,837	1,772,544	1,682,382	1,595,680	1,525,715	.....	.....

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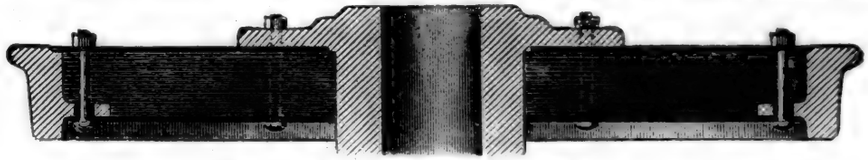
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McLEOD AIR RAILROAD SIGNAL CO.,
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New York Office with Col. Thos. R. Sharp, 115 Broadway.

Nixon's Traction Engine.

This new engine is made for plowing, threshing, road, mining, and yard transportation. The frame is constructed of four parallel I steel sills with cross-beams at ends, and diagonal braces throughout, except at base of boiler, giving stiffness to frame, and supporting at ends the coal-tender and water-tank, thereby giving equal distribution of weight and balance on the tracks. The parallel sills are twenty-four inches apart from centers, to which are attached on the underside of sills by adjustable boxes, three axles on each side. On these axles are firmly keyed three driving-wheels of two and three inch faces, with a space of two and one-half inches apart on axles. On the front and rear axles are four wheels, the first and fourth or outer wheels are three-inch face, and are flanged with flanges on outside of wheels to prevent track from slipping off in turning. The center axles have three wheels of two-inch face. The gangs of wheels intermesh or overlap each other; the tires of center gangs work close to the hubs of the front and rear gangs. Revolving over with these gangs of wheels are two tracks of rubber or other suitable elastic material composed of an outer and inner layer, between which are transverse metallic plates, secured through layers and plates by rivets or bolts, to retain tracks in shape transversely. The front and rear gangs of wheels are driven forward or backward, or one forward and the other backward in turning, by spur gears secured to inside of wheels; front and rear gangs are connected by idle gears on center axles. The center gangs are driven in the same direction by spur gears on axles, of the same diameter as those on front and rear gangs. Motion is given by long pinion to these gears from reversing yatch engine, one on each side of upright boiler for each track.

The width of each track is eighteen inches; thickness of rubber tracks, four and one-half inches; height of wheels, four and one-half feet; length of each track in contact with the earth, sixty inches; hence 60x18x2=2,160 inches of effective earth contact or traction, over which is distributed the six tons of weight of engine and track. A horse of 1,000 pounds weight has forty-eight inches of effective earth contact while pulling; hence ten horses have 480 inches of traction.

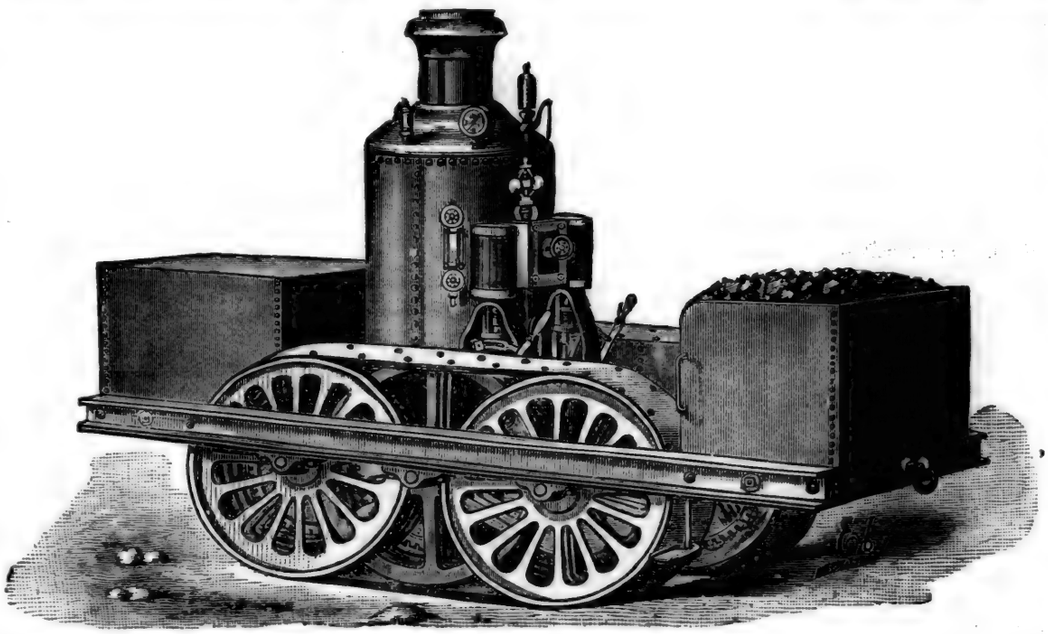
The engines now on the market with two drive wheels of eight to ten inch tires, have forty-eight to seventy-two inches only of effective earth contact, consequently are useless for plowing, or hauling their own weight over spongy ground.

This engine's tracks have no suction or adherence when the tracks leave the ground, therefore no loss of power by carrying its tracks forward. The tracks cannot be broken by passing over an obstruction, as the rubber will give to wheels until the wheel rotates over, and then instantly return to place.

The adherence of the tracks to the periphery of the one-half of the front and rear gangs and the bottom and top of center gangs of wheels insures no slipping of wheels on the tracks when worked to its fullest capacity on steep inclines.

Patented by Jacob Nixon, of Winfield, Kansas, in the United States, August 29, and in Canada, August 31, 1882, who can be addressed for further information.

Scientific men have lately discovered that the crab does not crawl backward. It is made so; it is going forward all the time.



NIXON'S TRACTION ENGINE.

The Great American and European Short Line Railway.

The charter of this company covers from the terminus of the Grand Trunk and Canadian Pacific railways at or near Montreal, through the State of Maine, passing near Fredericton, Moncton, Bari Vert, Pugwash and New Glasgow; thence over the Halifax and Cape Breton railways; thence through Cape Breton to Cape North; thence by water to New Foundland at or near Cape Ray; thence across New Foundland to a point on the east coast near Buena Vista; thence by steamer to the west of Ireland, probably Galway, reducing the ocean passage from 3,300 to 1,640 miles. From the east coast of New Foundland to Ireland, a line of fast steamers will be run, and from Galway fast express trains to London and all continental cities. At least forty-eight hours' time will be saved between New York and London, and 1,000 miles of dangerous coast travel between New York and Cape Race. This company are now at work in New Brunswick, and at Pugwash, N. S., and are building 2,000 feet of wharves for lumber and timber, and the finest coal-shutes in Canada. They are at work on the main line, and propose to extend surveys between Moncton and Montreal next spring. They have 900 miles to build from Montreal to Cape North, of which about 180 are completed, while about 390 miles are surveyed. The title of the syndicate controlling the road is "The New York, Boston and European Short Line," and the cost of the construction will be more than $30,000,000.

An Experiment in Switzerland.

Being desirous of testing the velocity of sound between two places of different heights above the sea level, two Frenchmen arranged for a small brass cannon to be fired from the top of a mountain in Switzerland (Faulhorn), and another from a little village near Lake Brienz, 6,500 feet lower than the former spot. The cannon—which were those used by the homely villagers in their festivals—were discharged twenty-eight times, and it was found that though the speed of the sound was not affected by the height, there was a very decided difference in the strength. The report from the cannon at the lake was well heard on the mountain top, while that from the latter was feeble, the strength of the sound being found to depend largely upon the density of the air at the place of its production, and not at the place of its being heard. Thus, in order to produce a sound whose intensity should be the same at both spots, it was necessary to put eight parts of powder in the cannon on the mountain for every seven used in the charge for the gun by the lake.

Bowers, Duré & Co., of Wilmington, Del., have received a contract to build twenty-four fine passenger cars for the Brooklyn Bridge. These cars will be similar to those run on the Manhattan Elevated Railway of New York, and the work of construction will be commenced shortly.

Enterprising people are beginning to learn the real value of advertising the year round. The persistency of those who are not intimidated by the cry of "dull times," but keep their names ever before the public, will surely place them on the right side in the end,

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Hang out your sign in the American Railroad Journal.

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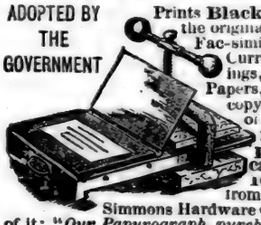
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which form non-metalic, permanently elastic compensating cushions, absorbing shocks and vibrations, and absolutely locking the nuts. These Washers have been adopted by a large number of railroads as the cheapest and best device in use. Flexible vulcanized-fibre dust guards and oil box packings, which are absolutely unaffected by oil and grease, are far more durable than leather and much cheaper.

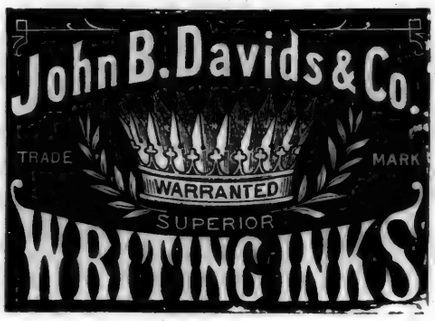
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MR. JAMES J. WHITE, Ottawa, Canada, writer of "Our Canadian Letter," acts as agent for the AMERICAN RAILROAD JOURNAL COMPANY, in Canada. He is authorized to receive, in behalf of the company, subscriptions and advertisements for this journal: also news of the character which he can utilize in the preparation of his Letter, or send to us for use elsewhere within these columns. He respectfully invites information concerning Railroad matters generally, Mining, Banking, Finance and Manufactures.

OUR CANADIAN LETTER.

[From our Special Correspondent.]

SIR HUGH ALLAN—A CANADIAN DISTRICT OF COLUMBIA—FOREIGN RELATIONS—RAILROAD AND OTHER NOTES, ETC.

SIR HUGH ALLAN.

SIR HUGH ALLAN, the eminent Canadian ship owner and capitalist, whose death is announced to have taken place in Edinburgh, Scotland, on Saturday last, was born September 29, 1810, at Salcoats, a seaport on the Frith of Clyde, Scotland. His father was captain Alexander Allan, a shipmaster and trader all his life between the Clyde and St. Lawrence. When he was sixteen years old he came to Canada with his father, who was master of the vessel, and obtained a situation in a dry goods house, but not being contented, at the expiration of three years returned to Scotland with his father's vessel. The following year he returned to Canada and obtained employment in an extensive shipping establishment. After five years' service he was taken in as junior partner. After many changes the firm became universally known as the "Allan Brothers—Hugh and Andrew Allan."

In 1851 the firm began to build iron screw steamships, and in 1853 began carrying the mails.

Messrs. Allan were the first to adopt the spar or flush deck.

The Allan fleet now ranks among the principal lines in the world, and Sir Hugh Allan ranked among the Canadian merchant princes: His Royal Highness, Prince Arthur, while in Canada in 1869, was his guest.

In recognition of his courtesies to the Prince, and in recognition of his past services to Canadian and British commerce, he was knighted by Her Majesty Queen Victoria in 1871.

Sir Hugh Allan at the time of his death was President of the Merchants Bank, Montreal Telegraph Co., etc., and connected with all the leading financial institutions of Canada. He belonged to the Scotch Presbyterian church. Sir Hugh and his family, socially, occupied the highest position in Montreal. He entertained Royalty on different occasions; among his guests were His Royal Highness, Prince Arthur, the Marquis of Lorne, Princess Louise, and the Governor General, Lord Dufferin. His family consisted of thirteen children, nine daughters and four sons. Lady Allan died in England last year.

A CANADIAN DISTRICT OF COLUMBIA.

The Ottawa City Council have decided to appoint a committee to wait on the Premier of Canada and ask him to use his influence with the government, to create a district here similar to the District of Columbia in the United States. It is said that Sir John McDonald a few years ago expressed himself as favorable to the scheme.

FOREIGN RELATIONS.

Sir Alexander Galt, High Commissioner of the Dominion Government in England, is receiving the assistance of the Colonial Secretary, connected with the negotiations for concluding commercial relations with France.

The Imperial Government is desirous of serving Canada's interests. Sir Alexander Galt will again visit Madrid, for the purpose of renewing negotiations with a view to extending the commercial relations of the Dominion with Cuba.

RAILROAD AND OTHER NOTES.

It is understood in Montreal that if the Grand Trunk Railway gets a monopoly of the railway traffic between Montreal and Quebec, the steamers with emigrants will come direct to Montreal without stopping at Quebec.

AN IMPORTANT SCHEME.

The Dominion Government will subsidize a line of steamers to run between Montreal and Bremen in summer, and in winter between Halifax and Bremen. This is done with the view to encourage German immigration to Canada. The Dominion and Local governments will also take other measures for promoting emigration, and are now making arrangements for that purpose, and the different parliaments will be asked for appropriations at the coming session.

The attention of the Government of Canada has been called to the delay in the outgoing and incoming mails by the "Allan" steamers calling at St. John, N. F.

An open Stock Exchange in Montreal is sueing those who became members and did not pay their entrance fee.

Major Rogers, engineer of the Canada Pacific Railway, has arrived at Montreal from British Columbia, where he has completed a survey of the line to connect at Fort Calgary. The line will be much shorter than the old line made by the government surveyors some years ago, and the new Rocky Mountain Pass (Kicking Horse) far surpasses the Leather Head Pass. There will be no tunnelling, and the gradient will be less than any on the American lines.

The Atlantic and Northwestern Railway Co., have re-opened their books for further subscription to capital stock, and for a further call of ten per cent.

The Canada Atlantic Railway have commenced an action against the City of Ottawa for the recovery of $100,000 bonus granted last year.

MARITIME PROVINCES.

The Dominion Government will place on the estimates for 1883-4, $10,000 for a Centennial Exhibition of New Brunswick at St. John.

A new Paper Mill Co. with a capital of $75,000 has been incorporated at Maysville, York county, N. B.

At the annual meeting of the St. John Board of Trade, held on December 4, the retiring president said: "The early completion of the Megantic Line is looked for. On it depends the chief hope for securing to us the Dominion winter port. Efforts are being made towards its completion more or less effectively, and we may reasonably expect that if the Canada Pacific line is finished, we may have the Megantic line completed and thus give to St. John the shortest through line from the Atlantic to the Pacific.

The cargo steamers of the Allan Line which sailed from Montreal during the season of the St. Lawrence navigation, took out 6,330 oxen and 5,887 sheep, landing all in good order excepting 4 oxen and 43 sheep.

MINING MATTERS.

A number of Americans are prospecting and examining the Ottawa Valley iron and phosphate region, with the object of investing. Several Boston and New York parties are expected here during the month. Mr. Geo. H. Nichols, of Brooklyn, N. Y., has purchased a large tract of phosphate land near Buckingham; he has also contracted for 8,000 tons to be shipped to the United States, during this winter. I am credibly informed that the article on "Phosphate" that appeared in the RAILROAD JOURNAL some weeks ago has been the means of increasing the interest in that mineral in the United States, the article having been re-copied extensively. "W."

OTTAWA, December 14, 1882.

The D. K. Miller Improved Padlock.

SUPERIOR TO EVERY OTHER

In Mechanical Construction, Security, and Durability.

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With Springs of the Celebrated Phosphor-Bronze,

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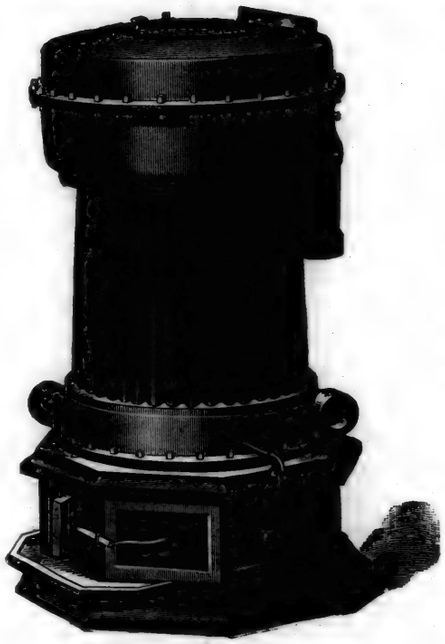
Every Padlock with a different Key and *Master Key* to unlock them all; or all Padlocks with same key if required.

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"36 per cent of coal saved and the car kept noticeably warmer!"
by using THE SALMON CAR HEATER.
It Insures Safety from Fire in case of Accident, Economy in Fuel and RAPID CIRCULATION. It heats quickly, is SELF-REGULATING, and can be used for either STEAM OR HOT WATER.

The Water Tubes do not come in contact with the Coals, but occupy the Smoke Flue in such a manner as to absorb the greatest amount of heat from Coal in a low state of combustion without danger of chilling the fire.

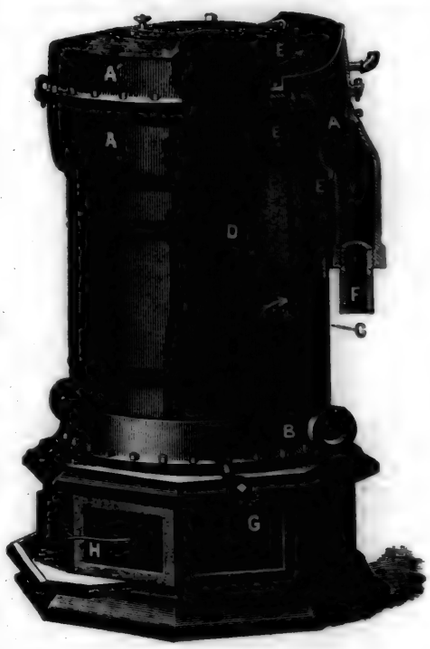
Once filled with coal the fire will last from 24 to 60 hours, according to weather, without replenishing, as proved by actual test.

At the last "Mechanics' Fair" it received the Silver Medal, being the highest award to heaters of any kind.

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Address, Munn & Co., publishers of Scientific American, 261 Broadway, New York.
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In His Own Coin.

"Is this seat engaged?" he asked of the prettiest girl in the car, and, finding it wasn't, he put his sample-box in the rack and braced himself for solid enjoyment. "Pleasant day," said the girl, coming for him before he could get his tongue unkinked. "Most bewildering day, isn't it?" "Ye-yes, miss," stammered the drummer. He wasn't in the habit of playing pitcher in this kind of a match, and the position of catcher didn't fit him as tight as his pantaloons. "Nice weather for traveling," continued the girl: "much nicer than when it was cold. Are you perfectly comfortable?" "Oh, yes; thanks!" murmured the drummer. "Glad of it," resumed the girl cheerfully. "You don't look so. Let me put my shawl under your head, won't you. Hadn't you rather sit next to the window and have me describe the landscape to you?" "No, please," he muttered; "I—I'm doing well enough." "Can't I buy you some peanuts, or a book? Let me do something to make the trip happy! Suppose I slip my arm around your waist. Just lean forward a trifle so I can!" "You'll—you'll have to excuse me!" gasped the wretched drummer; "I—I don't think you really mean it!" "You look so tired," she pleaded; "wouldn't you like to rest your head on my shoulder? No one will notice. Just lay your head right down, and I'll tell you stories." "No—no, thanks! I won't to-day! I'm very comfortable, thank you!" and the poor drummer looked around helplessly. "Your scarf-pin is coming out. Let me fix it. There!" and she arrayed deftly; "at the next station I'll get you a cup of tea, and when we arrive at our destination you'll let me call on you?" and she smiled an anxious prayer right up into his pallid countenance. "I think I'll go away and smoke," said the drummer, and, hauling down his grip-sack, he made for the door, knee deep in the grins showered around by his fellow passengers. "Strange!" murmured the girl to the lady in front of her. "I only did with him what he was making ready to do with me, and, big and strong as he is, he couldn't stand it. I really think women have stronger stomachs than men, and, besides that, there isn't any smoking-car for them to fly to for refuge. I don't understand this thing." But she settled back contentedly all the same; and at a convention of drummers held in the smoker that morning, it was unanimously resolved that her seat was engaged, so far as they were concerned, for the balance of the season.

A SKIPPER who plied between Boston and Nantucket had in his cabin a flower pot filled with earth from Nantucket. He boasted he could tell where he was always by tasting the bottom of the lead. Well, one night he bowsed up his jib pretty well, and a passenger put the bottom of the lead into the flower pot, and after pretending to heave it handed it to the captain. The captain tasted it as usual, and then ran wildly up the companionway on deck, exclaiming, "let go the anchor, Nantucket's sunk, and here we are right over my old woman's garden!"

FROM Jan. 1, 1883, all persons employed on Swedish railroads and ships will be tested as to color blindness.

Leonard's Reverse-Valve for Engines.

LEONARD'S reversing-valve (patented Sept. 5, 1882) consists of a valve placed between the ordinary slide or other valve in the steam-chest and the cylinder. The reversing-valve has five ports passing throrgh it, two for forward and two for backward movements of engine, one, the fifth port, as a balance port, which will be more fully described. The reverse-valve is a cylinder in form and is capable of being moved or turned to change the course of steam.

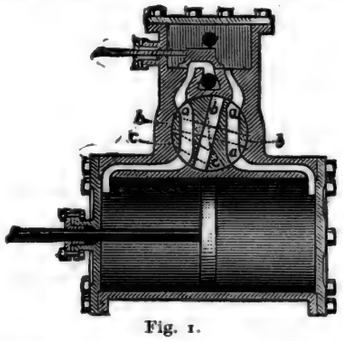


Fig. 1.

Referring to the engravings, Fig. 1 is a section showing the valve in a position here described as the forward movement of engine or locomotive. It will be seen that the ports *a a* in Fig. 1 are in a position which conducts the steam to that end of the cylinder which corresponds to the end of the steam-chest from which it enters.

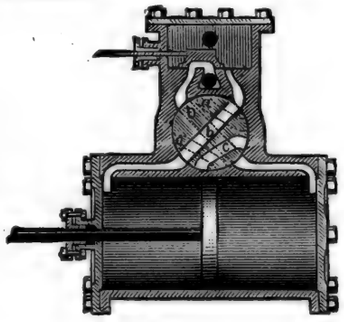


Fig. 2.

Fig. 2 is a section showing the valve in a reverse position to Fig. 1, described here as the backward movement. The ports *b b* are in position while the ports *a a* are out of position. When the valve is in this position it conducts the steam to that part of the cylinder opposite the end of the steam-chest from which it enters, thus reversing the action or movement of the engine (it is immaterial which of these two positions of the valve in Figs. 1 and 2 is used for forward or backward movements).

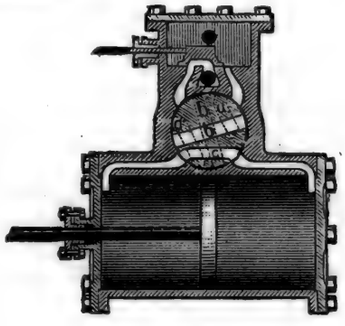


Fig. 3.

Fig. 3 is a section showing the port *c* in position while the ports *a a* and *b b* are out of position. When the valve is in this position the reverse lever in the cab of the engine is hooked in the center, thereby allowing a complete passage between the two ends of the cylinder while the steam is cut off, allowing the contents of the cylinder to pass from one end of the cylinder to the other, and prevents the drawing in of cinders or other extraneous matter from the smoke-box or elsewhere. It will also be noticed that when the valve is in this position the steam is fully cut off from the cylinder, and therefore this valve is adapted to serve temporarily as a throttle-valve, should the latter get out of order or should it, from any other reason, be desirable or necessary for it to perform such service.

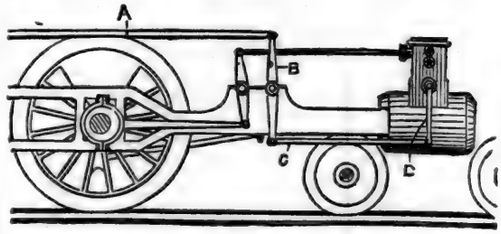


Fig. 4.

Fig. 4 is a skeleton view of a portion of a locomotive, looking from the center or inside outwards, showing the rods A and C, rock-beam B, and arm D.

Leonard's reverse-valve is managed by the engineer the same as the link, by means of the reverse-lever located in the cab. The rod A is attached to this lever in the cab, and the other end of the rod to the rock-beam B. To the opposite end of the rock-beam is attached another rod, C, which is attached to the arm D, which operates or causes the valve to rotate into any one of the three positions as shown in Figs. 1, 2 and 3. The rod A, attached to the lever in the cab, can be applied direct to the reverse-valve arm D by placing the arm D in a vertical instead of a swinging position, thereby dispensing with the rock-beam B.

The advantage this reverse-valve has over the reversing link and other devices of like character and purpose is, that the construction is less complicated; therefore the cost in constructing is much less than other reverse devices, the cost being but little more than it is to construct a portable or stationary engine (where the motion is but one way). It will be seen by examining Fig. 4 that only one eccentric is used, which is attached to the rock-beam which operates the cut-off or slide-valve, thus doing with but one eccentric to each engine or cylinder, dispensing with the link and other expensive reversing devices, thereby saving a great amount of lost motion and expensive machinery, as is used in all other devices for reversing.

This reverse valve can be applied to a locomotive (as is shown in Fig. 4), traction, or road engine, and other engines where the motion is to be reversed. It is less liable to get out of order than any other reverse device. It will be easily seen by any one who is versed in the different kinds of reverse devices that this reverse-valve is not complicated, there being fewer pieces and connections. Therefore it is less liable to get out of order and is much more easily manufactured. It will also be seen that this reverse-valve can be reversed much easier than any other device, as it can be reversed under full pressure of steam.

Further information can be had by addressing the inventor, CHARLES N. LEONARD, Rooms 16 and 18, Hubbard Block, Indianapolis, Ind.

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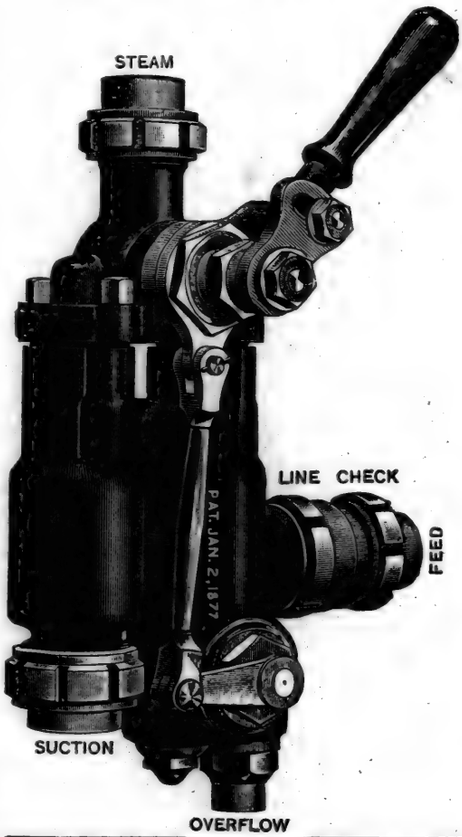
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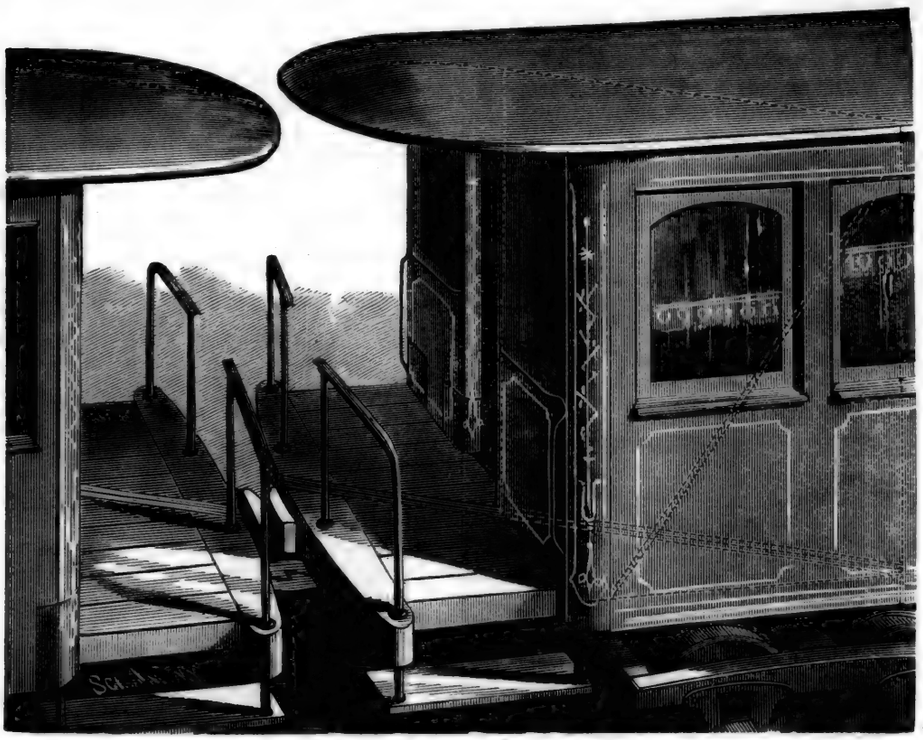
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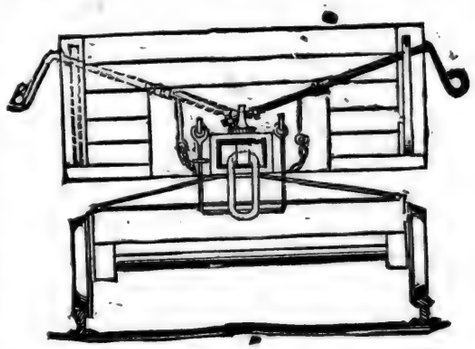
THE accompanying illustration represents an improvement in railway passenger cars, and is intended to secure to travelers safety from the frightful consequences of the telescoping and often burning of the cars in cases of severe collisions.

The improvement consists in framing the cars with one independent corner at each end, and on opposite sides attached to the main frame-work by a diagonal line passing from the end of the bolster to the end of the platform near the coupling, but not interfering with the middle bottom timbers to which the coupling is attached.

These diagonal lines bear such relation to each other on two adjacent cars in a train that when driven together violently, as in a collision, the tendency of the cars would be to pass each other instead of crushing; and to insure this effect, the permanent or rigid corners of the cars are built of unusual strength, especially at the frame work of the door-way, which is on the stronger side, heavily braced with iron stays concealed in the casing. The independent corners are attached by light frame-work sufficiently strong for all ordinary purposes or use, but so far weaker than the opposing part of the next car, that in the event of a collision, such as would otherwise telescope or crush the car, they would be broken or torn off and the cars diverted by reason of the angle at which the heavy timbers of the car come in contact with each other. This will be readily understood by reference to the dotted lines shown in the engraving. The stoves or heaters are situated in the stronger corners, and the closets in the weaker. It will be seen that this improvement adds but a trifle to the cost of building a car; that it sacrifices nothing essential to its strength, convenience or appearance, and that it insures the strongest probability of safety from the dangers against which it is intended to provide.

The changes in construction will not be apparent in any completed coach, as they refer only to the heavy frame-work, except so far as the connecting line between the independent corner and the main upright timbers can be followed by a joint at which the parts would sever in case of collision.

Further information may be obtained by addressing the patentee, JOHN MILTON, at Hamilton, Va.



Swinford's Car-Coupling.

INFORMATION received as to the car-coupling invented by Mr. W. H. SWINFORD, Cherokee, Ala., enables us to state that it is easily attached to the cars, and does not require any change in the old style draw-head, link and pin, the new car-coupling being simply attached to the old style coupling-pin. It is made of wrought iron, and the cost of production need not be more than two dollars each coupling. The use of the Swinford coupling on the M. and C. R. R. and the M. and T. R. R. has proved highly satisfactory, and its employment by connecting lines is considered probable.

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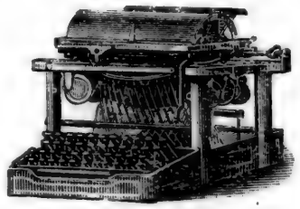
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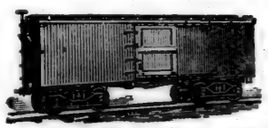
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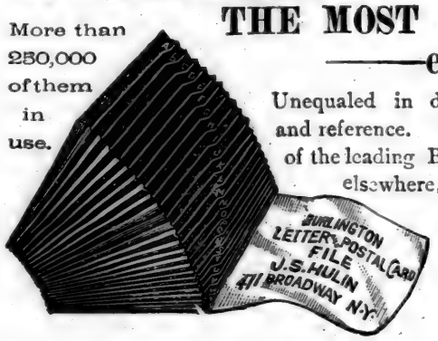
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Inventors, Read This.

1. THE AMERICAN RAILROAD JOURNAL gives great prominence to descriptions of such new inventions as relate to its proper class of subjects.

2. Its columns contain at least a notice of every patent granted in the United States upon railroad and kindred inventions. In many cases more than this is desirable, and

3. Its editors invite communications from inventors regarding their inventions.

4. Such communications are treated with a view to their publication, and appear within these columns in all cases when this is desirable.

5. This is the oldest railroad journal in the world, and therefore

6. Inventors cannot do themselves better service in order to advance their interests, than to act upon the foregoing information.

List of Patents for Inventions Relating to Railways, Manufacturing, Mining, Machinery, Etc.

BEARING DATE OF DECEMBER 12, 1882.

268,775. Railway Wood and Coal Loader: George B. Allis, Little Rock, Ark. Filed July 19, 1882.
268,789. Car-Coupling: Joseph Geddes, Rochester, N. Y. Filed Oct. 27, 1882.
268,796. Telegraph for Railroads: William L. Hunt, Port Hope, Ontario, Canada. Filed Oct. 3, 1882.
268,807. Coupling for shafts: Frank F. Landis, Waynesborough, Pa. Filed Sept. 13, 1882.
268,808. Traction-Engine: Frank F. Landis, Waynesborough, Pa. Filed June 27, 1882.
268,815. Cylinder Cock for Steam-Engines: Erich E. Mueller, St. Louis, Mo. Filed Oct. 13, 1882.
268,816. Rotary Differential Force-Pump: Peter Munzinger, Philadelphia, Pa. Filed Jan. 23, 1882.
268,823. Car-Coupling: Alfred E. Poland, Minneapolis, Minn. Filed July 3, 1882.
268,825. Rolling-Mill: Jacob Reese, Pittsburgh, Pa. Filed May 22, 1882.
268,829. Car-Coupling: William J. Ross, Memphis, Tenn. Filed Oct. 27, 1882.
268,832. Pump: William Sellers, Philadelphia, Pa. Filed Feb. 27, 1882.
268,834. Car-Label Holder: Coroden J. Slafter, Grand Junction, Mich. Filed Feb. 10, 1882.
268,859. Gate for Car-Platforms: Arthur V. Briesen, New York, N. Y. Filed May 1, 1882.
268,868. Draw-Bar Spring: John F. Collins, New York, N. Y. Filed Sept. 9, 1882.
268,889. Furnace-Door: Harris Higgins, Chicago, Ill, Filed Oct. 13, 1882.
268,905. Car-Coupling: Franklin W. Kelly, Vermontville, Mich., assignor to himself and Elvin U. Stiles, same place. Filed April 24, 1882.
268,906. Drill-Rest for Lathes: John P. Kelly, Saco, and Lewis P. Sherman, Biddeford, Me. Filed June 27, 1882.
268,916. Railroad-Signal: Gustave Macquart, Red Bluff, Cal. Filed Jan. 5, 1882. Renewed Nov. 16, 1882.
268,923. Steam-Boiler: George Miles, Wellesley Hills, Mass. Filed May 4, 1882.
268,928. Rail-Coupling and Bed-Plate: John Ney, Sheridan, Cal. Filed June 12, 1882.
269,944. Miner's Lamp: James Sawyer, Freeburg, Ill., assignor of one-half to Washington de Bolt, St. Louis, Mo. Filed Sept. 11, 1882.
268,957. Derrick: Fredrick C. Starke and Peter J. Crowley, Milwaukee, Wis. Filed Oct. 11, 1882.
268,967. Cash-Railway: George Willett, Eaglewood, Ill., assignor of one-half to George Middendorf, same place. Filed June 26, 1882.
268,977. Dredging-Machine: Horace B. Angell, San Francisco, assignor of one-half to Thomas H. Williams, Oakland, and David Bixler, San Francisco, Cal. Filed June 19, 1882.
268,978. Tap-Wrench: Frank Armstrong, Bridgeport, Conn. Filed Oct. 3, 1882.
268,983. Railroad-Signal: David C. Baughman, Albion, Ind. Filed Feb. 15, 1882.
268,998. Car-Brake: Edwin H. Brown, Washington, D. C. Filed April 25, 1882.
269,012. Fluid-Pressure Railway Brake Mechanism: John W. Cloud, Altoona, Pa. Filed Oct. 25, 1882.
269,016. Railway-Switch: Charles Lee Cooke, Syracuse, N. Y. Filed June 3, 1882.
269,037. Escape-Door for Railway Cars: Thomas E. Flint, Middlebury, Va. Filed Sept. 23, 1882.
269,041. Marine Steam-Boiler: Ferdinand Funke, Evansville, Ind. Filed August 18, 1882.
269,042. Valve-Gear for Steam-Engines: Charles M. Giddings, Massillon, Ohio. Filed Oct. 26, 1882.
269,043. Car-Couplings: Ezra N. Gifford, Cleveland, Ohio. Filed Nov. 7, 1882.
269,048. Railway-Switch: Martin A. Green, Altoona, Pa. Filed July 17, 1882.
269,065. Head-Light for Locomotives: John Kirby, Jr., Ludlow, Ky., assignor to Post & Co., Cincinnati, Ohio. Filed July 13, 1882.
269,084. Railway-Gate: Judson O. McCutchan, Middlebrook, Va. Filed July 27, 1882.
269,092. Electric Locomotive: Eusebius J. Mclera, San Francisco, Cal., assignor of one-half to John C. Cebrian, same place. Filed Nov. 4, 1880.
269,103. Car-Brake: Harmon P. Notbohm, Janesville, assignor to Caleb N. Harrison, Milwaukee, Wis. Filed August 31, 1882.
269,106. Car-Coupling: John G. Peace and Eben B. Sankey, Salem, Mo. Filed August 28, 1882.
269,111. Globe-Valve: George Reimann, Quincy, Ill. Filed May 4, 1882.
269,114. Steam-Boiler: Garrie H. Rheutan, Hartford, Conn. Filed June 6, 1882.
269,142. Automatic Car-Brake: Charles Van Dusen, New Albany, Ind., assignor of one-half to William L. Breyfogle, Louisville, Ky. Filed Sept. 15, 1882.
268,146. Gas-Engine: Hermann Wiedling, Baltimore, Md. Filed April 13, 1882.
269,148. Valve for Engines: William Wise, Bay City, Mich. Filed August 12, 1882.
269,161. Street-Car Attachment: Conrad de Staebler, St. Louis, Mo., assignor of one-third to Benjamin R. Bonner, same place. Filed May 31, 1882.
269,163. Gas-Engine: Karl Teichmann, Stuttgart, Wurtemberg, Germany. Filed August 14, 1882.

Electrical Distance and Speed Indicator.

THEIR having been thoroughly tested on the Michigan Central Railroad with most satisfactory results, is good reason why space should be given to an account of the Electrical Mileage and Speed Indicators, manufactured by the Electrical Mileage and Speed Indicator Company, of Detroit, Mich., under patents owned by Mr. E. R. E. COWELL, of the same city.

The Mileage Indicator takes its motion from a magnet connected with the revolving axle by a simple cast-iron commutator and wires. As 480 revolutions of the forty-two-wheel, and 610 of the thirty-three-wheel make a mile, an exact measurement is made easily. The device is very simple but effective. Tested over a ten thousand mile run, not one mile was lost.

An Electric Signal, coupled automatically throughout the train, is another of Mr. Cowell's inventions, manufactured by the company above named. It is intended to supersede the bell-rope with its many imperfections and shortcomings, and has been aptly described as "the bell-rope of the future." No matter what the length of the train, it gives a perfect and instantaneous signal to the engine-driver.

Arrangements are in operation for the formation of a stock manufacturing company for making these inventions. Books are open at the office of the Electrical Mileage and Speed Indicator Company, Detroit, Mich., in which city it is proposed to conduct the manufacture of these valuable railroad appliances. The Company invite inquiries, which are answered promptly.

Jacob's Car-Coupling.

LETTERS patent No. 267,210 have been granted IRVIN M. JACOBS, East Greenville, Montgomery county, Penn., for his improvements in automatic car-coupling. These consist of the combination, with an arrow-shaped draw-head, pivoted at the outer end of a draw-bar, of flat springs fixed on opposite sides of the draw-head and bearing with their free ends against the sides of the draw-bar. Detailed information is sent to applicants by the patentee.

Mr. Jacobs's invention admits the use of the pin and link system. It is described as certain in its action, insuring absolute safety in coupling and uncoupling cars of either class. The cost of the coupling is but little more than that of any first-class pin and link coupling now in use. Free in itself from the inconveniences of the pin and link system, especially that occasioned by the loss of parts, it couples with the pin and link coupling, when so required. Further information furnished on application to I. M. Jacobs, East Greenville, Montgomery co., Pa.

The Miller Padlock.

THIS padlock is for sale by FAIRBANKS & Co., No. 311 Broadway, New York City. It is made of brass, with springs of phosphor bronze. The keys are small and flat, and the lock being entirely of brass. They are not injured by rust or weather. Padlocks after the Miller construction have been used for several years as switch and car locks, it is claimed, with entire satisfaction. They are used by the revenue department and the express companies because of the security afforded by them. No two of these locks will pass the same key, unless made so to order, and owners must register them in order to be able to replace lost keys, which cannot be done unless this has been effected. Railroad and other large users have their names cast upon thelock cases.

Value of Smoke.

A COMPANY at Elk Rapids, Michigan, which manufactures fifty tons of charcoal iron a day, formerly allowed the smoke made in burning the coal to go to waste. Now the smoke as it is formed is delivered into stills charged with lime and surrounded by cold water, the result of the condensation being, first, acetate of lime; second, alcohol; third, tar; the fourth part produces gas, which is consumed under the boilers. A thousand cords of wood are converted into charcoal daily, yielding 2,800,000 cubic feet of smoke, from which are obtained 12,000 pounds of acetate of lime, 200 gallons of alcohol, and 25 pounds of tar. The alcohol has been contracted to a firm in Buffalo, N. Y., for five years, they furnished the packages and receiving it at the works at eighty cents per gallon.

American Railroad Journal.

ESTABLISHED 1831.

Steam Navigation, Commerce, Finance, Machinery, Mining, Manufactures, New Inventions.

SECOND QUARTO SERIES.—VOL. XXXVIII., No. 51.] NEW YORK, DECEMBER 23, 1882. [WHOLE No. 2,434.—VOL. LV.

THE editor of the RAILROAD JOURNAL is pleased to receive information of railroad enterprises already entered upon or projected, items regarding the business done on the roads, such as relate to persons employed in the rails road and kindred interests; in short, about all matter which the readers of such a paper as this are gratified to find within its columns.

INCORPORATION.

THE Citizens Street Railway Company, of Springfield, Ohio, has been incorporated with a capital of $100,000.

THE American Live-Stock and Meat Transportation Company, with a capital of $1,000,000, was incorporated at Albany on the 19th inst.

ARTICLES of incorporation of the "Consolidated Vanderbilt Mining Company" were filed on the 19th inst., in Milwaukee, Wis. The capital stock is $1,200,000 and the object is "general mining in Mexico and elsewhere."

ARTICLES of incorporation have been filed at Albany, N. Y., of the New York, Richfield Springs and Cooperstown Railroad Company, capital $6,000,000. The road is to begin at or near Fort Plain, and run in a southwesterly direction to Richfield Springs, with a branch to Cooperstown, through the counties of Montgomery, Herkimer and Otsego.

A CERTIFICATE of incorporation of the Automatic Elevator Hatchway Door Co. of Baltimore City, was filed in the office of the clerk of the Superior Court on the 16th inst. The board of directors are John H. Williams, Charles W. McCoy, Granville O. Wilson, Nathaniel P. Williams, Jr., Paul Turner and I. Parker Veazey, of Baltimore; and J. C. Hammett, of New York. The capital stock is $26,000, divided into 260 shares, each of $100 par value.

A CERTIFICATE of incorporation was filed at Albany on the 16th inst., of the Manhattan Beach Extension Railroad Company; capital, $100,000. The road commences at a point of junction with the New York and Manhattan Beach Railway, near Coney Island Creek, in the town of Gravesend, and runs thence westerly to a point of junction with the railroad of the Coney Island Elevated Railroad Company, a distance of about three-quarters of a mile.

ARTICLES of incorporation were filed with the Secretary of State of Arkansas, on the 14th inst., of the Fort Scott and Southern Railroad Co. The road is to extend from Fort Smith through Sebastian and Scott counties to the town of Waldron. The directors are James C. Gilbreath, Wm. B. Turman, Wm. J. King and Thos. Davenport. The capital stock amounts to $350,000 in shares of $100 each, and much of it has already been taken up. The road is fifty miles in length, and work on it will soon be commenced.

THE St. Louis and Chicago Railroad Company has filed articles of incorporation in the office of the Illinois Secretary of State. The line is to begin at East St. Louis, in the county of St. Clair, Ill., running in a northerly direction through the counties of St. Clair, Madison, Macoupin, Montgomery, Sangamon, Logan, DeWitt, and McLean, Ill. Its termination will be near the city of Litchfield. The capital stock is $3,000,000. The incorporators are Robert H. Hazelett, Springfield; Humphrey H. Hood, Litchfield; Thomas C. Kirkland, Montgomery county; Isaac Morrison and Lewis S. Olmstead, Jacksonville. The incorporators compose the board of directors for the first year.

PERSONAL.

GORDON L. FORD has been elected president of the Brooklyn, Flatbush and Coney Island Railroad in place of the late Henry C. Murphy.

THE directors of the Maine Central Railroad Company have unanimously re-elected Payson Tucker vice-president and general manager of the road.

COL. ORLAND SMITH has resigned as general manager of the Columbus, Hocking Valley and Toledo Railroad, to accept the third vice-presidency of the Baltimore and Ohio Railroad Co.

JAMES CONNOLLY, of Easton, Penn., who has been assistant superintendent of the Easton and Amboy Division of the Lehigh Valley Railroad for some time past, has been made General Superintendent of the road.

THE directors of the International Railway of Maine held a meeting at Bangor on the 14th inst. and elected J. H. Pope, of Cookshire, Quebec, as president; Noah Woods, of Bangor, vice-president; James F. Rawson, of Bangor, clerk, and C. F. Woodward, of Bangor, treasurer.

AT a meeting of the directors of the Northern Central Railway Company in Baltimore on the 14th inst., the following official appointments were confirmed, and will take effect January 1: Robert Neilson, at present general superintendent of the lines from Marysville to Canandaigua, to be general superintendent of all the lines of the company; A. O. Dayton, at present superintendent of Motive Power at Williamsport, to be superintendent of Motive Power of all the lines of the company; G. O. Wilkins, at present general superintendent of the Baltimore division, to be general agent at Baltimore; H. W. Kapp, at present train master, to be superintendent of the Baltimore division.

CONSTRUCTION.

THE survey of the Canada Southern Cut-off from Welland to Clifton has been completed.

THE preliminary survey of the Arkansas and Louisiana Railroad has been completed from Hope to Magnolia.

THE Mexican Government has extended for six months the time for commencing work upon Gen. Grant's Mexican Southern Railroad.

A RAILROAD is to be built from the Brazil (Ind.) coal district to connect with the Louisville, New Albany and Chicago at Bainbridge.

THE California Southern Railroad Company commenced on the 11th inst. the survey of its line from Colton, the present terminus, to San Bernardino.

THE president has accepted 250 miles of new road on the Atlantic and Pacific Railroad—200 miles in Arizona and fifty miles in the Indian Territory.

ABOUT 800 men are at work between Washington, Penn., and Pittsburgh, preparing the Pittsburgh Southern for the Baltimore and Ohio cars, and building the new track from Finleyville to the Monongahela River.

THE railroad from the Cranberry iron mines in Mitchell county, N. C., to Bristol, Va., is now in operation, and considerable North Carolina iron is now going out of this State in that direction.

THE St. John *Telegraph* says that a syndicate composed of John McDougall, Robt. Cowans, and David Morrice of Montreal; James Crossen of Cobourg; R. G. Leckie of Sherbrooke and L. A. Senecal of Montreal, have purchased a controlling interest in the stock and bonds of

the Spring Hill and Parrsboro Railway and Mining Company, with the intention of putting the road in first-class working order and developing the coal areas, which are said to be very valuable.

THE Portage, Westbourne and Northwestern Railway was transferred to the Allan Syndicate on the 16th inst. Trains are now regularly running on this road as far as Gladstone and fifteen more miles will be finally completed in the course of three or four weeks.

STEPS are being taken to secure the right of way from Coshocton, Ohio, to Wheeling, W. Va., for the extension of the Mt. Vernon, Coshocton and Wheeling Railroad. Engineers are now locating the road between Columbus and Mt. Vernon. Its western terminus will be Marion.

THE last rail connecting the two ends of the Chicago and Atlantic Railroad was laid recently between Huntington and Rochester, Ind. This opens up a new and important route between the East and West. This road will be run in connection with the New York, Pennsylvania and Ohio, close connection being made at Marion, Ohio.

THE Marquette, Houghton and Ontonagon has let contracts for grading a portion of its thirty-mile extension from L'Anse to Houghton. This extension is expected to cost about $500,000, and will be opened for business next year. Bonds to cover the cost will be issued in 1883. The company has ample funds to begin work with. A land grant of about 70,000 acres will, it is said, be secured by the construction of this line.

AT the meeting of the directors of the International Railway of Maine, held at Bangor, Me., on the 14th inst., the report of the engineer in regard to the location of the line was accepted. The statement was made that ten miles of road from the northwestern boundary into Maine were now under contract and ten miles more will be let to contractors within a few days. The expression of the directors was unanimous that the road will be pushed to early completion.

SEVENTY-ONE miles of fourth track have been completed on the New York division of the Pennsylvania Railroad this year, and fifteen miles are in progress. Nearly three miles of third track have been laid on the Kensington branch. Fourteen miles of fourth track between New Brunswick and Amboy Junction are under contract, and early next year fourth tracks will be laid from Germantown Junction to the North Pennsylvania Junction. Every car to be obtained is employed in transporting freight, and engines as fast as they can be procured are put in service.

LAST week 7.4 miles of new track were laid upon the western division of the Atlantic and Pacific Railroad, and the end of the track is now 443 miles west of Albuquerque, 400 miles of which have been examined by the Government Commissioners. One hundred miles of the central division in the Indian Territory, starting from Seneca, westward, have also been completed. This leaves a gap of some 600 to 800 miles between the two divisions for future operations. May 1, 1883, is the time now set for reaching the Colorado River and the California Southern Railroad.

THE formal opening by the Wisconsin Central Railroad Company of their new line known as the Milwaukee and Lake Winnebago line, from Milwaukee to Neenah, by way of Fond du Lac and Oshkosh, took place on the 18th inst. The new line is sixty-five miles in length and gives the Wisconsin Central Company a complete line from Milwaukee to Ashland. This has been constructed in the most approved manner, with all steel rails, and at a total cost of $1,950,000, which is $30,000 per mile. This includes all equipage and necessary buildings. The equipment of the road now consists of 50 locomotives, 1,562 freight cars, 28 passenger cars and 5 sleepers. It has 70 station agents and about 800 employés. The monthly payroll amounts to between $50,000 and $60,000.

ORGANIZATION.

THE directors of the Cincinnati and Eastern Connection Railway Company, elected on the 12th inst., are: W. R. McGill, G. H. Wilber, S. Woodword, O. H. Hardin, W. Mansfield, N. R. Thompson, M. Jamieson, H. Feike and J. W. Henley.

THE directors of the Dorchester and Delaware Railroad Company, elected on the 13th inst., are: John Webster, E. S. Johnson, Dr. R. G. Ellegood, John N. Wright, E. R. Goslin, Isaac H. Wright and M. S. Fletcher. President, John Webster; treasurer, E. S. Johnson.

THE incorporators of the Duluth and Winnipeg Railroad have elected the following board of directors: W. W. Spaulding, R. C. Mitchell, H. M. Peyton, James Bardon, A. M. Miller, A. J. Sawyer and J. C. Hunter, all local. The new board elected W. W. Spaulding, president; A. M. Miller, vice-president; and J. C. Hunter, secretary and treasurer.

AT the annual meeting of the shareholders of the Hartford and Connecticut Western Railroad Company, held in Hartford, Conn., on the 19th inst., the following board of directors was elected: W. L. Gilbert, of Winsted; Thos. Connell, R. B. Carpenter and S. G. Dimock, of Rondout, N. Y.; C. T. Hillyer, L. B. Merriam, and J. F. Jones, of Hartford; Frederick Miles, William H. Barnum, A. H. Holley and L. Dunning, of Salisbury; E. T. Butler, of New York; and J. O. Phelps, of Simsbury.

THE directors of the New York and Boston Inland Railroad Company, elected on the 14th inst., are: George Cook, George E. Spare, P. B. Adams, N. W. Merwin, Samuel W. Hurlbut and John B. Adriance, of New Haven; Edward N. Shelton and H. A. Nettleton, of Birmingham; William Roach, of Boston; H. A. Blood, Pittsburgh, Pa.; F. L. Ham, of Peabody, Mass.; Charles B. Bigelow, of Clinton, Mass. President, George Cook; secretary, George E. Spare; treasurer, J. H. Boardman, of Birmingham.

AT a meeting of the directors of the Chicago, St. Paul, Minneapolis and Omaha Railway Company, held in this city on the 14th inst., W. K. Vanderbilt, Cornelius Vanderbilt, Augustus Schell, M. L. Sykes, H. McK Twombly, Albert Keep, J. C. Spooner and Marvin Hughitt were elected new members, taking the places of H. R. Bishop, J. M. Fiske, A. Kountze, H. T. Wells, R. R. Cable, E. T. Drake, H. H. Porter and Benjamin Brewster. Of the old board yet remaining are David Dows, Roswell P. Flower, Philetus Sawyer, W. D. Washburn and A. H. Wilder. H. H. Porter resigned the presidency and Marvin Hughitt was elected in his place. M. L. Sykes was elected vice-president in place of Philetus Sawyer. Mr. Sykes was also elected treasurer and assistant secretary. C. W. Porter retains the position of secretary. S. O. Howe was elected assistant treasurer.

Eastern Railroad.

THE gross earnings of the Eastern Railroad Company for the years ending September 30, 1881 and 1882, were as follows:—

	1881.	1882.
From local passengers	$1,407,660 68	$1,538,344 27
From foreign passengers	203,369 70	227,912 86
From extra baggage	3,153 99	4,087 29
From express	69,292 14	70,432 03
From mails	48,874 64	63,079 70
From local freight	1,020,678 81	1,095,750 65
From foreign freight	278,169 27	297,944 99
From property	41,239 35	79,047 57
From miscellaneous	22,235 16	26,477 70
	$3,094,273 74	$3,403,077 51

The operating expenses for the year ending Sept. 30, 1882, were:—

Maintenance of way	$313,620 73	
Maintenance of bridges	67,976 68	
Maintenance of buildings, etc	116,888 22	
Maintenance of cars	241,894 43	
Motive power expenses	680,627 73	
Freight transportation expenses	276,380 34	
Passenger transportation expenses	239,317 88	
Injuries and damages	36,000 00	
Telegraph expenses	30,184 08	
Crossing expenses	49,159 22	
Drawbridge and signal expenses	29,737 29	
Switchmen and watchmen	32,782 44	
Removing ice and snow	12,887 03	
Salaries office and general expenses	47,405 35	
Legal expenses	19,881 35	
Insurance and fire losses	15,070 82	
Taxes	63,221 07	
Tenement expenses	11,436 35	
East Boston wharf expenses.	8,496 83	
		2,292,967 84
Net earnings		$1,110,109 67

Which are accounted for as follows:—

Interest accrued, for eleven months at 4½, one month at 6, per cent	$674,438 72	
Rent of leased roads	218,329 99	
Filling Charlestown flats	15,329 33	
Alterations Lewis street wharf, East Boston	16,444 19	
Salem electric signal	1,140 03	
Charlestown hay-sheds and paving	30,897 04	
Land purchased of State	3,248 00	
Steam-shovel	7,998 48	
Additional tools for shops	8,187 25	
Construction Chelsea Beach Railroad (bridge etc.)	5,974 43	
Three additional locomotives	31,570 95	
Twelve additional passenger and baggage cars	53,425 00	
Investment in Portland, Bangor, Mount Desert, and Machias Steamboat Company, less amount received for sale of Chambly bonds, etc.	7,323 44	
Total		1,074,306 85
Leaving surplus of		$35,802 82

Compared with the year 1880–81 the gross earnings of 1881–82 show an increase of $308,803.77, with an increase in expenses of $323,294.97, making a decrease in the net earnings of $14,491.20. The report says:—

Included in operating expenses are the fol-

lowing large items, many of which are really improvements and additions to the property of the road: Nineteen new passenger cars, less amount received for old cars sold, $51,816.43; thirty box freight cars, five caboose cars, one box-car (ice-cutter), forty-seven eight-wheel flat cars, thirty four-wheel dump-cars, etc., $40,071.35; also paid toward extinguishment of Car Trust, representing value of thirty box-cars and twenty-seven flat cars, $24,333.33. Of the above specified new freight cars, twenty-eight take the place of cars condemned; the payments therefore represent the value of one hundred and twenty-six and a half eight-wheel freight cars added to the rolling-stock of the road, all of which is included in operating expenses. Three new locomotives, less value of old, $31,912.57; steel and iron rails, $67,865.79; 123,337 new ties, $41,283.93; bridges, renewal and repairs, $67,976.68; water-stations, $32,641.04; repairs of buildings, including new stations, $84,247.18.

The value of the property has increased year by year until it is believed the condition of the road will bear comparison with that of any other in the vicinity

	Miles.
The main line and double track between Boston and Portland is all in steel	142.15
The Saugus branch is all in steel	9.55
The Gloucester branch is all in steel (except 9,985 feet)	15.05
The Conway division has of steel	6.09
The other branches, etc., have	4.89
Total steel track	177.73

During the year 55,530 ties, and 183,349 feet of other timber, have been kyanized at our Portsmouth Works, at a cost of about $2.32 per thousand feet; it is believed the process will materially add to the life of the material, and eventually lead to a large reduction in item of expense of ties and other exposed timber.

It has been the policy of the management to stimulate the growth of the passenger traffic, devoting special attention to the local and suburban business, by giving the public increased accommodations in both the number and speed of passenger trains, and in new equipment of cars and locomotives.

The figures appended may serve to indicate the satisfactory result of this policy as shown by the increase of traffic and earnings.

The miles run by passenger trains have increased from 1,084,615 in 1878–79 to 1,369,704 in 1881–82, an increase of 25 per cent; whereas the number of passengers carried has increased in the same time 2,069,339 passengers, a gain of 46 per cent; and the passenger earnings have increased from $1,451,857 in 1878-79 to $1,903,856 in 1881–82, a gain of $451,999, or 31 per cent.

The freight traffic has also largely increased; the earnings of the past year being $405,651 in excess of those of 1878–79, a gain of 41 per cent.

The heavy outlay for expenses necessitated by this increased traffic has been more than provided for by the earnings, and the net earnings of 1881–82 show a gain of nearly 12 per cent as compared with those of 1878–79.

The improvement in the financial condition of the company is also a marked one, as may be seen by reference to the General Balance Sheet of Sept. 30, 1882. The immediate cash assets, exclusive of investments, etc., are $780,081.54; the current floating debt for traffic balances, accrued interest, etc., is $728,609.95—making a net cash asset of $51,471.59.

The length of main line of road is as follows: Boston to New Hampshire State line (owned), 41.45; State Line to Portsmouth (leased), 15.84; Portsmouth to Maine State Line (leased), 0.24; State Line to Portland (leased), 50.76; Conway Junction to North Conway (leased), 71.37—total length of main line, 179.66. The branches owned by the company are as follows: East Boston (double-track, 1.29), 3.47; Charlestown, (all double-track,) 1.09; Saugus, 9.55; Swampscott, 3.96; Marblehead, 3.52; Lawrence (double-track, 1.64), 19.89; South Reading, 8.12; Gloucester, 16.94; Essex, 5.48; Asbury Grove, 1.06; Salisbury, 3.79—total length of branches owned, 76.87. Branches leased: Newburyport City Railway, 2.24, Portsmouth and Dover Railroad, 10.88; Wolfsborough Railroad, 12.03; Chelsea Beach Railroad, 1.78—total length of branches leased, 26.93; making the total length of road and branches operated by the company, 283.46, on which there are 37.88 miles of double-track—33.86 on the main line, and 4.02 on the branches; besides which there are sidings and other tracks, not above enumerated, the aggregate length of which is 90.60 miles, a total length of track of 411.94 miles, of which 177.73 miles are laid with steel rails.

The equipment of the road consists of 102 locomotives, with 2 spare tenders; 171 passenger, 1 parlor, 1 directors', 37 baggage, 4 mail, 3 express, 2,044 (equal to 1,880 on a basis of 8 wheels) freight, and 127 (equal to 74½ on a basis of 8 wheels) gravel, tool, boarding, pile-driving, derrick and stone cars, and 23 snow plows on wheels. Of these, 83 locomotives, 170 passenger, 1 parlor, 1 directors' 35 baggage, 4 mail, 1 express and 1,661 (equal to 1,446 on a basis of 8 wheels) freight and other cars, and 19 snow-plows are owned by the company.

The number of miles run by locomotives with passenger trains was 1,296,988; with freight trains, 718,809; switching, 455,722; working trains, 101,674—total, 2,573,193. Miles run by freight cars, 13,493,693; by passenger cars, 5,628,735.

Number of foreign passengers carried, 192,173; do. local (including season) 6,411,914—total, 6,604,087. Total number of passengers carried one mile, 93,871,712. Av. distance traveled per passenger, 14.21 miles; av. rate of fare per mile received from all passengers, 1.881 cent.

Number of tons of foreign freight carried, 248,355; do. local freight, 1,009,344—total, 1,257,699. Total tons of freight carried one mile, 68,479,129. Av. length of haul per ton of freight, 54.44 miles; av. rate received per ton per mile for all freight, 2.035 cents.

PROFIT AND LOSS ACCOUNT.

DEBIT.

Balance Sept. 30 1881		$9,667,695 70
Account transferred	$855 12	
Worthless bills, and accounts charged off	2,264 83	
Operating expenses for the year	2,292,967 84	
Interest for the year	674,438 72	
Rent of leased roads for the year	218,329 99	
Total debits for year		3,188,856 50
Total debit		$12,856,552 20

CREDIT.

Increase in value of Maine Central stock	$358,145 17	
Difference between value of Portland, Bangor, Mt. Desert, and Machias S. B. stock $15,000 00		
And amount of same paid from earnings 7,323 44		
This difference of being paid from sales of bonds, and other moneys not previously standing as assets on the books.	7,676 56	
Gross earnings for the year	3,403,077 51	
Total credits for the year		3,768,899 24
Balance to next year's account		$9,087,652 96

—which includes stocks of uncertain value as follows: 5,513 shares stock in Portsmouth, Great Falls and Conway Railroad, and 3,490 shares stock in Wolfeborough Railroad.

GENERAL BALANCE SHEET SEPT. 30, 1882.

Construction		$7,764,127 19
Equipment		1,048,695 95
Real estate		95,450 00
Stocks, bonds, etc.		1,258,507 81
Materials and supplies on hand		347,491 43
Cash on hand		124,412 46
Bills receivable		2,768 32
Due from agents		77,060 72
Due from Railroad Companies and others		115,970 16
Other debit balances		112,378 45
Profit and loss		9,087,652 96
Total resources		$20,034,515 45
Capital stock		$4,997,600 00
Funded Debt:		
Certificates of indebtedness (U. S. Gold)	$10,355,000 00	
Scrip certificates of indebtedness (U. S. Gold)	330 65	
Certificates of indebtedness Sterling (£630,900)	3,070,274 85	
Ten-year coupon notes to be funded	4,000 00	
Essex railroad bonds	194,400 00	
		13,624,005 50
Mortgage notes		684,300 00
Floating Debt:		
Notes payable	$112,378 45	
Current bills and pay-rolls audited	211,598 18	
Current traffic balances and accounts payable	239,349 85	
Coupons uncalled for	37,633 12	
Accrued interest uncalled for or not yet due	84,834 57	
Dividends uncalled for	15,817 00	
Injury fund	17,612 12	
Credit balances	9,386 66	
		728,609 95
Total liabilities		$20,034,515 45

President.—E. B. PHILLIPS.

Directors.—George S. Morison, George P. King, John Cummings, Alfred P. Rockwell, Richard Olney, Samuel C. Lawrence, Jacob C. Rogers, Charles Houghton, Elijah B. Phillips.

Treasurer.—N. G. CHAPIN.

Auditor.—C. S. SARGEANT.

Master of Transportation.—D. W. SANBORN.

Purchasing Agent.—G. J. FISHER.

Improved Mining Apparatus.

SOME improvements have been lately introduced in the English mines, intended to prevent the great wear in the ropes by one coil chafing against the other, and obviating the necessity for coiling the ropes round the drums usually employed. In this new arrangement there is used a single winding rope, an upper set of grooved head-gear pulleys and a lower set of grooved winding pulleys, each consisting of two pulleys and an intermediate grooved pulley between the two sets. The rope is attached to one end of the cages, passes over one of the head-gear pulleys, under one of the winding pulleys—to which motive the power is applied—and back over the intermediate pulley, then under the other winding pulley, and thence over the other head-gear to the other cage, to which the end of the rope is attached. By this simple plan not only is the greater durability of the rope necessarily insured, but all tendency to slipping off the rope is entirely obviated, because in proportion as the weight of the load is increased, the adhesion of the rope is augmented. Again, the bearings of the intermediate pulley may be carried in a movable frame, either inclined or otherwise, so as to admit of the pulley being adjusted as required, in order to maintain the rope taut.—*The Tradesman.*

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WE invite railroad officers to send us notice of elections, transfers, appointments, resignations, etc.; and all our readers would oblige us by furnishing for our columns any items of personal information, which may come to their knowledge, and are adapted to this department. We aim to record all new railway enterprises in the United States and Canada, and to note the progress of construction on all new roads and extensions; and we request all concerned in railway building to give us early information regarding the above, that our reports may be as complete as possible.

Subscribers are requested to report to our office any irregularity in receiving the JOURNAL.

Contributed articles relating to Railroad matters generally, Mining interests, Banking and Financial items, Agricultural development, and Manufacturing news, by those who are familiar with these subjects, are especially desired.

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New York Saturday December 23, 1882.

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WHO SHALL CONTROL THE RAILROADS?

THE Government functionary who was originally appointed to audit the accounts of the Pacific Railroads with the United States, then styled "Auditor of Railroad Accounts," but who has recently, after the type of the office-holder, bloomed out into all the importance of "Commissioner" of Railroads, in his Annual Report to the Secretary of the Interior, after alluding to the Pacific Railroad accounts with the Treasury, takes occasion to give his views upon the subject of Railroad Rates and Control; and, as might be expected, he is greatly in favor of their being controlled through a bureau of the Federal Executive. He cites the fact that twenty-one States, in some form or other, have adopted Railroad Commissioners, and infers because the sphere of the State Railroad Commissioners is confined to their separate respective States, that a Federal Railroad Commissioner is necessary in order that inter-State commerce may be "regulated." "The power," he says, "of Congress over the whole subject can hardly be questioned. The Supreme Court of Illinois concedes it, and the decisions of the Supreme Court of the United States seem to render it indisputable." It is unfortunately too true that the Supreme Court of the United States in the "Elevator" cases, and in what are known as the "Granger" cases, has lent its great authority to the prevailing delusion that political bodies may somehow rightfully prescribe the duties and compensation of railroads. It may be necessary to carry this spurious doctrine out to its legitimate conclusion, to show that it is nothing more nor less than a concealed form of communism, before the Court will retrace its steps. Whenever the majority, whether by votes or by main force, seek to take possession of property which they have not acquired by honest earning, or to dictate the compensation that an individual or corporation shall receive for its services where no monopoly is granted, then we have introduced the first steps of anarchy; the incentive for associated effort and for saving disappears as if by enchantment, and the safeguards are lacking which have held together society in the most powerful and respected nations.

Commissions are the fancy of the day. No State government, it would seem, is complete without one; and the Legislatures of our day are amusing themselves by setting up this plaything with the expectation that, in some way, it will work wonders in the matter of transportation. Perhaps as a cushion between the public clamor on the one side and vested property interests on the other the Commissioners may temporarily perform a useful function. But it is idle and chimerical to suppose that any political body, whether it be a Legislature, a Congress, or an organ acting for them in the name of a Commission, can continue to regulate the rates of freight and passage over the immense network of railroads in this country. The attempt to form a commission of the kind in this State by a representation of the different classes of community, including the anti-monopoly party, is a ludicrous thing. Nothing more is to be expected from it than that new offices will be created, and a few persons, more or less, well-paid for doing ornamental and perfunctory duty.

Attempts will be made, no doubt, in Congress to pass some measure like the Reagan Inter-state Commerce Bill. The proposal for a National Commission may be looked upon as a sort of antagonist to that foolish proposal. Commissioners being the fashion, Congress may be induced to create one; but where are the men that are competent to perform the duties? It is easy enough to make offices, and to prescribe the work; but quite another matter to find men capable of filling them properly.

The action of the four trunk lines between Chicago and St. Paul, and Chicago and Omaha, in resorting to unrestrained competition, is probably one of the weightiest arguments that can be adduced in favor of political commissions. Railroad presidents and managers owe it to themselves and to the great property and industry they are to care for, that these unseemly squabbles should not be allowed to go the length of inviting the politicians to take part in their disputes. As has been advocated in this JOURNAL repeatedly, if the railroad companies will themselves organize a Court of Appeal, not unlike in function the present Trunk Line Board of Control, to decide these disputes between the railroad companies themselves, and allow Chambers of Commerce, Boards of Trade and Transportation, and other parties to appear before it, and present grievances on the part of the public, they will do much to forestall all this monopoly agitation, and bring about a more stable and prosperous state of things.

It is evident that railroad property is threatened by a new danger—the danger of excessive and ruinous paralleling of roads; duplication of lines into territory heretofore exclusively served by one party or the other. The attitude of President PORTER, of the Omaha road, asking for an arbitration on the subject of "invasions" of the territory of a neighbor for competitive purposes, points at the imminent peril to railroad property. Some such body will

have to be "evolved" out of the necessities of the railroads themselves, or the Legislatures will be prompt to take advantage and get the masses of men imbued with the idea that they can by their voting power take possession of the property of other people against their consent, and without compensation. This is to drift into turbulence and instability.

Men like Mr. VANDERBILT, when they are beset at Albany by hostile legislation, may mistakenly welcome the effort of intervention from Federal interference. As was stated very tersely by one of the New York railroad men, "The railroads will have to own the Commission, or the Commission will have to own the railroads." Ownership is the characteristic of control; and however many laws may be made, or however Commissioners may be appointed to watch and regulate business with the railroads, it will still remain true that the owners of the railroads must, in the end, control them.

Until, by some process, they can invent a law with a new power which will compel a man to work without compensation, or to give the use of his property for less than he thinks it is worth, all such attempt at regulation must come to naught; and inasmuch as they are mere impediments to be supported either by money raised from taxation, or by money saddled upon commerce and transportation, the fewer such intermediaries between the shipper and the carrier the better. Commissions emanating from among the carriers themselves are necessary, and will save ten times their cost; but Commissioners imposed from without by the political power, in the long run strike at the foundations of property and good government.

WE once more direct attention to the coming National Exposition of Railway Appliances, to be held in Chicago, and to be opened on Thursday, May 24, and closed June 23, 1883. Arrangements for exhibits should be made as promptly as possible. An advertisement in this issue gives all necessary information on this head. The project is being promoted by so many eminent railroad men that its success is assured. Inventors and manufacturers have, in the coming Exposition, an enviable opportunity of making those persons acquainted with their productions whose knowledge is the most likely to result in profitable business. The exhibition will be on a scale of great magnitude and certainly will be one of the most important events in the history of railroad development in the United States.

THE Jamestown (N. Y.) Oil Exchange was organized on the 16th inst., with 150 members and $15,000 capital stock. A. M. Lowry was elected president, and K. W. Ingham, secretary.

ADVERTISE in the RAILROAD JOURNAL.

RAILROAD MEDICAL SERVICE.

[*Continuation of the French System.*]

BY S. S. HERRICK, M. D.

SECRETARY OF BOARD OF HEALTH, STATE OF LOUISIANA.

THE NORTHERN RAILWAY.

THE printed regulations of this company, dated 1874, have just reached me, and some points are here noted as worthy of attention:—

As a rule, injuries and diseases contracted in the line of duty entitle one to free medicines; and only those can claim them who occupy subordinate positions.

In addition to the relief-chests, amputation-cases, stretchers and certain other surgical appliances deposited at stations designated by the board of directors, every passenger train is provided with a relief-chest.

The commissioned physicians of the company receive for their services an annual fixed salary. The board of directors, having discovered from the annual reports of the physician-in-chief that many of the applications for medical relief came from men afflicted with organic maladies long previous to entering the company's service, determined to take measures to prevent this evil. It was decided to admit no one into the permanent employ of the company without a certificate from a company's physician of physical fitness for his particular duty, and of his freedom from any organic affection or manifest or hidden infirmity which might disable him for service.

Any degree whatever of organic heart trouble, or any predisposition to tuberculosis, would be reason for rejection. Particular attention was called to perfection of vision (with special reference to color-blindness), to freedom from varicose veins and rupture, among all men applying for train service, such as conductors, engineers, firemen, brakemen, and also switchmen, road laborers and shop operatives.

In the circular published at the end of 1880, are special directions for testing the visual faculty.

1. The outward appearance of the eyes is examined with reference to the eyelids, the lachrymal ducts, the conjunctiva, the cornea and the pupil. The result is indicated by the terms *good*, *ordinary* and *bad*. Any special lesion or defect is noted under the head of "observations."

2. The *Visual Field* is determined by comparing the candidate's extent of distinct vision with that of the examiner.

3. *Visual Acuteness* is determined by the use of Snellen's test-types. Certain grades are read at known distances by normal eyes, and inability to read at the usual distance indicates short sight in proportion to the nearness required for distinct vision.

4. The *Chromatic Sense* is determined by colored worsteds. Whenever a candidate is found to make repeated mistakes, or to hesitate in matching the skeins, he is re-examined by the physician-in-chief before being finally condemned.

The above qualifications must be possessed in a higher degree by engineers, firemen, conductors, gate-keepers, switchmen and road laborers, than by those engaged in office work. Attention is called to the liability of typhoid fever, cerebral affections, the abuse of alcohol and of tobacco to injure the appreciation of colors and visual acuteness.

PHYSICIAL EXAMINATION OF EMPLOYÉS.

A circular, dated July, 1872, from the physician-in-chief of the Paris, Lyons and Mediterranean Railway to his subordinates, calls attention to the necessity of applying stricter tests of the vision and hearing of certain classes of employés, such as locomotive engineers, firemen, switchmen, agents and attendants of stations, conductors of trains, workmen upon the tracks and female gate-keepers.

The examination of the eyes does not differ materially from the method previously noted. With reference to hearing, the external condition of the ears was to be observed, and the degree of sensibility to be determined by the distance at which the ticking of a watch could be heard.

A circular of the same company, dated 1864, contains a nomenclature of diseases and infirmities which are absolute causes of corporeal disqualification or relative cases of disrating for employés of the active service. In this list are recited a large number of maladies, under 68 different heads. Six of these are affections of the skin, including leprosy, syphilitic ulcers and lupus among others less severe. Four are maladies of the brain and nervous system, viz: convulsive affections, delirium tremens, paralysis and mental alienation. Eye disorders number twelve, the most important of which are nearsightedness, color-blindness, and cataract Of the ears, deafness, well marked and chronic, is the only infirmity named. The nose and the mouth each furnishes two ailments, which are rather uncommon. Of the neck, we find four infirmities enumerated, which in reality comprise several more, including wry-neck, scrofulous and cancerous tumors, goitre, chronic affections of the larynx, etc. Maladies of the thorax, four in number, have reference chiefly to diseases of the bones. For the lungs and respiratory passages, we find pulmonary consumption, chronic catarrh and asthma. Organic diseases of the heart, under two heads, include the various affections of the walls, valves and pericardium, and aneurisms. Abdominal ailments, under six heads, include a great variety of different organs. Those of the genito-urinary organs number eight, mostly grave disorders, but some not involving total disability. Disorders of the limbs, under ten heads, might count many more as separate ailments, and are mostly of a serious nature. Constitutional infirmities, under two heads, include the scrofulous, scorbutic, tuberculous and cancerous taints, and natural feebleness.

From the foregoing it is apparent that the French method of engaging railroad employés is, in reality, like the marriage formula of "taking for better or worse," but with the superadded precaution of obviating the taking for worse. It is in fact like enlistment in the army and navy, by a preliminary examination, with a consequent obligation provided for them in sickness and health. In consequence the companies retain their picked men, rather than examine and try new hands; the men, on their

part, become attached to a service where their allowances for relief gain in certainty and degree by lengthened employment.

A superficial view of such an arrangement might indicate that its benefits are rather one-sided, in favor of the employés; but it may be presumed that the managers understand their business, and find their interest in securing permanent engagements, higher skill, greater fidelity and no risk of strikes and interruption of business, nor of prosecutions for personal damages by injured employés.

It is clear that a well-organized medical department must diminish the business of the law department, but we need not apprehend jealousy on the part of the latter, for good lawyers study the interest of their clients as good physicians do that of their patients, and litigation and unsanitary conditions are alike avoided by those who gain their livelihood from these very evils. In fact these two departments must be helpers of each other as well as conservators of the company's interests; the medical aiding the law department in the settlement of claims for personal damages, and the latter aiding the former in resisting demands for relief by those who have forfeited the right by misconduct of any kind susceptible of proof.

Besides, there can be no doubt that the companies expect to derive advantage from the physical examination of their employés, in avoiding such accidents as may grow out of defects of sight and hearing, and those infirmities which might result in sudden break-down or in failure to answer special requirements of duty. It is simply a question of having picked men for responsible places, and of paying for the guarantee.

[TO BE CONTINUED.]

Revival of our Commercial Marine.

A PAMPHLET on "The Revival of the American Carrying Trade," by John Codman, just received, is well worth reading and thinking about. It was written in answer to the questions of the joint committee of Congress, appointed to inquire into the condition and wants of American shipbuilding and shipowning interests. The writer opposes the subsidy scheme, as being for individual benefit, and advocates the revision of those existing laws to which, in his opinion, the decline of American shipping is attributable. His concluding paragraph reads as follows:—

"In conclusion, I am sorry to express the opinion, that, do what Congress will in the way of removing our burdens, even to the extent of granting absolute freedom, and copying our navigation laws in all respect after those of England, measures that would have been eminently successful in the outset, the restoration of our carrying trade will be a labor of years. We have lost our prestige and experience; we are no longer a maritime nation; our shipowners have been wearied and disgusted; they have gone into other business, forced by their government to abandon their old calling. Our shipmasters, the pride of the ocean in the old packet days, are dead, and they have no successors. Congress, by its supine neglect has all this for which to answer. While it has lent a listening ear to bounty and subsidy seekers, intent only on personal gain, its committees have never been willing to report a free ship bill, nor has the Senate or the House allowed the subject to be otherwise than incidentally debated."

Lighting the Platforms and Steps of Railroad Cars at Night.

AN ingenious device for lighting the platforms and steps of railroad cars at night, and also station platforms in the vicinity of the car steps, was tested last week by the Philadelphia and Reading Railroad Company.

The object of the device is obtained by means of a lantern placed under the steps of the car. The rise of each step is provided with a window of thick plate glass, through which the light illuminates the steps. In the back of the lantern is set a door which has a bull's-eye of suitably colored glass, through which the light also shines, and may serve as a substitute for the danger and other signals usually placed upon the platform or railing of the rear car.

The lamp inside the lantern is an ordinary double-wick burner, and for the purposes of illumination on the trial trips mineral sperm oil was used. The lamp appears to have withstood the shocks of coupling and the jars incident to the application of air-brakes to the train; going through tunnels and passing moving trains without a noticeable flickering of the flame from excessive drafts, or a dislocation of any part of the lamp from shocks. It not only lit up the steps and a space of five to six feet on either side, but also the ground beneath and around them, thereby enabling passengers to see both the steps and the platform when the train was drawn up at a station. Apart from guarding against accidents and consequent risk of life, the following advantages are claimed for the invention:

Accidents sometimes occur by the starting of the train when the passenger is still on the steps. This risk will be obviated, for the conductor can always tell that the platform is clear when the interference with the light, caused by the passenger's body, ceases.

Another class of accidents intended to be avoided by the use of the invention is that which occurs when the brakeman, lifting his lantern to show the passenger the steps, may be mistaken by the engineer as giving a signal to start the train.

In regard to the immunity from collision, the cars provided with this device will always present two danger signals from the rear steps of the train, and this will be the case even if the rear car be switched off, as the then rear car will still have similar warning signals. The lines of light shining out from the steps of the train may afford additional protection from collision from the rear.

The inventor and patentee is GEORGE W. HUNT, of Philadelphia.

THE Mexican Congress, prior to its adjournment on the 16th inst., authorized the President to grant permission for the establishment of banks throughout the country.

The Pacific Railroads.

(Continued from page 999).

RAILWAY COMMISSIONERS.

Railway commissioners have been appointed in twenty-one States. The report continues:—

The general scope of the laws under which these commissioners are appointed is to control railroads within the State, and they exercise, in many instances, a healthful influence over railroad management. But railroad transportation, strictly confined within State jurisdiction, is so limited that it leaves the real difficulties unsolved and nearly unaffected. It cannot be said that State laws have been successful in dealing with the subject. Their limited jurisdiction involves conflicts with both the general government and their sister States. Diverse decisions have been rendered by the highest judicial tribunals of neighboring State, upon State laws of like import and purposee The power of Congress over the whole subject can hardly be questioned. The Supreme Court of Illinois concedes it, and the decisions of the Supreme Court of the United States seem to render it indisputable.

The universal use and absolute dependence of all interstate commerce upon railroads give constant rise to new questions, under new conditions, which only experience can properly solve. It would seem that true wisdom would hasten slowly in dealing with this great problem, seeking the fullest information as the only true basis for wise legislation. The solution must lie in the just application of the laws of trade and commerce, with such authoritative regulation by law as will hold abuses in check, and this power can be derived only from federal law of universal application.

I have felt it to be my duty to call attention to this subject, although I have not thought it appropriate to discuss the question in detail. I therefore respectfully recommend that a commission be appointed to take into consideration the whole question, and report to Congress the facts necessary for intelligent and efficient action upon the subject.

The Commissioner next speaks of the unnecessary and dangerous dissimilarity of railway signals, and recommends the adoption of a uniform system. He says he has reason to believe that most if not all the railroad companies would co-operate in securing such uniformity, and would regard a law to that effect with much favor.

Under the head of settlements of accounts for transportation service it is stated that efforts have been made to secure the adoption by all the departments having occasion for transportation upon the subsidized roads, of a uniform form of "request for passenger transportation," which, it is believed, will prevent many inconveniences to which the companies and the accounting departments are subjected by reason of the different forms now in use. It is probable that such uniform system will soon be adopted.

CENTRAL PACIFIC.

The different railroads are next taken up in detail, beginning with the Central Pacific, in regard to which the Commissioner says:—

The property and accounts of this company have been carefully examined. Every facility was accorded to render such examination thorough and complete. A marked improvement in the entire plant and a decided increase of business were exhibited. The total length of the roads operated by the company on June 30, 1882, was 3,036.35 miles, of which 1,204.5 miles are owned, being the same as in the previous year, and 1,831.35 miles are leased, being

an increase of 314.1 miles. Of the 1,204.5 miles owned, land was granted to aid in the construction of 1,012.47 miles, of which 860.66 miles were subsidized with bonds in addition to the lands. There is a decided improvement in the track, bridges and buildings. Steel rails are being laid to replace iron. At the beginning of this year there remained only 300 miles of iron rails, of which 106 miles have since been relaid with steel. The road is at present in excellent condition for safety and business. The intention is, however, frequently expressed to replace all wooden bridges and culverts with iron and stone, to reduce the curvature and grades where necessary and to extend and deepen the ballast and bring the road as rapidly as possible to the highest standard ot excellence. The equipment of the road is very good, and eighty-eight locomotives and 1,621 freight cars have been added during the fiscal year.

The company has leased and operates the Southern Pacific Railroad of California from Huron to the Colorado River at Yuma, and the Southern Pacific Railroad of Arizona and New Mexico from Yuma to El Paso, Texas, via Deming, N. M. The new road from El Paso to Deming, a distance of eighty-eight miles, was found to be in good condition, which was also true of the road from Deming to San Francisco. Passing west from Yuma on the California portion of the road, there is no water station until arriving at Walters, 106 miles from Yuma. At Newhall, 452 miles south of San Francisco, oil wells have been developed which produce oil claimed to be equal in quality to that of the Pennsylvania wells. From five to fifteen cars are daily shipped. This discovery is fortunate, and is likely to be of great value to the company. The road from Tehachipa Summit to Caliente, a distance of twenty-three miles, has a descent of 2,700 feet, or about 116 feet to the mile, with curves of about ten degrees. The engineering difficulties are of great magnitude. It is carefully watched and well maintained. A special engine was constructed in the works at Sacramento, with special reference to the necessities of this difficult section. It is said to be the largest engine in the country. It is twelve wheeled (eight driving and four truck) and weighs, in working order, 123,000 pounds or sixty-one and one-half tons. The tender, in working order, weighs 63,000 pounds or thirty-one and one-half tons, aggregating the enormous weight of ninety-three tons. It will haul up, over this section, fourteen loaded cars of twenty tons each.

The earnings of the Central Pacific road, as shown by the report, during the fiscal year, were $25,360,146, an increase of $2,466,801 over the previous year.

The operating expenses were $16,042,411, an increase of $2,529,907 over the expenses for 1881. These figures show a decrease in the net earnings for the last fiscal year of $73,105. A large portion of this increase in expenses is due to the improvement of the track, bridges and buildings, and to the substitution of steel rails for iron, all of which has been charged to operating expenses. There is a decided increase also in the expense of motive power and in the maintenance of cars.

A comparison of the above results with those of the previous years shows that the financial condition of the company has been much improved. On June 30, 1882, the total liabilities of the company, including $59,275,500 capital stock, were $175,773,286, and the total assets were $174,451,661, leaving a deficit of $1,321,625. Upon demand of the Commissioner a check for $79,149, balance due the United States upon account of the twenty-five per cent of net earnings required by law, after deducting transportation account, was sent to the United States Treasurer by the vice-president of the company, which has therefore paid to the United States all its accrued indebtedness to date.

The land grant to this company is estimated at 12,822,400 acres, of which 2,505,584.45 acres had been patented to June 30, 1882. The company has sold 1,031,199.21 acres for $5,917,000, or an average of $5.74 per acre.

THE SOUTHERN PACIFIC.

The Southern Pacific Company, so closely identified with the Central Pacific system, is now building, under the name of the Galveston, Harrisburg and San Antonio Railroad, a line from El Paso via Sierra Blanca, Texas, to San Antonio, thence via the Galveston, Harrisburg and San Antonio road to Houston and Galveston, Texas, connecting at Houston with the Texas and New Orleans and Morgan's Louisiana and Texas Railway for New Orleans. This will make a direct route from San Francisco to New Orleans, a distance, at present computed, of 2,450 miles, and will open to California and the southern territories an outlet of great value. If the expectations of the company are realized it is believed that a line of steamers can be supported between New Orleans and European ports, and which, on return voyage, will bring a large immigration for the Pacific coast, which has not heretofore received any considerable part of that valuable population.

THE UNION PACIFIC.

Taking up the Union Pacific Railway in order the Commissioner says:—

A thorough investigation and examination of the property and accounts of this company have been made, and the result shows marked improvement in the condition of the property and increase in business. The company reports 1,818.8 miles of road, all owned by it, in addition to which there were operated in the interest of the company 2,449.1 miles, of which 349.4 miles were opened during the year.

The total acres of land patented to the company to June 30, 1882, is 3,420,013.75. Their total sales were 4,317,959.55 acres, which amounted to $19,312,441.88. The total grant of land to this company, as at present consolidated, is estimated at 19,100,000 acres.

Among the noticeable improvements on the main line of this road are the rolling-mills at Laramie. They have eight furnaces, with capacity for rerolling seventy tons of rail per day and fifteen tons of bar iron. They employ about two hundred and thirty men. The buildings are of stone and the machinery and engines noticeably strong and well adapted to their work. The necessity for building these mills was early appreciated, and its accomplishment is highly creditable and economical to the company.

Another important addition within the year to the property of the company is an immense elevator at Council Bluffs, Iowa, the capacity of which is 1,500,000 bushels. Considerable additions to side tracks have been made at various points along the line, notably at Omaha and Council Bluffs. Improved bridges are being constructed.

By invitation of the officers of the road, inspection of the track, bridges and buildings of the Colorado Central, narrow gauge, from Denver to Georgetown, winding through mountains of rock, which afford abundance of stone for ballast, was made. The road runs into a rich mining district, the ores and supplies for which make it an important factor in the Union Pacific system.

The Denver and South Park division was also gone over. The road-bed is constructed admirably; about one-half is laid with steel. The buildings are amply sufficient for present demands, and the rolling-stock is good. The road penetrates an exceedingly rich mining district, affording large and increasing freightage. The rapid development of the Pitkin district bids fair to render it a most valuable contributor to the revenues of the Union Pacific system.

The Oregon Short Line Railway Company will form an important link in the Union Pacific system of roads, and will aid materially in the development of that entire section of the country.

The Utah and Northern Railway Company is the successor of the Utah Northern Railroad, which was sold under foreclosure March 28, 1878, and at present extends from Ogden, U. T., to Butte City, M. T., a distance of 415.54 miles. This road is operated by the Union Pacific Railway Company, which owns nearly the entire stock, and as it passes through a rich mining country is expected to be a source of considerable revenue in the near future.

[TO BE CONTINUED.]

Illinois Central Railroad.

During the month of November, 1882, the traffic on the lines operated by this Company was (estimated):—

In Illinois	$579,419 00
In Iowa (leased lines)	172,725 00
Total	$752,144 00

The traffic for the same month in 1881, on the same mileage, was (actual):—

In Illinois	$572,540 06
In Iowa (leased lines)	164,677 78
Total	$737,217 84

During November, 1882, the land sales were 2,018.10 acres for $11,774.69, and the cash collected on land contracts was $19,656.15.

L. A. CATLIN, *Secretary.*

IN a history of the Chesapeake and Ohio Railroad just published, it is stated that as long ago as 1868 Professor Maury, the State Geologist of Virginia, demonstrated that Newport News was the natural port for all the country except the most northerly States and Territories, and urged the completion of this railroad, which had been projected long years before, through the best and lowest pass of the Alleghanies, which had been discovered in 1714 by Gov. Spotswood and his band of cavaliers. He claimed that the local business of the Virginias alone would crowd a single track to its utmost. It is stated that the road from Newport News to Big Sandy River is now 404 miles; and including branches to Old Point Comfort and to local mines the total mileage is 561 miles. The history is published in handsome form by Fisk & Hatch. It contains also some account of the Lexington and Big Sandy Railroad, which is part of the Chesapeake and Ohio system.

THE Jackson & Sharp Company, of Wilmington, Del., shipped on the 16th inst. four first-class passenger cars to the Florida Central and Western Railroad, two special officers' cars to the Denver and Rio Grande Railway, and one narrow-gauge passenger car to the Houston, East and West Texas Railroad. The officers' cars for the use of the officials of the Denver and Rio Grande Railway are beautiful and convenient. They contain separate apartments for offices, dining-room and kitchen, and are connected with electric bells. The cars are heated with Baker's patent heaters, and have all the modern appliances.

THE Pittsburgh *Chronicle* of 18th inst. says that to transport by rail the same amount of coal that was shipped from Pittsburgh in two days by river, last week, it would require 11,400 cars with a carrying capacity of fifteen tons each, and would consist of 570 trains of twenty cars each. Each train, including locomotive, would be at least 630 feet long, and the combined length of the trains would be sixty-six miles. The rolling-stock of all the railroads leading out of Pittsburgh would not be equal to the emergency.

The Stock Exchanges and Money Market.

New York Stock Exchange.

Closing Prices for the week ending Dec. 20.

	Th.14.	F.15.	Sat.16.	M.18.	Tu.19.	W.20.
Adams Express	134⅞	.....	136	138	.....	137½
Albany and Susq	.....	.....	.....	.....	.....	.....
1st mortgage	.....	.....	.....	.....	.....	.....
2d mortgage	.....	.....	.....	.....	.....	106¼
American Express	91½	92½	93	92¾	92¾	92¾
Burl., C. R. & Nor	.....	82¼	.....	.....	82	.....
1st mortgage 5s	100¼	100¼	100¾	100¾	100¼	.....
Canada Southern	70¾	71¾	70	70	70¾	69¾
1st mortgage guar	98¾	99¾	99¾	99¼	.....	99
Central of N. Jersey	72½	73	72½	72	72¾	72¼
1st mort. 1890	.....	.....	.....	.....	.....	.....
7s, consol. ass	.....	110	.....	103¾	.....	.....
7s, convertible ass	.....	.....	.....	103¾	.....	109¼
7s, Income	85	.....	.....	.....	.....	83
Adjustment	105¼	.....	104¾	105¼	.....	.....
Central Pacific	87⅞	88¼	88	87¾	87¾	86½
6s, gold	116½	.....	.....	.....	116½	.....
1st M. (San Joaq)	.....	.....	.....	.....	.....	.....
1st M. (Cal. & Or.)	.....	.....	.....	.....	.....	.....
Land grant 6s	.....	.....	104½	104	.....	.....
Chesapeake & Ohio	24¼	24¼	.....	.....	24¾	.....
1st pref	35¼	35¼	35½	33	35¾	.....
2d pref	25¾	.....	.....	.....	.....	.....
1st mort., series B	87¾	87⅞	87¾	87⅞	87¾	87½
Chicago and Alton	135	134¾	134¼	134¼	.....	134½
Preferred	.....	.....	.....	.....	.....	.....
1st mortgage	.....	.....	.....	.....	.....	.....
Sinking Fund	.....	114¾	.....	.....	.....	113½
Chi., Bur. & Quincy	129	129½	129	128¾	128½	128½
7s, Consol. 1903	.....	.....	128½	129	.....	.....
Chi., Mil. & St. Paul	108½	108⅝	108	108¼	108¾	108
Preferred	123	123¾	122½	122⅝	122¼	122
1st mortgage, 8s	.....	.....	.....	133	.....	.....
2d mort., 7 3-10s	.....	.....	.....	.....	.....	.....
7s, gold	.....	.....	.....	.....	.....	.....
1st M. (La. C. div)	.....	.....	.....	.....	.....	.....
1st M. I. & M. div.)	.....	.....	.....	.....	.....	.....
1st. M. (I. & D. ext.)	.....	124½	.....	.....	.....	.....
1st M. (H. & D. div.)	120	.....	.....	.....	.....	.....
1st M. (C. & M. div.)	.....	.....	125½	.....	.....	.....
Consolidated S. F.	.....	126½	.....	.....	.....	.....
Chi. & Northwestern	138½	139	138¾	138¾	139½	138¾
Preferred	157	157½	156¼	156	156¾	156½
1st mortgage	8	108½	108¾	108¾	108¾	.....
Sinking Fund 6s	.....	.....	.....	.....	.....	.....
Consolidated 7s	.....	.....	.....	.....	.....	.....
Consol. Gold bo'ds	.....	.....	.....	.....	.....	.....
Do. reg	.....	.....	.....	.....	.....	.....
Chi., R. Isl. & Pac.	130½	130½	129¾	129¾	130	129¼
6s, 1917, c	.....	.....	128	.....	.....	128¼
Clev., Col., Cin. & Ind.	80¾	82	83¼	83½	83¾	82¾
1st mortgage	.....	.....	.....	.....	.....	.....
Clev. & Pittsburg gr.	.....	140	139½	139	.....	.....
7s, Consolidated	.....	.....	.....	.....	.....	.....
4th mortgage	.....	.....	.....	.....	.....	.....
Col., Chi., & Ind. Cent	5	4¾	4½	4	4¾	4
1st mortgage	.....	.....	.....	.....	.....	.....
2d mortgage	.....	.....	.....	.....	.....	.....
Del. & Hud Canal.	109¾	110	110½	109½	110	109
Reg. 7s, 1891	.....	116	.....	.....	.....	.....
Reg. 7s, 1884	.....	.....	.....	.....	.....	106½
7s, 1894	.....	115	.....	.....	.....	.....
Del., Lack. & Western	130	131⅞	130¾	131¼	131⅞	130¾
2d mortgage 7s	.....	.....	.....	.....	.....	.....
Consol. 1907	.....	.....	.....	.....	.....	.....
Erie Railway	.....	.....	.....	.....	.....	.....
1st mortgage	122	122¾	124	.....	.....	.....
2d mort. 5s, ext	.....	.....	.....	.....	.....	.....
3d mortgage	102¾	.....	.....	.....	.....	.....
4th mort. 5s, ext	.....	.....	.....	.....	.....	.....
5th mortgage	.....	.....	.....	.....	.....	.....
7s, Consol. gold	.....	.....	130	.....	.....	.....
Great West. 1st mort	.....	.....	.....	.....	.....	.....
2d mortgage	97	98	99	.....	.....	98½
Hannibal & St. Jo	.....	.....	.....	.....	.....	45
Preferred	82¾	82½	82⅞	77½	76½	.....
8s, Convertible	.....	.....	.....	.....	105	106
Houston & Tex. Cen	76¾	76	75	.....	79	78¾
1st mortgage	.....	.....	111½	112	112	.....
2d mortgage	.....	.....	.....	.....	120	.....
Illinois Central	145¼	146¼	146½	145¾	145¾	145¾
LakeShore & MichSo	117½	118½	117¾	117⅝	117⅞	117½
Consol. 7s	.....	.....	.....	.....	.....	.....
Consol. 7s, reg	.....	.....	.....	.....	.....	.....
2d Consolidated	.....	.....	122	.....	.....	.....
Leh. & W. B. con. ass	.....	.....	.....	.....	.....	.....
Long Dock bonds	.....	.....	.....	117	.....	.....
Louisville & Nash.	53⅞	54⅜	53⅞	54¼	55	54⅝
7s, Consolidated	.....	.....	.....	.....	.....	.....
Manhattan	46	.....	.....	45	.....	.....
1st pref	85	.....	.....	.....	.....	.....
Met. Elevated	.....	.....	.....	.....	.....	.....
1st mortgage	100	100½	101	101¼	102	102
Michigan Central	101¾	102⅞	101½	102½	103¾	102¾
7s, 1902	.....	.....	.....	.....	.....	.....
Morris & Essex	123	122½	122¾	122¾	.....	.....
1st mortgage	.....	.....	.....	.....	.....	.....
2d mortgage	.....	.....	.....	.....	.....	.....
7s of 1871	.....	.....	.....	121½	.....	.....
7s, Convertible	.....	.....	.....	.....	.....	.....
7s, Consolidated	122½	.....	122	122¾	122¾	.....
N. Y. Cen. & Hud. R.	133¾	132¾x	131¾	131⅝	131⅝	131
6s, S. F. 1883	.....	100⅜	101	.....	101	.....
6s, S. F., 1887	.....	.....	.....	.....	.....	.....
1st mortgage	.....	.....	133	.....	.....	.....
1st mortgage, reg	...	133	133¾	.....	.....	.....
N. Y. Elevated	.....	.....	.....	.....	.....	.....
1st mortgage	.....	.....	.....	118	.....	.....
N. Y. & Harlem	.....	196	.....	.....	.....	.....
Preferred	.....	.....	.....	.....	.....	.....
1st mortgage	.....	126	.....	.....	.....	.....
1st mortgage, reg	...	126	.....	.....	.....	.....
N. Y. Lake Erie & W	39¼	40¾	39	39¾	40	39¼
Preferred	86⅝	87⅞	88	87	88	87¼
2d Consolidated	97	97¼	97¼	97¼	97¼	97
New 2d 5s fund	.....	.....	96	.....	.....	.....
N. Y., N. Hav'n & Hart	.....	.....	.....	.....	.....	.....
North Mo. 1st mort	.....	.....	.....	.....	.....	.....
Northern Pacific	45¼	45	45¾	45¼	45¼	45⅝
Preferred	84⅞	86	85⅝	84¾	85	84⅝
Ohio & Mississippi.	34	34½	34	34¾	.....	33¾
Preferred	.....	.....	.....	.....	.....	.....
2d mortgage	.....	.....	.....	.....	.....	.....
Consolidated 7s	.....	.....	.....	.....	.....	.....
Consol. S. Fund	.....	.....	.....	.....	.....	.....
Pacific Mail S. S. Co	42	45¼	43¾	45	44¼	43¾
Pacific R. R. of Mo.	.....	.....	.....	.....	.....	.....
1st mortgage	106	.....	.....	.....	.....	.....
2d mortgage	.....	.....	.....	114	.....	.....
Panama	.....	.....	.....	.....	.....	.....
Phila. & Reading	53¾	56	55¾	55⅛	55⅝	55
Pitts, Ft. W. & Chi. gtd	.....	.....	136½	.....	.....	.....
1st mortgage	.....	.....	.....	.....	.....	138
2d mortgage	.....	.....	.....	.....	.....	.....
3d mortgage	.....	.....	.....	.....	.....	.....
Pullman Palace Car	125⅝	125⅝	125⅞	125¾	.....	.....
Quicksil'r Min'g Co	.....	.....	.....	9¼	.....	.....
Preferred	.....	.....	.....	.....	.....	.....
St. Louis & San Fran	34¼	.....	35¼	.....	.....	.....
Preferred	54¼	54⅛	55	54¾	55⅛	55⅜
1st Preferred	98	100	100	.....	.....	99⅛
St. L., Alt'n & T. H.	46¾	47	48¼	.....	.....	45
Preferred	92¼	94⅛	.....	92	93	89¾x
1st mortgage	.....	.....	.....	.....	.....	.....
2d mort. pref	.....	108¼	.....	.....	.....	.....
Income bonds	.....	.....	.....	.....	.....	.....
St. L., Iron Mt. & S.	.....	.....	.....	.....	.....	.....
1st mortgage	.....	.....	.....	.....	.....	.....
2d mortgage	103¼	104	.....	104½	.....	104¾
Toledo and Wabash	....	.....	.....	.....	.....	.....
1st mortgage	.....	.....	.....	.....	.....	.....
2d mortgage	.....	98	.....	98	98¾	98¾
7s, Consolidated	.....	.....	.....	97	.....	98
St. Louis Division	102	.....	.....	.....	.....	.....
Union Pacific	102¾	104¾	103⅝	103⅝	105	103⅞
1st mortgage	116½	117	116⅜	116½	.....	116½
Land Grant 7s	111¾	111	.....	.....	111¾	.....
Sinking Fund 8s	.....	.....	117⅛	.....	118	.....
United States Ex	.....	.....	.....	.....	.....	.....
Wabash, St. L. & Pac	34¼	34¾	34½	34	34¾	34⅝
Preferred	56⅜	56	55⅛	55	55⅜	55
New mort. 7s	.....	.....	.....	.....	.....	.....
Wells-Fargo Ex	130	128¾	130	.....	130	130
Western Pacific b'ds	.....	.....	.....	.....	.....	.....
Western Union Tel.	83¾	83⅝	81⅞	81¾	82⅞	81⅜x
7s., S.F conv., 1900	.....	115	115½	.....	.....	.....
FEDERAL STOCKS :—						
U. S. 4s, 1907, reg	.....	119⅞	119⅞	119¾	.....	.....
U. S. 4s, 1907, coup	121	.. ..	.....	.....	.....	.....
U. S. 4½s, 1891, reg	113¾	.....	.....	.....	.....	113⅜
U. S. 4½s, 1891, coup	.....	...	113¾	.....	.....	.....
U. S. 5s, cont'd at 3½	.....	.....	.....	.....	.....	.....
U. S. 3s, reg	103½	.....	.....	103¾	.....	103¾
Dt. of Col. 3-65s, reg	.....	.....	.....	.....	.....	.....
Dt. of Col. 3-65s, coup	.....	.....	.....	.....	.....	.....

Boston Stock Exchange.

Closing Prices for the Week Ending Dec. 20.

	Th.14.	F.15.	Sat.16.	M.18.	Tu.19.	W.20
Atch., Top. & San. Fe.	87¼	88¼	88¾	87⅞	87⅞	87
1st mortgage	120	.....	.....	120½	.....	.....
Land Grant 7s	.....	.....	.....	.....	114	.....
Boston & Albany	173¼	174	.....	173	173	.....
Boston and Lowell	.....	.....	.....	.....	.....	.....
Boston & Maine	.....	149	149	.....	149½	149½
Boston & Providence	.....	.....	.....	.....	160	160
Bos'n, Hart. & Erie 7s	.....	.....	.....	.....	.....	.....
Burl. & Mo. R. L. G. 7s	.....	.....	.....	.....	.....	.....
Burl. & Mo. R. in Neb	.....	.....	.....	.....	.....	.....
6s, exempt	.....	.....	.....	.....	.....	112½
4s	.....	.....	.....	.....	83	.....
Chi., Burl. & Quincy	123¼	129½	129¾	128½	129	128⅜
Cin., Sand. & Clev ($50)	25	25½	26	.....	.....	.....
Concord ($50)	....	.....	.....	.....	.....	.....
Connecticut River	.....	.....	.....	.....	.....	.....
Eastern	35	35	36	35¾	35¼	.....
New 6s, Bond	110½	110	110	.....	110¾	.....
Fitchburg	.....	.....	.....	.....	.....	.....
N. Y. & New England	48¾	49¼	50	£49¾	49¾	49¼
7s	115¾	....	116	115¾	.....	115¾
Northern N. H	.....	.....	.....	.....	.....	.....
Norwich & Worcester	.....	.....	.....	.....	.....	.....
Ogden & Lake Cham	.....	.....	.....	.....	.....	.....
Old Colony	.....	137	137½	134¾x	134	.....
Ph., Wil. & Balt. ($50)	.....	.....	.....	.....	.....	.....
Portl'd, Saco & Ports	.....	.....	.....	.....	.....	.....
Pueblo & Ark Val 7s	.....	.....	114	.....	114	.....
Pullman Palace Car	125	.....	.....	.....	125¾	.....
Union Pacific	101¾	104	103⅝	103⅞	105	104
6s	114	.....	115	....	113¾	.....
Land Grant 7s	110¾	.....	111	.....	.....	.....
Sinking Fund 8s	115	....	.....	.....	115	.....
Vermont & Mass	.....	.....	.....	.....	.....	.....
Worcester & Nashua	.....	.....	.....	.....	.....	.....
Cambridge (Horse)	..	.....	89	.....	.....	86¼
Metropolitan (Horse)	.....	.....	.....	.....	75	.....
Middlesex (Horse)	.....	.....	.....	.....	.....	.....
Cal. & Hecla Min'g Co	251	251	.....	250	251	251
Quincy	64	64½	64	.....	64¼	64½

Philadelphia Stock Exchange.

Closing Prices for the Week Ending Dec. 19.

	W.13.	Th.14.	F.15.	Sat.16.	M.18.	Tu 19.
Allegh'y Val. 7 3-10s	.....	.....	123¾	.....	.....	123¾
7s, Income	.....	48	48	.....	.....	.....
Buff., Pitts & West.	18	18¼	18¾	18¾	19	18¾
Camd'n & Am. 6s, '83	.....	.....	.....	.....	.....	.....
6s, 1889	.....	.....	.....	.....	.....	.....
Mort. 6s, 1889	.....	112	112	.....	111	112
Camden & Atlantic	.....	.....	.....	.....	.....	.....
Preferred	.....	.....	.....	.....	.....	.....
1st mortgage	.....	.....	.....	.....	.....	.....
2d mortgage	.....	.....	.....	.....	.....	.....
Catawissa	.....	23¼	.....	.....	.....	.....
Preferred	.....	.....	54	.....	54	.....
2d pref	.....	.....	.....	.....	.....	.....
7s, new	.....	.....	.....	.....	.....	.....
Del. & Bound Brook	.....	.....	.....	.....	.....	.....
7s	.....	.....	.....	.....	.....	.....
Elmira & Williamsp't	.....	.....	.....	.....	.....	.....
Preferred	.....	.....	.....	.....	.....	.....
Hunt. & B. Top Mt.	16	.....	.....	.....	.....	.....
Preferred	....	.....	.....	.....	.....	.....
2d mortgage	.....	.....	.....	.....	.....	.....
Lehigh Navigation	38¼	38¾	39	39¾	39¼	39¼
6s, 1884	.....	.....	.....	.....	.....	.....
Gold Loan	.....	.....	.....	110x	.....	.....
Railroad Loan	.....	.....	.....	115	.....	.....
Conv. Gold Loan	...	.....	.....	.....	.....	.....
Consol. Mort, 7s	115½	115¼	.....	.....	.....	.....
Lehigh Valley	64¾	66	65	64¾	64¾	63¼
1st mort. 6s, coup	.....	.....	.....	.....	190	.....
1st mort. 6s, reg	.....	.....	.....	.....	.....	.....
2d mort. 7s	.....	.....	.....	.....	.....	133¾
Consol mort. 6s	.....	.....	.....	.....	.....	.....
Consol. mtg. 6s, reg	....	120	.....	.....	120	119¾
Little Schuylkill	.....	.....	.....	.....	.....	.....
Minehill & Sch. Hav'n	.....	65	63¾	.....	.....	.....
North Pennsylvania	63¾	64	63¾	64	63¾	64
1st mortgage 6s	.....	.....	.....	.....	.....	.....
2d mortgage 7s	.....	.....	.....	.....	.....	.....
Genl. mtg. 7s, coup	.....	124½	.....	.....	.....	.....
Genl. mtg. 7s, reg	.....	.....	.....	.....	.....	.....
Northern Central	57⅞	57¾	58	57¾	.....	.....
5s	.....	100½	100¾	.....	101½	101½
Northern Pacific	44¾	45¾	46	45¾	45¾	45
Preferred	84¾	84¾	86¼	85¾	84¾	85¾
Pennsylvania R. R.	60	60¾	60¾	60¾	60¾	60¾
1st mortgage	.....	.....	.....	.....	.....	.....
Gen'l mort	.....	125	.....	.....	.....	.....
Gen'l mort reg	.....	124	.....	.....	.....	...
Consol. mort. 6s	.....	.....	.....	.....	.....	116½
Consol. mort. reg	120	.....	.....	.....	.....	.....
Pa. State 5s, new	120	.....	119¾	.....	.....	.....
do 4s, new	.....	.....	.....	.....	.....	.....
do 3½s, 1912	.....	.....	.....	.....	.....	.....
Phila. & Reading	26¾	26⅞	28	27¾	27¾	27¾
1st mortgage 6s	.....	.....	.....	.....	.....	.....
7s of 1893	.....	.....	119½	119¾	119¾	.....
7s, new convert	74	73	71	72	72	72¾
Consol. mort. 7s	.....	.....	.....	.....	.....	.....
Consol. mort. reg	.....	122	.....	.....	.....	.....
Gen'l mort. 6s	97	96	96	96	96	96¾
Def. Income bonds	.....	.....	.....	25	.....	.....
Philadelphia & Erie	20	20¾	20	.....	.....	.....
1st mortgage 5s	.....	.....	.....	.....	.....	.....
2d mortgage 7s	.....	.....	.....	115¾	115¾	.....
Pittsb., Cin. & St. L. 7s	119	.....	119	.....	.....	.....
Pitts., Tit. & Buff. 7s	92	.....	.....	.....	.....	.....
Schuylkill Navi't'n.	.	.. ..	.. ..	.....	.....	.....
Preferred	.....	.....	.....	.....	.....	.....
6s, 1897	.....	.....	.....	.....	.....	.....
6s, 1907	.....	.....	.....	.....	90	90
United Co. of N. J.	187¾	187¾	.....	.....	.....	.....
Hestonville, (Horse)	15	....	.....	.....	15	.....
Ch tnut & Walnut	.....	.....	.....	.....	.....	.....

Baltimore Stock Exchange.

Closing Prices for the Week Ending Dec. 19.

	W. 13.	Th. 14.	F. 15.	Sat. 16.	M. 18.	Tu. 19.
Baltimore & Ohio	.....	.....	199	200	200	.....
6s, 1885	.....	.....	.....	.....	.....	.....
Central Ohio ($50)	.....	.....	.....	.....	.....	.....
1st mortgage	.....	.....	.....	.....	.....	.....
Marietta & Cincin'ti	.....	.....	.....	.....	.....	.....
1st mortgage, 7s	125	.....	.....	127	129½	.....
2d mortgage, 7s	100⅛	101	.....	100	100	100
3d mortgage, 8s	56	56¼	56¼	55⅝	55⅝	56¼
Northern Cen. ($50)	57⅜	57⅛	57½	57⅛	57⅛	57⅛
2d mort. 6s, 1885	.....	.....	105¾	.....	.....	.....
3d mort. 6s, 1900	.....	.....	.....	.....	.....	.....
6s, 1900, gold	.....	.....	.....	.....	.....	.....
6s, 1904, gold	.....	.....	.....	115¾	.....	.....
Pitts. & Connelsv. 7s	.....	.....	.....	.....	123	.....
Virginia 6s Consol.	63	53	.....	.....	.....	62
Consol. coupons	62¾	.....	63	.....	.....	.....
10-40 bonds	.....	43¾	.....	43¾	43¾	.....
Def'd Certificates	.....	.....	.....	.....	.....	.....
New 3s	.....	46⅛	.....	.....	.....	.....
Western Maryland	.....	16	.....	.....	.....	.....
1st M., end. by Balt	.....	.....	.....	.....	.....	.....
2d M., do.	.....	.....	.....	.....	.....	.....
3d M., do.	.....	.....	.....	.....	137	.....
1st M., unendorsed	....	.....	.....	.....	.....	.....
2d M., end. Wash Co	.....	.....	.....	.....	.....	.....
2d M., preferred	.....	.....	.....	.....	.....	.....
City Passenger R. R.	47	.....	.....	.....	.....	.....

London Stock Exchange.

	Closing Prices—Dec. 1.		Dec. 8.	
Baltimore and Ohio 5s, 1927	106	108	106	108
Central of N. J., $100 shares	80	85	70	75
Do. consol. mort	110	112	111	113
Do. Income Bonds	88	92	89	90
Central Pacific of Cal., $100 shs.	90	91	86	89
Do. 1st mort. 6s, 1895-'98	117	119	117	119
Det., G'd Haven & Mil. Equip bds.	116	118	117	119
Do. Con. M. 5p.c., till '83 after 6p.c.	115	117	116	118
Illinois Central $100 shares	149	151	148	149
Do. S. F. 5s, 1903	104	106	104	106
Lehigh Valley Cons. mort. 1923	112	116	112	116
Louisville and Nashville mort. 6s	90	92	91	93
Do. capital stock $100 shares	53	55	52	53
N. Y. Cen. & Hud. R. mort. bonds.	132	136	132	136
Do. $100 shares	134	135	134	135
Do. mort. bonds (stg.)	122	124	122	124
N. Y. Lake Erie & West. $100 shs.	37¾	39¼	37⅛	37¾
Do. 6 p. c, pref. $100 shares	86	88	87	89
Do. 1st Con. Mort. bonds (Erie)	127	130	128	132
Do. do. Funded Coupon bonds	124	127	125	130
Do. 2d Consol. Mort. bonds	99	101	98	99
Do. do. Funded Coupon bonds	97	99	97	99
N. Y., Pa. & Ohio 1st mort. bonds	51⅛	52⅛	52	53
Do. Prior Lien bonds (sterling)	100	105	100	105
Pennsylvania $50 shares	62	62⅛	61⅛	62
General Mortgage	124	126	124	126
Phil. & Erie Gen. mort. 6s, 1920	117	119	117	119
Philadelphia & Reading $50 shs.	26¼	27¼	26¼	26¾
General Consol Mortgage	114	116	114	116
Do. Improvement Mortgage	103	105	104	105
Do. Gen. Mtg. '74, ex-def'd coup.	96	98	96	98
St. L. Bridge 1st mort. gold bond.	121	123	121	123
Do. 1st. pref. stock	94	98	94	98
S. P'fic of Cal., 1st mort 6s, 1905-6.	106⅛	107¼	106⅛	107¼
Union Pacific 1st mtg. 6s, 1896-9	117	119	117	119
Wabash, St. L. & P. $100 shares	31	33	33	35
Do. $100 pref shares	56	57	54⅛	56½
Do. gen. mort. bonds	81	83	91	83

AMERICAN RAILROAD JOURNAL

Financial and Commercial Review.

THURSDAY EVENING, December 21, 1882.

DURING the forenoon the rate for money on call on stock collaterals was 5 per cent. Time money was 6 per cent. In the afternoon the quotation was 5 per cent, and during the last hours of business 6, 5 and 4 per cent successively.

The posted rates for foreign exchange were 4.81½ and 4.85½. Sixty-day bills were 4.80½ and 4.81. Demand, 4.84¾ and 4.85; cables, 4.85¾ and 4.86; commercial bills, 4.79 and 4.79½. Continental exchange was as follows: Francs, 5.23⅛@5.20; Reichmarks, 94⅛@⅛ and 95⅛@⅜; Guilders, 39⅝ and 39⅞@40.

The total values of the exports of domestic breadstuffs from the United States during the month of November, 1882, was $15,306,494; for the month of November, 1861, the total was $18,025,880. The total exports of breadstuffs for the five months ended November 30, 1882, amounted to $100,750,452; for the same period in 1881 the amount was $98,337,515. The value of the exports for the eleven months ended November 30, 1882, was $165,606,693; for the eleven months ended November 30, 1881, the amount was $210,318,432.

The assessed value of all taxable property in Washington Territory this year is $32,566,897. Last year it was $25,786,415, this year's increase being $6,780,482, or more than 25 per cent. The Territorial tax of 2½ mills on the dollar will yield a revenue of $81,416, against $67,351 last year with a 3 mill tax. The territory is out of debt, with money in the treasury.

A mortgage of the San Joaquin and Sierra Nevada Railroad Company to E. Judson and Stewart Menzies, as trustees, was filed in the Recorder's office at San Francisco, Cal., on the 8th inst. The amount of the mortgage is $750,000 to secure the bonds of the road. The money will be expended in the construction and equipment of a railroad from a point in the San Joaquin valley to the Calaveras Big Trees.

The following circular, concerning the suspension of exchanges of three and a-half per cent bonds into three per cent bonds from December 30, 1882, to February 1, 1883, and the adjustment of interest on exchanges made thereafter, was issued from the Treasury Department at Washington on the 18th inst.:

"Notice is hereby given that in order to allow the preparation of the schedules and interest checks for the payment of the dividend due February 1 on the United States registered bonds of the acts of July 14, 1870, and January 20, 1871—continued at three and a half per cent—and on the United States registered bonds of the three per cent loan of 1882, the exchange of three and a half per cent bonds into three per cent bonds will be suspended from December 30, 1882, until February 1, 1883.

"Between the above dates, three and a half per cent bonds intended for exchange will be received and filed in the order of their receipt: the exchange being effected upon the re-opening of the books, February 1, 1883.

"Upon the resumption of the exchange of bonds, and until further notice, the interest on the three and a half per cent bonds surrendered for exchange into three per cent bonds will cease February 1, 1883, and the three per cent bonds issued therefor will bear interest from that date; and Department circulars heretofore issued concerning the exchange of three and a half per cent bonds are modified accordingly.

"The books of the three per cent loan of 1882 will be closed during the months of January, April, July and October in each year, during which months bonds will not be transferred."

Efforts are being made to depress the Tennessee State bonds by the circulation of reports that the Compromise Act of 1882 will be undone by the new Legislature, and a new law passed redeeming the debt at fifty cents on the dollar, with interest at three per cent in the future. As so much of the debt has been funded under the Compromise Act, of this year, in good faith on the part of the holders of the bonds, it is not believed by those well acquainted with the position that these settlements will be disturbed. What bonds remain unfunded are largely composed of those that are held as liens against the railroads, and these are not likely to be presented. The history of the Tennessee State debt in late years has been so marked by speculation that it is not impossible that the agitation of the subject will be renewed after the 1st of January, and the bonds made subject to such fluctuations as can be bought to bear against them.

The Income bonds of the Chicago and Alton Railroad Company, due Jan. 1, 1883, will be paid by Jesup, Paton & Co., on and after the 2d prox., after which day interest will cease.

It is learned at the Bureau of Statistics that the importation of Sumatran tobacco into this country has increased from thirty-eight pounds in 1880 to 782,763 lbs. in 1882, and that the importations since June 30 last were 527,249 pounds.

The directors of the Matthews Cotton Factory, at Selma, Ala., have resolved to increase the capital stock from $100,000 to $300,000. Extensive plans of enlargement have been determined on, and they will be commensurate with the amount of increased stock taken. The factory is in a most prosperous condition.

The Northern Central Railway Company has declared a dividend for the past six months of 4 per cent, payable 15th January next. This is an increase of 1 per cent on the previous semi-annual dividends.

Over $200,000 has been subscribed in Louisville, Ky., as a guarantee fund towards the proposed exposition in that city in 1883, which, it is claimed, assures the success of the scheme.

It is estimated that fully $60,000,000 will be disbursed in interest and dividends after the 1st of January.

The net reduction in the debt of the State of Pennsylvania during the past year was $915,184.77.

The value of the exports from the United States of provisions, tallow and dairy products in November, 1882, was $6,824,408, and in November, 1881, $8,621,521. In 11 months ended November 30, 1882, $84,863,003, and in same period of 1881, $120,345,092.

A private conference of the managers of the Eastern and Maine Central railroads was held in Boston on the 20th inst., at which a consolidation of the two interests was practically agreed upon to go into effect after January 1, thus forming a grand Eastern sytem.

The earnings of the Western Union Telegraph Co. for the quarter ending Dec. 31, 1882, based upon nearly completed returns for October, partial returns for November, and estimating the business for December will be about $2,150,000. After payment of a dividend of 1½ per cent, which will aggregate $1,199,800, and appropriating $106,850 for interest on bonded debt, and $20,000 for sinking funds, the surplus remaining will be $3,490,447.33. The estimated net revenues for the present quarter are $139,489 less than those for the quarter ending Sept. 30, 1882.

The directors of the Mathew Cotton Factory, at Selma, Ala., have resolved to increase the capital stock from $100,000 to $300,000. Extensive plans of enlargement have been determined on, and they will be commensurate with the amount of increased stock taken. The factory is in a most prosperous condition.

The sale of the Marietta and Cincinnati Railroad, which took place at Chillicothe, O., on the 9th instant, was confirmed on the 19th inst. by the court having jurisdiction of the matter. This confirmation finally precludes any further resistance to the reorganization of the company under the plan heretofore presented to the public.

The Receivers of the Philadelphia and Reading Railroad Company have given notice of their intention to pay the next coupon of the general mortgage loan at maturity—that is, on and after January 2.

The report of the Master under the Receivership of the Philadelphia and Reading Railroad and Coal and Iron Companies, shows a balance in the treasury on November 1 of $404,292.78, the balance at the close of September having been $464,180.66, and the receipts during October $3,260,642.49. The balance on hand in the treasury of the Coal and Iron Company November 1 was $49,423.27, the receipts during October having been $1,731,551.80.

The following quotations of sales of railway and other securities, for the week, are in addition to those given elsewhere in our columns.

New York.—Am. Dock and Imp. 5s, 93; Atlantic and Pacific 1st, 96; Boston and New York Air Line pref., 79½; Chicago, St. Paul, Minn. and Omaha, 53⅞; do. pref., 114½; do. consol., 108¾; Central Iowa, 32; Chicago, St. Louis and New Orleans, 81¼; Chicago, Milwaukee and St. Paul, Chicago and Pacific West div. 1st, 93⅝; do. Southern Minn. div. 1st, 109; Chicago and Northwestern S. F. 5s, 90½; Columbus, Chicago and Indiana Central inc., 52; Central Iowa 1st, 110½; Chesapeake and Ohio cur. 6s, 53⅜; do. 1st, Series A, 106; Chicago, Burlington and Quincy 8s, 103⅝; do. Denver div. 4s, 85½; do. Iowa div. 4s, 87; Chicago and Eastern Illinois inc., 87; Denver and Rio Grande, 43⅜; do. 1st, 108¾; do. consol., 92; Dubuque and Sioux City, 88½; Danbury and Norwalk, 74⅜; Denver, South Park and Pacific 1st, 99; East Tennessee, Virginia and Georgia, 10; do. pref., 18; do. inc., 40¼; do. 5s, 75½; Evansville Terre Haute 1st, 100; Fort Worth and Denver, 30¾; Flint and Pere Marquette 1st, 112¾; Green Bay, Winona and St. Paul, 7; Gulf, Colorado and Santa Fe, 1st, 112; Hannibal and St. Joseph 6s, consol., 107; Indiana, Bloomington and Western, 35½; do. 1st, 88; do. 2d, 74; do. Eastern div. 6s 93; Indianapolis, Decatur and Springfield 1st, 101½; International and Gt. Northern coupon 6s, 84¼; do. 1st, 105¾; Kansas Pacific 1st consol., 101; do. 6s, 1896, 108; do. 6s, Denver div. ass., 107; Louisville, New Albany and Chicago, 65; do. 1st, 104¾; Long Island 58⅜; do. consol. 5s, 98½; Lake Erie and Western, 32¾; do. 1st, 100; Louisville and Nashville genl. mort. 6s, 90; do. Cecelian Branch 1st, 104½; Manhattan Beach, 19; Metropolitan Elevated 2d, 88; Minneapolis and St. Louis, 30½; do. pref., 69; do. Pacific ext. 1st, 99; Missouri, Kansas and Texas, 33⅜; do. consol., 7s, 106⅞; do. 2d, 57⅜; do. Gen'l mort. 6s, 85; Missouri Pacific, ex-div., 102⅞; do. 1st consol., 100¾; do. 3d, 109; Mil-

waukee, Lake Shore and Western, 17: do. pref., 51½; do. 1st, 98⅞; Mobile and Ohio, 19; do. 1st deben., 80; do. 2d deben., 46: Memphis and Charleston, 46; Michigan Southern S. F., 105⅞; New York, Chicago and St. Louis, 14¾; do. pref., 32½; do. 1st, 96½; Nashville, Chattanooga and St. Louis, 56½; New York, Ontario and Western, 26½; Norfolk and Western, 18¼; do. pref., 51; do. genl. mort., 100½; Northern Pacific 1st, 104⅞; New Orleans Pacific 1st, 87; Ohio Central, 14; do. 1st, 95; do. inc., 32; Oregon Transcontinental, 84¾; Oregon and California 1st, 92; Oregon Short Line 6s, 100; Oregon Railway and Nav., 154; do. 1st, 108½; Ohio Southern 1st, 80; do. inc., 27; Ohio and Mississippi, Springfield div. 1st, 114; Peoria, Decatur and Evansville, 26; do. 1st, 105; Richmond and Danville, 61; do. deben., 67; do. 1st, 89½; Rensselaer and Saratoga, 139½; Rochester and Pittsburgh, 20¾; Rome, Watertown and Ogdensburgh, 31¾; do. inc., 44; do. ext. 5s, 74½; Richmond and Alleghany, 16; do. 1st, 83; Richmond, Danville and West Point, 26½; St. Paul and Duluth, 39⅞; do. pref., 96½; St. Paul, Minn. and Man., 144; do. 1st, 111; do. 2d, 108½; do. Dakota ext. 1st, 106½; St. Louis, Jacksonville and Chicago, 129; St. Louis and San Francisco 2d, class A, 97; do. B, 92; do. C, 93; St. Louis, Alton and Terre Haute dividend bonds 50; St. Paul and Sioux City 1st, 112; St. Louis and Iron Mt., Cairo and Fulton 1st, 110; do. Cairo, Arkansas and Texas 1st, 104¾; do. 5s, 74; do. Arkansas Branch 1st, 105½; Southern Pacific of Cal. 1st, 103; St. Louis, Kansas City and Northern Omaha div. 1st, 108; do. R. E., 78, 107; South Carolina 2d, 90; Texas and Pacific, 40½; do. inc. L. G., 58½; do. Rio Grande div. 1st, 82½; Toledo, Delphos and Burlington inc., 10¼: Utah Southern ext. 1st, 103¾; Virginia Midland inc., 55; Wabash gen'l. mort. 6s, 80; do. Iowa div. 1st, 91; do. Toledo, Peoria and Western 1st, 108¾; Alabama, Class A, 8; Georgia 7s, gold, 116: do. 6s, 1886, 108; do. 1888, 107; Missouri 6s, 1886, 109⅛; do. 1887, 110½; North Carolina 4s, consol., 78½: do. 6s, Special Tax 3d class, 6½; South Carolina 6s, Brown consul., 106; do. 6s, non-fund., 5; Tennessee 6s, 45¾; do. compromise bonds, 49; American Cable, 66½; Mutual Union Tel. 6s, 71; Colorado Coal and Iron, 31; do. 6s, 82¾; Consolidated Coal, 27½; New Central Coal, 16; Ontario Mining, 35⅝; Standard, 6.

Boston.—Atlantic and Pacific blocks, 103⅝; do. 6s, 93; Atchison, Topeka and Santa Fe 7s, guar., 112½; Boston Land, 6½; Boston Water Power, 3½; Burlington and Missouri River in Neb. 6s, non-exempt, 102½; Cincinnati, Sandusky and Cleveland 7s, 103; Chicago, Burlington and Quincy 4s, plain, 82¾; do. 4s, old, 86¾; do. 7s, 1889, 112; do. Denver ext. 4s, 84; do. Southwest div. 7s, 82; Chicago, Milwaukee and St. Paul, Dubuque div. 6s, 103½; Central of Iowa, 33½; Cedar Rapids and Missouri River, 105½; Detroit, Lansing and Northern, 78; Flint and Pere Marquette, 23½; do. pref., 102½; Iowa Falls and Sioux City, 90; Jackson, Lansing and Saginaw 8s, green, 112; Kansas City, Lawrence and Southern 5s, 104; Kansas City, Fort Scott and Gulf, 60; do, 7s, 110½; Kansas City, St. Joseph and Council Bluffs 7s, 114; Little Rock and Ft. Smith, 49½; Massachusetts Central, 3¾; Mexican Central, 23; do. 7s, 75⅞; do. inc., 20½; do. block No. 2, 250; do. No. 3, 95; Marquette, Houghton and Ontonagon, 68; do. pref., 119: Maine Central, 79⅞; New York and New England 6s, 105; New Mexico and Southern Pacific 7s, 114; Oregon Short Line subscriptions, 105; do. 6s, 98½; Summit Branch, 8½; Sonora 7s, 104¾; Toledo, Cincinnati and St. Louis 4¼; do. 6s, 38; Toledo, Delphos and Burlington, Main Line inc., 12; do. Dayton div. 6s, 43; do. Branch inc., 9½; Wisconsin Central, 16; do. 7s, 1st series, 79½; do. 2d series, 44; Wisconsin Valley 7s, 112½; Allouez Mining Co., 2; Atlantic, 17; Franklin, 14⅜; Huron, 2⅛; Osceola, 31½; Pewabic, 12; Silver Islet, 5¼; Sullivan, 1¼.

Philadelphia.—Am. Steamship Co. 6s, 105; Belvidere Delaware 3d, 104½; Central Transp., 34¾; Chesapeake and Delaware Canal 6s, 87¾; Elmira and Williamsport 6s, 117; Northern Pacific 5s, Series B, 99; Nesquehoning Valley, 52½; Oil Creek 1st, 103; Pittsburgh Av. 7s, 1885, 106⅝; Pennsylvania Canal 6s, 87; Philadelphia and Erie consol. 6s, 110; Pennsylvania Co. 6s, 107; Pennsylvania R. R. scrip, 119½; do. consol. mort. 5s, 107; Philadelphia and Reading R. R. scrip, 96; do. inc. 7s, 95; do. deben. 6s, 65; Philadelphia, Wilmington and Baltimore 4s, 92; Philadelphia, Germantown and Norristown, 108; Philadelphia City 6s, 1891, 121; do. 1899, 132; do. 4s, 1895, 110; Philadelphia and Trenton, 185; Shamokin Valley and Pottsville 7s, 124¼; Susq. Canal pref. 6s, 85; St. Paul and Duluth, 39¾; Schuylkill Nav. B. L. 7s, 65; Texas and Pacific consol. mort. 6s, 91; do. 1st mort., 105; do. Rio Grande div. 6s, 80¾; Union and Titusville 7s, 93. The latest quotations are: City 6s, 108@120; do. free of tax, 127 @132; do. 4s, new, 106@114; Pennsylvania State 5s, new loan, 119@120; do. 4s, old, 112@114; do. 4s, new, 116@ 118; Philadelphia and Reading Railroad, 27⅛@27⅝; do. consol. mort. 7s, reg., 122@123; do. gen'l mort. 6s, coupon, 95@97; do. 7s, 1893, 119@120; do. 7s, new conv., 72@ 73; United New Jersey R. R. and Canal, 188@—; Buffalo, Pittsburg and Western, 18⅜@18¾; Pittsburgh, Titusville and Buffalo 7s, 93@95; Camden and Amboy mort. 6s, 1889, 111⅛@112¼; Pennsylvania R. R., 59⅞@60⅛; do. general mort. 6s, coupon, 124@125; do. reg., 124@125; do. consol. mort. 6s, reg., 116@117; Little Schuylkill R. R., 59@60; Schuylkill Navigation pref., 12@13; do. 6s, 1882, 89@92; Elmira and Williamsport pref., 58@60; do. 5s, 99@ 100; Lehigh Coal and Navigation, 38¾@39⅛; do. 6s, 1884, 103@103½; do. R. R. loan, 115@116; do. Gold Loan, 110@111; do. consol. 7s, reg., 115@117; Northern Pacific, 45⅝@45¾; do. pref., 84⅝@85¾; North Pennsylvania, 63⅛@64½; do. 6s, 105@106; do. 7s, 119@121; do. 7s, General mort. reg., 124½@—; Philadelphia and Erie, 20 @20½; do. 7s, 115⅛@116; do. 5s, 102⅛@103⅛; Minehill, 63 @64; Catawissa, 22@24; do. pref., 53@54; do. new pref., 52@52½; do. 7s, 1900, 118@120; Lehigh Valley, 63⅛@63¼; do. 6s, coupon, 120@121; do. reg., 119@121; do. 7s, reg., 133@134; do. consol. mort. reg., 119@120; Fifth and Sixth streets (horse), —@190; Second and Third, 114@116; Thirteenth and Fifteenth, 75@78; Spruce and Pine, 43½@44; Green and Coates, 80@88; Chestnut and Walnut, —@93; Germantown, 70@72; Union, 110@ —; West Philadelphia, 128@—; People's, 8@9; Continental, 103@105.

Baltimore.—Atlanta and Charlotte 1st, 107; Atlantic Coal, 1.10; Baltimore City 6s, 1890, 112½; do. 5s, 1900, 119; do. 5s, 1916, 120¼; Baltimore and Ohio 1st pref., 129; Columbia and Greenville 1st, 102¾; do. 2d, 73; Canton Co., 60; do. 6s, 112; Charlotte, Columbia and Augusta, 37⅝; do. 2d, 99¾; Consolidation Coal, 30; George's Creek Coal, 94; Maryland Defense 6s, 101½; Northern Central 5s, Series A, 100; do. B, 98¼; Ohio and Mississippi, Springfield div. 1st, 115; Virginia Midland pref., 70: do. 2d mort., 107; do. 5th mort., 93½; do. inc., 56; Wilmington, Columbia and Augusta, 92. The latest quotations are: Atlanta and Charlotte 1st, 103½@104¾; Baltimore and Ohio, 199@201; Baltimore City 5s, 1894, 112¾@113½; do. 5s, 1916, 120¾@122; do. 6s, 1890, 112¼ @112⅝; do. 6s, 1893, 114@115; Central Ohio 6s, 108@—; Canton Co. 6s, —@112½; Columbia and Greenville 1st, 1916, 102½@102⅞; do. 2d, 72¾@73; Marietta and Cincinnati 7s, 1891, 129@129¾; do. 7s, 1896, 100¼ @100½; do. 8s, 1890, 56@56¼; Maryland Defense 6s, 101⅛@102; Northern Central, 57½@57¾; do. 6s, 1885, 105⅛@107; do. 6s, gold, 1900, 117@— do. 6s, 1904, gold, 115½@116; do. 5s, Series A, 100¾@ —; do. B, 98@98¾; Northwestern Va. 6s, 104½@106; Ohio and Mississippi, Springfield div. 1st, 113½@ 114¼; Richmond and Danville gold 6s, 96@—; Virginia Midland 5th mort., 93½@94; do. inc., 50@59; Virginia consol., 61¾@62; do. consol. coupons, 62½@63; do. 10-40s, 43⅝@43¾; do. 10-40 coupons, 64½@65; do. 3s, 46@47: Western Maryland 1st, unindorsed, 110½@—.

The Coal Trade.

THE leading coal-carrying companies make the following reports of their tonnage for the week ending Dec. 9, and for the year to the same date, compared with their respective amounts carried to the same time last year:—

	Week.	1882.	1881.
Phil. and Reading R. R.....	168,826	216,577	253,586
Schuylkill Canal	5,412	6,676	24,319
Lehigh Valley	173,676	173,676	196,350
Delaware, Lackawanna and Western	97,857	4,323,096	4,073,479
Shamokin	19,220	1,076,387	1,019,432
Central R. R. of New Jersey..	94,552	4,166,346	4,187,353
United R. R. of New Jersey...	42,250	1,632,165	1,503,702
Pennsylvania Coal..... ..	34,103	1,362,245	1,349,474
Delaware and Hudson Canal..	77,736	3,414,709	3,422,460
Huntingdon and Broad Top Mountain.....	10,680	439,650	489,813
Penn. and New York.....	37,439	37,439	46,850
Clearfield, Pa.....	50,950	2,686,997	2,273,606

The total tonnage of anthracite coal from all the regions for the week ending Dec. 9, as reported by the several carrying companies, amounted to 688,756 tons, against 743,311 tons in the corresponding week last year, a decrease of 54,555 tons. The total amount of anthracite mined for the year is 27,492,287 tons, against 26,569,313 tons for the same period last year, an increase of 922,955 tons. The quantity of bituminous coal sent to market for the week amounted to 98,531 tons, against 112,317 tons in the corresponding week last year, a decrease of 13,786 tons. The total amount of bituminous mined for the year is 4,233,285 tons, against 4,486,772 tons for the corresponding period last year, a decrease of 253,487 tons. The total tonnage of all kinds of coal for the week is 787,287 tons, against 855,628 tons in corresponding week last year, a decrease of 68,341 tons, and the total tonnage for the coal year is 31,725,571 tons, against 31,056,103 tons to same date last year, an increase of 669,468 tons. The quantity of coal and coke carried over the Pennsylvania Railroad for the week ending Dec. 9 was 218,313 tons, of which 160,195 tons were coal and 58,118 tons coke. The total tonnage for the year thus far has been 10,416,174 tons, of which 7,722,365 tons were coal and 2,693,809 tons coke. These figures embrace all the coal and coke carried over the road, east and west. The shipments of bituminous coal from the mines of the Cumberland coal region for the week ended Dec. 9 were 44,804 tons, and for the year to that date 1,397,297 tons, a decrease of 703,208 tons as compared with the corresponding period of last year. The shipments were: To the Baltimore and Ohio Railroad—For the week, 84,472 tons; year, 943,748 tons; decrease as compared with 1881, 393,802 tons. Chesapeake and Ohio Canal—Week, 2,248 tons; year, 269,519 tons; decrease as compared with 1881, 228,801 tons. The canal was closed by the ice last week. The total amount of coal shipped for the season was 315,965 tons, compared with 521,190 tons last year, a decrease of 205,225 tons. Pennsylvania Railroad — Week, 7,802 tons; year, 164,412 tons, decrease from last year, 96,956 tons. The Reading Railroad shipment for last week, ending December 16, was about 171,000 tons, of which 27,000 tons were sent to and 23,500 tons shipped from Port Richmond, and 21,000 tons sent to and 19,500 tons shipped from Elizabethport.—*Philadelphia Ledger, Dec.* 18.

IN a trial in Germany recently a curious document was produced, which was called forth by the marriage of the Count de Sulz, a Roman Catholic, to Agatha, Countess of Hanan, a Protestant, in the year 1605. At the wedding the bridegroom solemnly swore to respect his future wife's religious views, and signed, sealed, and delivered a deed to that effect. It was couched in the following terms: "I, Rudolph, Count of Sulz, hereby promise on my honor as a nobleman—or may the devil take me—that I will allow my future wife to remain in her religion nor will I offer her an inducement in the slightest to abandon it. I have at home two bibles; if that is not enough for her, I will get her two more. Let her read them bravely and industriously. Moreover, it is her body, not her soul, I take. I shall remain in my religion, in which I have been brought up from my youth. I know that I am on the right road; if she won't go to heaven, let her go to hell. Signed, Rudolph, Count of Sulz."

THE Secretary of State of Illinois, has issued certificates of incorporation to the Illinois and Texas Cattle Company, of Paris, with a capital stock of $1,000,000. The corporators are: J. A. Dickenson, H. E. Rives, J. C. Ficklin and others.

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PAT, observing a land turtle slowly wending its way up a knoll, exclaimed: "What sort of a country is this, anyway, where the snuff-boxes walk up hill!"

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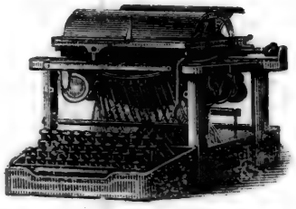
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Showing the amount of Stock Outstanding, the Dividend Periods and the date of last Dividend.

Marked thus(*)are leased roads.	Stock outstanding.	Divide'd Periods.	Last Dividend Payable.
Albany and Susq*...100	2,500,000	semi-an	July '82 2
Ashnelot.....100	210,000	q'arterly	Oct. '81 3½
Atch., Top. and S. Fe100	54,000,000	q'arterly	Nov. '82 1½
Atlanta and W. Point100	1,232 200	semi-an	Jan. '82 6
Atlantic and St. Law*100	5,840,000	semi-an	Mar. '82 3
Augusta and Savan'h100	1,022,900	semi-an	June'81 3½
Avon,Geneseo&MtM*100	225,000	semi-an	July '81 3
Baltimore and Ohio.100	14,792,566	semi-an	Nov. '82 5
" " pref.100	5,000,000	semi-an	July '82 3
Washington Br....100	1,650,000	semi-an	Nov. '82 5
Berkshire* 100	600,000	q'arterly	Apl. '82 1¾
Boston and Albany..100	20,000,000	q'arterly	Dec. '82 2
Bos.&N.Y.AirLine pf.100	2,795,227	q'arterly	June'82 1
Bos.,Cl.,F.&N.B.pref.100	1,750,100	semi-an	Oct. '82 3½
Bos.,Conc.&Mont.pf*100	800,000	semi-an	Nov. '82 3
Boston and Lowell..500	3,940,000	semi-an	Jan. '83 2¼
Boston and Maine...100	6,921,274	semi-an	Nov. '82 4
Boston & Providence100	4,000,000	semi-an	Nov. '82 4
Attleborough Br...100	131,700	semi-an	July '82 3½
Bos.,Revere B&Lynn100	419,400	semi-an	Jan. '83 3
Buffalo,N. Y. & Erie*.100	950,000	semi-an	June'82 3
Camden & Atlantic.. 50	377,400	q'arterly	Nov. '82 3
" " pref. 50	880,650	q'arterly	Nov. '82 4
Camden & Burl. Co..100	381,925	semi-an	July '82 3
Canada Southern....100	15,000,000	.....	Feb. '81 2½
Cape May & Millville* 50	447,000	semi-an	June'81 3
Catawissa*..... 50	1,159,500	annual	Oct.'82$2½
" pref..... 20	2,200,000	semi-an	Nov. '82 3½
" new pref.. 50	1,000,000	semi-an	Nov. '82 3½
Cayuga and Susq.*.. 50	589,110	semi-an	July '81 4½
Cedar Rapids&Mo.R*100	6,850,400	q'arterly	Nov. '82 1½
" " pref.100	769,600	semi-an	Aug .'82 3½
Central of Georgia...100	7,500,000	semi-an	June '82 4
Central of New Jersey100	18,563,200	q'arterly	July '76 2½
Central Ohio* 50	2,437,950	semi-an	July '82 3
" pref.. . 50	411,550	semi-an	July '82 3
Central Pacific 100	59,275,500	semi-an	Aug. '82 3
Chemung* 100	380,000	q'arterly	July '81 1½
Cheshire preferred ..100	2,155,300	semi-an	July '82 1½
Chicago and Alton...100	11,181,741	semi-an	Sept. '82 4
" " pref 100	2,245,400	semi-an	Sept. '82 4
Chi., Burl. & Quincy.100	55,337,455	q'arterly	Dec. '82 2
Chi., Iowa & Nebras*.100	3,916,200	semi-an	July '82 4
Chi., Mil. & St. Paul.100	20,404,261	semi-an	Oct. '82 3½
" pref 100	14,401,483	semi-an	Oct. '82 3½
Chi. & N. Western...100	14,988,257	semi-an	Dec. '82 3½
" pref 100	21,525,353	q'arterly	Dec. '82 2
Chi., R. I. & Pacific..100	41,960,000	q'arterly	Nov. '82 1¾
Chi. and West Mich .100	6,151,000	semi-an	Feb. '82 2½
Chi.,St.P.,M.&O.pref.100	10,390,000	q'arterly	Jan. '83 1¾
C., Ind., St. L. & Chi..100	6,000,000	q'arterly	July '82 1½
Cin., Sand. & Clev.pf. 50	429,037	semi-an	Nov. '82 3
Clev. and Mahoning* 50	3,759,200	semi-an	Nov. '81 3½
Clev. and Pittsburg* 50	11,244,336	q'arterly	Dec. '82 1¾
Columbus & Xenia*. 50	1,786,200	q'arterly	Dec. '82 2
Colum.&HockingVal.100	2,500,200	semi-an	Aug. '81 208
Concord 50	1,500,000	semi-an	Nov. '82 5
Concord and Ports.*.100	350,000	semi-an	July '82 3½
Conn.& Passump.Riv100	2,244,400	semi-an	Aug '82 3
Connecticut River ..100	2,100,000	semi-an	Jan. '83 4
Cumberland Valley.. 50	1,292,950	q'arterly	Oct.' 82 2½
" 1st pref 50	241,900	semi-an	Oct. '82 4
" 2d pref. 50	243,000	semi-an	Oct. '82 4
Danbury & Norwalk. 50	600,000	.....	Oct. '82 2½
Dayton and Mich.*.. 50	2,402,573	semi-an	Apl. '82 1¾
" " pref. 50	1,211,250	q'arterly	July '82 2
Delaware*..... 25	1,468,940	semi-an	July '82 3
Del. & Bound Brook*100	1,652,000	q'arterly	Nov. '82 1¾
Del., Lack.& Western 50	26,200,000	q'arterly	Oct.. 82 2
Denver & Rio Grande.100	29,160,000	q'arterly	Jan '82 1½
Detroit, Lans. & Nor.100	1,825,600	semi-an	Aug.'80 2½
" " pref.100	2,503,380	semi-an	Aug.'82 3½
Dubuque&Sioux C'y*100	5,000,000	semi-an	Oct. '82 3
East Pennsylvania*.. 50	1,709 550	semi-an	Jan. '83 3
East Mahanoy*..... 50	392,950	semi-an	July '82 3
Eastern (N. H.).....100	492,500	semi-an	Dec. '82 2½
Eel River.....100	3,000,000	q'arterly	Dec. '82 $1
Elmira&Williamsp't* 50	500,000	semi-an	Nov. '82 1½
" " pref. 50	500,000	semi-an	July '82 3½
Erie and Pitsburg*.. 50	1,998,400	q'arterly	June'82 1¾
Evansville & Terre H.100	100,000	semi-an	Nov.'81 2
Fitchburg.....100	4,500,000	semi-an	Jan. '83 3
F. & P. Marquette pf.100	6,500,000	semi-an	Jan. '83 3½
Ft.W. & Jackson pref.100	2,000,000	.....	May '82 2
Georgia. 100	4,200,000	q'arterly	July '82 2½
Granite 100	1,250.000	semi-an	July '82 3
Greenw'h&Johnsonv.100	118,000	semi-an	July' 82 3
Han. & St. Jo. pref .100	5,083,024	semi-an	Aug. '82 3½
Harrisbg&Lancaster 50	1,182,500	semi-an	July '82 3½
H'ford&Conn.West'n.100	.....	.....	Nov. '82 1½
Housatonic pref. ...100	1,180,000	q'arterly	Oct. '82 2
Illinois Central.....100	39,000,000	semi-an	Sept. '82 3½
Ia.Falls & Sioux City*100	4,623,500	q'arterly	Dec. '82 1¾
Iowa R. Land Co....100	7,620,000	q'arterly	Nov. '82 1
Jeffersonv. Mad.&Ind100	2,000,000	q'arterly	May '82 1¾
Joliet and Chicago*..100	1,500,000	q'arterly	June'82 1¾
Kan.C.,Ft.S.&Gulf...100	4,000,000	.....	Feb. '82 2
" " pref ...100	2,750,000	semi-an	Aug. '82 4
Kentucky Central...100	500,000	semi-an	June'81 1
" " pref..100	5,583,500	semi-an	June'81 1
Lake Shore&Mich.So.100	49,466,500	q'arterly	Nov. '82 2
" (guar.)100	533,500	semi-an	Aug. '82 5
Lawrence*..... 50	450,000	q'arterly	Oct. '82 2
Lehigh Valley..... 50	27,496,895	q'arterly	Jan. '83 2
" " pref. 50	106,300	q'arterly	Jan. 83 2

Marked thus(*)are leased roads.	Stock outstanding.	Divide'd Periods.	Last Dividend Payable.
Little Miami..... 50	4,637)300	q'arterly	Dec. '82 2
Little Rock & Ft. S..100	4,096,135	.....	July' 81 108
Little Schuylkill*.. . 50	2,646,100	semi-an.	July '82 3½
Long Island..... 50	10,000,000	q'arterly	Nov. '82 1
Louisville & Nashv..100	19,130,913	semi-an.	Feb. '82 3
Lowell & Andover...100	500,000	semi-an.	Jan. '82 3½
Lykens Valley 100	600,000	q'rterly.	Oct.' 81 2½
Manchester & Law..'00	1,000,000	semi-an.	Nov. '82 5
Manhattan 100	13,000,000	.....	.....
" " 1st pref.100	6,500,000	q'rterly.	Jan. '83 1½
" " 2d pref.100	6,500,000	q'rterly.	Jan. '83 1½
Marietta& Cincinnati 50	1,386,350	.....	.....
" " 1st pref 50	8,105,600	semi-an.	Sep. '66 38
" " 2d pref 50	4,440,000	semi-an.	Sep. '66 38
Marq.Hout.&Ont.pf..100	2,259 026	.....	Aug. '82 4
Massawippi*..... .100	400,000	semi-an.	Aug. '82 3
Metropolitan 100	6,500,000	q'rterly.	Oct. '82 1½
Michigan Central....100	18,738,204	q'rterly.	Aug.'81 1
Middlesex Central...100	280,000	semi-an.	Aug.'82 3
Mill Creek&Minehill* 50	323,000	semi-an.	July '82 5
M.Hill& Schuyl.Hav* 50	4,022,500	semi-an.	July '82 3½
Missouri Pacific.....100	28,169,800	q'rterly.	Jan. '83 1¾
Mobile&Montgomery100	3,022,517	semi-an.	Feb. '80 2½
Morris and Essex.... 50	15,000,000	semi-an.	Jan. '33 3½
Mt Carbon&PtCarbon 50	282,350	semi-an.	July '82 6
Nashua and Lowell..100	800,000	semi-an.	Nov. '82 4
Nashua & Rochester.100	1,305,800	semi-an.	Oct. '82 1½
Nashv. & Decatur...100	1,827,000	semi-an.	June'81 3
Nash.,Chat.&StLouis 25	6,670,325	semi-an.	Apl. '82 1½
Naugatuck 100	2,000,000	semi-an.	July '82 5
Nesquehoning Val'y* 50	1,300,000	semi-an.	Sept.'82 3
N.Castle&Beaver Val* 50	600,000	q'rterly.	Oct. '81 —
NewLondonNorth'n*100	1,500,000	q'rterly.	Oct. '82 1½
N. Y. Cen. & Hud. R.100	89,428,330	q'rterly.	Jan. '83 2
N. Y. and Harlem....100	7,950,000	q'rterly.	Jan. '83 4
" " pref.100	1,500,000	q'rterly.	Jan. '83 4
" City Line.. —	.....	annual	Apl. '82 3
N.Y.,LakeErie&West.100	77,087,600	.....	.....
" " pref.100	7,987,500	annual..	Jan. '83 6
N. Y., N. H. & Hart...100	15,500,000	semi-an.	July '82 5
N. Y., Prov. & Boston100	3,000,000	q'rterly.	Nov. '82 2
Niag.Bridg&Canand*100	1,000,000	semi-an.	July '81 3
North Carolina*.....100	3,000,000	semi-an.	Sep. '81 3
" " pref.100	1,000,000	semi-an.	Sep. '81 3
N. Eastern (S.C.) pref100	86,000	semi-an.	May '81 4
Norfolk & Western pref.	15,000,000	q'rterly.	Dec. '82 $1
North Pennsylvania. 50	4,527,150	q'rterly.	Nov. '82 1¾
Northern Central.... 50	6,142,000	semi-an.	Jan. '83 4
Northern N. Hampsh100	3,068,400	semi-an.	Dec. '82 3
Northern Pacific pref100	42,312,589	.....	Jan. '83 11.1
Norwich&Worcester*100	2,604,400	semi-an.	Jan. '83 5
Oregon &Transcont'l.100	40,000,000	q'rterly.	Jan. '83 1½
Old Colony 100	7,333,800	semi-an.	Jan '83 3½
Oregon R'way&Nav.100	6,000,000	q'rterly.	Nov. '82 2
Oswego & Syracuse..100	1,320,400	semi-an.	Aug.'81 4½
Panama 100	7,000,000	.....	July '82 6½
Paterson & Hudson*.100	630,000	semi-an.	July '82 4
Paterson & Ramapo.100	248,000	semi-an.	July '82 4
Pember.&Hightst'n*. 50	342,150	semi-an.	Jan. '82 3
Pennsylvania.. 50	83,786,570	semi-an.	Nov. '82 4½
Pennsylvania Co..... 50	20,000,000	semi-an.	June'81 2½
Peoria & Bureau Val*100	1,200,000	semi-an.	Aug. '82 4
Philadelphia & Erie*. 50	7,013,700	semi-an.	.....
" " pfd 50	2,400,000	semi-an.	Jan. '75 4
Phil,Ger.&Norrist'n* 50	2,231,900	q'rterly.	Dec. '82 3
Phil. and Reading... 50	32,726,375	q'rterly.	Jan. '76 2½
" " pref. 50	1,551,800	q'rterly.	July '76 3½
Phila. and Trenton..100	1,259,100	q'rterly.	Jan. '83 2½
Phila., Wil. and Balt. 50	11,585,750	semi-an.	July '82 4
Pittsb., Ft. W. & Chi.*100	19,714,285	q'rterly.	Oct. '82 1¾
" Special Imp.100	6,770,900	q'rterly.	Oct. '82 1¾
Pittsfield&N.Adams..100	450,000	semi-an.	July '82 2½
Portl., Saco & Portsm100	1,500,000	semi-an.	July '82 3
Providence &Worces.100	2,000,000	semi-an.	Jan. '83 3
Rensselaer&Saratog.*100	7,000,000	semi-an.	July '82 4
Rhode Island& Mass..100	100,000	.....	Jan. '81 3
Richmond& Danv...100	3,866,000	q'rterly.	Aug. '82 2
Richmond & Petersb100	1,009,300	semi-an.	Jan. '82 3
Roch.&Genesee Val.*100	555,200	semi-an.	July '82 3
Rutland preferred.. 100	4,000,000	semi-an.	Sept. '82 1
St.L.,Alt. & T.Haute.100	2,300,000	.....	.....
" " pref.100	2,468,406	.....	Dec. '82 4
St.L.&S.Fran.1st pref100	4,500,000	.....	Aug. '82 3½
St.L.,I.Mt.&South'n.100	21,459,921	semi-an.	Feb. '74 3
St.L.,Jac'ville & Chic.100	1,293,000	.....	Aug. '82 4½
" " " pref.100	1,034,000	.....	Aug. '82 4½
St. P. & Duluth pref.100	4,705,000	semi-an.	Jan. '83 3½
St. P., Minn. & Man..100	20,000,000	q'rterly.	Nov. '82 2
Schuylkill Valley*.... 50	576,050	semi-an.	July '82 2½
Seaboard & Roanoke.100	1,229,600	semi-an.	Nov. '82 5
Shamokin V.&Pottsv 50	669,450	semi-an.	Feb. '82 3
Shore Line*.....100	1,000,000	semi-an.	July '82 4
Sioux C.&Pacific pref100	169,000	semi-an.	Oct. '82 3½
South Br. (N. J.)*....	438,300	semi-an.	Jan. '82 3
South Western (Ga.)*100	3,892,300	semi-an.	Dec. '81 3½
Stockbridge&Pitts.*. 100	448,700	semi-an.	Oct. '81 1½
Syr.,Bingham&N.Y.*100	2,500,000	semi-an.	Feb. '81 2
Terre Haute & Ind...100	1,988,150	semi-an.	Aug. '82 4
Troy and Boston.....100	1,609,000	semi-an.	Feb. '80 2
Union Pacific. 100	61,000,000	q rterly.	Jan. '83 1¾
United Cos of N. J.*.100	20,490,000	q'rterly.	Jan. '83 2½
Utica, Shenango&S V100	4,000,000	semi-an.	Nov.'81 3
Utica and Black Riv.100	1,772,000	semi-an.	Mar. '82 2
Vermont and Mass..100	3,050,000	semi-an.	Oct .'82 3
Wab. St.L.&Pac.pref.100	22,615,100	q'rterly.	Nov.'81 1½

Markedthus(*)are leased roads.	Stock outstanding.	Divide'd Periods.	Last Dividend Payable.
Ware River*.....100	750,000	semi-an.	July '82 3½
Warren (N. J.).....100	1,800,000	semi-an.	Apl. '82 3½
Warwick Valley.....100	340,000	semi-an.	July '82 2½
Westchest&Phil.pref100	821,300	semi-an.	July '80 2
West Jersey 100	1,359,750	semi-an.	Sept. '82 3
Wilmingt'n&Weld'n.100	1,456,200	semi-an.	July '82 3
Wil., Col., & Aug 100	960,000	semi-an.	July '82 3
Winchester&Poto'c.*100	180,000	semi-an.	July '82 3
Winchester&Strasb.*100	74,700	semi-an.	July '82 3
Worcester & Nashua. 75	1,789,800	semi-an.	Jan. '83 1½
HORSE-POWER R. R.			
Albany City.....100	200,000	annual	.... '80 5½
Baltimore City 25	1,000,000	semi-an.	Jan. '83 3
Balt.,Cat.&El. Mills..100	....	semi-an.	July '82 2
BleeckerSt.&Ful.F'y.100	900,000	semi-an.	July '82 ¾
Boston&Chelsea pref. 50	110,000	semi-an.	Oct. '82 3
Broadway (Brooklyn)100	250,000	q'arterly	Oct. '82 6
B'way&7th Av,(N.Y.)100	2,100,000	q'arterly	Oct, '82 2
B'klyn&Hunter's Pt.100	400,000	semi-an.	Oct. '82 6
Brooklyn City 100	2,000,000	q'arterly	Nov. '82 3½
Bushwick (Brooklyn)100	309,000	semi-an.	Oct. '82 6
Cambridge.....100	908,000	q'arterly	Oct. '82 4½
Cen.Park,N.& E.Riv.100	1,800,000	q'rterly.	Oct. '82 6
Christoph'r&TenthSt100	650,000	semi-an.	Aug.'82 2½
Citizens' (Phil.)..... 50	192,500	q'rterly.	Jan. '82 2½
Citizens' (Pbg.)..... 50	200,000	annual..	....'80 14½
Coney Island&Bklyn100	500,000	semi-an.	Oct. '80 5
Continental (Phil.) .. 50	580,000	semi-an.	Jan. '83 6
D.Dock,E.B'way&Bat100	1,200,000	q'arterly	Aug.'82 4
Eighth Av. (N. Y.)...100	1,000,000	q'rterly.	Oct. '82 3
42d St. & G. St. Ferry100	747,000	semi-an.	May '82 6
Frankf.&Southw (Ph) 50	600,000	q'rterly.	Oct. '82 6
Germantown, (Ph.).. 50	572,800	q'rterly.	Oct. '82 2¼
Girard College (Ph.) . 50	500,000	semi-an.	July '71 3
Grand St. & Newton..100	170,091	semi-an.	July '81 1½
Green&Coates St.(Ph) 50	150,000	q'rterly.	Oct. '82 3
Heston,Mantau&F'm 50	299,381	semi-an.	Jan. '75 4
Highland.....100	600,000	semi-an.	July '82 4
Lomb.&SouthSts(Ph) 25	195,000	semi-an.	Oct. '75 4
Lynn and Boston....100	200,000	semi-an.	Nov. '82 4
Malden and Melrose.100	165,000	.....	.....
Metropolitan (Bost.). 50	1,500,000	semi-an.	July '82 4
Middlesex (Boston)..100	650,000	semi-an.	Nov. '82 3½
N.Y.,Bay Ridge&Jam100	150,000	..... .	Oct. '78 7
Ninth Av. (N. Y.)....100	797,320	.....	.....
Orange &Newark....100	282,555	.....	.....
People's (Phila.) pref. 25	124,744	.....	July '82 2
Philadelphia City... 50	475,000	semi-an.	July '82 4
Phila. and Darby.... 20	200,000	semi-an.	July '81 3½
Phila.&Grey's Ferry. 50	308,000	semi-an.	Jan. '82 6
Pbg,Alleg.&Manches. 50	300,000	q'rterly.	Oct. '81 3
Ridge Avenue (Ph.).. 50	420,000	semi-an.	Oct. '81 11
Second Avenue (N.Y.)100	1,199,500	semi-an.	July '82 4
Second&ThirdSt.(Ph) 50	771,076	q'rterly.	Jan. '82 4½
17th &19th sts (Ph.).. 50	250,000	semi-an.	July '81 3
Sixth Avenue (N. Y.)100	750,000	semi-an.	May '82 5
Somerville (Boston).100	113,000	semi-an.	Nov. '82 3
South Boston..... 50	600,000	semi-an.	July '82 4
Third Avenue, N. Y..100	2,000,000	q'rterly.	Aug '82 5
13th and 16th sts.,Ph 50	334,529	q'rterly.	Jan. '82 4
23d street, N. Y.....100	600,000	semi-an.	Aug.'82 4
Union, Boston.....100	374,300	semi-an.	Jan '82 4
Union, Phila..... 50	1,005,000	semi-an.	Jan. '82 7
West Philadelphia... 50	750,000	semi-an.	July '77 10
CANALS.			
Chesapeake and Dela 50	2,078,038	semi-an.	June'75 2
Delaware Division... 50	1,633,350	semi-an.	Aug. '82 $1
Delawa. and Hudson100	80,000,000	q'rterly.	Dec. '82 1¾
Delaware & Raritan*.100	5,847,400	q'rterly.	Jan. '83 2½
Lehigh Coal and Nav 50	11,204,250	semi-an.	Dec. '82 2
Monongahela Nav... 50	1,004,500	semi-an.	July '82$3
Morris, consolidated.100	1,025,000	semi-an.	Aug. '82 2
" preferred....100	1,175,000	semi-an.	Aug.'82 5
Pennsylvania.....100	4,501,200	.....	.....
Schuyl. Nav., com.*. 50	859,100	annual..	Oct.'82 500.
" " pref... 50	3,200,000	annual..	Oct. '82 $1
MISCELLANEOUS.			
Adams Express.....100	12,000,000	q'rterly.	Dec. '82 2
American Express... 50	18,000,000	semi-an.	Jan '83 3
Amoskeag Manuf.Co.100	3,000,000	semi-an.	June'81 5
Calumet&HeclaMin'g 25	100,000 S.	q'rterly.	Nov. '82 $5
Central Mining Co...100	.....	semi-an.	Feb.'82 2½
Consolidation Coal..100	10,250,000	semi-an.	Jan. '82 2
George's Creek C.&I.100	.....	semi-an.	Jan. '82 3
Maryland Coal.....100	4,400,000	semi-an.	Feb. '76 1½
Mariposa L. &Mining100	10,000,000	..... .	.....
" pref100	5,000,000	..... .	.....
Missouri Val.LandCo100	200,000	semi-an.	July '82 12
National Tube Works100	1,000,000	q'rterly.	Oct. '82 3
Pac. Mail Steamship.100	20,000,000	q'rterly.	Sept.'69 3
Pennsylvania Coal... 50	5,000,000	q'rterly.	Nov. '82 3
Pullman Palace Car..100	10,032,800	q'rterly.	Nov. '82 2
Quicksilver, com....100	5,708,700	..... .	May '82 0.4
" pref....100	4,291,300	..... .	May '82 6
Quincy Mining Co... 25	40,000 shs	semi-an.	Aug. '82 $5
Quincy R. R. Bridge.100	1,750,000	semi-an.	July '82 5
SiouxC.&I.F.L.&L.Co100	500,000	semi-an.	June'82 5
Spring Mt. Coal.....100	1,500,000	semi-an.	Dec. '82 3½
Topeka Equip'nt Co.100	255,500	semi-an.	Oct. '82 5
United States Ex....100	7,000,000	q'rterly	Nov. '80 1
Wells-Fargo & Co. Ex100	6,250,000	semi-an.	Jan. '83 4
Western Union Tel..100	80,000,000	q'rterly.	Jan. ' 1½

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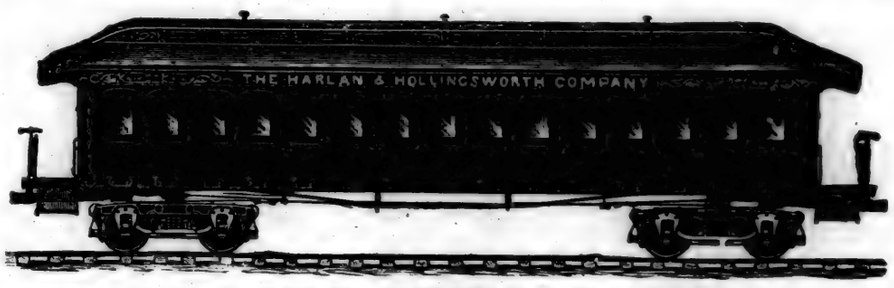
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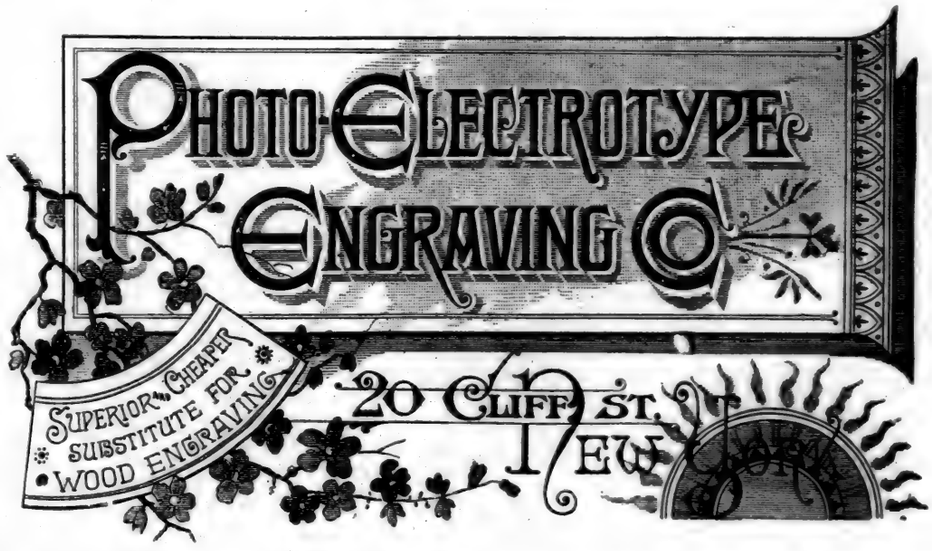
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CONCORD CONSTRUCTION CO., Concord, N. H.

Letters respecting the financial affairs of the Company should be addressed—
H. F. WORRALL, Treasurer, 8 Exchange Place, Boston, Mass.

RAILROAD EARNINGS.—MONTHLY.

	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total.
Burl., Cedar Rap. & Northern:													
1880	184,316	165,170	188,325	141,652	149,504	153,378	143,432	160,160	179,804	204,991	189,330	193,419	2,053,484
1881	167,750	124,510	148,551	184,680	165,630	205,912	174,351	209,112	221,801	221,748	202,180	232,812	2,259,037
1882	252,823	225,631	224,107	178,304	199,278	211,257	198,276	224,921	261,439	300,155	278,439	.....	.....
Central Pacific:													
1880	1,200,615	1,070,487	1,373,438	1,356,716	1,778,488	1,724,930	1,840,067	1,973,438	1,994,997	1,120,229	2,199,466	1,905,221	20,508,113
1881	1,602,907	1,454,218	1,709,638	1,872,370	2,091,411	2,159,382	1,899,346	2,088,519	2,185,303	2,507,857	2,297,971	2,225,179	24,094,101
1882	1,839,469	1,720,675	1,969,737	2,054,687	2,342,298	2,229,105	2,020 000	2,277,000	2,474,000	2,409 000	2,242,000	.....	.....
Chesapeake and Ohio:													
1880	202,335	198,681	222,762	221,559	199,443	214,352	238,236	259,110	247,303	211,820	240,795	218,009	2,674,308
1881	162,540	184,389	228,479	227,343	252,235	241,135	225,096	262,858	247,144	236,396	230,022	203,562	2,702.762
1882	210,455	209,708	208,981	267,454	255,939	260,753	306,831	371,175	332,219	347,882	287,850	.....	.....
Chicago and Alton:													
1880	534,054	497 013	626,473	542,961	616,128	617,524	708,906	761,120	767,349	785,199	696,776	574,695	7,718,198
1881	487,890	461,641	529,915	558,190	548,556	635,860	676,205	769,751	774,790	771,844	672,380	635,307	7,553,988
1882	570,447	530,480	584,483	561,787	553,412	613,886	671,537	800,624	881,109	812,032	748,151	.....	.....
Chicago and Northwestern:													
1880	1,154,632	1,131,683	1,361,725	1,294,573	1,875,608	1,671,177	1,699,686	1,767,938	2,020,245	2,105,217	1,855,622	1,477,902	19,416,007
1881	1,240,664	963,204	1,178,795	1,474,612	1,879,006	2,306,440	1,983,032	2,315,164	2,292,676	2,341,098	2,019,038	1,855,477	21,849,209
1882	1,644,935	1,474,176	1,672,931	1,668,741	2,110,947	2,022,700	2,025,736	2,099,755	2,497,053	2,592,100	2,069,287	.....	.....
Chicago, Burlington and Quincy:													
1880	1,432,740	1,411,870	1,732,518	1,489,894	1,909,627	1,682,956	1,773,643	1,834,321	1,862,285	1,934,762	1,837,860	1,552,018	20,454,494
1881	1,307,948	1,034,821	1,418,149	1,574,371	1,679,455	2,083,803	1,888,358	2,173,945	2,262,981	2,031,001	1,816,133	1,905,490	21,324,150
1882	1,658,834	1,457,300	1,566,217	1,530,838	1,505,261	1,437,164	1,625,006	2,086,858	2,186,400	2,270,444	.....	.....	.....
Chicago, Milwaukee and St. Paul:													
1880	764,298	738,749	900,675	871,041	1,134,745	1,037,958	1,026,708	991,297	1,257,677	1,493,620	1,472,037	1 397,308	13,086,119
1881	990,847	682,717	916.989	1,259,946	1,538,491	1,729,811	1,568,706	1,678,361	1,644,670	1,591,052	1,569.597	1,855,000	17,025,462
1882	1,435,000	1,377,000	1,561,000	1,518,000	1,629,000	1,620,000	1,465,000	1,545,000	1,950,000	2,251,000	2,072,000	.....	.....
Chicago, St. Paul, Minneapolis and Omaha:													
1880	193,827	173,078	259,783	259,208	232,146	218,093	236,995	251,013	300,833	342,052	342,894	312,173	3,122,097
1881	257,786	158,594	251,648	261,211	350,124	404,567	383,202	385,586	373,370	379,029	392,921	391,950	3,981,296
1882	307,498	315,100	405,779	356,558	406,420	363,109	331,480	394,555	482,997	546,671	517,595	.....	.....
Cincinnati, Indianapolis, St. Louis and Chicago:													
1880	155,697	172,541	198,220	168,199	186,995	200,332	204,138	233,478	343,627	239,881	209,014	198,254	2,412,185
1881	182,523	171,511	191,005	183,710	191,056	192,299	177,161	229,858	228,653	221,320	194,805	192,623	2,296,916
1882	200,042	186,879	208,066	204,269	199,110	195,948	209,564	.....	259,379	.....	.....	.....	.....
Denver and Rio Grande:													
1880	124,759	126,922	160,883	164,882	193,925	295,455	373,132	400,133	406,583	473,318	408,562	349,196	3,478,007
1881	307,476	317,681	398,493	433,111	514,767	584,230	548,284	606,103	589,287	638,432	547,055	643,417	6,206,812
1882	491,914	412,987	535,055	559,917	614,298	537,462	495,797	574,040	595,306	630,598	512,965	.....	.....
Hannibal and St. Joseph:													
1880	176,079	166,965	216,061	206,735	191,317	179,396	224,312	238,081	233,448	242,214	207,147	279,635	2,561,366
1881	154,401	122,874	176,356	190,812	172,950	190,740	201,899	210,240	215,103	231,913	195,607	180,376	2,230,961
1882	138,284	154,717	168,798	148,913	154,917	155,030	184,347	258,628	239,196	238,442	249 252	.....	.....
Illinois Central:													
1880	595,212	613,806	613,008	535,732	665,120	681,736	724,095	732,755	806,836	880,211	783,120	673 182	8,304,812
1881	631,281	524,499	557,789	662,493	673,259	803,887	720,004	868,407	828,847	815,238	737 218	763,475	8,586,397
1882	728,173	689,387	695,371	674,603	674,749	663,746	752,251	813,600	828,238	865,325	752,144	.....	.....
Indiana, Bloomington and Western:													
1880	80,498	89,690	116,185	90,374	85,733	106,954	103,438	116,732	110,622	121,343	96,621	104,619	1,233,079
1881	90,283	83,261	192,085	203,677	200,064	199,846	190,125	272,174	247,932	225,678	200,450	156,697	.....
1882	195,824	175,755	206,235	205,934	182,554	186,133	206,072	278,814	273,100	269,046	256,998	.....	.....
Louisville and Nashville:													
1880	674,455	575,035	612,593	563,883	655,014	976,229	772,538	827,089	931,911	1,000,327	953,087	949,185	9,491,346
1881	812,118	805,124	947,959	855,704	828,726	1,227,885	817,135	876,192	951,566	1,002,950	1,065,223	1,153,779	11,344,361
1882	964,527	960,315	1,068,834	953,603	958,130	1,215,490	1,063,765	1,043,912	1,107,985	1,216,215	1,192.390	.....	.....
Mobile and Ohio:													
1880	250,116	204,095	168,302	140,091	129,248	121,855	131,621	140,593	184,247	264,714	251,368	287,372	2,273,622
1881	224,347	216,768	230,916	163,551	145,803	136,517	135,549	169,789	210,262	256,924	262,986	258,812	2,403,224
1882	159,676	158,590	148,166	141,957	134,378	136,184	136,398	140,443	160,031	265,201	295,110	.....	.....
Nashville, Chattanooga and St. Louis:													
1880	205,634	191,154	169,457	155,466	158,839	144,130	151,594	169,326	167,473	178,266	182,087	175,966	2,049,484
1881	178,143	190,866	207,710	183,525	104,430	154,549	150,430	168 317	179,979	172,121	152,059	173,127	2,075,256
1882	156,994	159,961	161,005	154,155	135,556	119,074	160,991	168,304	168,999	180,319	.....	.....	.....
New York and New England:													
1880	164,232	149,907	183,845	179,689	183,701	219,891	205,056	249,885	235,642	215,491	210,856	198 108	2,396,302
1881	189,749	173,614	212,019	216,913	217,185	231,518	246,821	280,524	299,573	261,200	240,764	237,729	2,809,255
1882	213,840	217,261	265,222	263,544	283,244	290,060	340,920	353,726	338,490	310,145	276,183	.....	.....
New York, Lake Erie and Western:													
1879	1,147,173	1,207,391	1,356,780	1,372,755	1,350,574	1,230,419	1,273,533	1,450,223	1,492,497	1,713,697	1,515,835	1,398,224	16,509,127
1880	1,296,381	1,252,218	1,644,958	1,643,151	1,592,544	1,661,812	1,580,976	1,606,874	1,786,417	1,899,910	1,799,338	1,726,788	19,149,361
1881	1,443,437	1,425,765	1,847,261	1,709,057	1,776,891	1,794,982	1,787,081	1,772,895	1,734,200	.....	.....	.....	.....
Northern Central:													
1880	334,494	330,860	415,325	386,130	329,788	419,193	450,298	453,923	464,093	512,918	459,054	494,310	5,050,387
1881	386,157	382,657	452,906	487,273	465,588	487,287	440,811	498,008	429,565	449,664	487,160	476,622	5,443,697
1882	407,368	413,551	430,194	435,129	482,607	482,762	509,683	667,488	592,435	550,225	.....	.....	.....
Northern Pacific:													
1880	81,390	77,259	119,357	185,700	217,613	253,105	241,277	223,500	330,300	358,456	300,822	220,993	2,629,710
1881	116,508	78,803	162,984	216,210	312,705	412,024	393,260	434,085	534,363	583,955	475,610	434,331	4,044,576
1882	239,800	269,000	384,000	438,000	568,332	631,342	679,240	727,377	789,700	834,460	761,324	.....	.....
Philadelphia and Erie:													
1880	224,307	245,372	327,678	334,947	311,470	331,024	308,699	347,532	322,737	367,082	324,966	281,919	3,727,733
1881	224,303	225,501	285,573	293,323	343,792	350,585	291,669	303,849	276,522	292,392	284,078	282,772	3,454,309
1882	252,727	246,246	265,311	277,851	341,415	347,614	377,206	420,329	386,455	397,164	.....	.....	.....
St. Louis and San Francisco:													
1880	198,091	195,948	193,146	176,164	167,664	173,607	213,297	259,995	280,873	328,194	290,329	226,063	2,698,371
1881	212,435	178,234	262,050	265,298	283,399	260,254	252,333	286,373	279,064	308,569	284,320	287,914	3,160,245
1882	256,784	244,654	274,959	242,806	253,419	240,177	318,613	381,637	336,805	360,900	331,490	.....	.....
St. Louis, Alton and Terre Haute:													
1880	153,139	163,737	168,994	155,462	147,928	150,207	191,077	216,759	204,295	221,863	188,773	184,503	2,146,741
1881	175,725	166,012	201,137	197,447	172,177	165,896	165,393	189,180	196,368	204,338	169,795	153,852	2,112,801
1882	168,987	149,619	178,145	157,450	162,842	142,742	192,017	236,137	217,659	229,962	206,040	.....	.....
St. Louis, Iron Mountain and Southern:													
1880	555,983	490,195	451,560	408,241	349,053	363,454	432,655	565,869	671,219	688,365	632,052	656,951	6,265,597
1881	570,957	560,791	704,002	548,300	479,075	474,302	533,512	644,386	708,325	719,239	687,271	709 498	7,319,744
1882	516,370	501,127	585,008	581,977	519,120	529,700	515,519	675,981	724,160	809,394	843,973	.....	.....
St. Paul, Minneapolis and Manitoba:													
1880	180,239	137,645	261,798	333,014	281,899	243,407	272,089	232,579	274,188	345,057	300,675	297,641	3,160,231
1881	254,187	159,482	320,962	425,685	382,642	405,322	387,488	414,954	485,736	605,708	508,530	528,262	4,878,960
1882	395,461	418 358	531,004	570,890	858,902	856,417	853,296	801,759	832,776	979,057	913,335	.....	.....
Texas and Pacific:													
1880	245,785	219.165	215,070	174,177	141,083	153,066	195,711	226,073	266,570	303,666	312,184	301,858	2,754,408
1881	281,176	260,781	319,928	295,066	281,782	285,405	328,663	381,331	345,790	419,203	369,521	381,218	3,921,569
1882	310,785	255,644	332,911	359,543	409,228	384,713	367,215	439,918	470,613	541,901	619,655	.....	.....
Union Pacific Railway:													
1880	1,433,636	1,393,992	1,730,509	1,937,220	2,027,269	1,928,528	1,934,215	1,913,035	2,270,179	2,707,860	2,251,148	1,869,335	23,448,445
1881	1,339,799	1,374,740	1,674,860	1,766,894	2,319,238	2,884,774	2,528,826	2,638,659	2,844,357	3,169,530	2,723,608	2,267,004	27,451,831
1882	1,961,088	1,759,863	2,226,832	2,462,004	2,491,590	2,508,453	2,301,000	2,762,107	2,949,112	3,158,337	2,821,070	.....	.....
Wabash, St. Louis and Pacific:													
1880	776,790	759,451	978,629	892,024	948,773	953,468	1,966,742	1,189,478	1,178,950	1,501,203	1,131,787	1,050,816	12,428,112
1881	811,617	818,922	1,121,592	1,023,482	1,144,660	1,308,993	1,131,752	1,542,838	1,490,027	1,397,781	1,343,556	1,328,278	14,461,570
1882	1,229,965	1,134,768	1,315,776	1,378,194	1,204,864	1,149,682	1,418,837	1,772,544	1,682,382	1,595,680	1,525,715	.....	.....

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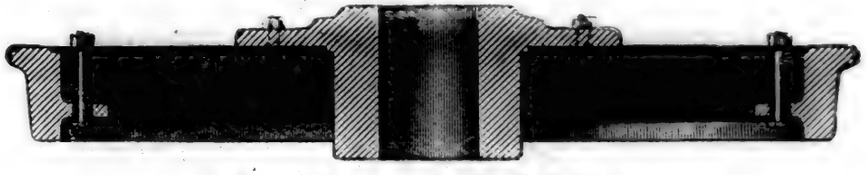
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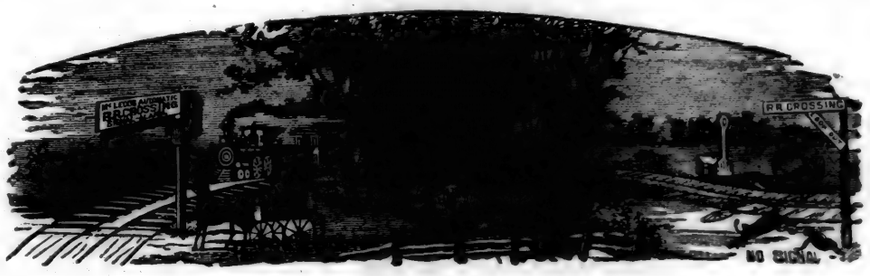
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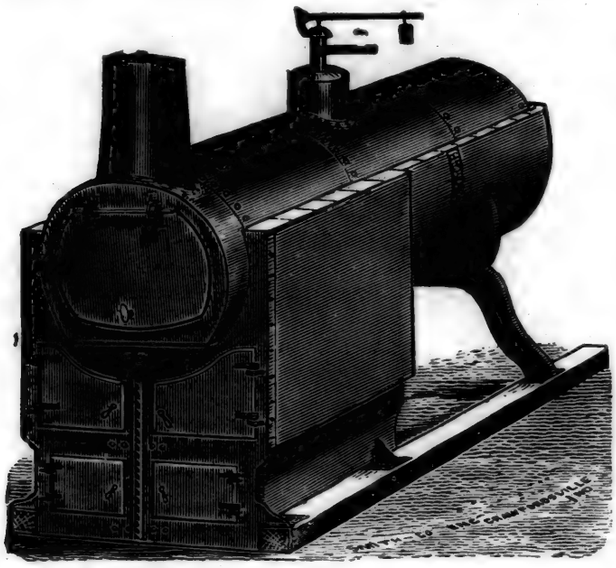
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4 Pemberton Square, Boston, Mass.
New York Office with Col. Thos. R. Sharp, 115 Broadway.



Haag's Portable Arch for Steam Boilers.

Patented September 12, 1882.

THE above cut represents a support or arch for portable boilers, consisting of cast-iron walls and sheet-iron combustion chamber. It is constructed in sections so as to be easily put up or taken down, and is securely fastened with bolts. The inside of the fire-box is lined with fire or common brick, and the inside of the combustion chamber is lined with common brick laid flatwise, to protect the iron from the action of the fire.

The entire top of the device is open before the boiler is placed in the support or arch, and rests within the arch of the front wall, and fits snugly at the top of the combustion chamber.

The boiler is supported at the rear end by a piece of heavy strap-iron, which is bolted to the upper side of the combustion chamber, leaving a space of about nine inches between the bottom of the boiler and combustion chamber. The space between the boiler and the side walls of the fire-box may be closed by a course of brick or fire plate, to protect the walls of the fire-box from the action of the fire.

This support can be used for boilers of any size, for operating portable, stationary or marine engines, and should the boiler need repairs it can readily be lifted out of its seat or support and be again replaced without disturbing the engine.

The engine rests on skids laid crosswise of those represented in the cut, with the shaft running under the arch with the driving-pulley on the opposite side—the arch expands and contracts with the boiler, thus preventing cracks, which are very common in brick constructions. An arch or support thus made is more durable and less expensive than any other support or arch. Wood, coal or saw-dust, are successfully used.

After years of profound study and application, we have produced this marvel in mechanism as represented above. State rights for sale. For price lists, circulars, and further information, address JOHN C. HAAG, Lansing, Mich.

ADVERTISE in the RAILROAD JOURNAL.

THAT the hearing as well as the sight of railway employés should not be defective is apparent to every one. Professor Moos, of Heidelberg, has been investigating the matter of deafness on the part of those in charge of trains, and finds that many of those in responsible positions are suffering from diseases of the ear, and that accidents are not infrequently attributed to the defective hearing of both engineer and fireman. Professor Moos quotes several medical authorities who have paid special attention to this subject. One of these, Dr. Jacoby, found that in ten and a half years he was called upon to treat twenty out of eighty engineers for affections of the ear. Dr. Hartman is of the opinion that these diseases are mainly caused by violent winds, severe colds, and passing through long tunnels, to which engine-drivers are exposed. This is a subject of importance only secondary to color-blindness. The hearing as well as the sight of railway employés should be thoroughly tested.

A New Method of Smelting Iron Ore.

IN 1859, when Mr. Bessemer wrote from Sweden that by means of a current of air introduced into a mass of cast-iron in fusion he could produce at will either iron or steel, the news was simply ridiculed in France. At the present time our rails and cannon are made of Bessemer steel. An experiment, perhaps even more curious than the first one made by Mr. Bessemer for the production of steel from his cast-iron in fusion, has just been made at Rive de Gier, in the works of M. Barthelemy Brunon, the distinguished metallurgist of the district of the Loire. A lump of African iron ore, weighing thirty-two pounds, was broken up into small fragments and placed in a crucible. As soon as the ore was at red heat a reacting substance was added, and in three minutes the liquefaction of the ore was complete. The produce obtained is iron. All those employed in the establishment—engineers and workmen—were stupefied at the result. Experiments will shortly be made in a fully loaded cubilot at a foundry at Lyons. The reacting substance above mentioned cost about 1f. 25c., per ton. By means of this process a blast furnace, instead of producing twenty-two tons of cast-iron every twelve hours, would turn out twenty-two tons every fourteen minutes, besides which the furnace would be self-cleaned at each operation. These facts deserve the attention of metallurgists; they are making quite a stir in the manufacturing district of the Loire. —*Journal des Mines.*

ARTICLES of incorporation have been filed with the Secretary of State of California, of the North Pacific Coast Railroad Extension Company. The directors are: James D. Walker, Thos. Menzies, David Nye, Frederick B. Catton, Donald F. Tillinghast. Capital stock, $1,000,000. Principal place of business, San Francisco.

North Shore Railway.

THE Toronto *Globe* says that the sale of the controlling interest in the North Shore Railway, from Montreal to Quebec, to the Grand Trunk Railway Company is likely to result detrimentally to the interests of the Province of Quebec, and then adds:—

"At the time of the sale of the western section of the line to the Canadian Pacific Railway Syndicate we pointed out that the Quebec Government by dividing the road in selling it into two sections were acting in a manner most prejudicial to the Province, in order to serve the private interests of Mr. Senecal and his friends. The Grand Trunk has not bought the North Shore line because it was necessary or advantageous. The purchase was simply made in the madness of railway rivalry, with the object of depriving the Canadian Pacific of a possible advantage. That Company have no outlet to Quebec, and had they secured control of the North Shore line it is likely that a considerable proportion of their traffic from the West would have passed over it. Now there will be little if any of the volume of the Northwestern produce shipped to Quebec by this route, as the Syndicate will prefer to avail themselves of their connections with American lines, and the Grand Trunk traffic can be accommodated by its own line on the South Shore. The effect will be to deprive Quebec of any advantage from the connection with the Northwest. It is another flagrant instance of the manner in which the Province has been injured and impoverished by corrupt rulers."

Value of Foreign Coins.

THE following statement of the value of foreign coins is furnished by the Director of the United States Mint: Austria, florin, 40.6 cents; Belgium, franc, 19.3; Bolivia, bolinano, 82.3; Brazil, milreis of one thousand reis, 54.6; British possessions, N. A., dollar, 100; Chili, peso, 91.2; Cuba, peso, 93.2; Denmark, crown, 26.8; Ecquador, peso, 82.3; Egypt, piaster, 4.9; France, franc, 19.3; Great Britain, pound sterling, 486.6½; Greece, drachma, 19.3; German Empire, mark, 23.8; Hayti, gourde, 96.5; India, rupee of 16 annas, 39; Italy, lira, 19.3; Japan, zen, 88.7; Liberia, dollar, same as United States; Mexico, dollar, 89.4; Netherlands, florin, 40.2; Norway, crown, 26.8; Peru, sol, 82.3; Portugal, milreis of 1,000 reis, 1.08; Russia, rouble of 100 copecks, 65.8; Sandwich Islands, dollar, same as American dollar; Spain, peseta of 100 centimes, 19.3; Sweden, crown, 26.8; Switzerland, franc, 19.3; Tripoli, mahbub of 20 piasters, 74.3; Turkey, piaster, 4.4; United States of Colombia, peso, 82.3; Venezuela, bolivar, 19.3.

WHILE the advertiser eats and sleeps, printers, steam-engines and printing-presses are at work for him; trains are bearing his words to thousands of towns and hundreds of thousands of readers, all glancing with more or less interest at the message prepared for them in the solitude of his office. No preacher ever spoke to so large an audience, or with so little effort, or so eloquently, as you, gentle reader, may do, with the newspaper man's assistance.

53d YEAR!!

—:o:—

Now Is The Time

—TO—

SEND IN YOUR

SUBSCRIPTION

FOR THE

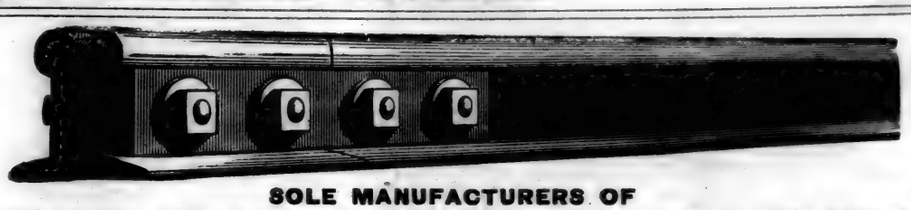
AMERICAN

RAILROAD

JOURNAL

FOR

1883.



SOLE MANUFACTURERS OF

IMPROVED VULCANIZED FIBRE TRACK-BOLT WASHERS,

which form non-metalic, permanently elastic compensating cushions, absorbing shocks and vibrations, and absolutely locking the nuts. These Washers have been adopted by a large number of railroads as the cheapest and best device in use. Flexible vulcanized-fibre dust guards and oil box packings, which are absolutely unaffected by oil and grease, are far more durable than leather and much cheaper.

Office and Factory, Wilmington. Del.

RAILROAD IRON.

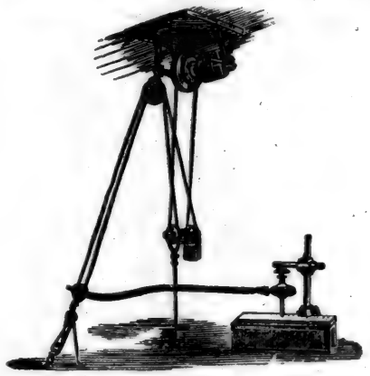
The undersigned, agents for the manufacturers, are prepared to contract to deliver best quality American or Welsh Steel or Iron Rails, and of any required weight and pattern. Also Speigel and Ferro Manganese

PERKINS & CHOATE,

23 Nassau Street, - - New York.

STOW FLEXIBLE SHAFT CO., LIMITED,

1507 Pennsylvania Ave., Philadelphia, Pa.,



MANUFACTURERS OF

PORTABLE Power Drill Presses,
PORTABLE Power Reaming Tools,
PORTABLE Power Tools,

for TAPPING and putting in STAY BOLTS, etc., etc.

THE COST OF ADVERTISING

For any responsible advertiser, making application in good faith, we prepare and furnish a written estimate, showing the cost of any proposed advertising in the leading Newspapers of the United States and Dominion of Canada.

We prepare and exhibit printed proofs of any proposed advertisements.

For the preparing of estimates no charge is made, and the applicant is placed under no obligation to transact his advertising business through us unless it appears to him that by doing so he will best advance his own interests.

A copy of the advertisement, a list of the papers, the space the advertisement is to occupy and the time it is to appear, should all be given with the application for an estimate of the cost.

When an advertiser does not know what he wants or what he ought to do, he can designate some sum of money within which he wishes to limit his expenditure: this will enable us to prepare for him such a list of papers as will be the best for his purpose, within the limits which he prescribes.

Send 25c. for 100-page pamphlet. Address

GEO. P. ROWELL & CO.

Newspaper Advertising Bureau,

Printing House Square,
Opposite Tribune Building,

10 Spruce St., New York.



THE JENKINS STANDARD PACKING is acknowledged by users as the *Best* in the world. Unlike all other Packings, the **Jenkins Standard Packing** can be made any thickness desired in a joint by placing two or as many thicknesses together as desired, and following up joint it vulcanizes in place and becomes a metal of itself (it is frequently called Jenkins Metal), and will last for years, as it does not rot or burn out. Avoid all imitations, as a good article is always subject to cheap imitations. The **genuine** has stamped on every sheet, "**Jenkins Standard Packing,**" and is for sale by the Trade generally. Manufactured only by

JENKINS BROS.,

PROPRIETORS JENKINS PATENT VALVES, PACKING, &c.

71 JOHN ST., NEW YORK.

104 Sudbury St., Boston.

DODGE & SINCLAIR.

MANUFACTURERS OF

Rubber and Leather BELTING,

RUBBER HOSE PACKING, TUBING, SPRINGS, GASKETS, Etc.

RUBBER CLOTHING, LACE LEATHER, BELT HOOKS,

RAILROAD, MINING, AND MILL SUPPLIES.

No. 21 Park Place,

NEW YORK.

CORRESPONDENCE.

[We pay no attention to communications unless the name and address of the writer are given, though the same will not be published if so requested. We assume no responsibility for statements made by correspondents, and we do not necessarily endorse ideas advanced by them. Under these conditions we think it of value to our readers to devote a liberal space to the free discussion by others—whose opinions may be at variance with our own—of subjects pertinent to our department of journalism.]

A Veteran's Communication.

The following is a private letter received by the Secretary of the American Railroad Journal Company, from the oldest engineer in the United States:

Clarksville, Ga., Dec. 14, 1882.

C. T. Valentine, Esq.—*Dear Sir:*—According to promise I send you a small instalment of reminiscences. Whether it is of sufficient importance to interest any of the readers of your excellent Journal, is for you to decide.

I have been engaged up to the present time in various jobs pertaining to our railroad, which is now finished, and open to our celebrated Tallulah Falls, which are the Niagara of Georgia. I find my health and strength giving way from the wearing out of this old machine, which has done good service for near eighty-three years.

I take much pleasure in reading the American Railroad Journal. *It is the best paper of its class in the United States*, and long may you live to conduct it with its present ability and usefulness, is the ardent wish of

Your humble servant,

J. Van Buren.

P. S.—You cannot fail to perceive that my good right arm is getting to be quite shaky.

Mr. Van Buren's valued reminiscences are subjoined.

The Mohawk and Hudson Turnpike.

It is out of my power to give the precise time of the construction of this road, further than that it was open to public use at the commencement of the war of 1812, as I had occasion to pass over it a number of times during the war.

It was run in a direct line from the city of Albany to the city of Schenectady; was about sixty feet in width. The hills were graded down to an easy ascent both ways, and the road paved with common paving-stone in places where it was liable to be cut up by the ponderous wheels of the huge wagons used in carrying the war munitions from the former city to the latter, where they were transferred to batteaux and pole boats on the Mohawk River thence to Lake Ontario and Lake Erie, and probably to interior stations where needed. The turnpike was ornamented with a row of poplar trees planted on either side, which gave it quite a picturesque appearance for many years, but which proved to be very injurious by shading it and rendering it muddy and almost impassable at times. The vast amount of war material forwarded from the city of Albany destined to the western lakes, passed over this road for some three years, both summer and winter, in large wagons with tires six inches in width and drawn by six and eight horses to a wagon. During the winter months I have seen this road become so smooth from the constant rolling of these wide-tired wheels, that it was very difficult for the horses to keep on their feet. I have seen many of them with their front teeth knocked out, by falling on their noses, and otherwise seriously maimed. As I have not seen this road for near fifty years past, I am unable to say anything as to its present condition. From the close of the war of 1812, up to the construction of the Erie Canal, it was the great market avenue for the farmers of the Mohawk Valley, and was studded with hotels, or taverns as they were then called, from one city to the other so closely that you could never get out of sight of a swinging tavern signboard; and I have spent many a merry night at the fireside of these hospitable houses in my boyish days in going to and from market, and on parties of pleasure in both summer and winter.

J. V. B.

Extraordinary Stage Driving.

Some forty years ago, Col. R. W. Habersham, who was then a member of Congress from this district, was the owner of an African negro by the name of Cæsar, who was quite a character in his way. On being asked one day what work he was put at when he was first brought to this country, he answered pompously, "Me stage driver, sah." "Stage driver, were you, eh?" "Yes, Sah." "Where did you drive stage, Cæsar?" "Me dribe stage from New York to Liberpool, sah."

He Collected the Debt.

One day a Michigan constable who had long been trying to collect a claim of $40 against a sharp citizen, went to a worthy burgher and said—'See here, Jones, I've got a plan to collect $40 off that sharp Perkins. All I want is a little from you, and if you'll grant it I won't forget the favor.'—'I'm willing—what's your plan?' replied Jones. 'Why, I want you to bet him $20 that he doesn't weigh 120 pounds. If you'll do that I can fix the rest." "Oh, I'll do anything to help you out, said Jones, and the two walked around to the grocery where Perkins was known to hang out. After a little talk, the constable keeping in the shade, Jones began bluffing, and when he stated his fiendish desire to bet $20 that Perkins wouldn't tip the beam at 120 pounds, his greenbacks were covered before a mule could kick three times. As the money was put up the constable slipped out for a garnishee, and was back in time to serve it on the stakeholders. Perkins weighed 148 pound, and the $40 in the hands of the stakeholder eventually paid a claim against him, but it has never yet been made clear to Jones how he made anything out of it. It has always seemed to him that he was $20 out, and for fifteen long years he has refused to walk on the same side of the street with that constable.

The girly girl is the truest girl. She is what she seems, and is not a sham and a pretence. The slangy girl has a hard job of it not to forget her character. The boyy girl and the rapid girl are likewise wearers of masks. The girly girl never bothers about woman rights and woman wrongs. She is a girl and is glad of it. She would not be a boy and grow up into a man and vote and go to war and puzzle her brains about stocks for a kingdom. She knows nothing about business, and does not want to know anything about it. Her aim is to marry some good fellow and make a good wife, and she generally succeeds in doing both. She delights in dress and everything that is pretty, and she is not ashamed to own up that she does. She is pleased when she is admired, and lets you see that she is. She is feminine from the top of her head to the end of her toes, and if you try to draw her into the discussion of dry themes she tells you squarely that the conversation does not suit her. She is the personification of frankness. There is not a particle of humbug in her composition. Here is a health to the girly girl!

Large type is not necessary in advertising—blind folks don't read newspapers.

The D. K. Miller Improved Padlock.

SUPERIOR TO EVERY OTHER

In Mechanical Construction, Security, and Durability.



MADE OF BRASS,

With Springs of the Celebrated Phosphor-Bronze,

And Warranted to Stand in Every Climate.



UNPICKABLE, NO RUSTING OR CORRODING.

Shown by general use to be the best Padlock in the Market for Railway Cars, Switches, Tool Boxes, and for all other purposes for which padlocks are used.

Every Padlock with a different Key and *Master Key* to unlock them all; or all Padlocks with same key if required.

Send for Circulars with Details and Prices.

FAIRBANKS & COMPANY, Agents,

Philadelphia, Baltimore, New Orleans, **NEW YORK.** Buffalo, Pittsburgh, Albany

THE SALMON CAR HEATER



"36 per cent of coa. saved and the car kept noticeably warmer!"
by using THE SALMON CAR HEATER.
It Insures Safety from Fire in case of Accident, Economy in Fuel and RAPID CIRCULATION. It heats quickly, is SELF-REGULATING, and can be used for either STEAM OR HOT WATER.

The Water Tubes do not come in contact with the Coals, but occupy the Smoke Flue in such a manner as to absorb the greatest amount of heat from Coal in a low state of combustion without danger of chilling the fire.

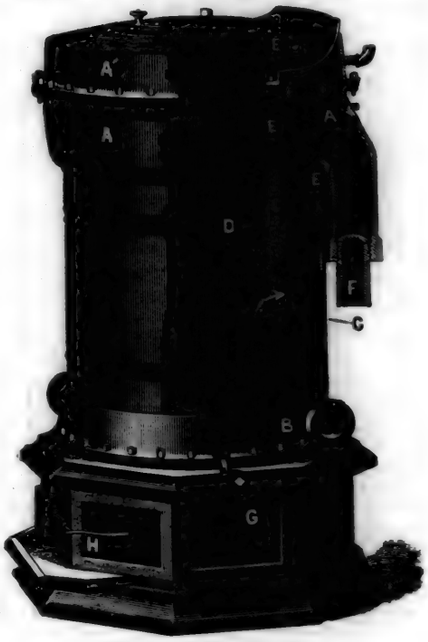
Once filled with coal the fire will last from 24 to 60 hours, according to weather, without replenishing, as proved by actual test.

At the last "Mechanics' Fair" it received the Silver Medal, being the highest award to heaters of any kind.

CORRESPONDENCE SOLICITED.

The Salmon Heater Co.

OFFICE, 35 CONGRESS STREET, BOSTON, MASS.



Established 1863

MOLLER & SCHUMANN

Manufacturers of Fine

COACH AND CAR VARNISHES.

BROOKLYN, N.Y. U.S.A.



STEEL CAR PUSHER

MADE ENTIRELY OF STEEL. ONE MAN with it can easily move a loaded car.

Manufactured by E. P. DWIGHT,
DEALER IN RAILROAD SUPPLIES,
407 LIBRARY ST.,
PHILADELPHIA.

ESTABLISHED IN 1836.

LOBDELL CAR WHEEL COMPANY,

Wilmington, Delaware.

GEORGE G. LOBDELL, *President.*
WILLIAM W. LOBDELL, *Secretary.*
P. N. BRENNAN, *Treasurer.*

First-Class English

IRON AND STEEL RAILS

AT LONDON PRICES, F. O. B.

We also purchase all classes of Railroad Securities and negotiate loans for Railroad Companies.

Wm. A. Guest & Co.,
MECHANICS' BANK BUILDING,
Nos. 31 and 33 Wall Street, - New York.

SAFETY RAILROAD SWITCHES,

WITH MAIN TRACKS UNBROKEN.

Railroad Crossings, Frogs, and other Railroad Supplies,

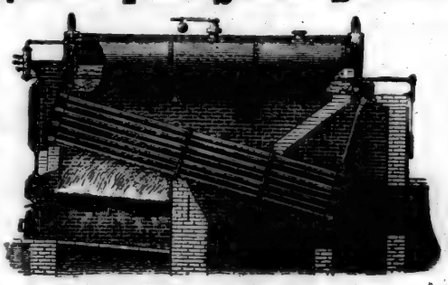
MANUFACTURED BY THE

WHARTON RAILROAD SWITCH CO.,

PHILADELPHIA.

Works: 23d and Washington Avenue.
Office: 28 South 3d Street.

WATER TUBE STEAM BOILERS.



THE BABCOCK & WILCOX CO.,
30 Cortlandt St, New York.
116 James Street, Glasgow.



REMINGTON STANDARD
Only Rapid and Durable
WRITING MACHINE.
Used at sight. Phonography practically taught. Situations procured for competent Students. Send for circulars. W. O. WYCKOFF, Ithaca, N. Y.

ESTABLISHED 1846

MUNN & Co PATENTS

NEW YORK

We continue to act as solicitors for patents, caveats, trade-marks, copyrights, etc., for the United States, and to obtain patents in Canada, England, France, Germany, and all other countries.

Thirty-six years' practice. No charge for examination of models or drawings. Advice by mail free.

Patents obtained through us are noticed in the SCIENTIFIC AMERICAN, which has the largest circulation, and is the most influential newspaper of its kind published in the world. The advantages of such a notice every patentee understands.

This large and splendidly illustrated newspaper is published WEEKLY at $3.20 a year, and is admitted to be the best paper devoted to science, mechanics, inventions, engineering works, and other departments of industrial progress, published in any country. Single copies by mail, 10 cents. Sold by all newsdealers.

Address, Munn & Co., publishers of Scientific American, 261 Broadway, New York.

Handbook about patents mailed free.

CANADIAN DEPARTMENT.

MR. JAMES J. WHITE, Ottawa, Canada, writer of "Our Canadian Letter," acts as agent for the AMERICAN RAILROAD JOURNAL COMPANY, in Canada. He is authorized to receive, in behalf of the company, subscriptions and advertisements for this journal: also news of the character which he can utilize in the preparation of his Letter, or send to us for use elsewhere within these columns. He respectfully invites information concerning Railroad matters generally, Mining, Banking, Finance and Manufactures.

OUR CANADIAN LETTER.

[From our Special Correspondent.]

THE COMING STORM — MARITIME NOTES — WHY STEAMERS ARE WRECKED — A NEW FRENCH STEAMSHIP LINE — NORTHWESTERN AND OTHER NOTES.

THE COMING STORM.

DR. E. STONE WIGGINS, of Ottawa, who has predicted a terrible storm on land and sea on March 11, 1883, is besieged with letters from all parts in reference to his predictions. Among the number one from Mr. Haswell, City Engineer of New York.

MARITIME NOTES.

THE Marine Department have forwarded to all the fishing offices in the Maritime Provinces blank forms of application for the Government fisbing bounty. The basis upon which the bounty is paid is $2 per man for vessels up to eighty tons, to be divided in an equal ratio between crew and vessel; for boats, $2.50 per each man employed in sea fishing for three months, and taking not less than 2,500 pounds of sea fish, other than those exempted by the treaty of Washington.

The Toronto Bridge Company have just completed a new railroad bridge at Amherst; the span is eighty feet, height twenty-one feet.

FARTHER POINT.

An influential delegation will interview the Government to secure a deep water harbor at Farther Point, in connection with the Intercolonial Railway. It is not likely that Parliament will favor the artificial harbor scheme, and the members representing maritime interests will oppose it tooth and nail, and insist that the Government should make the most of the winter harbor it already possesses. The harbors of St. John, Halifax, Whitehaven and others are open all the year, and are the natural and proper winter ports.

WHY STEAMERS ARE WRECKED.

The following will be read with interest, and the disturbances of the compass of the "Cedar Grove," and other vessels wrecked at sea do not stand alone among such experience:—

NARROW ESCAPE OF A MAIL STEAMER.

Among the passengers by the Allan Line mail steamer Polynesian, which arrived at Liverpool on Monday last, were Commander Grenfell and some of the officers of the unfortunate Phœnix, which was lost six weeks before on the coast of Prince Edward Island. The Polynesian had a narrow escape from being totally lost, on the coast of Labrador, whilst on her passage to England. The following particulars are supplied by one of the passengers: We left Quebec on the 28th of October, and had a fine run down the Gulf. The morning of the 30th was misty, with a fresh breeze and rising sea from the southwest. The afternoon brought with it a thick fog, in consequence of which Captain Brown reduced the speed of the vessel. Just after 4 P. M., when from our assumed position we should have been over fifteen miles from the Straits of Belleisle, breakers were sighted through the fog, right ahead, at a distance of but little more than half a mile. Although the engines were immediately reversed at full speed, the wind and sea, which were both astern, greatly retarded the effect of the screw in checking the onward motion of the ship, so that at first there seemed no hope of being able to stop her and back astern clear of the rocks. It was an exciting time. Ahead and on each bow was a seething mass of white breakers, dashing on a grim line of iron rocks growing nearer and more distinct each moment. Fortunately for us there was deep water close up to the rocks, for it was not until the ship's bow was actually within half her length of the rocks, and almost in the breakers, that her motion towards them was arrested, and she began to come slowly astern. We were several minutes expecting each plunge the ship gave to be her last, and it was with intense relief and thankfulness that we saw the breakers recede into the fog again and disappear. With the sea which was running at the time, the ship, had she struck, must have been twisted round broadside on to the rocks, and would probably within half an hour have gone down in deep water close to them with all hands, as no landing could by any possibility have been effected on them. At 5 P. M. the fog cleared off, and showed us that we had been swept more than eighteen miles out of our course. The captain of the Polynesian is one of the oldest and most skillful commanders in the company's service. During the many years he has been traveling over the same ground he never experienced such a strong set of the current, and could only attribute it to the great variation which has been observed in the direction and force of the currents in the Gulf of St. Lawrence this year.

NEW FRENCH STEAMSHIP LINE.

A French gentleman has been in Ottawa interviewing the Government regarding a direct line of steamers between France and Canada. He has proposed to the Dominion Government to undertake this service, for which service a subsidy of $50,000 was voted at the last session, to establish a direct line between Havre and Quebec, provided the French Government grant a like amount.

The French Government have not acted in the matter further than to express a willingness to do so as soon as it is proven that the establishment of the line is a foregone conclusion.

The projectors of the Bremen line have proposed to the Government to combine their own and the new direct Havre and Quebec line.

RAILROAD AND OTHER NOTES.

The Montreal, Ottawa and Western Railway Company will apply at the next session of Parliament for leave to extend their line, by means of branches to different parts.

At the next session of Parliament application will be made for the granting of a charter for a railway line, to run from Callender to James' Bay (in Hudson's Bay). Callender is at present the eastern section of the Canadian Pacific Railway.

The Chignecto Marine Transport Railway have applied for letters of incorporation.

The Stormont (Ont.) Cotton Manufacturing Company have declared a dividend of five per cent for the half year.

Professor Selwyn, of the Geological survey, reports the discovery of rich lignite coal beds in the Bow River district, northwest territory.

NORTHWESTERN NOTES.

A Winnipeg special says:—

"The *Times* comments upon the alleged attack of the Grand Trunk, in the English money market, upon the Syndicate, and says that the contest is desperate. To proceed with construction next year the Syndicate must have an enormous amount of money or else the company will go under. It is no exaggeration to say that Stephen and his colleagues are face to face with a trying crisis, and, as the fortunes of Manitoba are bound up in their position, it is a critical one. Other well-informed persons say that the Grand Trunk is acting with a view to force an entrance into Manitoba by enabling the Northern Pacific to float its bonds and close the money market against the Canadian Pacific. There is good reason to believe that the situation is more critical than would appear on the surface.

FINANCIAL.

The Montreal stock market on Saturday last was irregular; Bank of Montreal was a shade better, but other securities lower; Federal sold at 153. "W."

OTTAWA, December 21, 1882.

EAMES VACUUM BRAKE CO.

RAILWAY TRAIN BRAKES.

P. O. Box 2,878.] SALES OFFICE, 15 COLD ST., N. Y. Represented by THOS. PROSSER & SON.

The EAMES VACUUM BRAKE is confidently offered as the most efficient, simple, durable, and cheap Power Brake in the market. It can be seen in operation upon 6 or seventy roads.

BUSINESS CARDS.

ALLEN PAPER CAR WHEEL CO., 240 BROADWAY, New York.

BROWN BROTHERS & CO., BANKERS AND BROKERS, 59 Wall Street, N. Y.

BABCOCK & WILCOX CO., WATER TUBE STEAM Boilers, 30 Cortlandt Street, N. Y.

BROWN MANUFACTURING CO., ABSORBENT Wiper Cloths, Providence, R. I.

BEARDSLEY, D. N. & CO., MANUFACTURERS OF Superior Oak and Chestnut Lumber, and Railroad Ties, 9 Murray Street, N. Y.

CHESTER STEEL CASTING CO., MANUFACTURE Steel Castings, Cross-heads, Rocker-arms, Pistonheads, etc., for Locomotives, 407 Library St., Phila., Pa.

DAVIDS, JOHN B. & CO., WRITING INKS, 184 William Street, N. Y.

DAVIS, JOHN H. & CO., BANKERS AND BROKERS, 17 Wall Street, N. Y.

DODGE & SINCLAIR, MANUFACTURERS OF RUBber and Leather Belting, 21 Park Row, N. Y.

EVANS, GEO. A. IRON AND STEEL RAILS, 74 WALL Street, N. Y.

EAGLE TUBE CO., BOILER TUBES, 614 to 626 WEST Twenty-fourth Street, N. Y.

EAMES VACUUM BRAKE CO., RAILWAY TRAIN Brakes, 15 Gold Street, N. Y.

FAIRBANKS & CO., STANDARD SCALES, RAILROAD and Warehouse Trucks, and Copying-presses, 311 Broadway N. Y.

GORDON & DUGGAN, RAILWAY SWITCHES, 28 State Street, Boston, Mass.

GUEST, WM. A. & CO., IRON AND STEEL RAILS, 41 and 43 Pine Street, N. Y.

GEORGE, EVAN P. Jr., COUNSELLOR AT LAW AND Solicitor of Patents, 4 and 6 Warren Street, N. Y.

HARLAN & HOLLINGSWORTH CO., MANUFACTURE Passenger Cars, Wilmington, Del.

HAYWARD, S. F. GENERAL AGENT BABCOCK Fire Extinguisher, 407 Broadway, N. Y.

IVISON, BLAKEMAN, TAYLOR & CO., STEEL PENS 753 and 755 Broadway N. Y.

JOHN STEPHENSON CO., TRAM-CAR BUILDERS, New York.

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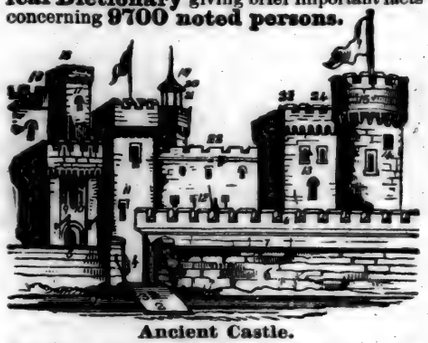
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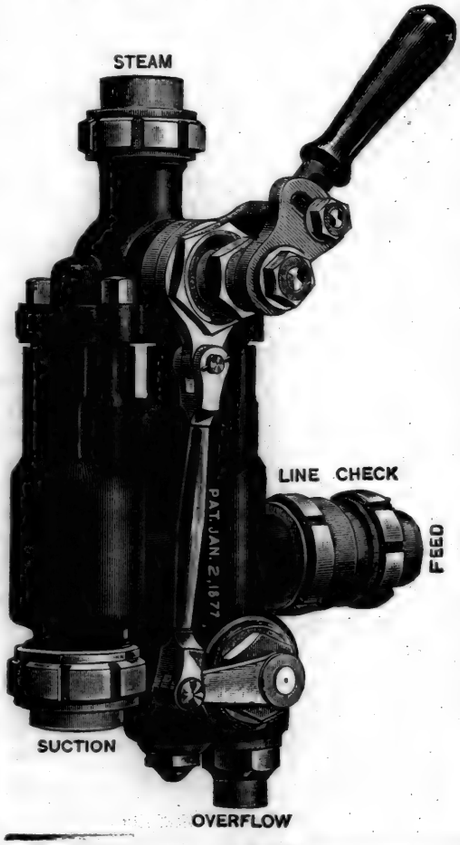
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Commerce of New York.

THE foreign imports at New York for the month of November were :—

	1880.	1881.	1882.
Ent. for cons.....	$12,684,476	$19,638,860	$16,708,812
Do. for warehousing	5,965,112	6,122,466	6,243,514
Free goods.....	11,968,093	11,683,306	10,658,719
Specie and bullion..	9,248,677	1,350,239	1,698,388
Total ent. at port....	$39,866,358	$35,794,871	$35,309,433
Withdrawn from warehouse.....	8,368,898	6,222,609	6,718,405

The foreign imports at New York for eleven months from January 1, were :—

	1880.	1881.	1882.
Ent. for cons.....	$216,528,514	$206,086,307	$238,662,288
Do. warehouse....	106,178,308	78,547,401	92,820,747
Free goods.....	116,368,458	115,403,613	119,900,747
Specie and bullion.	59,007,649	54,266,132	6,222,470
Total ent. at port..	$492,100,929	$454,303,453	$457,605,906
Withdrawn from warehouse	85,833,430	99,913,900	89,581,315

Received for Customs at the Port of New York :—

	1880.	1881.	1882.
In Jan.....	$11,960,677 78	$10,572,559 15	$13,387,551 25
In Feb.....	12,254,602 24	11,217,766 87	13,585,053 65
In March....	14,469,557 65	13,122,964 03	13,999,138 76
In April.....	11,901,071 43	11,678,760 93	11,906,105 45
In May.....	9,752,873 54	11,055,935 39	11,981,893 c8
In June.....	10,699,840 52	10,993,452 70	11,428,930 11
In July.....	13,360,394 37	12,079,573 95	13,730,752 87
In August....	14,492,361 87	15,205,469 58	16,483,260 62
In Sept.....	12,856,636 10	14,104,647 51	14,690,362 47
In Oct.....	10,574,333 53	13,011,426 27	13,095,876 74
In Nov.....	9,079,082 36	9,711,039 46	9,938,679 71
Total 11 mos.	$131,401,331 39	$132,752,595 84	$144,227,569 02

The exports from New York to foreign ports for the month of November, were :—

	1880.	1881.	1882.
Dom. produce.....	$33,618,018	$26,203,570	$29,601,264
For. free goods.....	267,066	636,754	146,212
Do. dutiable.....	687,404	722,689	607,311
Specie and bullion.	682,491	1,006,329	741,010
Total exports.....	$35,254,979	$28,569,342	$31,095,797
Do. exclusive of specie.....	34,572,488	27,563,013	30,354,787

The exports from New York to foreign ports for eleven months from January 1 were :—

	1880.	1881.	1882.
Dom. produce.....	$373,335,431	$329,040,618	$301,779,378
For. free goods....	2,580,607	7,193,496	4,446,008
Do. dutiable....	4,982,500	5,662,910	5,653,744
Specie and bullion	7,702,310	11,519,071	46,487,926
Total exports.....	$388,510,848	$353,425,095	$358,367,056
Do. exclusive of specie	380,808,538	341,906,024	311,879,130

Anthracite Coal Tonnage.

THE following is a comparative statement of anthracite coal tonnage for the month of November, 1882, compared with the same month in 1881:—

	1882.	1881.
Philadelphia and Reading Railroad.....	728,696	690,764
Lehigh Valley Railroad.....	568,219	551.499
Central Railroad of New Jersey.....	377,612	360,784
Delaware, Lackawanna and Western....	416,354	423,461
Delaware and Hudson Co.....	343,627	320,633
Pennsylvania Railroad.....	196,271	195,138
Pennsylvania Coal Co.....	142,121	150,717
New York, Lake Erie and Western Railroad.....	24,468	34,872
Total.....	2,797,372	2,727,871

The following is the statement for the year 1882, compared with the year 1881 :—

	1882.	1881.
Reading Railroad.....	6,355,690	6,307,166
Lehigh Valley Railroad.....	5,408,808	5,126,844
Central Railroad of New Jersey.....	3,862,703	3,678,586
Delaware, Lackawanna and Western.	4,230,066	3,963,054
Delaware and Hudson Canal.....	2,906,848	2,910,766
Pennsylvania Railroad.....	2,169,601	2,030,831
Pennsylvania Coal..... ..	1,344,544	1,333,217
New York, Lake Erie and Western Railroad	242,394	424,822
Total.....	26,520,656	25,775,289

—showing an increase for the month of 69,500, and for the year of 745,367. The stock of coal on hand at tide-water shipping points November 30, 1882, was 535,891 tons; on October 31, 1882, 524,050 tons—increase, 11,841 tons.

AN incident in connection with the floods in the south of France brings into striking relief the rigor with which rules are enforced by the directors of French railways. A freight train was stopped between Guiche and Urt, unable to proceed or go back, the fires having been put out by the water. The rules of the French railway company in question say that the responsibility of the driver, stoker, and guard only ceases when their arrival has been duly certified at their destination. The three officials, therefore, had to stick to their fireless trains till the subsidence of the waters. Food was brought to them in boats, so that they did not starve, but they were nearly dead with cold.

THE great obstacle in the way of railroad building in China is said to be the over-peopled condition of the country. The Chinese thinkers say, If we build railroads to transport people and merchandise from one point to another, what are we going to do with the immense surplus of labor it will throw upon us? What can we do with the thousands of coolies and others thrown out of employment? The question is a very serious one. At present the internal commerce of the empire is moved almost entirely by the canals and natural water courses, or on the backs of camels, mules and men. There are but few horses and almost no vehicles.

THE Stow Flexible Shaft Company, of Philadelphia, are running extra hands as hard as they can be pushed, to fill large orders received from England and Germany, and which must be shipped this year.

THE Treaty of Commerce, Navigation and Amity, recently concluded between Mexico and Germany, has been ratified by the Mexican Senate. The treaty contains the "most favored nation" clause.

THE Jackson & Sharp Company shipped on Saturday last two officers' cars to the Denver and Rio Grande Railroad, and four passenger cars for the Florida Central and Southern Railroad.

A WOMAN who keeps only one servant to do her work says that "helps are always leaving, you know, and when you are left alone it's much easier to do the work of one servant than two."

THE Harlan & Hollingsworth Company shipped on Tuesday last six passenger and two baggage cars to the Pittsburgh and Western Railroad.

"THEY lay in beauty side by side"—one hundred and forty-four perfect pens in boxes put up by the Esterbrook Steel Pen Co.

THE reason why a railroad is so patriotic is because it is bound to the country by the strongest ties.

A LADY'S TOAST TO THE MEN.—At a literary meeting, Mrs. Duniway "toasted" men as follows: "God bless 'em. We halve their joys, double their sorrows, treble their expenses, quadruple their cares, excite their affections, control their property, and outmanœuver them in everything. This would be a very dreary world without men. In fact, I may say, without prospect of successful contradiction, without 'em it would not be much of a world anyhow. We love 'em, and the dear beings can't help it; we control 'em, and the precious fellows don't know it. As husbands, they are always convenient, though not always on hand; as beaux they are by no means matchless. They are most agreeable visitors; they are handy at State fairs, and indispensable at oyster saloons. They are splendid as escorts for some other fellow's wife or sister, and as friends they are better than women. As our fathers they are inexpressibly grand. A man may be a failure in business, a wreck in constitution, not enough to boast of as a beauty, nothing as a legislator for woman's rights, and even not very brilliant as a member of the press, but if he is our own father, we overlook his shortcomings, and cover his peccadilloes with the divine mantle of charity. Then, as our husbands, how we love to parade them as paragons! In the sublime language of the inspired poet:—

'We'll lie for them,
We'll cry for them,
And if we could we'd fly for them,
We'd do anything but die for them.'"

THE increasing cost of wood for constructive purposes and for railroad ties is, says the Boston *Journal of Chemistry*, one of the most serious problems which confront the managers of railroads. Processes of preservation of wood have been tried with more or less success on nearly all of our trunk lines. The latest method suggested for the preservation of bridge timber and ties consists in first subjecting the finished timber to dry heat and then immersing it in a hot bath composed of asphalt and carbolic acid. On cooling, the solvent of the asphalt evaporates, leaving a skin or coating of asphalt on the surface of the wood that resists water and keeps the antiseptic material locked within the pores of the wood. The exterior of the wood presents a smooth and dark surface, requiring no planing. It is understood that the process is to be used on a large scale on one of the Canadian trunk lines.

A RECENT visitor to the Dismal Swamp in Virginia found it much reduced in extent compared to what it was twenty years ago. It now contains some of the best farming land in the State. A railroad runs across it, and it is on its way to final extinction. The drainage of Lake Drummond, a central body of water lying higher than the average level of the swamp, would make the whole area fertile. This is a project of Gen. Benjamin F. Butler, who once had surveys made, but at length abandoned it. The great industry of the swamp is lumbering. It is penetrated by small ditches in connection with larger canals, and by rude tramroads, over which the logs are hauled to be sawed up into shingles, railroad ties and fencing. The lake itself, however, with the almost impenetrable fringe of cypress and its projecting roots and broken stumps, is quite as dismal as ever.

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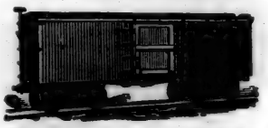
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The large and widespread circulation of this paper, its prestige as the oldest railroad journal in the world, and the weight attached to its contents by the general consent of leading railroad men in all countries, give such value to its carefully prepared descriptions of new machinery and appliances as cannot be found outside of its columns.

The interest manifested by inventors in supplying us with information of their doings, and the eagerness with which this is received, encourage us to give an increased attention to that department of this paper treating of new inventions.

We therefore repeat our invitation to all persons who have produced what they regard as improvements coming within the range of railroad operations, to communicate with us promptly regarding the same.

All matter sent us will be thoroughly examined and considered, and no inventions in our opinion likely to be practicable and useful will be passed over without receiving due attention from us.

List of Patents for Inventions Relating to Railways, Manufacturing, Mining, Machinery, Etc.

BEARING DATE OF DECEMBER 19, 1882.

269,168. Car-Coupling: Absalom Beans, Rosco Township, Davis county, Iowa. Filed May 9, 1882.

269,176. Car-Coupling: John Boyd, La Grange, Ind. Filed May 12, 1882.

269,189. Apparatus for Heating Freight-Cars: William E. Eastman, Boston Mass., assignor to the American Freight Car Heater Company, Portland, Me. Filed A gust 4, 1882.

269,190. Method of and Means for Utilizing Locomotive-Engines for Stationary Purposes: Clement B. Finley, Huntingdon, Pa. Filed Oct. 27, 1882.

269,195. Fare-Box: William Golding, New Orleans, La., assignor of one-half to Schuyler B. Steers, same place. Filed Sept. 9, 1881.

269,235. Means for Automatically Stopping Trains and Signaling: William C. Shaffer and Arthur M. White, Philadelphia, Pa., assignors to the Railroad Safety Lock and Signal Company, of New Jersey. Filed Sept. 1, 1882.

269,237. Hand-Car: George S. Sheffield, Three Rivers, Mich. Filed July 13, 1882.

269,243. Feed Water Heater: Daniel C. Stillson, Somerville, Mass. Filed August 24, 1882.

269,257. Car-Coupling: Fred. W. Brooks, Oak Grove, Wis. Filed Oct. 11, 1882.

269,259. Automatic Railroad Switch: Joseph G. Chasse, Springfield, Mass., assignor of one-tenth to Benjamin Fagnant, same place. Filed Jan. 25, 1882.

269,287. Car-Brake: John W. Henson, Benjamin F. Hudson and Sydney Smith, Dallas, Tex. Filed Sept. 27, 1882.

269,300. Rotary Engine: John F. Lash, Hamilton, Ontario, assignor to William Nicholas Miller, Toronto, Canada. Filed May 9, 1882.

269,301. Relief-Valve for Engines: James Livingston and John Kennedy, Toronto, Ontario, Canada. Filed August 10, 1882.

269,311. Railroad-Switch: Sylvanis B. Nickum, Marion, Ind. Filed Nov. 29, 1881.

269,319. Steam-Actuated Valve: H. Lansing Perrine, Denver, Col. Filed Oct. 18, 1882.

269,322. Car-Coupling: John J. Pursley, Wetmore, Kans. Filed Nov. 11, 1882.

269,324. Car-Stove: Abram Reese, Pittsburgh, Pa. Filed July 24, 1882.

269,354. Car-Coupling: Jonah J. Vinson, Waveland, Ind. Filed June 17, 1882.

269,358. Car-Coupling: John F. Wallace, Pittsburgh, Pa. Filed March 15, 1882.

269,394. Railroad Signal: James Dolan, Suckasunny, N. J. Filed July 1, 1882.

269,398. Railroad-Switch: Charles F. A. Eddy, Greenfield, Mass. Filed June 22, 1882.

269,412. Nut-Lock Washer: H. L. Heaton, Columbus, Ohio, assignor of three-fourths to Hylas Sabin, George W. Luce, and John M. Tibbetts, same place. Filed Oct. 12, 1882.

269,424. Wheel: Ebenezer S. Jennings, Nelsonville, Ohio. Filed Oct. 26, 1882.

269,431. Tubular Lamp: John Krummenauer, Brooklyn, assignor to Frederick Dietz, New York, N. Y. Filed August 7, 1882.

269,442. Railroad: Ross B. Meeker, Sanford's Corners, N. Y. Filed March 28, 1882.

269,456. Car-Coupling: Levi Pentz, Canton, Ohio, assignor of one-half to John P. Rauch, same place, and Robert G. MacGonigle, Pittsburgh, Pa. Filed July 29, 1882.

269,458. Safety Steam-Boiler: George T. Pillings, Baltimore, Md. Filed Sept. 11, 1882.

269,474. Nut-Lock: John Sherman, Cleveland, Ohio. Filed May 25, 1882.

269,482. Wrench: Loyd H. Swan, Oxford, Ind. Filed April 26, 1882.

269,485. Car-Coupling: William P. Taggart, Phœnixville, Pa. Filed Sept. 22, 1882.

269,489. Apparatus for Heating Railway Cars: Maurice J. Walsh, New York, N. Y., assignor, by mesne assignments, to Louis Fitzgerald, same place. Filed July 20, 1882.

269,490. Hand-Car for Railways: Samuel H. Walz, Three Rivers, Mich., assignor, by direct and mesne assignments, to the Three Rivers Velocipede Car Company, same place. Filed Feb. 17, 1882.

269:505. Signal-Light: Julius Pintsch, Jr., Berlin Germany. Filed April 14, 1882.

AT the annual meeting of the stockholders and holders of certificates of indebtedness of the Eastern Railroad Company, held in Boston, Mass., on the 13th inst., the annual report of the directors, an abstract of which is given in our present issue, was presented and accepted, and the following gentlemen elected directors on the part of the certificate holders: Richard Olney, of Boston; Jacob C. Rogers, of Peabody; George S. Morrison, of New York; George E. B. Jackson, of Portland; Jonas H. French, of Gloucester; and Samuel C. Lawrence of Medford. The last three are new members, and succeed George P. King, Alfred P. Rockwell and Elisha B. Phillips. The directors on the part of the stockholders subsequently elected, are: Charles Houghton, of Boston; John Cummings, of Woburn; Arthur Sewall, of Bath, Me, the latter being a new director. In the afternoon the directors met and elected George E. B. Jackson, of Portland, Me., president, in the place of Elisha B. Phillips, resigned. Mr. Jackson is president of the Maine Central Railroad Company, the lessees of the European and North American Railroad, and therefore now controls a through line from Boston to the New Brunswick line.

OUT of 17,207 ships, representing a tonnage of 33,244,452 tons, which have passed through the Suez Canal since it was opened in December 1869, up to the end of 1881, 12,960 ships, representing 25,779,664 tons, bore the British flag, leaving 4,247 ships, representing 7,464,788 tons, for the collective commerce of the rest of the nations. France, whose interest comes next after that of the English in the canal, sent through during the same period only 1,048 ships, having a tonnage of 2,963,765 tons, or about a twelfth of the ships and a ninth of the tonnage sent by Great Britain.

Duty on Cotton Ties.

A DECISION was rendered in the Supreme Court of the United States at Washington, on the 11th inst., in the case of A. S. Badger, Collector of Customs of the port of New Orleans, against D. L. Ranlett & Co., in which the controversy relates to the proper duty to be collected on imported cotton ties. The Court holds that cotton ties, each consisting of an iron strip and an iron buckle, imported in bundles, each bundle consisting of thirty strips and thirty buckles, each strip eleven feet long, and the whole blackened, are subject to a duty of thirty-five per cent, ad valorem, as "manufactures of iron" not otherwise provided for, under Schedule E. Section 2,504 of the Revised Statutes, and not to a duty of one and one-half cents per pound, under said schedule, as "band, hoop and scroll iron." The question as to whether the articles were subject to some other rate of duty than one of those two, not having been raised on the trial in the Court below, cannot be raised by the plaintiff in error in this Court. The judgment of the Circuit Court is affirmed. Opinion by Justice Blatchford.

A PULLMAN car porter has been telling a St. Louis reporter about the earnings of the employés on those cars. Drummers are liberal, young married men are good, women are very bad, millionaires worst. "I had a sad illustration of that a couple of weeks ago. Col. Gillette, a millionare mine owner (traveling with Bonanza Mackey), gave me a dollar. He said, with a terrible stutter, 'It was all the ch-ch-ange he had.' It was somewhat of a blow, but I went in and got Mr. Mackey out for his brush. He fumbled round among a lot of keys, and finally fished out fifty cents. By jinks! I was mad, but I couldn't say anything. It's so with most rich men. There's Gov. Tabor, he's about as good as any of 'em, but he never gives me more than a dollar. There's Senator Jones, he went to Deming once with me and gave me $5. On the other hand, Senator Fair, who is fifty times richer than Jones, they say, came up once, and he only gave me $1. He was nice about it, though—spoke so kind, and told me not to spend my money foolishly. Politicians, when they get money, are mighty good. There's Dorsey, the Star route man. When he goes down to his ranch he always gives me a handful of silver—don't stop to count it." The worst of all are old ladies, who want bags and parcels carried, but never give aught but thanks; in these, however, they are usually generous.

AT a meeting of the stockholders of the Wheeling, Parkersburg and Charleston Railroad Company, held at Parkersburg, W. Va., on the 16th inst., the name of the corporation was changed to that of the Ohio River Railroad, and the limit of stock of the company increased to $5,000,000, and mortgaging was authorized. The following directors were elected: John McLure, W. F. Peterson, Semptimius Hall, E. H. Browse, D. R. Neal, George W. Thompson, W. N. Chancellor, C. H. Shattuck, R. S. Brown, E. Schon and B. W. Byrne. It was stated that the road will be put to contract within three weeks.

AMERICAN Railroad Journal.

ESTABLISHED 1831.

Steam Navigation, Commerce, Finance, Machinery, Mining, Manufactures, New Inventions.

SECOND QUARTO SERIES.—VOL. XXXVIII., No. 52.] NEW YORK, DECEMBER 30, 1882. [WHOLE No. 2,435.—VOL. LV.

THE editor of the RAILROAD JOURNAL is pleased to receive information of railroad enterprises already entered upon or projected, items regarding the business done on the roads, such as relate to persons employed in the rails road and kindred interests; in short, about all matter which the readers of such a paper as this are gratified to find within its columns.

ORGANIZATION.

AT the annual meeting of the stockholders of the Wheeling and Lake Erie Railroad Company, held at Toledo, Ohio, on the 20th inst., Geo. W. Davis and M. D. Woodford were elected directors in the place of N. H. Swayne, Jr., and J. S. Oliver.

AN "Association of American Economists" was organized at Washington, D. C., on the 21st inst. The object is the gathering of facts and statistics bearing on industry, commerce and finance, and the wide dissemination of economic knowledge. The officers elected are: President, Hon. Wm. Lawrence; first vice-president, John C. New; vice-president for Ohio, C. Delano; for Illinois, Daniel H. Mason; treasurer, J. P. Dodge; secretaries, Dr. E. Young and L. Sanial.

AT the annual meeting of the Virginia Midland Railway Company, held in Alexandria on the 21st inst., the following gentlemen were elected directors for the ensuing year: John S. Barbour, T. M. Logan, John McAuerney, John E. Hurst, W. H. Payne, M. Bayard Brown, Wm. S. Young, Robert Garrett, Lewis N. Hopkins, Robert T. Baldwin, George Parsons, C. J. Osborne, John T. Lovell, Samuel Spencer, James Sloan, Jr., Wm. F. Frick and John R. Bland. John S. Barbour was unanimously re-elected president.

AT a meeting of the directors of the Baltimore, Catonsville and Ellicott's Mills Railway Co., held in Baltimore on the 21st inst., John C. Holland, Benjamin Whitely and James W. Flack resigned as directors, and E. J. E. Cross, Josiah L. Keck and Edgar M. Johnson were elected to fill their places. Asa H. Smith, H. H. Graue, Frank Frick and Jeremiah Storm, of the old board, continue as directors. John C. Holland resigned as president, and T. C. Robbins was elected to the vacancy. Mr. Keck is president, Mr. Cross is treasurer, and Mr. Robbins manager of the Union Passenger Railway, which extends from Camden station by way of Howard, Lombard, Gilmor and Pratt streets to the Frederick road, near the city limits; also, northward by Howard, Liberty, Park and Maryland avenues to Huntingdon avenue and Hampden. The change in the organization of the road is brought about by purchases of stock by these gentlemen as individuals, and not as officers of the Union Road. It is understood, however, that new stock and equipment will be added to the road, and that cars will run every half hour from Liberty and Fayette streets to Catonsville, and every fifteen minutes to Loudon Park Cemetery. The tracks of the Union line will be used to Pratt street and Frederick avenue, and from there the road-bed just purchased. For the present the Catonsville depot on Baltimore street, near Mount street, will be used, but in the course of time it will likely be devoted to other uses. The stock of the Catonsville Railway Company is $80,000. The property consists of the depot on Baltimore street, a brick hotel, station and several acres of land at Catonsville, besides seven miles of road-bed, and cars and horses.

AT the annual meeting of the directors of the Maine Central Railroad Company, held in Portland, Me., on the 21st inst., the following directors were elected: Abner Coburn, Darius Alden, William B. Bacon, William G. Davis, George E. B. Jackson, Horatio N. Jose, George S. Morison, Willard P. Phillips, Arthur Sewall, Stephen J. Young, Lysander Strickland, Jonas H. French, and Thomas W. Hyde. At a meeting of the newly chosen board George E. B. Jackson was chosen president of the road for the coming year, and J. H. Drummond clerk. It was voted that the regular meeting of the directors be held on Wednesday following the fourth Tuesday in each month, beginning with January.

PERSONAL.

W. R. MCGILL has been elected president of the Cincinnati and Eastern Connection Railway Company.

AT a meeting of the directors of the New Orleans, Mobile and Texas Railroad Company, held at the office of the Louisville and Nashville Railroad Company, on the 20th inst., Edward H. Green was elected president in place of George C. Clark, resigned.

D. A. WATERMAN, auditor of the Michigan Central Railroad Company, has been appointed auditor of the Canada Southern Railway Company, with J. Peliton, as assistant. H. B. Ledyard will be general manager of both roads, with W. P. Taylor as assistant, in charge of the Canada Southern. All the other offices will be arranged on the basis of Michigan Central men as heads and Canada Southern men as assistants.

INCORPORATION.

A CHARTER was granted the Glenwood, (Penn.) Bridge Company on the 21st inst. It is the intention of the corporation to build a bridge across the Monongahela from Street's Run to Glenwood. The capital stock is $100,000. Thomas M. King is president and J. B. Washington, treasurer.

THE Fort Pond Bay Railroad Company, capital, $5,000,000, was filed at Albany, N. Y., on the 23d inst. The road is to commence at or near the station of Bridgehampton, at a point of junction with the Long Island Railroad, and run to Fort Pond Bay, and along such bay to a point at or near Culloden Point.

A CERTIFICATE of incorporation was filed with the Secretary of State at Albany, N. Y., on the 22d inst. by the Lehigh and Eastern Railway Company of New York for manufacturing, mechanical and chemical purposes in, and for the construction of a railway from, Tomhickon, Luzerne county, Pa., to and across the Delaware River to Port Jervis, N. Y., under a charter granted to the Lehigh and Eastern Railway Company by the Commonwealth of Pennsylvania, March 16, 1868. The capital is $1,200,000.

THE Woodruff Car Trust Company was organized on the 23d inst. for the purpose of building and renting Woodruff Sleeping, Parlor and Hotel cars. Their works are located at Swissvale, Allegheny county, Penn., and their headquarters will be in Pittsburgh. They propose to have cars enough on hand to supply any reasonable demand at any time. Henry G. Whelan of Philadelphia, and J. J. Donnell of Pittsburgh, are the trustees. The capital stock is fixed at $150,000, and may be increased to $300,000. The board of managers consists of J. L. Holmes, Wilson McCandless, J. H. Hopkins, Frank Rahm and Henry G. Whelan.

ARTICLES of incorporation have been filed in

the office of the Secretary of State of Illinois of the Vandalia, Hillsboro and Springfield Railroad Company. The road is to be constructed from Springfield, Ill., by way of Hillsboro to Vandalia, with the power and right to extend the same north and northwest from Springfield to any point desired, as far north as Peoria and southeast from Vandalia to some point on the Ohio River or any point south of said road, to be constructed from Springfield, Ill., through the counties of Sangamon and Montgomery to Hillsboro, and from there through the counties of Montgomery and Fayette to Vandalia. If found more practicable, the road may be constructed through Christian county or any part thereof. The principal business office shall be at Vandalia. The capital stock is 100,000 shares. The incorporators are J. M. P. Howard, of Effingham; Richard T. Higgins and Beverly W. Henry, of Vandalia; Wm. H. Brewer and James M. Truitt, of Hillsboro; Edward H. Rice, of Springfield; and Frederick Remane, of Vandalia.

CONSTRUCTION.

THE extension of the German railways to the Russian frontier is being rapidly continued.

IT is proposed to extend the Danville and New River Railroad from Martinsville to Patrick C. H., Va.

THE length of the Chicago and Atlantic Railroad between Marion, Ohio, and Chicago, Ill., is 268.6 miles, and there are sixty-nine stations between the two points. It crosses nineteen railroads between Marion and Chicago.

IT is stated that the Central Pacific Railroad has a corps of surveyors in the field in Eastern Oregon. It is believed they are surveying a line to connect the Central Pacific system with the Oregon Railway and Navigation Company's line.

AN extension of the Maryland Central Railroad from Glenarm to Baldwin, through the Long Green Valley, was opened to traffic on the 25th inst. Five trains now leave Baldwin for North avenue, and all trains heretofore leaving North avenue for Glenarm now run to Baldwin.

THE Marlborough (Md.) *Gazette* says an engineer corps is surveying for a new railroad to be called the Washington City and Chesapeake, from that town to a point on the Chesapeake near Fair Haven. The line will also be surveyed between Marlborough and Washington.

THE Northern Pacific Railroad Company having secured nearly all the right of way over the surveyed route, are beginning preparations to build the line from Portland to Kalama. This will connect the entire system of railways in Oregon and Washington Territory with Puget Sound.

THAT branch of the Chicago and Northwestern Railway commonly known as the Slippery Elm Railroad, has been completed to Eldora, Hardin county, Iowa, and trains will be running in a few days. The total cost of the line so far has been about $100,000. This road will be completed to Iowa Falls early in the summer of 1883.

A DISPATCH dated Albany, Ga., December 26, says that "Frederick Wolffe and his associates have bought the Brunswick and Albany Railroad. They have re-organized the board and have elected Mr. Wolffe president. He has ordered the construction of the line into Albany and toward Montgomery. The road will eventually be connected with the Erlanger system. Representatives of the Frankfort bondholders have received a check for the purchase money on J. & W. Seligman & Co."

A DISPATCH dated City of Mexico, Dec. 23, says that George Tyng, representing the Tehuantepec Railroad Company, of New York, has formally agreed to the forfeiture of the concession by the Mexican Government. The Government pays the company $1,625,000 for the road constructed, the rolling-stock and materials. Already $125,000 in Mexican silver are paid, and of the balance, $400,000 will be paid in April and $100,000 per month thereafter until the completion of the payment—the future payments to be made in American gold.

THE Tana City extension of the Chicago and Northwestern Railway is completed. It starts from Tana City, 270 miles west of Chicago, and runs to the Minnesota State line at Elmore, a distance of 136 miles. A western branch runs from Jewel City to Lake City, a distance of fifty-five miles, and another branch runs from Eagle Grove to Calliope, on the boundary line between Iowa and southern Dakota, a distance of 144 miles. The whole length of the road is 385 miles.

New York Central and Hudson River Railroad.

THE earnings of the New York Central and Hudson River Railroad Company for the years ending September 30, 1881 and 1882, were as follows:—

	1881.	1882.
From passengers	$6,958,038 32	$7,816,519 35
From freight	20,736,749 54	17,672,251 86
From mails	610,891 64	684,089 16
From rents	1,288,433 38	1,305,560 21
From car service	1,009,836 08	1,067,114 41
From telegraph	7,016 57	9,222 41
From interest	263,696 18	272,874 25
From use of road	266,639 99	291,424 38
From other sources	1,207,094 08	1,509,125 35
	$32,348,396 78	$30,628,781 38
Charges against earnings:—		
Transportation expenses	$19,464,786 54	$19,395,974 36
Rent of leased lines	1,926,513 66	1,937,528 20
State tax on capital	74,370 17	178,488 42
State tax on earnings	140,308 24	122,785 27
	$21,605,975 61	$21,634,776 25
Net earnings	$10,742,418 17	$8,994,005 13
From which deduct—		
Interest	$2,849,591 06	$3,250,101 42
Dividends, 8 per cent	7,138,343 51	7,145,512 62
	$9,987,934 57	$10,395,614 04
Surplus for 1881	$754,483 60	.....
Deficiency for 1882	.....	$1,401,608 91

The total miles of track in 1881 was 2,622.23, and in1882, 2,657.51, an increase of 35.28. The equipment of the road at the close of each year compares as follows:—

	1881.	1882.
Locomotives	646	632
First-class passenger cars	343	341
Second-class and emigrant cars	92	97
Baggage, mail and express cars	153	158
Freight cars	22,465	24,565

The company have five elevators the capacity of which is 3,450,000 bushels. In 1881, the average number of persons employed was 14,702, and the salaries paid amounted to $7,746,426.49. In 1882, the average number employed was 15,380, and the salaries paid $8,107,309.20.

The number of miles run by passenger trains in 1881, was 5,135,328, and by freight trains 12,160,213, total, 17,235,541; in 1882, the number of miles run by passenger trains was 5,448,929, and by freight trains, 10,912,064, total, 16,360,993—a decrease of 874,548.

The number of tons of through freight eastbound in 1881 was 2,056,588, do. west-bound, 436,497; way freight east-bound, 5,484,370, do. west-bound, 3,613,424—total freight tonnage, 11,591,379. In 1882, the number of tons of through east-bound freight was 1,523,907, do. west-bound, 582,800; way freight east-bound, 5,297,040, do. west-bound, 3,926,646—total freight tonnage, 11,330,393, a decrease of 260,986.

The number of through passengers carried in 1881 was 164,561 and of way passengers 8,735,688, total, 8,900,249; in 1882, the number of through passengers was 207,496, and of way passengers, 10,101,483—an increase in through passengers of 42,935, and in way passengers of 1,365,795, a total increase of 1,408,730.

The capital stock of the company remains unchanged, being $89,428,300. The funded debt has been increased $5,000,000 by the issue of first mortgage bonds to that amount, and is now $48,473,033.33, while the unfunded debt has been reduced $302,312.88, and now amounts to $5,254,369.93, making the total funded and unfunded debt on September 30 last, $53,727,403.26, against $49,029,716.14 in 1881. The cost of the road and equipment for the year was $112,756,935.54, while in 1881 it was $110,090,216.90, an increase of $2,666,718.64, represented by the following additions and betterments:—

Grading and masonry for third and fourth tracks, improvement at Rochester and Broadway crossing at Albany		$446,970 10
Iron bridges for Rochester improvement, Broadway crossing at Albany, and other places		82,963 78
Superstructure for new yards, sidings, etc.		261,703 37
Additional buildings for stations, shops, warehouses, piers, etc., etc., and including new telegraph wire New York and Buffalo		352,724 28
Passenger and baggage cars		13,500 00
Freight cars (2,100)		1,306,250 00
Land at Buffalo, Rochester, Fonda, Canastota, Albany, etc.		327,112 11
Engineering. Rochester improvement		7,345 00
Total		$2,798,568 64
Less decrease in locomotives	$128,500 00	
Less decrease in floating equipment	3,350 00	
		131,850 00
Total, as above		$2,666,718 64

As stated above, the gross earnings in 1881 were $32,348,396.78, the transportation expenses $19,464,786.54, and the net earnings $12,883,610.24; in 1882 the gross earnings were $30,628,781.38, the transportation expenses $19,395,974.36, and the net earnings $11,232,807,02—showing a decrease in gross earnings of $1,719,615.40, with a decrease in transportation expenses of $68,812.18, making a decrease in the net earnings of $1,650,803.22.

The earnings per ton mile freight in 1881 were 0.78 cent, the expenses 0.56, and the profit 0.22; in 1882 the earnings were 0.73 cent, the expenses 0.60, and the profit 0.13.

The earnings per passenger mile passengers in 1881 were 1.86 cent, the expenses 1.22, and the profit 0.64; in 1882 the earnin were 1.80

cent, the expenses 1.15, and the profit 0.65.

The expenses in 1881 were 60.17 per cent of gross earnings, against 63.32 per cent in 1882, an increase of 3.15.

The profit per share in 1881 was $8.82, against $6.42 in 1882, a decrease of $2.40.

The assets and liabilities of the company September 30, 1881 and 1882, are shown in the annexed

BALANCE SHEET.

	1881.	1882.
Cost of road and equipment	$110,090,216 99	$112,756,935 54
Consolidation certificates representing additional cost of road to this company	31,157,904 00	31,157,904 00
Hudson River bridges	1,739,372 16	1,845,775 78
Dunkirk, A. V. & P. R. R.	2,920,621 09	2,920,621 09
Geneva & Lyons R. R.	331,889 93	331,889 93
Real estate	1,173,500 36	1,173,500 36
Advances on Harlem construction account	277,513 49	303,124 84
Company's own stock held	184,200 00	184,200 00
Stock Troy U. R. R	15,000 00	15,000 00
Stock Buffalo Cros town Railroad	12,684 77	12,684 77
Stock Merchants' Dispatch Trans. Co.	730,575 00	1,317,475 00
Stock United Pipe L'ns.	22,749 80	.....
Stock Pittsburg and L. E. Railroad	100,000 00	100,000 00
Stock N. Y. C. and N. River Railroad	28,100 09	28,100 09
Stock and bonds Syracuse, G. and C. R. R.	376,010 00	373,010 00
Stock Westinghouse Air-Brake Company	.....	18,750 00
Stock Morris Run Coal and M. Company	.....	589,712 17
Fuel and supplies on hand	1,624,358 28	2,096,135 48
Cash on hand	248,913 87	1,043,980 17
Station balances	864,776 52	874,819 55
Connecting R. R. and other balances	316,075 24	298,746 26
United States	558,634 05	716,731 29
Equipment Harlem Line.	404,394 22	404,394 22
Sundry open accounts	33,191 15	33,268 65
Total assets	$153,210,680 83	$158,496,759 10
Capital stock	$89,428,300 00	$89,428,300 00
Funded debt	43,473,033 33	48,473,033 33
Unfunded debt	5,556,682 81	5,254,369 93
Income and earnings	14,752,664 69	15,341,055 84
Total liabilities	$153,210,680 83	$158,496,759 10

PROFIT AND LOSS ACCOUNT.

	1881.	1882.
Balance previous year	$13,216,847 98	$14,752,664 69
Surplus	754,483 60	.....
Premium on bonds sold.	778,151 00	1,590,000 00
Profit from sale of securities	33,000 00	.....
Rental Saratoga and Hudson River Railroad	.....	400,000 00
Total	$14,782,482 58	$16,742,664 69
Less internal revenue tax on undivided profits for year ending Sept. 30, 1869	29,817 89	.....
Deficiency	.....	1,401,608 85
Balance	$14,752,664 69	$15,341,055 84

The additions to cost of road and equipment for seven years ending September 30, 1882, amounted to $16,401,161.04; during same time the increase in funded debt (including $3,039,706.48 premium on bonds issued) was $11,509,072.19. The average profit from earnings each year for the seven years amounted to 8.64 per cent, and an annual dividend of 8 per cent has been declared during that period. The proceeds of the $5,000,000 first mortgage bonds issued, which amounted with the premiums and the rental of the Athens branch for 499 years, to $6,990,000, were applied as follows: Construction increased, New York Central and Harlem roads, $2,692,329.99; permanent investments increased, $1,095,361.17; assets increased, $1,498,387.11; liabilities and bonds and mortgages decreased, $302,312.88; deficiency for the year, $1,401,608.85. In concluding his statement the auditor says that the gross earnings for October, November and December, 1882, being the first quarter of the new year, will show a gain of $1,200,000 over the same quarter for last year.

The LakeShore and Michigan Southern Railway Co.

GRAND CENTRAL DEPOT,
NEW YORK, Dec. 22, 1882.

AT a meeting of the board of directors, held this day, a quarterly dividend of two per cent was declared, payable on the first day of February next.

The following is the statement which was presented at the meeting, December, 1882, being partly estimated:—

	1882.	1881.
Gross earnings	$18,275,000	$17,971,391
Operating expenses and taxes	11,125,000	11,278,429
Percentage of earnings	(60.87)	(62.76)
Net earnings	$7,150,000	$6,692,962
Interest, rentals and dividends on guaranteed stock	2,990,000	2,725,375
Balance	$4,160,000	$3,967,586
Equals per share	($8.37)	($8.02)
Dividends, 8 per cent	3,957,320	3,957,320
Surplus	$202,680	$10,266
Increase in gross earnings	303,609	
Decrease in operating expenses	153,429	
Increase in net earnings	457,038	

The passenger, mail and express business shows a gain of $800,000. The amounts received from these sources during the past three years are as follows:—

In 1882	$5,963,000
In 1881	5,161,351
In 1880	4,541,901

Operating expenses include the cost of 12,014 tons steel rails and all other outlay for the maintenance and improvement of the property. Nothing has been charged to construction account this year. The road and equipment have been fully maintained at their best standard.

F. W. VANDERBILT, Acting Treasurer.

The Michigan Central Railroad Company.

GRAND CENTRAL DEPOT,
NEW YORK, Dec. 22, 1882.

AT a meeting of the board of directors held this day a dividend of two per cent was declared, payable on the first day of February next.

The following is the statement which was presented at the meeting, December being partly estimated:—

	1882.	1881.
Gross earnings	$8,950,000	$8,934,332
Operating expenses and taxes	6,525,000	6,732,096
Percentage of earnings	(72.90)	(75.35)
Net earnings	$2,425,000	$2,202,236
Interest on rentals	1,800,000	1,692,926
Balance	$625,000	$509,310
Equals per share	(3.33)	(2.72)

Balance for 1882 appropriated as follows:—

Dividend 2 per cent, February, 1883	$374,764
Construction	190,000
Surplus	60,236
Total	$625,000

The hopes entertained for the last half of the year, as expressed in the semi-annual statement of June 27, have been practically realized in the net results, as above shown.

Operating expenses include $550,000 paid for steel rails, $15,000 for new locomotives and $70,000 for new iron bridges.

Construction expenditures include $60,000 paid for increased terminal improvements at Detroit, South Bend, etc.; $40,000 for new works at Detroit Junction and about $50,000 for new buildings.

C. VANDERBILT, Treasurer.

Canada Southern Railway Company.

GRAND CENTRAL DEPOT,
NEW YORK, Dec. 22, 1882.

AT a meeting of the board of directors, held this day, the following statement was presented, December, 1882, being partly estimated:—

	1882.	1881.
Gross earnings	$3,452,795 33	$3,369,259 56
Operating expenses and taxes	2,533,997 38	2,672,346 95
Percentage of earnings	(73.97)	(79.31)
Net earnings	898,797 95	696,912 61
Receipts from other sources.	7,937 72	9,656 91
Total net receipts	906,735 67	706,569 52
Interest on bonds	679,088 93	678,624 70
Balance	227,646 74	27,944 82
Equals per share of stock	(1.52)	(0.19)

Balance for 1882 appropriated as follows:—

Construction		$227,646 74
New side tracks	$35,497 14	
New buildings and bridges	43,238 42	
New cars	10,347 37	
Other purposes	15,265 55	
Surplus	$104,338 48	$123,308 26

Included in operating expenses are the following items of renewal:—

Ties and rails	$77,310 10
Cars built and rebuilt	87,070 51
Total	$164,380 61

C. VANDERBILT, Treasurer.

THE Indiana Bureau of Statistics reports great advance in the manufactures of that State. The figures show 12,088 different establishments, $50,169,061 as the capital employed, and $167,067,443 as the value of manufactured products. The value of the products is about $19,000,000 more than reported by the census of 1880. The average number of males employed was 69,273, and of females 3,698, making a total of 72,971. The aggregate amount of the wages paid these employés was $28,944,894.

IT is said that M. de Lesseps's son will visit the isthmus during the dry season. If he does there will be unbounded enthusiasm and they will open the canal for the fifth time. It already has had four opening ceremonies. These openings on paper are intensely amusing to those who have lived in these swamps for years. They all want the canal badly, and are likely to want it, from the present outlook.

THE new side-wheel steamboat City of Jacksonville, built by the Harlan and Hollingsworth Company, of Wilmington, Del., for the De Barry Merchants' Line of steamers, of Jacksonville, Fla., made her trial trip on Thursday of last week on the Delaware River. She was to have left last Wednesday via the inside route for Florida.

WORK is about to be begun on the Williamsport and Clearfield Railroad, to extend from Beech Creek, on the Bald Eagle Valley Railroad, to Cato, in the Snow Shoe coal region. The traffic will add a large tonnage to the Pennsylvania railroad lines.

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WE invite railroad officers to send us notice of elections, transfers, appointments, resignations, etc.; and all our readers would oblige us by furnishing for our columns any items of personal information, which may come to their knowledge, and are adapted to this department. We aim to record all new railway enterprises in the United States and Canada, and to note the progress of construction on all new roads and extensions; and we request all concerned in railway building to give us early information regarding the above, that our reports may be as complete as possible.

Subscribers are requested to report to our office any irregularity in receiving the JOURNAL.

Contributed articles relating to Railroad matters generally, Mining interests, Banking and Financial items, Agricultural development, and Manufacturing news, by those who are familiar with these subjects, are especially desired.

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THIS number concludes the volume for the present year, the last of a series of publications including nearly 500 pages of information, not taking into account that conveyed in the form of advertisements. Taking this as well, subscribers to the AMERICAN RAILROAD JOURNAL for the year about to expire, have received for a trifling subscription, over a thousand pages of matter, new, informing and useful. Our arrangements for next year have been made with liberality, and readers will find features additional to those which in the past have given value and earned flattering acceptance to these columns. The publishers have endeavored to keep pace in their enterprise with the steadily increasing demand for the paper, and by enlarged correspondence and the engagement of additional assistance in the editorial rooms have, they believe, materially strengthened it during the year. Such is the unanimous opinion of subscribers, the most capable of a practical and sound judgment, whose complimentary expressions and prompt renewal of their subscription and advertising patronage warrant the liberal improvements which will be continued, and which will speak for themselves at the proper time. Heartily in accord with the spirit of the season, with cordial acknowledgements of the pleasant relations of the AMERICAN RAILROAD JOURNAL with its subscribers and advertisers, present and prospective, its publishers and editors in all sincerity and heartiness wish its numerous readers everywhere,

"A HAPPY NEW YEAR."

THE AMERICAN RAILROAD JOURNAL is fifty-two years old with the present issue, and we venture to say that its editors and publishers are as anxious and busy as those concerned in its first issue, as to its contents and the punctuality of its appearance. Like the "unwearied sun" of which Addison's hymn speaks, the journalist has no cessation to his labor; and if, like him, he is found to diffuse a warmth of good feeling as well as the light of information in his steady progress, he is very well satisfied with the comparison, notwithstanding its being a remembrancer of his unresting quality. During the year many pleasing testimonies have been received, of the value and interest of the JOURNAL, and its circulation increases gratifyingly. Subscribers will find the volume for 1883 to surpass even that of the present year, of which so many good things are being said, and which has been quoted so much by other journals. Arrangements have been made for the strengthening of every department, and advertisers and subscribers alike will find the next year of their acquaintance with the JOURNAL the most profitable of all. We are gratified to see how many staunch old friends are readers of this paper, and take a particular pleasure in the anticipation that many new readers of to-day will be recognized as the "staunch old friends" of the JOURNAL many years from the date of this declining year. Cheered by this prospect and the substantial encouragement of the present time, we present our seasonable good wishes with the warmest cordiality. Though fifty-two years old, the JOURNAL is livelier and stronger to-day than ever before, and the more holiday company it entertains the greater will be the satisfaction of its promoters.

TAX-DISCRIMINATION AGAINST CORPORATIONS.

A VERY important case has just been argued before the Supreme Court of the United States, the decision of which will be looked forward to with much interest by lawyers and capitalists. Observers will have noticed in the agricultural (or Granger) States a disposition among the legislators and politicians to curry favor with the farmers who carry the floating vote by either lightening their burdens or, by what is equivalent, adding to those of other classes. The Government of the State of California seems to have fallen into the hands of an inveterate lot of communists when, a few years ago, it adopted a new constitution. Among other things the new régime required that a law should be enacted making radical changes in the manner of levying taxes. It was purposely aimed at the corporations, for it provided that while individuals might deduct from the assessed value of their real estate the mortgage thereon, it denied this to corporations. A corporation is an artificial person, and the Supreme Court has decided that such fictitious persons have the same rights, within their charter-powers, as natural persons.

The Fourteenth Amendment to the Constitution of the United States says that "no State shall deny any person within its jurisdiction the equal protection of the laws." This has commonly been supposed to refer to the discrimination "on account of race, color or previous condition of servitude;" but on its face it carries no such limitation. If it is not broad enough to cover corporations, it ought to be; and every company, whether railroad, insurance, banking, mining, manufacturing or trading, doing business in the States beyond its home State is equally interested to see that some such constitutional limit is put upon the caprice or prejudice of the thirty-eight States.

The suit pending is one brought by the South-

ern Pacific Railroad Company against the assessor of San Mateo county, Cal., and has been heard by the Circuit Court of California, with a decision in favor of the Company. An array of legal talent has been brought out on both sides, and as the Supreme Court has been in large part reconstructed of late, it is difficult to forecast the decision, or the numerical division of the Judges. It remains to be seen, therefore, whether the Calfornia demagogues, in their haste to discriminate against corporations who have no votes, and in favor of farmers whose votes they hoped to catch by such legalized communism, have not overdone the matter. Of course, if this agrarian law stands the test of the court of last resort it is equivalent to saying that the railroads of the State may be made to pay all the taxes of the State. In California, too, there is a State Railroad Commission which claims the right to regulate and prescribe the rates of fare, so that if at one end the political power can deprive the railroad of its revenue, and at the other end can require its income to be handed over as taxes without allowing an appeal, the spoliation of railroad property is complete.

It is an old saying that "thieves rarely succeed—they don't know enough." It makes no difference whether the thief operates with the crowbar or with a fraudulent statute, he is sure to come to grief. The thieving souls who get themselves elected to office on the promise that if elected they will rob somebody and divide with the voter are no exception. We shall be surprised if the majority in California do not turn on their agrarian advisers.

TWO pamphlets on an important subject have just been received at this office, for review. The first contains a statement of action by the National Board of Trade and the New York Board of Trade and Transportation on the Government Postal Telegraph and Telephone System of Great Britain, as contrasted with the system obtaining in this country; and the second is a reprint of an ably prepared paper on postal telegraphy, read recently before the Board of Trade, at Scranton, Penn., by J. A. Price. Both condemn the American service as leading to abuses which are prejudicial to the public interests, and favor the British system as far preferable. In view of the fact that the present Postmaster-General of the United States favors a postal telegraph, a more than ordinary interest attaches to the subject treated; and we commend the pamphlets named to the attention of all interested in the attainment of the best and cheapest methods of providing facilities for the use of the telegraph and telephone in the United States. The argument in both productions is based upon an array of figures and facts, the trustworthiness of which is not open to question; and is stated in a compact and readable form.

RAILROAD MEDICAL SERVICE.

[*Continuation of the French System.*]

BY S. S. HERRICK, M. D.

SECRETARY OF BOARD OF HEALTH, STATE OF LOUISIANA.

ON the subject of sanitation of buildings and of railroad cars, I am in receipt of a recent communication from the management of the Northern Railway, through the U. S. Consul-General at Paris.

There are no special written regulations concerning the sanitary condition of buildings. The designs of structures, previous to their execution, are submitted to the inspection of the state authority, which moreover reserves, after completion, a right of superintendence provided in the conditions of contract.

Relative to traffic, there are no special sanitary precautions, except for the transportation of animals, in order to obviate the epidemic diseases which scourge them. Stock cars, coming from a foreign country to the French frontier, are visited by an agent of the government, who stops every car containing sick or suspected animals.

On reaching its destination, every cattle car, after its discharge, is subjected to a thorough cleansing, internally and externally, after which its floor and inner walls are treated with a solution of zinc sulphate. At stations where locomotives are housed or stationary steam-boilers are available, disinfection of the cars is effected by super-heated steam, which is thought to be more effectual than the disinfecting liquid.

The transportation of animals is made in covered cars specially constructed for this purpose. For the carriage of beeves, horses and large animals, cars are used having a length of 4.40 to 5.94 *metres*, a breadth of 2.50 and a height of 2.14 *metres;* and these hold six to eight animals. Ventilation is provided by four moveable windows on the sides. Sheep and small animals are carried in cars with two floors, allowing about sixty head to each car.

Cattle trains usually have rapid and uninterrupted dispatch, to shorten as much as possible the time of confinement. They are generally accompanied by special attendants employed by the shippers, to look after the feeding, loading and unloading of the animals.

The above regulations are instituted by the paternal government and carried out by its officers.

Similar regulations are in force upon the Paris, Lyons and Mediterranean Railroad and upon the Eastern Railway, having reference to the exclusion of pestilential diseases. The companies assume no risks from overcrowding or deprivation of food or water, these matters being left to the shippers, who employ attendants to travel on the trains with their animals.

On the Paris, Lyons and Mediterranean Railroad no precautions are taken against the infection of passenger coaches by sick travelers or infected personal baggage, as is expressly stated by one of their officials, and I have no evidence that a different practice prevails on other lines. It seems indeed remarkable that neither the paternal government nor the well-organized medical staff of these corporations should take measures to prevent the infection of rail-carriages by such spreading diseases as small-pox, scarlet fever, diphtheria and measles, and the transportation of these diseases from infected to healthy localities through the medium of sick or recently sick passengers and their personal baggage.

There can be no doubt that it is the moral duty of common carriers to protect, by all practicable precautions, the lives and health of passengers from contagious diseases. I am not aware that their legal responsibility has yet been tested by any suit for damages in case of disease contracted while traveling in rail-carriages, but it may reasonably be expected that the issue will arise at no distant day, since it is clearly within the province and power of preventive medicine to reduce the danger of propagating these diseases through the medium of common carriers to a minimum, if not to absolute nullity.

We may leave small-pox out of the question, for this is preventable positively by vaccination, and it is the fault of the individual, or of his natural protectors in infancy, if he ever contracts the disease. But take scarlet-fever, not thus preventable and never without danger, contagious during a prolonged convalescence, its infection active for an indefinite period when carried or kept in porous materials; here we have a disease which may lodge and lurk in the upholstered seats and bedding of passenger coaches, and seize upon its unsuspecting victims long after its first implantation. Surely something should be done to prevent such mischief, either by the civil authority or by the corporation.

The primary and most important function of government is the protection of life and property; but, though life is indissolubly connected with health, and though infectious diseases are those most subject to intelligent human control, yet the civil arm is but lately and rarely extended to shield the people from assaults as preventable as murder or robbery. If, then, the older and stronger governments of the east have neglected this duty, we can hardly expect our self-governing people to originate reforms of this kind, which begin by curtailing personal liberty. The want of laws for compulsory vaccination confirm this conclusion, for it is evident that the temper of our citizens will not tolerate a coercion which invades the person, even though professing to be a defence.

In this country, evidently for some time to come, the sanitation of railway carriages must be a question of property interest rather than government control, of dividends and the quotations of share-values rather than benevolence or sentiment. Liberality in providing for the comfort, convenience and rapid transit of passengers has proved a remunerative policy. Whether they would exchange a modicum of

personal liberty and convenience for a plenum of security from disease is still rather conjectural. The fact of cheerful submission to quarantine regulations, as administered by the health authorities on our railways here in the southwest, is rather encouraging to the policy of prevention; but it is evident that no radical and far-reaching measures could be successfully inaugurated, in the absence of an epidemic either actual or impending. It is certain that such a medical or sanitary *surveillance* of passengers, as would measurably prevent the admission of individuals affected by the ordinary infectious diseases to railway carriages, must be felt by the public; and, while approved and willingly tolerated by the majority, might be resented clamorously by the unreasonable few who are habitual fault-finders. These sticklers for the democratic (politics aside) right to make themselves disagreeable and dangerous, might be relegated to a personal-liberty car by themselves, as tobacco-smokers are now accommodated, but without privilege of invading the protected cars at all; and thus the peace of traffic be conserved. It is not improbable that the methods and appliances of safety might be made fashionable and remunerative, by adroit management, as the Pullman-car service has become within a few years. Such coaches should be made exclusive and more expensive to their occupants. Even the crazy Hamlet was about ready to admit that human nature could be played upon, like a pipe, if you would but study and learn its stops.

I forbear at present to enter upon details of such a feature in railroad sanitation. The mat er is somewhat speculative, and must necessarily be evolved rather than created.

[TO BE CONTINUED.]

Color-Blindness Once More.

BY WILLIAM S. HUNTINGTON.

THE men of science have kindly given us a rest of a few months on the subject of defective vision, styled color-blindness. There is always a calm before a storm, and there are indications of a breeze from the same quarter that the *wind* came from some time since. But, as "it is an ill wind that blows good to no one," we may expect some good results from the storm that is evidently brewing. It is expected that Congress will appropriate a liberal sum for the purpose of ascertaining the extent of defective vision among government employés. The experts who have charge of the investigations will get a good plum, whether the public receives any benefit from the expenditures or not. However, it will be a matter of satisfaction worth paying a reasonable amount for to know how many men who are color-blind are in the government employ; but what the people are most interested in, and what they are willing to pay for, is to know to what extent (if any) the public service is injured and the lives of people endangered on land and water by the employment of these men. Opthalmic surgeons who have given the subject their attention, have astonished the world by the great numbers of color-blind men they have discovered in positions of great responsibility; but they have not succeeded in showing that a single life or a dollar's worth of property has been destroyed in consequence of color-blind employés on railways or as pilots. It is true that accidents have happened to trains and vessels in charge of men whose visions were defective, but these disasters have never been traced directly to color-blindness as the cause.

Suppose these experts select a number of the worst cases of color-blindness they can find, and an equal number whose vision is perfect, and all employed in the same capacity, and ascertain which class has destroyed the most lives and property in a given time of service. This would be information worth paying for. Men whose vision is known to be perfect frequently become confused and mistake signals, with disastrous results, and a man color-blind could do no worse. An expert who was examining a number of men for color-blindness, became confused himself to such a degree that he was in fear that some of his subjects would discover his infirmity and *expose his color-blindness.*

The experts examine the operatives; *but who will examine the experts?* The latter gentlemen say that a man's vision may be perfect now and in a year hence develop color-blindness to an "alarming extent." Therefore it is necessary that operatives be examined at short intervals, to make sure that their vision remains perfect. But suppose that in the interval the expert has become color-blind, which, according to their theory would not be at all unlikely, they would give certificates of perfect vision to the very men they are paid to weed out of the service as dangerous! And again, suppose these examiners have been examined by the "boss experts" and their (the latter's) vision has become defective, where does the safety come in? Mariners and railroad men use but three colors in their codes of signals, and they have been selected as being the most readily discernible of any colors in the list under all conditions of the atmosphere, and the most likely to attract the attention of engineers, pilots and others at all times. Men who are color-blind will not give the proper name to these colors, but they know exactly what they mean, and that would seem to be all that is required.

Some months since the writer had occasion to mention the fact that a deaf man was giving entire satisfaction as a brakeman on a freight train, and an engineer with only one eye had served a quarter of a century and was regarded as one of the safest runners in the country, but was discharged by the examiners as unsafe! Some of the gentlemen who are hunting for the color-blind waxed funny on reading these statements, and proceeded to argue that railway managers had better procure their brakemen from the asylums for the deaf, and hinted that they had better search the country for one-eyed men for engineers, who, according to my statement, were the most reliable. The statement above referred to was made to show that under the present system of inspection great injustice will and has been done to a great many of the most reliable and thoroughly tried men in the country. If it can be shown conclusively that a man is, from any cause, an unsafe or improper person to hold a position of great responsibility, he should be removed, or, if not already employed, rejected on application for employment. Too much care cannot be exercised in the selection of men as railway operatives and for the marine service, but there is such a thing as overdoing even a good thing, or in being "more nice than wise." For instance, men who are said to be color-blind are discharged after twenty years of service without accident, but men who can outdo an artist in naming colors and shades but have met with many accidents (so called) by failing to notice signals are retained in the service. When a man gets old he should be examined for amaurosis, and in fact impaired vision should be looked for in persons of all ages, but when signals can be seen a proper distance and their meaning understood, what more do we want in the line of vision?

CANADIAN DEPARTMENT.

MR. JAMES J. WHITE, Ottawa, Canada, writer of "Our Canadian Letter," acts as agent for the AMERICAN RAILROAD JOURNAL COMPANY, in Canada. He is authorized to receive, in behalf of the company, subscriptions and advertisements for this journal: also news of the character which he can utilize in the preparation of his Letter, or send to us for use elsewhere within these columns. He respectfully invites information concerning Railroad matters generally, Mining, Banking, Finance and Manufactures.

OUR CANADIAN LETTER.

[From our Special Correspondent.]

"REFUTING A MISREPRESENTATION"—TORONTO CORN EXCHANGE MEMORIAL ON THE "CANALS"—NORTHWEST NOTES—MARITIME PROVINCE NOTES—RAILROAD AND OTHER NOTES—"THE CANADIAN CASTLE GARDEN"—THE MONTREAL ICE PALACE AND ELECTRIC LIGHT.

GREAT interest is being developed in railway matters just now in Canada, no less than twenty-five new charters and extensions having been applied for, and the prospect is the number will be increased before Parliament meets in January next. The acquisition of the North Shore Railway by the Grand Trunk is bitterly opposed by certain papers, and the outcome of the Grand Trunk controlling both sides of the St. Lawrence will be the immediate construction of competing lines to the seaboard, and active measures on the part of the syndicate to secure their share of the traffic.

NORTHWEST PAMPHLET.

The Department of Agriculture have just issued a pamphlet on the "Canadian Northwest, its climate and productions." The object of the pamphlet is to counteract the injury done to the Canadian west by a pamphlet circulated in England and Europe by the Northern Pacific Railroad, and steamship and other companies. This pamphlet contains gross misrepresentations, and in order to refute these, the Canadian department publish letters from eminent divines, scientists and citizens who know the country well, and who speak of it in very high terms, and on account of the climate and fertility recommend it as a place for settlement. Among the letters published are extracts from letters of ex-Governor Horatio Seymour of New York, the late William H. Seward, and U. S. Consul Taylor, of Winnipeg.

Mr. C. H. Mackintosh, M. P., president of the proposed Ottawa and Gatineau Valley and Colonization Railroad, has just returned from England, where he has been engaged in looking after the interests of his company. He speaks encouragingly of the results of his mission, and expects that this important branch of our railway system will be placed under construction at an early date.

MARITIME PROVINCE NOTES.

An order of the marine department directs that in future the two lights on St. Paul's Island at the entrance to the Gulf of St. Lawrence, heretofore exhibited all the year round, will be extinguished on Dec. 31, and relighted on April 1 following; subject to the condition that if at any time during this interval, open water should be visible, or other circumstances indicating that navigation in the vicinity of the island is practicable, the lights will be exhibited for the time being.

Manganese is being shipped to New York from Markhamville, N. B.

The St. John Nut and Bolt Works are doubling their capacity, and are doing a largely increasing business, which will compel them to further increase their capacity.

The Lake Megantic Railway surveying party have been exploring for a line some twelve miles north of Monson, at a point between Lake Pond and Lake Onaway.

NORTHWESTERN NOTES.

The city council of Winnipeg has received an offer from Edinburgh, Scotland, of 99½ for half a million dollars debentures, and a month is asked to take the remaining $500,000 at par. Financial agents have been appointed at New York, London and Edinburgh.

The Portage, Westbourne and Northwestern Railway of Manitoba has been sold for $617,000 to a company composed of Sir Hugh Allan's executor, Andrew Allan, of Montreal, P. G. Allan, Liverpool, Messrs. Duncan McArthur, F. H. Boyle, C. S. Drummond, and L. N. Ruttan of Winnipeg. The railway is in running order as far as Gladstone, and graded fifteen miles beyond, and will be railed and completed for traffic by April 1, 1883. Tenders for construction of the line as far as Minnedoza will be let immediately.

A strong mining company has been formed at Winnipeg to develop the coal mines on the Saskatchewan at Medicine Hat.

West Lynne will give a bonus of $60,000 to the Canadian Pacific Railway on condition that the company shall build, complete and operate a loop line of railway with a passenger station equal in size to the present station in Emerson with the necessary freight-sheds and appurtenances.

RAILROAD NOTES.

The Grand Trunk Railway will construct a branch from Berlin to St. Jacobs and Elmira.

Work on the Kingston and Pembroke Railroad is going on rapidly.

Owing to the increasing traffic of the Grand Trunk, a second track between Montreal and Toronto will be laid in the spring.

The Grand Trunk Railway have just sent out a locomotive weighing seventy-two tons, with 5 ft. 8 driving wheels and 18x24 cylinders. This locomotive is one of several which are to be placed on the line between Sarnia and Montreal. They will be the most powerful and fastest engines in America.

Wednesday last the Essex Center cut off was completed, and Windsor, Ont., has another railroad with regular train service. Great credit is due the contractors, C. E. Danforth & Co., for the promptness with which they paid their workmen. On Wednesday morning there were 450 men and 188 teams at work; they finished at 11 A. M., and before 10 o'clock, P. M., every man had received the amount due him—some $30,000 having been paid out during the day by the cashier, Mr. F. B. Ushher.

The Grand Trunk Railway will pay, it is said, $5,250,000 for the North Shore Railroad, between Quebec and Montreal.

A company has been formed for the construction of the Caraquet Railway, between Bathurst and Shippegan harbor a distance of forty miles.

As the Midland has not been able to arrange with the Canadian Pacific, it will have to complete its line to Ottawa, and very probably to some point on the Grand Trunk Railway. Cornwall is endeavoring to get this connection; a charter will be asked for a road from Cornwall to Perth or Carleton Place, and also for another road from Cornwall to Ottawa, with branches to L'Orignal, Carleton Place and Smith's Falls.

The Grand Trunk could now build a short and inexpensive line to Sault Ste. Marie, and this line would also be of great use for its Toronto traffic. The best way to do this would be to connect the Midland Railway at Perth with Cornwall by an air line. The Midland could be used from Perth to Maberly, and from the latter point, it is said, a comparatively cheap line could be built in a northwesterly direction to Sault Ste. Marie.

The route of the Canadian Pacific from Prince Arthur's Landing, Lake Superior, eastward, has been agreed upon by the company and the government.

The Canadian Pacific will construct a connecting link of about seventeen miles between Emerson, Manitoba, and the southwestern junction of their road.

It is rumored that the Canadian Pacific have purchased the Pontiac and Pacific Junction. This gives the company control of both sides of the upper Ottawa as far as Pembroke.

THE CANADIAN CASTLE GARDEN.

The Emigration Buildings at the Tanneries, Montreal, for the temporary accommodation of immigrants *en route*, are substantial and comfortable. Although not large enough for the increasing demand, three hundred persons can be seated at the tables, and one thousand persons and over (which often is the case) can be accommodated with meals in a very short time by the caterers, Mr. Daniel McClanaghan and Mr. George Carslake. The meals are very good, and furnished in neat, clean white dishes. During an experience of six days' inspection I found the expression of thanks and gratitude on the part of the immigrants unanimous, and it can be safely set down that in no other place on the continent are the immigrants so well received and treated as at Montreal—in fact no other system would be tolerated by the department and the great city of Montreal. Immigrants are received at Montreal from Halifax, Quebec, Portland, Boston and New York, and sent on with all dispatch to their destination. The tide of emigration has been very large this year, but in 1883 it is expected will be doubled. Mr. John J. Daly is the emigration agent, and Mr. Wm. Nichol, his assistant, and the Department of Agriculture and the public are to be congratulated in having such indefatigable, kind and humane men in charge of the Montreal branch.

THE ICE PALACE AND CARNIVAL.

Preparations are nearly completed at Montreal for the Grand Carnival to take place in January. There will be skating, curling matches, snow-shoe races, and at night torch-light processions and parades. The ice palace will be constructed in geometrical and architectual style, and will be very attractive. The palace will be lighted up by electricity reflected through red, blue, white, green and other colored globes placed behind transparent ice. An offer has been received from Messrs. R. J. Kimball & Co., Bankers and Brokers, 40 Broadway, N. Y., to furnish their "Fuller Electric Light" free to the Carnival Committee; and the chairman, Mr. Robert Reed, informed me that in case the palace "was located on Victoria Square, the 'Fuller Light' would be used." While speaking of electric light, it is very strange that the American electric light companies do not make an effort to introduce their light at Ottawa, and secure the approval, and thereby the patronage of the Government. There is a fine opening to introduce the electric light in the Parliament buildings, at Ottawa. Any company desirous of securing information on this subject can do so by addressing your correspondent.

"W."

OTTAWA, December 28, 1882.

A VIRGINIA (Nevada) man recently erected some kind of a new-fangled pumping apparatus for a rancher at Paradise Valley. The pumping machine was to be driven by wind. The other day when a ten-knot breeze was blowing the inventor "turned her loose." In about half an hour the machine flooded the cattle corral with water and floated away the butt end of a haystack. The ranchman yelled to his machinist, "Stop her! stop her!" but it happened that provision for stopping was what the inventor had not thought of. Had it not been that the well was soon pumped dry the whole ranch would probably have been washed away. Even after the well was dry the machine threw mud and gravel so wickedly that to approach it was unsafe. The rancher now says: "It is a good pump—a wonderful pump!—but it needs a regulator."

THE Steamer City of Panama, which arrived in Panama Bay on the 15th from Central American ports, had a most valuable cargo of indigo. It was for different directions, almost every steamship line leaving the isthmus having to receive some of it. In all there were 3,749 packages.

LARGE type is not necessary in advertising—blind folks don't read newspapers.

The Stock Exchanges and Money Market.

New York Stock Exchange.

Closing Prices for the week ending Dec. 27.

	Th.21.	F.22.	Sat.23.	M.25.	Tu.26.	W.27.
Adams Express						
Albany and Susq.						
1st mortgage						
2d mortgage						
American Express		93	91			
Burl., C. R. & Nor.	80					
1st mortgage 5s	100¼		100¼		100¼	100¼
Canada Southern	69⅞	69	69¼		68	68
1st mortgage guar		98¾			99	98⅞
Central of N. Jersey	72⅛	71⅛	71⅛		70⅜	70⅛
1st mort. 1890						
7s, consol. ass					110	
7s, convertible ass.	109⅛					
7s, Income						
Adjustment						106
Central Pacific	86¾	86⅜	86⅛		86¼	86⅛
6s, gold			106		116¼	
1st M. (San Joaq)					106¾	
1st M. (Cal. & Or.)						
Land grant 6s						
Chesapeake & Ohio	23½		23¾			22⅛
1st pref					33¾	
2d pref						
1st mort., series B	87⅞	87⅞	88		88⅝	88⅛
Chicago and Alton	134¼		134½			134
Preferred						
1st mortgage						
Sinking Fund	113¼					
Chi., Bur. & Quincy	128¼	128¼	127¾		127½	126
7s, Consol. 1903					129	
Chi., Mil. & St. Paul	107¾	107¾	108¼		106¾	107¼
Preferred	122	122			121¾	
1st mortgage, 8s						
2d mort., 7 3-10s					125	
7s, gold						
1st M. (La. C. div)						
1st M. I. & M. div.)						123
1st. M. (I. & D. ext.)						
1st M. (H.&D. div.)						
1st M.(C. & M.div.)	126					
Consolidated S. F.						
Chi. & Northwestern	138½	138¼	138		137¼	137½
Preferred	155⅞	155⅛			155	154
1st mortgage			108			
Sinking Fund 6s						
Consolidated 7s						
Consol. Gold bo'ds		125				
Do. reg						
Chi., R. Isl. & Pac.	129	128¾	128¾		128⅝	128½
6s, 1917, c						
Clev.,Col.,Cin.&Ind.			82¾			
1st mortgage			121½			121
Clev. & Pittsburg gr.						139
7s, Consolidated						126½
4th mortgage						
Col.,Chi.,& Ind.Cent	4	4	4		4	4
1st mortgage						130
2d mortgage						
Del. & Hud Canal.	108⅞	108¼	108½		108½	108⅜
Reg. 7s, 1891						
Reg. 7s, 1884	107					
7s, 1894						
Del.,Lack.& Western	130⅝	130½	130⅜		128¼	128⅛
2d mortgage 7s						
Consol. 1907	128				128¾	
Erie Railway						
1st mortgage						
2d mort. 5s, ext.						
3d mortgage	102	102¼				
4th mort. 5s, ext.						
5th mortgage						
7s, Consol. gold						
Great West. 1st mort			107½			
2d mortgage						
Hannibal & St. Jo.						
Preferred	80		80		78	
8s, Convertible		107				106¼
Houston & Tex. Cen					78½	
1st mortgage		112	112		111¾	
2d mortgage						
Illinois Central	145	144¾	143⅞		143	142⅝
LakeShore&MichSo	117½	116¼	117¾		116¾	116¾
Consol. 7s						
Consol. 7s, reg						
2d Consolidated						
Leh. & W. B. con.ass	101					
Long Dock bonds						
Louisville & Nash.	54¼	54	54⅜		52⅞	53⅜
7s, Consolidated	115¼		115			
Manhattan						
1st pref						
Met. Elevated						
1st mortgage	102	101¾	102½		102½	
Michigan Central	103	102¾	102⅞		100⅞	101½
7s, 1902						123
Morris & Essex			122½			123¼
1st mortgage						
2d mortgage						
7s of 1871						
7s, Convertible						
7s, Consolidated		122¼				122¼
N.Y. Cen. & Hud. R.	130	129¾	129⅝		128¾	128¾
6s, S. F. 1883			101			
6s, S. F., 1887						
1st mortgage						134
1st mortgage, reg.						
N. Y. Elevated						
1st mortgage		117¾			118¾	
N. Y. & Harlem						
Preferred						
1st mortgage						
1st mortgage, reg						
N. Y. Lake Erie & W	39¼	39¼	39¾		39⅛	39¼
Preferred	87⅜	87⅜			87¼	86¾
2d Consolidated	97	97	96¼		96¾	96¼
New 2d 5s fund						
N.Y.,N.Hav'n&Hart						177
North Mo. 1st mort						
Northern Pacific	46	45¾	46¾		45¼	46
Preferred	85¾	84¾	85¼		84½	84⅝
Ohio & Mississippi.	33⅜	32⅞			32⅝	32½
Preferred			94¼			90
2d mortgage						
Consolidated 7s						
Consol. S. Fund	119		119¾			
Pacific Mail S. S. Co	43¼	42¼	43		43⅛	43⅛
Pacific R. R. of Mo.						
1st mortgage						
2d mortgage						
Panama						
Phila. & Reading	54¼	54¼	54		52¾	52⅝
Pitts,Ft.W.&Chi.gtd						
1st mortgage	138½	140				125
2d mortgage						
3d mortgage		131				
Pullman Palace Car	125					
Quicksil'r Min'g Co						
Preferred						
St. Louis & San Fran						
Preferred	54⅛		54⅛		53	
1st Preferred						
St. L., Alt'n & T. H.	45	46			47	45
Preferred						89½
1st mortgage						117
2d mort. pref						
Income bonds						
St. L., Iron Mt.& S.						
1st mortgage						
2d mortgage	104½		104½		105	
Toledo and Wabash.						
1st mortgage		107¾				
2d mortgage			98½			
7s, Consolidated						
St. Louis Division						102½
Union Pacific	103¾	103⅝	103⅝		102⅞	102¾
1st mortgage		116½	116½		116⅜	116½
Land Grant 7s						
Sinking Fund 8s		117⅛				118
United States Ex	66					
Wabash, St. L.& Pac	34⅞	35¾	36¼		35	35¾
Preferred	54⅞	55⅛	55⅛		54⅞	54⅜
New mort. 7s						
Wells-Fargo Ex			131		131	
Western Pacific b'ds			113¾			
Western Union Tel.	81¾	82	82⅝		81⅞	81⅛
7s., S.F conv., 1900					115¼	
Federal Stocks:—						
U. S. 4s, 1907, reg		119½			119¾	
U. S. 4s, 1907, coup.					120⅜	120¼
U. S. 4½s, 1891, reg.					113	
U. S. 4½s, 1891, coup	113¼	113⅛				
U. S. 5s, cont'd at 3½			103⅜		103¼	103¼
U. S. 3s, reg	103⅜		103½		103⅜	103⅜
Dt. of Col. 3-65s, reg						
Dt. of Col.3-65s,coup						

Boston Stock Exchange.

Closing Prices for the Week Ending Dec. 27.

	Th.21.	F.22.	Sat.23.	M.25.	Tu.26.	W.27.
Atch.,Top.&San.Fe.	86⅞	86¾	86⅝		85¾	85
1st mortgage	120⅜				121	120⅝
Land Grant 7s						
Boston & Albany	173	173¾	173½		174	
Boston and Lowell						
Boston & Maine	149					
Boston& Providence						
Bos'n,Hart.& Erie7s						
Burl.& Mo.R.L.G.7s						
Burl.& Mo.R.in Neb						
6s, exempt						
4s			83		83	
Chi.,Burl. & Quincy	128½	128¼	128⅛		127	126¼
Cin.,Sand&Clev($50)			25			24½
Concord ($50)			102			102
Connecticut River						
Eastern	35				33¾	35
New 6s, Bond		110			110	
Fitchburg						
N.Y. & New England	49¾	49½			50	49⅝
7s		115½	115⅞		125¾	
Northern N. H		109				
Norwich&Worcester						
Ogden & Lake Cham						
Old Colony		134			134¾	
Ph.,Wil.&Balt.($50)						
Portl'd,Saco & Ports						
Pueblo & Ark Val 7s					113½	
Pullman Palace Car	125	125½				
Union Pacific	103¾	103¾	103⅞		102¾	102¾
6s						
Land Grant 7s						
Sinking Fund 8s						
Vermont & Mass		131				
Worcester & Nashua		58½				
Cambridge (Horse)					85	
Metropolitan(Horse)						
Middlesex (Horse)						
Cal.&Hecla Min'gCo					252	
Quincy						

Philadelphia Stock Exchange.

Closing Prices for the Week Ending Dec. 26.

	W.20.	Th.21.	F.22.	Sat.23.	M.25.	Tu 26.
Allegh'y Val. 7 3-10s						
7s, Income		47⅜				
Buff., Pitts & West.	18⅛		18¾			18¾
Camd'n & Am. 6s, '83						
6s, 1889	112		107¾			
Mort. 6s, 1889		112		112		112
Camden & Atlantic						
Preferred						
1st mortgage						
2d mortgage						
Catawissa						
Preferred						
2d pref						
7s, new						
Del. & Bound Brook						
7s						
Elmira&Williamsp't						
Preferred						
Hunt. & B. Top Mt.			15			
Preferred			31			31¾
2d mortgage						
Lehigh Navigation	39	39	38¾			38¾
6s, 1884			103	103		
Gold Loan			110			
Railroad Loan				115¾		
Conv. Gold Loan						
Consol. Mort, 7s		116				116¼
Lehigh Valley	63¼		63¼	63¾		63¼
1st mort. 6s, coup						
1st mort. 6s, reg						
2d mort. 7s						
Consol mort. 6s	120	120				
Consol.mtg.6s,reg	120					
Little Schuylkill	59¾					
Minehill&Sch.Hav'n				62¾		62¾
North Pennsylvania	64			64		64
1st mortgage 6s				105		
2d mortgage 7s		120				119
Genl. mtg.7s,coup						
Genl. mtg. 7s, reg						
Northern Central		57¼		57¼		57⅛
5s						
Northern Pacific	45⅛	46	45⅜	46⅜		45⅛
Preferred	94¾	85¼	84¾	85¼		84¾
Pennsylvania R. R.	60	59⅝	60	60¼		59⅞
1st mortgage						
Gen'l mort						
Gen'l mort reg						
Consol. mort. 6s			117			
Consol. mort. reg						
Pa. State 5s, new		119				
do 4s, new						
do 3½s, 1912						
Phila. & Reading	27⅛	27⅜	27¼	27½		26¼
1st mortgage 6s						
7s of 1893						
7s, new convert	72¾	72¾	72¾	72		
Consol. mort. 7s		122				122⅛
Consol. mort. reg		123				
Gen'l mort. 6s	96	96	96	96		96
Def.Income bonds						
Philadelphia & Erie						
1st mortgage 5s						
2d mortgage 7s		115¾				
Pittsb.,Cin.&St.L.7s						
Pitts.,Tit.&Buff. 7s						
Schuylkill Navi't'n						
Preferred		11¾				
6s, 1897						
6s, 1907						
United Co. of N. J						
Hestonville, (Horse)						
Chestnut&Walnut)						

Baltimore Stock Exchange.

Closing Prices for the Week Ending Dec. 26.

	W. 20.	Th. 21.	F. 22.	Sat. 23.	M. 25.	Tu. 26
Baltimore & Ohio	.....	.....	199	.....	.....	200
6s, 1885	.....	.....	.....	.....	.....	.....
Central Ohio ($50)	.....	.....	.....	.....	.....	.....
1st mortgage	.....	.....	.....	.....	.....	.....
Marietta & Cincin'ti	.....	.....	.....	.....	.....	.....
1st mortgage, 7s	129	130	130	.....	.....	.....
2d mortgage, 7s	.....	101	101¾	.....	.....	.....
3d mortgage, 8s	.....	56	56⅛	.....	.....	.....
Northern Cen. ($50)	57¾	57⅝	57¼	.....	.....	.....
2d mort. 6s, 1885	.....	.....	.....	.....	.....	.....
3d mort. 6s, 1900	.....	.....	.....	.....	.....	.....
6s, 1900, gold	.....	.....	.....	.....	.....	.....
6s, 1904, gold	.....	.....	.....	.....	.....	115
Pitts. & Connelsv. 7s	.....	.....	.....	.....	.....	122
Virginia 6s Consol	62	52	61¾	61¾	.....	62
Consol. coupons	.....	.....	62	62	.....	.....
10-40 bonds	43¾	43¾	.....	44	.....	.....
Def'd Certificates	.....	.....	.....	.....	.....	.....
New 3s	46¼	.....	.....	.....	.....	.....
Western Maryland	.....	16	.....	.....	.....	.....
1st M., end. by Balt	.....	.....	.....	.....	.....	.....
2d M., do.	.....	.....	.....	.....	.....	.....
3d M., do.	.....	.....	.....	.....	.....	.....
1st M., unendorsed	.....	.....	.....	.....	.....	.....
2d M., end. Wash Co	.....	.....	.....	.....	.....	.....
2d M., preferred	.....	.....	.....	.....	.....	.....
City Passenger R. R.	47	.....	.....	.....	.....	.....

London Stock Exchange.

	Closing Prices Dec. 1.	Dec. 8.		
Baltimore and Ohio 5s, 1927	106	108	106	108
Central of N. J., $100 shares	80	35	70	75
Do. consol. mort	110	112	111	113
Do. Income Bonds	88	92	89	90
Central Pacific of Cal., $100 shs	90	91	86	89
Do. 1st mort. 6s, 1895-'98	117	119	117	119
Det., G'd Haven & Mil. Equip bds.	116	118	117	119
Do. Con. M. 5p.c., till '83 after 6p.c.	115	117	116	118
Illinois Central $100 shares	149	151	148	149
Do. S. F. 5s, 1903	104	106	104	106
Lehigh Valley Cons. mort. 1923	112	116	112	116
Louisville and Nashville mort. 6s	90	92	91	93
Do. capital stock $100 shares	53	55	52	53
N. Y. Cen. & Hud. R. mort. bonds.	132	136	132	136
Do. $100 shares	134	135	134	135
Do. mort. bonds (stg.)	122	124	122	124
N. Y. Lake Erie & West. $100 shs.	37¾	39¼	37¼	37¾
Do. 6 p. c, pref. $100 shares	86	88	87	89
Do. 1st Con. Mort. bonds (Erie).	127	130	128	132
Do. do. Funded Coupon bonds.	124	127	125	130
Do. 2d Consol. Mort. bonds	99	101	98	99
Do. do. Funded Coupon bonds.	97	99	97	99
N. Y., Pa. & Ohio 1st mort. bonds.	51½	52½	52	53
Do. Prior Lien bonds (sterling).	100	105	100	105
Pennsylvania $50 shares	62	62¼	61½	62
General Mortgage	124	126	124	126
Phil. & Erie Gen. mort. 6s, 1920	117	119	117	119
Philadelphia & Reading $50 shs	26¼	27¼	26¼	26¾
General Consol Mortgage	114	116	114	116
Do. Improvement Mortgage	103	105	104	105
Do. Gen. Mtg. '74, ex-def'd coup.	96	98	96	98
St. L. Bridge 1st mort. gold bond.	121	123	121	123
Do. 1st. pref. stock	94	98	94	98
S. P'fic of Cal., 1st mort 6s, 1905-6.	106½	107½	106¼	107¼
Union Pacific 1st mtg. 6s, 1896-9.	117	119	117	119
Wabash, St. L. & P. $100 shares	31	33	33	35
Do. $100 pref shares	56	57	54½	56½
Do. gen. mort. bonds	81	83	81	83

AMERICAN RAILROAD JOURNAL

Financial and Commercial Review.

THURSDAY EVENING, December 28, 1882.

DURING the forenoon the rate for call loans on stock collaterals was 7 per cent. After 2 o'clock money loaned as high as 8 per cent, but by 3 o'clock was down to 3 per cent.

The posted rates for foreign exchange were 4.81@4.81½ for sixty days, and 4.85@4.85½ for demand. The actual rates were: Sixty-day, 4.80¼@4.80¾; demand, 4.84¼@4.84¾; cables, 4.85½@4.85¾. Commercial bills were 4.87¾@4.79. Continental exchange was as follows: francs, 523¾@523¾ and 520⅝@520. Reichsmarks were 94⅜@95¼; Guilders were 39⅝@40.

The Wells-Fargo Express Company, which has for many years done the carrying business on the Pacific Coast has, it is said, suddenly lost its valuable branches of business north of San Francisco. They have millions invested, and have been patronized hitherto by all the gold and silver miners of California and Nevada. Every stage-coach carried a Wells-Fargo treasure box, with city gold coin going up, and gold dust, etc., returning, through wild canyons and over lonely mountains, dismal swamps and sharp turns in every highway. Everything invited the "Road Agents," whose first requisition was invariably, "hand down Wells-Fargo's box. Now, however, the approaching completion of the Great Northern Pacific Transit Railway has inaugurated at Portland, Oregon, the Northern Pacific Express Company, to begin business 1st January next, and Wells, Fargo & Co. withdraw from that route.

Baron Richthofen shows that in China the supply of anthracite coal is not less than 630,000,000,000 of tons, and the bituminous coal area is just as large. The Baron thinks that, taking what is left in other parts of the world with the Chinese coal area, we need not fear a fuel famine. He thinks that the supply in the Chinese province of Shansi alone will last the world about 4,200 years.

The gross earnings of the Northern Central Railway for the month of Nov., 1882, were $526,685.46, the expenses $378,455.10, and the net earnings $148,230.36, being a decrease of $25,226.81 as compared with the month of November, 1881. The gross earnings for the eleven months of 1882 were $5,310,172.66, expenses $3,381,007.99, net earnings, $1,929,164.67, being an increase as compared with the corresponding period last year of $427,900. In this statement the earnings of the Union Railroad are not included.

The Mexican Banking Law, prepared by the President by authority of Congress, is copied from the American law, with the exception that instead of Government bonds being deposited in the national treasury as security the bonds of railroads being constructed in Mexico, which have paid interest for last year will be used. The banks conforming to this law will only pay the stamp tax. The other taxes will be levied on banks not conforming thereto.

At New Orleans, La., on the 22d inst., Judge Righter, of the Civil District Court, rendered a decision ordering the City Council to levy and collect annually a tax of $650,000 to pay interest on and provide for a sinking fund for the redemption of consolidated bonds.

The stockholders of the Oil City and Chicago Railroad Company met in the office of the Buffalo, Pittsburg and Western Railroad Company on the 23d inst. and passed a resolution authorizing the issue of bonds of the former company to the amount of $1,600,000, to be secured by mortgage on its property and franchises. The Oil City and Chicago Company is controlled by the Buffalo, Pittsburg and Western Company, and the proposed issue of bonds is to be made in pursuance of a plan to consolidate the two companies named with the Buffalo, New York and Philadelphia Railroad Company.

The fund of $800,000, required to complete and fully equip the Toledo, Cincinnati and St. Louis Railroad and save it from falling into a Receiver's hands was all subscribed in Boston on the 23d inst., and it is expected that E. B. Phillips, the former president of the Eastern Railroad Co., will at once take the presidency of this company and push forward the enterprise. The subscribers will receive debenture bonds bearing 8 per cent interest, payable semi-annually.

The Manhattan Railway Company has paid $1,041.34, and A. D. Chambers, for a number of railroad companies, has paid $523.41 to the Comptroller towards defraying the expenses of the State Engineer's office at Albany.

During the year 1882, the receipts into the Treasury of Allegheny county, Penn., from taxes, fees, etc. were $500,908, and from liquor license $222,355, which with the balance of $261,972, on hand at the beginning of the year, makes a total of $985,235. The expenditures for the same period were $965,462, principally as follows: Interest on county debt, $218,000; matured debt, $85,000; purchase of University building, $80,000; refitting the same, $20,000; for salaries and fees, $157,000. There were 1,926 licenses granted during the year.

The statement of business of all the lines of the Pennsylvania Railroad Company east of Pittsburg and Erie for November, 1882, as compared with the corresponding month in 1881, shows an increase in gross earnings of $533,610; an increase in expenses of $391,592; an increase in net earnings of $142,018. The eleven months of 1882, as compared with the like period in 1881, show an increase in gross earnings of $4,530,233; an increase in expenses of $3,493,838; an increase in net earnings of $1,036,395. All lines west of Pittsburg and Erie for the eleven months of 1882 show a surplus over liabilities of $1,865,628, being a decrease as compared with the like period of 1881 of $874,380.

The deposit system, under which the enlisted men of the army can leave a portion of their pay in the hands of the Government and receive interest on it, has been in operation for ten years, and during that time the sum of $3,813,081.78 has been received on deposit. The payments during the same period amount to $2,766,613.27, leaving at the close of the fiscal year the sum of $1,046,468.51 still on deposit. While the amount deposited last year ($448,566.83) was less than the amount deposited during the previous year, it is noticed that the average amount of each deposit is larger and the number of deposits less.

Senor Matias Romero, the Mexican Minister at Washington, has received a dispatch from his Government dated Dec. 22 at the City of Mexico, informing him that General Pacheco, the Secretary of Public Works, has signed a contract with Mr. George Tyng, the representative of the Learned Tehuantepec Railroad Company, and of the bondholders of the same road, which settles, in a satisfactory manner for both parties, the difficulties growing out of the action of Mexico in declaring the grant forfeited. Mr. Tyng sold to the Mexican Government the road and railroad material belonging to the company, and accepted as satisfactory to his clients the action of the Mexican Government in the premises.

A dispatch from Jefferson City, Missouri, says that the State Fund Commissioners have decided to defer payment of the January interest on certain Missouri bonds on which there are no coupons representing this interest, and the matter will be referred to the Legislature.

According to the annual report of the Texas State Treasurer, the cash in the treasury amounts to $1,770,189, and the bonds to $4,427,510. The permanent free school fund of the State consists of $492,730 cash; 5 per cent bonds, $219,468; 6 per cent bonds, $1,277,867; 7 per cent bonds, $323,000: railroad bonds, $1,753,317. In addition to the above, the schools own thirty million acres of land, valued at $45,000,000, but the price of this land is certain to be raised by the next Legislature to $3 and $5 an acre, making the aggregate value about $110,000,000, and swelling the permanent school fund, which can never be disbursed, to the sum of $114,176,382.

There was a report circulated some time since that Mr. Dillon said in Chicago that the Union Pacific stock outstanding was $65,372,155. He should have said that the Union Pacific stock was $60,854,105, and the branch line stocks $31,256,650, of which the Union Pacific owns $26,738,600, leaving $4,518,050 of these outstanding. This latter amount added to the Union Pacific stock makes a total of both outstanding $65,372,155.

At a meeting of the Board of Aldermen on the 26th inst. the Committee on Railroads reported that the capital stock of the New York and Harlem Railroad Company was $10,000,000, of which amount $9,450,000 was paid in. The funded debt was $11,109,625. During last year there were 9,031,274 passengers carried on the horse-cars of the company. The receipts from fare, at 6 cents each passenger, amounted to $541,876.46. The total receipts being $657,826. The expenses footed up $423,320.35. The property of the company was valued at $1,198,762.

The mortgage of the Jersey Shore, Pine Creek and Buffalo Railroad Company for $3,500,000 has been recorded at Williamsport, Penn.

The Mayor of Baltimore signed on the 21st inst. the new certificates of Baltimore City stock of 1925 for $371,000 awarded on account of the Western Maryland Railroad loan. The money was paid over by the persons to whom the stock was issued, and it was deposited in bank. The loan of $371,000 was made to the Western Maryland Railroad Company and receipted for by President Hood. The premium of $11,417 above par at which the stock was awarded was retained for the starting of a sinking fund for the future redemption of the loan.

The Buffalo *Commercial Advertiser* says that the local grain receipts by lake during the season just closed (including flour estimated as grain) aggregate, 58,757,083 bushels, as against 61,183,257 in 1881 and 111,799,754 in 1880. The exports show a decided increase in the three leading articles—coal, cement and salt. The coal shipments foot up to the handsome total of 1,114,498, as against 806,771 last year. The *Advertiser* adds: "The commerce of the port has not been so extensive as in former years, but there are well understood causes for the decline, which will not act permanently. There is no probability, however, that lake freights will ever again be as remunerative as they have been in the past."

Ex-Governor Seymour has written a letter to the Buffalo *Express* on the canals in which he states his belief

that the canals in future will be chiefly used to transport coarse and cheap articles, like lumber, stone, clay and coal, which railroads cannot carry as well, and which, as our population increases, will grow in tonnage immensely. He is disposed to think that increased efficiency lies in the direction of faster boats rather than in enlarging the canals.

The directors of the Buffalo, Pittsburgh and Western Railroad Company have declared a dividend of 3 per cent on its preferred stock and agreed to merge its interests with the Buffalo, New York and Philadelphia Railroad Company. A special meeting of the stockholders will be held on the 24th prox., to ratify the agreement.

The wholesale market in Montreal and Toronto is quiet, but the last six months have been more profitable than the same period for 1881. Profits were better generally in all the trades. In dry goods, some houses are carrying over heavy stocks. The supply in cotton goods is full everywhere. There is a fair prospect for a good spring trade. The manufacturers of boots and shoes report brisk business. Hardware in good demand, with prices firm. Groceries are quiet. Trade is not expected to improve until after the holidays. In Provisions, trade is reported fairly profitable. Pork packers are uncertain, and handling carefully. It is said there is no desire to hold over the crops for high prices next summer, and in consequence money is expected to be abundant.

The following quotations of sales of railway and other securities, for the week, are in addition to those given elsewhere in our columns.

New York.—Boston and New York Air Line pref., 78; Cedar Falls and Minnesota, 15; Chicago, St. Paul Minn. and Omaha, 53; do. pref., 113¾; do. consol., 119¾; Central Iowa, 28; do. 1st, 112; Chesapeake and Ohio 1st, Series A, 105½; do. cur. 6s, 53¾; Chicago, St. Louis and New O leans 1st, 96¼; Chicago and Northwestern S. F. 5s, 99¾; Chicago, Milwaukee and St. Paul, Chicago and Pacific West div. 1st, 94; Cedar Rapids, Iowa Falls and Northern 1st, 106; Columbus, Chicago and Indiana Central inc., 52; Chicago, Burlington and Quincy Denver div. 4s, 85½; do. Iowa div. 4s, 87½; Dubuque and Sioux City, 87; Denver and Rio Grande, 40; do. 1st, 107; do. consol., 91; Denver, South Park and Pacific 1st, 100; East Tennessee, Virginia and Georgia, 9⅜; do. pref., 17⅜; do. 5s, 75¾; do. inc., 40; Evansville and Terre Haute 1st, 100; Fort Worth and Denver 1st, 67; Gulf, Colorado and Santa Fe, 1st, 112½; Houston and Texas Central gen'l mort., 98; do. Waco and N. W. div. 1st, 113: Indiana, Bloomington and Western, 35¼; do. consol. inc., 49; International and Gt. Northern 1st, 105⅜; do. coupon 6s, 84½; Kansas Pacific 1st consol., 100¾; do. 6s, Denver div. ass., 107; Keokuk and Des Moines 1st, 101¾; Louisville and Nashville genl. mort. 6s, 83¾; Louisville, New Albany and Chicago, 6s: do. 1st, 104½; Long Island, 6o; Lake Erie and Western, 34½; Milwaukee, Lake Shore and Western pref., 49½; do. 1st, 99; Memphis and Charleston, 45; Minneapolis and St. Louis, 28½; do. pref., 65; do. 2d, 101; Missouri, Kansas and Texas, 33¼; do. consol. 7s, 107¼; Missouri Pacific, 102½; do. 1st consol., 100½; do. 3d, 109¼; Manhattan Beach, 19¼; Metropolitan Elevated 2d, 88; Michigan Central consol. 5s, 101; Mobile and Ohio 1st mort., 105; do. 1st deben., 80; Michigan Southern S. F., 105⅞; New York, Chicago and St. Louis, 14½; do. pref., 32¼; do. 1st, 96¼; Nashville, Chattanooga and St. Louis, 59¼; do. 1st, 118; New York, Ontario and Western, 25½; Norfolk and Western, 18: do. pref., 48½; do. genl. mort., 101; New Orleans Pacific 1st, 86; Northern Pacific 1st, 105¼; Ohio Central, 13¼; do. 1st, 95½; do. inc., 32; Oregon Railway and Nav., 138; Oregon Transcontinental, ex-div., 83½; Oregon Short Line 6s, 100; Oregon and California 1st, 92; Ohio Southern 1st, 80; do. inc., 25; Peoria, Decatur and Evansville, 25¼; do. 1st, 103; Pittsburgh, Bradford and Buffalo 1st, 75½; Quincy and Toledo 1st, 101; Rome, Watertown and Ogdensburgh inc., 45; do. ext. 5s, 75; Rochester and Pittsburgh, 20½; do. inc., 42½; do. 1st, 104½; Richmond, Danville and West Point, 24; Rensselaer and Saratoga, 140; Richmond and Danville 1st, 96⅜; do. deben., 65; St. Paul, Minn. and Man., 142½; do. 1st, 110⅜; do. 2d, 108½; do. Dakota ext. 1st, 106½; St. Paul and Duluth, 39¼; South Carolina, 24; do. inc., 57; do. 1st, 100½; St. Louis and Iron Mt., Cairo and Fulton 1st, 111; do. Arkansas Branch 1st, 107½; do. 5s, 74; St. Louis, Kansas City and Northern Omaha div. 1st, 108½; St. Louis, Alton and Terre Haute dividend bonds 6o; South Pacific of Mo. 1st, 104½; St. Paul and Sioux City 1st, 113; St. Louis and San Francisco 2d, class A, 96: do. B, 92½; do. C, 92½; Toledo, Delphos and Burlington 1st, 55; Texas and Pacific, 40½; do. consol. 6s, 91; do. inc. L. G., 58¾; do. Rio Grande div. 1st, 82; Tonawanda Valley 1st, 98; Wabash, St. Louis and Pacific, gen'l. mort. 6s, 80; do. Iowa div. 1st, 91; do. Toledo, Peoria and Western 1st, 108; Missouri 6s, fund., 1894-'95, 121½: North Carolina consol., 4s, 80: do. Special Tax 3d class, 6½; Tennessee 6s, 45; do. compromise, 47; American Cable, 67; Mutual Union Tel., 25; do. 6s, 72½; Colorado Coal and Iron, 29; Homestake Mining, 17½.

Boston.—Atlantic and Pacific inc., 18; do. blocks, 104½; Burlington and Missouri River in Neb. 6s, nonexempt, 102; Boston, Clinton, Fitchburg and New Bedford pref., 135; Columbus, Springfield and Cincinnati, 9¾; Chicago, Burlington and Quincy 7s, 126; do. 5s, 101; do. 4s, S. W. div., 81½. do. 4s, Denver ext., 84; Chicago and West Michigan, 60; Fort Scott Branch, 101; Flint and Pere Marquette pref., 103; Iowa Falls and Sioux City, 89¾; Jackson, Lansing and Saginaw 8s, green, 112½; Kansas City, St. Joseph and Council Bluffs 7s, 113¼; Kansas City, Lawrence and Southern 5s, 104¾; Kansas City, Fort Scott and Gulf, 84; do, 7s, 111½; Kansas City, Springfield and Memphis blocks, 100; Little Rock and Ft. Smith, 47; Mexican Central, 21⅛; do. 7s, 72⅞; do. blocks No. 3, 94¾; Marquette, Houghton and Ontonagon, 70; Massachusetts Central 6s, 26; New York and New England 6s, 105; Rutland pref., 20; do. 6s, 96; Southern Kansas and Western 7s, 109½; South Boston Horse, 73; Sonora 7s, 104¾; Toledo, Cincinnati and St. Louis, 5⅝; do. 6s, 44½; do. Branch inc., 11¼: Toledo, Delphos and Burlington, S. E. div. 6s, 44; do. Branch inc., 10; Wisconsin Central, 15; do. 7s, 1st series, 80; do. 2d series, 42; Wisconsin Valley 7s, 112¾; Allouez Mining Co., 2⅛; Franklin, 15; Napa Quicksilver, 3¾; Osceola, 33; Pewabic, 12; Silver Islet, 5⅛; Sullivan, 1.

Philadelphia.—Am. Steamship Co. 6s, 105; Belvidere Delaware 2d, 105½; Central Transp., 34½; Huntington and Broad Top Mt. consol. mort. 5s, 89; Nesquehoning Valley, 52½; Northern Pacific pref. scrip., 85; Norfolk and Western pref., 46½; Pennsylvania Co. 4½s, 97; do. 6s, 107; Philadelphia Cl'y 6s, 1891, 122; do. 6s, 1896, 129; do. 6s, 1902, 133; Philadelphia and Reading scrip, 95; do. deben. 6s, 60½; Philadelphia, Wilmington and Baltimore 4s, 93; Pennsylvania Canal 6s, 88½; Pennsylvania R. R. scrip, 119; Philadelphia, Germantown and Norristown, 108; St. Paul and Duluth, 38; Texas and Pacific consol. mort. 6s, 91¼; do. Rio Grande div. 6s, 82⅝; Westchester and Philadelphia 7s, 117½. The latest quotations are: City 6s, 108@120; do. free of tax, 127 @133; do. 4s, new, 106@114; Pennsylvania State 5s, new loan, 119@120; do. 4s, old, 112@114; do. 4s, new, 116@118; Philadelphia and Reading Railroad, 26¾@26¼; do. consol. mort. 7s, reg., 122½@123; do. gen'l mort. 6s, coupon, 95½@96½; do. 7s, 1893, 119@120; do. 7s, new conv., 70 @72; United New Jersey R. R. and Canal, 186¾@187; Buffalo, Pittsburg and Western, 18¾@18⅞; Pittsburgh, Titusville and Buffalo 7s, 93@96; Camden and Amboy mort. 6s, 1889, 111@113; Pennsylvania R. R., 59¾@59⅞; do. general mort. 6s, coupon, 124½@125; do. reg., 124@125; do. consol. mort. 6s, reg., 116@118; Little Schuylkill R. R., 58½@59¾; Schuylkill Navigation pref., 11¾@12; do. 6s, 1882, 89@91; Elmira and Williamsport pref., 58@60; do. 5s, 99@100; Lehigh Coal and Navigation, 38¾@39; do. 6s, 1884, 103@103¾; do. R. R. loan, 115@116; do. Gold Loan, 110@111; do. consol. 7s, reg., 115½@117; Northern Pacific, 45⅞@46; do. pref., 84¾@85⅞; North Pennsylvania, 63½@64½; do. 6s, 105@106; do. 7s, 118¾@—; do. 7s, General mort. reg., 124@—; Philadelphia and Erie, 19 @20; do. 7s, 115½@116; do. 5s, 102½@103½; Minehill, 62½ @63; Catawissa, 22¾@24; do. pref., 54@55; do. new pref., 53@—; do. 7s, 1900, 118@120; Lehigh Valley, 63@63¼; do. 6s, coupon, 119@121; do. reg., 120@121; do. 7s, reg., 132@134; do. consol. mort. reg., 119½@120½; Fifth and Sixth streets (horse), —@190; Second and Third, 114@117; Thirteenth and Fifteenth, 75@80; Spruce and Pine, 42@44; Green and Coates, 80@88; Chestnut and Walnut, —@93; Germantown, 70@72; Union, 110@ —; West Philadelphia, 130@—; People's, 11¾@12¼; Continental, 100@102.

Baltimore.—Atlanta and Charlotte, 62; do. 1st, 104; Baltimore City 6s, 1890, 112⅞; do. 6s, 1886, 106½; do. 6s, 1900, new, 123⅜; do. 6s, 1893, 114; do. 4s, 1925, 109; Columbia and Greenville 1st, 102⅝; do. 2d, 74½; Chesapeake and Ohio Canal, 31; Charlotte, Columbia and Augusta, 37; George's Creek Coal, 94; Maryland Defense 6s, 101½; Ohio and Mississippi, Springfield div, 1st, 114½; Virginia Midland 1st mort., 112; do. 5th mort., 93¾; Virginia Black scrip, 30; Wilmington, Columbia and Augusta, 106½. The latest quotations are: Atlanta and Charlotte 1st, 1907, 103¼@104¼; Baltimore and Ohio, 199@205: do. 6s, 1885, 104¼@—; Baltimore City 6s, 1890, 112⅞@113; do. 6s, 1886, 106@—; do. 5s, 1916, 120¾@122; do. 4s, 1925, 108@109; Columbia and Greenville 1st, 1916, 102½@102¾; do. 2d, 74@75; Central Ohio 6s, 108½@—; Canton Co. 6s, 112@—; Chesapeake and Ohio Canal, 28@34; Marietta and Cincinnati 7s, 1891, 129@130; do. 7s, 1896, 101½@101⅝; do. 8s, 1890, 55¾ @55⅞; Northern Central, 57@57½; do. 6s, 1885, 105½ @107; do. 6s, 1904, gold, 115@115½; do. 6s, 1900, gold 117@—; do. 5s, Series B, 98@98¼; Ohio and Mississippi, Springfield div. 6s, 113¾@115; Pittsburgh and Connellsville 7s, 121@123; Richmond and Danville gold 6s, 95@ 96½; Virginia Midland 5th, 93¼@95; do. inc., 38@50; Virginia consol., 62@62¼; do. 10-40s, 43½@43¾; do. 3s, 47¼@47¾: Wilmington, Columbia and Augusta, 106@—.

The Coal Trade.

THE leading coal-carrying companies make the following reports of their tonnage for the week ending Dec. 16, and for the year to the same date, compared with their respective amounts carried to the same time last year:—

	Week.	1882.	1881.
Phil. and Reading R. R.	172,620	389,198	442,160
Schuylkill Canal	550	7,231	27,655
Lehigh Valley	129,050	302,726	337,718
Delaware, Lackawanna and Western	96,018	4,419,112	4,174,134
Shamokin	17,235	1,093,623	1,041,935
Central R. R. of New Jersey	73,924	4,240,270	4,288,476
United R. R. of New Jersey	42,118	1,674,284	1,550,441
Pennsylvania Coal	29,266	1,391,452	1,378,438
Delaware and Hudson Canal	85,308	3,500,317	3,500,338
Huntingdon and Broad Top Mountain	12,451	452,101	498,282
Penn. and New York	28,390	65,836	77,766
Clearfield, Pa.	52,955	2,739,952	2,318,885

The total tonnage of anthracite coal from all the regions for the week ending Dec. 16, as reported by the several carrying companies, amounted to 587,572 tons, against 644,984 tons in the corresponding week last year, a decrease of 57,412 tons. The total amount of anthracite mined for the year is 28,079,958 tons, against 27,214,315 tons for the same period last year, an increase of 865,643 tons. The quantity of bituminous coal sent to market for the week amounted to 98,037 tons, against 103,057 tons in the corresponding week last year, a decrease of 5,020 tons. The total amount of bituminous mined for the year is 4,331,322 tons, against 4,883,018 tons for the corresponding period last year, a decrease of 551,696 tons. The total tonnage of all kinds of coal for the week is 685,609 tons, against 748,041 tons in corresponding week last year, a decrease of 62,432 tons, and the total tonnage for the coal year is 32,411,280 tons, against 32,097,333 tons to same date last year, an increase of 311,947 tons. The quantity of coal and coke carried over the Pennsylvania Railroad for the week ending Dec. 16 was 229,516 tons, of which 173,585 tons were coal and 55,931 tons coke. The total tonnage for the year thus far has been 10,645,690 tons, of which 7,895,950 tons were coal and 2,749,740 tons coke. These figures embrace all the coal and coke carried over the road, east and west. The shipments of bituminous coal from the mines of the Cumberland coal region for the week ended Dec. 16 were 41,855 tons, and for the year to that date 1,429,152 tons, a decrease of 725,046 tons as compared with the corresponding period of last year.

THE LAKE SHORE AND MICHIGAN SOUTHERN RAILWAY CO.,
TREASURER'S OFFICE,
GRAND CENTRAL DEPOT,
NEW YORK, Dec. 22, 1882.

THE BOARD OF DIRECTORS OF THIS COMPANY have this day declared a quarterly dividend of TWO PER CENT upon its capital stock, payable on THURSDAY, the FIRST day of FEBRUARY next, at this office.

The transfer books will be closed at 3 o'clock p. m. on FRIDAY, the 29th inst., and will be reopened on the morning of Monday the 5th day of February next.

F. W. VANDERBILT, Acting Treasurer.

OFFICE OF THE
CENTRAL PACIFIC RAILROAD COMPANY,
23 BROAD STREET, NEW YORK, Dec. 28, 1882.

THE COUPONS OF THE FIRST MORTGAGE BONDS of the Central Pacific Railroad Company, the Western Pacific Railroad Company and the California and Oregon Railway Company, due January 1, 1883, will be paid at the office of FISK & HATCH, No. 5 Nassau street.

Holders presenting ten or more coupons will leave them for examination, in which case a receipt will be given and payment made on the following day.

E. H. MILLER, Jr., Secretary.

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—OF—

RAILWAY APPLIANCES,

TO BE HELD IN

CHICAGO, from THURSDAY, the 24th day of May, to SATURDAY, the 23d day of June, 1883, in the INTER-STATE EXPOSITION Buildings, the largest and best adapted for the purpose in the United States.

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All material and articles properly coming under the head of RAILWAY APPLIANCES or SUPPLIES admitted.

For FULL INFORMATION address the SECRETARY, care GRAND PACIFIC HOTEL, CHICAGO.

E. H. TALBOTT, *Secretary.* LUCIUS FAIRCHILD, *President.*

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RAILROAD AND CANAL DIVIDEND STATEMENT.

Showing the amount of Stock Outstanding, the Dividend Periods and the date of last Dividend.

Marked thus(*)are leased roads.	Stock out-standing.	Divide'd Periods.	Last Dividend Payable.
Albany and Susq*...100	2,500,000	semi-an	July '82 2
Atch., Top. and S. Fe100	54,000,000	q'arterly	Nov. '82 1½
Atlanta and W. Point100	1,232 200	semi-an	Jan. '82 6
Atlantic and St. Law*100	5,840,000	semi-an	Sept. '82 3
Augusta and Savan'h100	1,022,900	semi-an	June'81 3½
Avon, Geneseo&MtM*100	225,000	semi-an	July '81 3
Baltimore and Ohio.100	14,792,566	semi-an	Nov. '82 5
" " pref.100	5,000,000	semi-an	July '82 3
Washington Br....100	1,650,000	semi-an	Nov. '82 5
Berkshire*..... 100	600,000	q'arterly	Apl. '82 1¾
Boston and Albany..100	20,000,000	q'arterly	Dec. '82 2
Bos.&N.Y.AirLine pf.100	2,795,227	q'arterly	June'82 1
Bos.,Cl.,F.&N.B.pref.100	1,750,100	semi-an	Oct. '82 3½
Bos.,Conc.&Mont.pf*100	800,000	semi-an	Nov. '82 3
Boston and Lowell..500	3,940,000	semi-an	Jan. '83 2½
Boston and Maine...100	6,921,274	semi-an	Nov. '82 4
Boston & Providence100	4,000,000	semi-an	Nov. '82 4
Attleborough Br...100	131,700	semi-an	July '82 3½
Bos.,Revere B&Lynn100	419,400	semi-an	Jan. '83 3
Buffalo,N. Y. & Erie*.100	950,000	semi-an	June'82 3
Buff.,Pitts. & West.pf. 50	1,457,000	.....	Jan. '83 3
Camden & Atlantic.. 50	377,400	q'arterly	Nov. '82 3
" " pref. 50	880,650	q'arterly	Nov.'82 4
Camden & Burl. Co...100	381,925	semi-an	July '82 3
Canada Southern....100	15,000,000	.....	Feb. '81 2½
Cape May&Millville* 50	447,000	semi-an	June'81 3
Catawissa*..... 50	1,159,500	annual	Oct.'82$2½
" pref..... 20	2,200,000	semi-an	Nov. '82 3½
" new pref.. 50	1,000,000	semi-an	Nov. '82 3½
Cayuga and Susq.*.. 50	589,110	semi-an	July '81 4½
Cedar Rapids&Mo.R*100	6,850,400	q'arterly	Nov. '82 1½
" " pref.100	769,600	semi-an	Aug .'82 3½
Central of Georgia....100	7,500,000	semi-an	June '82 4
Central of New Jersey100	18,563,200	q'arterly	July '76 2½
Central Ohio*..... 50	2,437,950	semi-an	July '82 3
" pref.... 50	411,550	semi-an	July '82 3
Central Pacific 100	59,275,500	semi-an	Aug. '82 3
Chemung*..... 100	380,000	q'arterly	July '81 1½
Cheshire preferred ...100	2,155,300	semi-an	July '82 1½
Chicago and Alton...100	11,181,741	semi-an	Sept. '82 4
" " pref 100	2,245,400	semi-an	Sept. '82 4
Chi., Burl. & Quincy.100	55,337,455	q'arterly	Dec. '82 2
Chi., Iowa & Nebras*.100	3,916,200	semi-an	Jan. '83 4
Chi., Mil. & St. Paul.100	20,404,261	semi-an	Oct. '82 3½
" " pref 100	14,401,483	semi-an	Oct. '82 3½
Chi. & N. Western....100	14,988,257	semi-an	Dec. '82 3½
" pref.100	21,525,353	q'arterly	Dec. '82 2
Chi., R. I. & Pacific..100	41,960,000	q'arterly	Feb. '83 1¾
Chi. and West Mich .100	6,151,000	semi-an	Feb. '82 2½
Chi.,St.P.,M.&O.pref.100	10,390,000	q'arterly	Jan. '83 1¾
C., Ind., St. L. & Chi..100	6,000,000	q'arterly	July '82 1½
Cin., Sand. & Clev.pf. 50	429,037	semi-an	Nov. '82 3
Clev. and Mahoning* 50	3,759,200	semi-an	Nov. '81 3½
Clev. and Pittsburg* 50	11,244,336	q'arterly	Dec. '82 1¾
Columbus & Xenia*. 50	1,786,200	q'arterly	Dec. '82 2
Colum.&HockingVal.100	2,500,200	semi-an	Aug. '81 208
Concord 50	1,500,000	semi-an	Nov. '82 5
Concord and Ports.*.100	350,000	semi-an	July '82 3½
Conn.& Passump.Riv100	2,244,400	semi-an	Aug '82 3
Connecticut River ..100	2,100,000	semi-an	Jan. '83 4
Cumberland Valley.. 50	1,292,950	q'arterly	Oct.' 82 2½
" 1st pref 50	241,900	semi-an	Oct. '82 4
" 2d pref. 50	243,000	semi-an	Oct. '82 4
Danbury & Norwalk. 50	600,000	.....	Oct. '82 2½
Dayton and Mich.*.. 50	2,402,573	semi-an	Apl. '82 1¾
" " pref. 50	1,211,250	q'arterly	July '82 2
Delaware*..... 25	1,468,940	semi-an	July '82 3
Del. & Bound Brook*100	1,652,000	q'arterly	Nov. '82 1¾
Del., Lack.& Western 50	26,200,000	q'arterly	Oct., 82 2
Denver & Rio Grande.100	29,160,000	q'arterly	Jan '82 1½
Detroit, Lans. & Nor.100	1,825,600	semi-an	Aug.'80 2½
" " pref.100	2,508,380	semi-an	Aug. '82 3½
Dubuque&Sioux C'y*100	5,000,000	semi-an	Oct. '82 3
East Pennsylvania*.. 50	1,709-550	semi-an	Jan. '83 3
East Mahanoy*..... 50	392,950	semi-an	July '82 3
Eastern (N. H.).....100	492,500	semi-an	Dec. '82 2½
Eel River.....100	3,000,000	q'arterly	Dec. '82 $1
Elmira&Williamsp't* 50	500,000	semi-an	Nov. '82 1½
" " pref. 50	500,000	semi-an	July '82 3½
Erie and Pitsburg*.. 50	1,998,400	q'arterly	Dec. '82 1¾
Evansville & Terre H.100	100,000	semi-an	Jan.' 83 6b
Fitchburg.....100	4,500,000	semi-an	Jan. '83 3
F. & P. Marquette pf.100	6,500,000	semi-an	Jan. '83 3½
Ft.W. & Jackson pref.100	2,000,000	.....	May '82 2
Georgia. 100	4,200,000	q'arterly	July '82 2½
Granite 100	1,250,000	semi-an	Jan. '83 3
Greenw'h&Johnsonv.100	118,000	semi-an	July' 82 3
Han. & St. Jo. pref .100	5,083,024	semi-an	Aug. '82 3½
Harrisbg&Lancaster 50	1,182,500	semi-an	July '82 3½
H'ford &Conn.West'n.100	.....	.....	Nov. '82 1½
Housatonic pref. ...100	1,180,000	q'arterly	Jan. '83 2
Illinois Central.....100	39,000,000	semi-an	Sept. '82 3½
Ia.Falls & Sioux City*100	4,623,500	q'arterly	Dec. '82 1¾
Iowa R. Land Co....100	7,620,000	q'arterly	Nov. '82 1
Jeffersonv. Mad.&Ind100	2,000,000	q'arterly	May '82 1¾
Joliet and Chicago*..100	1,500,000	q'arterly	June'82 1¾
Kan.C.,Ft.S.&Gulf...100	4,000,000	.....	Feb. '82 2
" " pref..100	2,750,000	semi-an	Aug. '82 4
Kentucky Central...100	500,000	semi-an	June'81 1
" " pref..100	5,583,500	semi-an	June'81 1
Lake Shore&Mich.So.100	49,466,500	q'arterly	Feb. '83 2
" (guar.)100	533,500	semi-an	Aug. '82 5
Lawrence*..... 50	450,000	q'arterly	Oct. '82 2
Lehigh Valley..... 50	27,496,895	q'arterly	Jan. '83 2
" " pref. 50	106,300	q'arterly	Jan. 83 2

Marked thus(*)are leased roads.	Stock out-standing.	Divide'd Periods.	Last Dividend Payable.
Little Miami..... 50	4,637)300	q'arterly	Dec. '82 2
Little Rock & Ft. S..100	4,096,135	.....	July' 81 108
Little Schuylkill*.. . 50	2,646,100	semi-an.	July '82 3½
Long Island..... 50	10,000,000	q'arterly	Nov. '82 1
Louisville & Nashv..100	19,130,913	semi-an.	Feb. '82 3
Lowell & Andover...100	500,000	semi-an.	Jan. '82 3½
Lykens Valley 100	600,000	q'rterly.	Oct.' 81 2½
Manchester & Law..'00	1,000,000	semi-an.	Nov. '82 5
Manhattan 100	13,000,000	.....	.....
" " 1st pref.100	6,500,000	q'rterly.	Jan. '83 1½
" " 2d pref.100	6,500,000	q'rterly.	Jan. '83 1½
Marietta& Cincinnati 50	1,386,350	.....	.....
" " 1st pref 50	8,105,600	semi-an.	Sep. '66 3
" " 2d pref 50	4,440,000	semi-an.	Sep. '66 3
Marq.Hout.&Ont.pf..100	2,259.026	.....	Aug. '82 4
Massawippi*.....100	400,000	semi-an.	Aug. '82 3
Metropolitan 100	6,500,000	q'rterly.	Oct. '82 1½
Michigan Central....100	18,738,204	.....	Feb. '83 2
Middlesex Central...100	280,000	semi-an.	Aug. '82 3
Mill Creek&Minehill* 50	323,000	semi-an.	July '82 5
M. Hill& Schuyl.Hav* 50	4,022,500	semi-an.	July '82 3½
Missouri Pacific.....100	28,169,800	q'rterly.	Jan. '83 1¾
Mobile&Montgomery100	3,022,517	semi-an.	Feb. '80 2½
Morris and Essex.... 50	15,000,000	semi-an.	Jan. '83 3½
Mt Carbon&PtCarbon 50	282,350	semi-an.	July '82 6
Nashua and Lowell...100	800,000	semi-an.	Nov. '82 4
Nashua & Rochester.100	1,305,800	semi-an.	Oct. '82 1½
Nashv. & Decatur...100	1,827,000	semi-an.	June'81 3
Nash.,Chat.&StLouis 25	6,670,325	semi-an.	Apl. '82 1½
Naugatuck.....100	2,000,000	semi-an.	July '82 5
Nesquehoning Val'y* 50	1,300,000	semi-an.	Sept.'82 3
N.Castle&Beaver Val* 50	600,000	q'rterly.	Oct. '81 —
NewLondonNorth'n*100	1,500,000	q'rterly.	Oct. '82 1½
N. Y. Cen. & Hud. R.100	89,428,330	q'rterly.	Jan. '83 2
N. Y. and Harlem....100	7,950,000	q'rterly.	Jan. '83 4
" " pref.100	1,500,000	q'rterly.	Jan. '83 4
" City Line.. —	.....	annual	Apl. '82 3
N.Y.,LakeErie&West.100	77,087,600	.....	.....
" " pref.100	7,987,500	annual..	Jan. '83 6
N. Y., N. H. & Hart..100	15,500,000	semi-an.	July '82 5
N. Y., Prov. & Boston100	3,000,000	q'rterly.	Nov. '82 2
Niag.Bridg&Canand*100	1,000,000	semi-an.	July '81 3
North Carolina*.....100	3,000,000	semi-an.	Sep. '81 3
" " pref.100	1,000,000	semi-an.	Sep. '81 3
N. Eastern (S.C.) pref100	86,000	semi-an.	May '81 4
Norfolk & Western pref. 100	15,000,000	q'rterly.	Dec. '82 $1
North Pennsylvania. 50	4,527,150	q'rterly.	Nov. '82 1¾
Northern Central.... 50	6,142,000	semi-an.	Jan. '83 4
Northern N. Hampsh100	3,068,400	semi-an.	Dec. '82 3
Northern Pacific pref100	42,312,589	.....	Jan. '83 11.1
Norwich&Worcester*100	2,604,400	semi-an.	Jan. '83 5
Oregon &Transcont'l.100	40,000,000	q'rterly.	Jan. '83 1½
Old Colony 100	7,333,800	semi-an.	Jan '83 3½
Oregon R'way&Nav.100	6,000,000	q'rterly.	Nov. '82 2
Oswego & Syracuse...100	1,320,400	semi-an.	Aug. '81 4½
Panama..... 100	7,000,000	.....	July '82 6½
Paterson & Hudson*.100	630,000	semi-an.	July '82 4
Paterson & Ramapo.100	248,000	semi-an.	July '82 4
Pember.&Hightst'n*. 50	342,150	semi-an.	Jan. '82 3
Pennsylvania..... 50	83,786,570	semi-an.	Nov. '82 4½
Pennsylvania Co..... 50	20,000,000	Annual	Dec. 82 4
Peoria & Bureau Val*100	1,200,000	semi-an.	Aug. '82 4
Philadelphia & Erie*. 50	7,013,700	semi-an.	.....
" " pfd 50	2,400,000	semi-an.	Jan. '75 4
Phil,Ger.&Norrist'n* 50	2,231,900	q'rterly.	Dec. '82 3
Phil. and Reading... 50	32,726,375	q'rterly.	Jan. '76 2½
" " pref. 50	1,551,800	q'rterly.	July '76 3½
Phila. and Trenton..100	1,259,100	q'rterly.	Jan. '83 2½
Phila., Wil. and Balt. 50	11,585,750	semi-an.	July '82 4
Pittsb.,Ft. W. & Chi.*100	19,714,285	q'rterly.	Oct. '82 1¾
" Special Imp.100	6,770,900	q'rterly.	Oct. '82 1¾
Pittsfield&N.Adams..100	450,000	semi-an.	July '82 2½
Portl., Saco & Portsm100	1,500,000	semi-an.	July '82 3
Providence &Worces.100	2,000,000	semi-an.	Jan. '83 3
Rensselaer&Saratog.*100	7,000,000	semi-an.	July '82 4
Richmond& Danv...100	3,866,000	q'rterly.	Jan. '81 3
Richmond & Petersb100	1,009,300	semi-an.	Aug. '82 2
Roch.&Genesee Val.*100	5,293,900	semi-an.	Jan. '82 3
RomeWater.&Ogdens100	555,200	.....	Jan. '83 3
Rutland preferred.. 100	4,000,000	semi-an.	Sept. '82 1
St.L.,Alt. & T.Haute.100	2,300,000	.....	.....
" " pref.100	2,468,406	.....	Dec. '82 4
St.L.&S.Fran.1st pref100	4,500,000	.....	Aug. '82 3½
St.L.,I.Mt.&South'n.100	21,459,921	semi-an.	Feb. '74 3
St.L.,Jac'ville & Chic.100	1,293,000	.....	Aug. '82 4½
" " " pref.100	1,034,000	.....	Aug. '82 4½
St. P. & Duluth pref.100	4,705,000	semi-an.	Jan. '83 3½
St. P., Minn. & Man..100	20,000,000	q'rterly.	Nov. '82 2
Schuylkill Valley*... 50	576,050	semi-an.	July '82 2½
Seaboard & Roanoke.100	1,229,600	semi-an.	Nov. '82 5
Shamokin V.&Pottsv 50	669,450	semi-an.	Feb. '82 3
Shore Line*.....100	1,000,000	semi-an.	July '82 4
Sioux C.&Pacific pref100	169,000	semi-an.	Oct. '82 3½
South Br. (N. J.)*....100	438,300	semi-an.	Jan. '82 3
South Western (Ga.)*100	3,892,300	semi-an.	Dec. '81 3½
Stockbridge&Pitts.*. 100	448,700	semi-an.	Oct. '81 1½
Syr.,Bingham&N.Y.*100	2,500,000	semi-an.	Feb. '81 2
Terre Haute & Ind....100	1,988,150	semi-an.	Aug. '82 4
Union Pacific. 100	60,854,105	q rterly.	Jan. '83 1¾
United Cos of N. J.*.100	20,490,000	q'rterly.	Jan. '83 2½
Utica, Shenango&S V100	4,000,000	semi-an.	Nov. '823
Utica and Black Riv.100	1,772,000	semi-an.	Mar. '82 2
Vermont and Mass...100	1,000,000	semi-an.	Oct .'82 3
Vermont Valley....,100	3,050,000	.....	Jan. '83 3
Wab. St.L.& Pac.pref.100	22,615,100	q'rterly.	Nov.'81 1½

Markedthus(*)are leased roads.	Stock out-standing.	Divide'd Periods.	Last Dividend Payable.
Ware River*.....100	750,000	semi-an.	July '82 3½
Warren (N. J.).....100	1,800,000	semi-an.	Apl. '82 3½
Warwick Valley.....100	340,000	semi-an.	July '82 2½
Westchest&Phil.pref100	821,300	semi-an.	July '80 2
West Jersey 100	1,359,750	semi-an.	Sept. '82 3
Wilmingt'n&Weld'n.100	1,456,200	semi-an.	July '82 3
Wil., Col., & Aug 100	960,000	semi-an.	Jan. '83 3
Winchester&Poto'c.*100	180,000	semi-an.	July '82 3
Winchester&Strasb.*100	74,700	semi-an.	July '82 3
Worcester & Nashua. 75	1,789,800	semi-an.	Jan. '83 1¾
HORSE-POWER R. R.			
Albany City.....100	200,000	annual	.....'80 5½
Baltimore City 25	1,000,000	semi-an.	Jan. '83 3
Balt.,Cat.&El. Mills.. 100	8c,ccc	semi-an.	Jan. '83 3½
BleeckerSt.&Ful.F'y.100	900,000	semi-an.	July '82 ¾
Boston&Chelsea pref. 50	110,000	semi-an.	Oct. '82 3
Broadway (Brooklyn)100	250,000	q'arterly	Oct. '82 6
B'way&7th Av.(N.Y.)100	2,100,000	q'arterly	Oct, '82 2
B'klyn&Hunter's Pt.100	400,000	semi-an.	Oct. '82 6
Brooklyn City.....100	2,000,000	q'arterly	Nov. '82 3½
Bushwick (Brooklyn)100	309,000	semi-an.	Oct. '82 6
Cambridge.....100	908,000	q'arterly	Oct. '82 4½
Cen.Park,N.& E.Riv.100	1,800,000	q'rterly.	Oct. '82 6
Christoph'r&Tenth8t100	650,000	semi-an.	Aug. '82 2½
Citizens' (Phil.)..... 50	192,500	q'rterly.	Jan. '82 2½
Citizens' (Pbg.)..... 50	200,000	annual..	....'80 14½
Coney Island&Bklyn100	500,000	semi-an.	Oct. '80 5
Continental (Phil.) .. 50	580,000	semi-an.	Jan. '83 6
D.Dock,E.B'way&Bat100	1,200,000	q'arterly	Aug. '82 4
Eighth Av. (N. Y.)....100	1,000,000	q'rterly.	Oct. '82 3
42d St. & G. St. Ferry100	747,000	semi-an.	May '82 6
Frankf.&Southw (Ph) 50	600,000	q'rterly.	Oct. '82 6
Germantown, (Ph.).. 50	572,800	q'rterly.	Jan. '83 2½
Girard College (Ph.) . 50	500,000	semi-an.	July '71 3
Grand St. & Newton..100	170,091	semi-an.	July '81 2½
Green&Coates St.(Ph) 50	150,000	q'rterly.	Oct. '82 3
Heston,Mantau&F'm 50	299,381	semi-an.	Jan. '75 4
Highland.....100	600,000	semi-an.	July '82 4
Lomb.&South8ts(Ph) 25	195,000	semi-an.	Oct. '75 4
Lynn and Boston....100	200,000	semi-an.	Nov.'82 4
Malden and Melrose.100	165,000	....	..... .
Metropolitan (Bost.). 50	1,500,000	semi-an.	Jan. '83 4
Middlesex (Boston)..100	650,000	semi-an.	Nov. '82 3½
N.Y.,Bay Ridge&Jam100	150,000	..... .	Oct. '78 7
Ninth Av. (N. Y.)....100	797,320	....	.....
Orange &Newark....100	282,555	....	..... .
People's (Phila.) pref. 25	124,744	..... .	July '82 2
Philadelphia City... 50	475,000	semi-an.	July '82 4
Phila. and Darby.... 20	200,000	semi-an.	July '81 3½
Phila.&Grey's Ferry. 50	308,000	semi-an.	Jan. '82 6
Pbg,Alleg.&Manches. 50	300,000	q'rterly.	Oct. '81 3
Ridge Avenue (Ph.).. 50	420,000	semi-an.	Oct. '81 11
Second Avenue (N.Y.)100	1,199,500	semi-an.	July '82 4
Second&ThirdSt.(Ph) 50	771)076	q'rterly.	Jan. '82 4½
17th &19th sts (Ph.).. 50	250,000	semi-an.	July '81 3
Sixth Avenue (N. Y.)100	750,000	semi-an.	May '82 5
Somerville (Boston).100	113,000	semi-an.	Nov. '82 3
South Boston..... 50	600,000	semi-an.	July '82 4
Third Avenue, N. Y..100	2,000,000	q'rterly.	Aug '82 5
13th and 15th sts.,Ph 50	334,529	q'rterly.	Jan. '82 4
23d street, N. Y.....100	600,000	semi-an.	Aug.'82 4
Union, Boston.....100	374,300	semi-an.	Jan. '82 4
Union, Phila..... 50	1,005,000	semi-an.	Jan. '82 7
West Philadelphia... 50	750,000	semi-an.	July '77 10
CANALS.			
Chesapeake and Dela 50	2,078,038	semi-an.	June'75 2
Delaware Division... 50	1,633,350	semi-an.	Aug. '82 $1
Delawa. and Hudson100	20,000,000	q'rterly.	Dec. '82 1¾
Delaware & Raritan*.100	5,847,400	q'rterly.	Jan. '83 2½
Lehigh Coal and Nav 50	11,204,250	semi-an.	Dec. '82 2
Monongahela Nav... 50	1,004,500	semi-an.	July '82$3
Morris, consolidated.100	1,025,000	semi-an.	Aug. '82 2
" preferred.....100	1,175,000	semi-an.	Aug.'82 5
Pennsylvania..... 50	4,501,200	....	.....
Schuyl. Nav., com.*. 50	859,100	annual..	Oct.'82 50c.
" " pref... 50	3,200,000	annual..	Oct. '82 $1
MISCELLANEOUS.			
Adams Express.....100	12,000,000	q'rterly.	Dec. '82 2
American Express... 50	18,000,000	semi-an.	Jan '83 3
Amoskeag Manuf.Co.100	3,000,000	semi-an.	June'81 5
Calumet&HeclaMin'g 25	100,000 S.	q'rterly.	Nov. '82 $5
Central Mining Co....100	.....	semi-an.	Feb.'82 2½
Consolidation Coal..100	10,250,000	semi-an.	Jan. '82 2
George's Creek C.&I.100	.....	semi-an.	Jan. '82 3
Maryland Coal.....100	4,400,000	semi-an.	Feb. '76 1½
Mariposa L. &Mining100	10,000,000	..... .	.....
" pref100	5,000,000	..... .	.....
Missouri Val.LandCo100	200,000	semi-an.	Jan. '83 $6
National Tube Works100	1,000,000	q'rterly.	Oct. '82 3
Pac. Mail Steamship.100	20,000,000	q'rterly.	Sept.'69 3
Pennsylvania Coal... 50	5,000,000	q'rterly.	Nov. '82 3
Pullman Palace Car...100	10,032,800	q'rterly.	Nov. '82 2
Quicksilver, com....100	5,708,700	..... .	May '82 0.4
" pref....100	4,291,300	..... .	May '82 6
Quincy Mining Co... 25	40,000 shs	semi-an.	Aug. '82 $5
Quincy R. R. Bridge.100	1,750,000	semi-an.	July '82 5
SiouxC.&I.F.L.&L.Co100	500,000	semi-an.	Dec. '82 3½
Spring Mt. Coal.....100	1,500,000	semi-an.	Dec. '82 3½
Topeka Equip'n Co.100	255,500	semi-an.	Oct. '82 5
United States Ex....100	7,000,000	q'rterly	Nov. '81 1
Wells-Fargo & Co. Ex100	6,250,000	semi-an.	Jan. '83 4
Western Union Tel..100	80,000,000	q'rterly.	Jan. '83 1½

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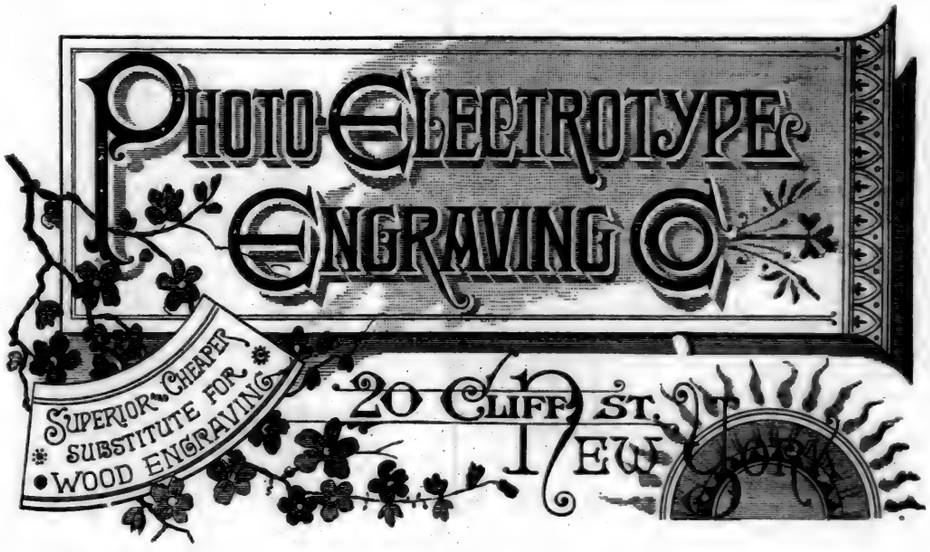
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RAILROAD EARNINGS.—MONTHLY.

	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total.
Burl., Cedar Rap. & Northern:													
1880	184,316	165,170	188,325	141,652	149,504	153,378	143,432	160,160	179,804	204,991	189,330	193,419	2,053,484
1881	167,750	124,510	148,551	184,680	165,630	205,912	174,351	209,112	221,801	221,748	202,180	232,812	2,259,037
1882	252,823	225,631	224,107	178,304	199,278	211,257	198,476	224,921	261,439	300,155	278,439	.....	.....
Central Pacific:													
1880	1,200,615	1,070,487	1,373,438	1,356,716	1,778,488	1,724,930	1,840,067	1,973,438	1,994,997	1,120,229	2,199,466	1,905,221	20,508,113
1881	1,602,907	1,454,218	1,709,638	1,872,370	2,091,411	2,159,382	1,899,346	2,088,519	2,185,303	2,507,857	2,297,971	2,225,179	24,094,101
1882	1,839,469	1,720,675	1,969,737	2,054,687	2,342,298	2,229,105	2,020 000	2,277,000	2,474,000	2,409 000	2,242,000	.....	.....
Chesapeake and Ohio:													
1880	202,335	198,681	222,762	221,559	199,443	214,352	238,236	259,110	247,303	211,820	240,795	218,009	2,674,308
1881	162,540	184,389	228,479	227,343	252,235	241,135	225,096	262,858	247,144	236,396	230,022	203,562	2,702,762
1882	210,455	209,708	208,981	267,454	255,939	260,753	306,831	371,175	332,219	347,882	287,850	.....	.....
Chicago and Alton:													
1880	534,054	497 013	626,473	542,961	616,128	617,524	708,906	761,120	767,349	785,199	696,776	574,695	7,718,198
1881	487,890	461,641	529,915	558,190	548,556	635,860	676,205	769,751	774,790	771,844	672,380	635,307	7,553,988
1882	570,447	530,480	584,483	561,787	553,412	613,886	671,537	800,624	881,109	812,032	748,151	.....	.....
Chicago and Northwestern:													
1880	1,154,632	1,131,683	1,361,725	1,294,573	1,875,608	1,671,177	1,699,686	1,767,938	2,020,245	2,105,217	1,855,622	1,477,902	19,416,007
1881	1,240,664	963,204	1,178,795	1,474,612	1,879,006	2,306,440	1,983,032	2,315,164	2,292,676	2,341,098	2,019,038	1,855,477	21,849,209
1882	1,644,935	1,474,176	1,672,931	1,668,741	2,110,947	2,022,700	2,025,736	2,099,755	2,497,053	2,592,100	2,069,287	.....	.....
Chicago, Burlington and Quincy:													
1880	1,432,740	1,411,870	1,732,518	1,489,894	1,909,627	1,682,956	1,773,643	1,834,321	1,862,285	1,934,762	1,837,860	1,552,018	20,454,494
1881	1,307,948	1,034,821	1,418,149	1,574,371	1,679,455	2,083,803	1,888,358	2,173,945	2,262,981	2,031,001	1,816,133	1,905,490	21,324,150
1882	1,658,834	1,457,300	1,566,217	1,530,838	1,505,261	1,437,164	1,625,006	2,086,858	2,186,400	2,270,444	.....	.....	.....
Chicago, Milwaukee and St. Paul:													
1880	764,298	738,749	900,675	871,041	1,134,745	1,037,958	1,026,708	991,297	1,257,677	1,493,620	1,472,037	1 397,308	13,086,119
1881	990,847	682,717	916,989	1,259,946	1,538,491	1,729,811	1,568,706	1,678,361	1,644,670	1,591,052	1,569.597	1,855,000	17,025,462
1882	1,435,000	1,377,000	1,561,000	1,518,000	1,629,000	1,620,000	1,465,000	1,545,000	1,950,000	2,251,000	2,072,000	.....	.....
Chicago, St. Paul, Minneapolis and Omaha:													
1880	193,827	173,078	259,783	259,208	232,146	218,093	236,995	251,013	300,833	342,052	342,894	312,173	3,122,097
1881	257,786	158,594	251,648	261,211	350,124	404,562	383,202	385,586	373,370	379,029	392,921	391,950	3,981,296
1882	307,498	315,100	405,779	356,558	406,420	363,109	331,480	394,555	482,997	546,671	517,595	.....	.....
Cincinnati, Indianapolis, St. Louis and Chicago:													
1880	155,697	172,541	198,220	168,199	186,995	200,332	204,138	233,478	343,627	239,881	209,014	198,254	2,412,185
1881	182,523	171,511	191,005	183,710	191,096	192,299	177,161	229,858	228,653	221,320	211,014	192,623	2,296,916
1882	200,042	186,879	208,066	204,269	199,110	195,948	209,564	.....	259,379	.....	219,732	.....	.....
Denver and Rio Grande:													
1880	124,759	126,922	160,883	164,882	193,925	295,455	373,132	400,133	406,583	473,318	408,562	349,196	3,478,007
1881	307,476	317,681	398,493	433,111	514,767	584,230	548,284	606,193	589,287	638,432	547,055	643,417	6,206,812
1882	491,914	412,987	535,055	559,917	614,298	537,462	495,797	574,040	595,306	630,598	512,965	.....	.....
Hannibal and St. Joseph:													
1880	176,079	166,965	216,061	206,735	191,317	179,396	224,312	238,081	233,448	242,214	207,147	279,635	2,561,366
1881	154,401	122,874	176,356	190,812	172,950	190,740	201,899	210,240	215,103	231,913	195,607	180,376	2,230,961
1882	138,284	154,717	168,798	148,913	154,917	155,030	184,347	258,628	239,196	238,442	249 252	.....	.....
Illinois Central:													
1880	595,212	613,806	613,008	535,732	665,120	681,736	724,095	732,755	806,836	880,211	783,120	673 182	8,304,812
1881	631,281	524,499	557,789	662,493	673,259	803,887	720,004	868,407	828,847	815,238	737 218	763,475	8,586,397
1882	728,173	689,387	695,371	674,603	674,749	663,746	752,251	813,600	828,238	865,325	752,144	.....	.....
Indiana, Bloomington and Western:													
1880	80,498	89,690	116,185	90,374	85,733	106,954	103,438	116,732	110,622	121,343	95,621	104,619	1,233,079
1881	90,283	83,261	192,085	203,677	200,064	199,846	190,125	272,114	247,332	225,678	200,450	156,697	.....
1882	195,824	175,755	206,235	205,934	182,554	186,133	206,072	278,814	273,100	269,046	256,998	.....	.....
Louisville and Nashville:													
1880	674,455	575,035	612,593	563,883	655,018	976,229	772,538	827,089	931,911	1,000,327	953,087	949,185	9,491,346
1881	812,118	805,124	947,959	855,704	828,726	1,227,885	817,135	876,192	951,566	1,002,950	1,065,223	1,153,779	11,344,361
1882	964,527	960,315	1,068,834	953,603	958,130	1,215,490	1,063,765	1,043,912	1,107,985	1,216,215	1,192.390	.....	.....
Mobile and Ohio:													
1880	250,116	204,095	168,302	140,091	129,248	121,855	131,621	140,593	184,247	264,714	251,368	287,372	2,273,622
1881	224,347	216,768	230,916	163,551	145,803	136,517	135,549	160,789	210,262	256,924	262,986	258,812	2,403,224
1882	150,676	158,590	148,166	141,957	134,378	136,184	136,398	140,443	160,031	265,201	295,110	.....	.....
Nashville, Chattanooga and St. Louis:													
1880	205,634	191,154	169,457	155,466	158,839	144,130	151,594	169,326	167,473	178,266	182,087	175,966	2,049,484
1881	178,143	190,866	207,710	183,525	104,430	154,549	150,430	168 317	179,979	172,121	152,059	173,127	2,075,256
1882	156,994	159,961	161,005	154,155	135,556	119,074	160,991	168,304	168,999	180,319	181,336	.....	.....
New York and New England:													
1880	164,232	149,907	183,845	179,689	183,701	219,891	205,056	249,885	235,642	215,491	210,856	198 108	2,396,302
1881	189,749	173,614	212,019	216,913	217,185	231,518	246,821	280,524	299,573	261,200	240,764	237,729	2,809,255
1882	213,840	217,261	265,222	263,544	283,244	290,060	300,920	353,726	338,490	310,145	276,183	.....	.....
New York, Lake Erie and Western:													
1879	1,147,173	1,207,391	1,356,780	1,372,755	1,350,574	1,230,419	1,273,533	1,450,223	1,492,497	1,713,697	1,515,835	1,398,224	16,509,127
1880	1,296,381	1,252,218	1,644,958	1,643,151	1,592,544	1,661,812	1,580,976	1,606,874	1,786,417	1,899,910	1,799,338	1,726,788	19,149,361
1881	1,443,437	1,425,765	1,847,261	1,709,057	1,776,891	1,794,982	1,787,081	1,772,895	1,734,200	1,814,866	.....	.....	.....
Northern Central:													
1880	334,494	330,860	415,325	386,130	329,788	419,193	450,298	453,923	464,093	512,918	459,054	494,310	5,050,387
1881	386,157	382,657	452,906	487,273	465,588	487,287	440,811	498,008	429,565	449,664	487,160	476,622	5,443,697
1882	407,368	413,551	430,194	435,129	482,607	482,752	509,683	667,488	592,435	550,225	526,685	.....	.....
Northern Pacific:													
1880	81,390	77,259	119,357	185,700	217,613	253,105	241,277	223,500	330,300	358,456	300,822	220,993	2,629,710
1881	116,508	78,803	162,984	216,210	312,705	412,024	393,260	434,085	534,363	583,555	475,610	434,331	4,044,576
1882	239,800	269,000	384,000	438,000	568,332	631,342	679,240	727,377	789,700	834,460	761,324	.....	.....
Philadelphia and Erie:													
1880	224,307	245,372	327,678	334,947	311,470	331,024	308,699	347,532	322,737	367,082	324,966	281,919	3,727,733
1881	224,303	225,501	285,573	293,323	343,792	350,585	291,669	303,849	276,522	292,392	284,078	282,772	3,454,309
1882	252,727	246,246	265,311	277,851	341,415	347,614	377,206	420,329	386,455	397,164	.....	.....	.....
St. Louis and San Francisco:													
1880	198,091	195,948	193,146	176,164	167,664	173,607	213,297	259,995	280,873	328,194	290,329	226,063	2,698,371
1881	212,435	178,234	262,050	265,298	283,399	260,254	252,333	286,373	279,064	308,569	284,320	287,914	3,160,245
1882	256,784	244,654	274,959	242,806	253,419	240,177	318,613	381,637	336,805	360,900	331,490	.....	.....
St. Louis, Alton and Terre Haute:													
1880	153,139	163,737	168,994	155,462	147,928	150,207	191,077	216,759	204,295	221,863	188,773	184,503	2,146,741
1881	175,725	166,012	201,137	197,447	172,177	165,896	165,393	189,180	196,368	204,338	169,795	153,852	2,112,801
1882	168,987	149,619	178,145	157,450	162,842	142,742	192,017	236,137	217,659	229,962	206,040	.....	.....
St. Louis, Iron Mountain and Southern:													
1880	555,983	490,195	451,560	408,241	349,053	363,454	432,655	565,869	671,219	688,365	632,052	656,951	6,265,597
1881	570,957	560,791	704,002	548,300	479,075	474,302	533,512	644,386	708,325	719,239	687,271	709 498	7,319,744
1882	516,370	501,127	585,008	582,977	519,120	529,700	515,519	675,981	724,160	809,394	843,973	.....	.....
St. Paul, Minneapolis and Manitoba:													
1880	180,239	137,645	261,798	333,014	281,899	243,407	272,089	232,579	274,188	345,057	300,675	297,641	3,160,231
1881	254,187	159,482	320,962	425,685	382,642	405,322	387,488	414,954	485,736	605,708	508,530	528,262	4,878,960
1882	395,461	418 358	531,004	570,890	858,902	856,417	853,296	801,759	832,776	979,057	913,335	.....	.....
Texas and Pacific:													
1880	245,785	219.165	215,070	174,177	141,083	153,066	195,711	226,073	266,570	303,666	312,184	301,858	2,754,408
1881	281,176	260,781	319,928	295,066	281,782	285,105	328,063	381,331	345,790	419,203	369,521	381,218	3,921,569
1882	310,785	255,644	332,911	359,543	409,228	384,713	367,215	439,918	470,613	541,901	619,655	.....	.....
Union Pacific Railway:													
1880	1,433,636	1,393,992	1,730,509	1,937,220	2,027,269	1,028,528	1,934,215	1,913.035	2,270,179	2,707,860	2,251,148	1,869,335	23,448,445
1881	1,339,799	1,374,740	1,674,860	1,766,894	2,319,238	2,884,774	2,528,826	2,638,659	2,844,357	3,169,530	2,723,608	2,267,004	27,451,831
1882	1,961,088	1,759,863	2,226,832	2,462,004	2,491,590	2,508,453	2,301,000	2,762,107	2,949,112	3,158,337	2,821,070	.....	.....
Wabash, St. Louis and Pacific:													
1880	776,790	759,451	978,629	892,024	948,773	953,468	1,966,742	1,189,478	1,178,950	1,501,203	1,131,787	1,050,816	12,428,112
1881	811,617	818,922	1,121,592	1,023,482	1,144,660	1,308,993	1,131,752	1,542,838	1,490,027	1,397,781	1,343,556	1,328,278	14,461,570
1882	1,220,965	1,134,768	1,315,776	1,378,194	1,204,864	1,149,632	1,418,837	1,772,544	1,682,382	1,595,680	1,525,715	.....	.....

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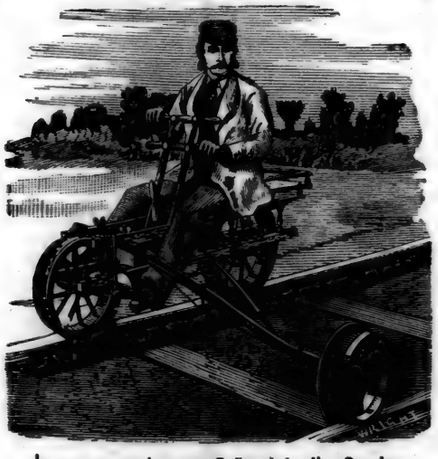
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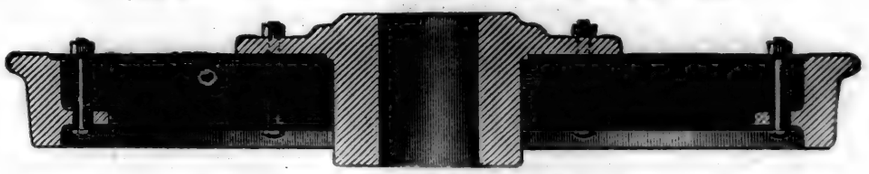
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The Pacific Railroads.

THE UNION PACIFIC.

(*Continued from page* 1027).

At the close of the fiscal year the liabilities of the company were $219,965,742, including the capital stock of $60,868,500; the assets were $226,822,580; net surplus, $6,856,838. The earnings were $24,094,627; increase over 1881, $1,328,875. The operating expenses were $12,069,792; increase over 1881, $594,882; gain in net earnings over the previous fiscal year, $733,992.

The books and accounts of this company were thoroughly examined in Boston. Twenty-five per cent of the net earnings of the subsidized portion of the Union Pacific for the year 1881 was found to be $1,826,294, and five per cent of the net earnings of the Kansas division subsidy portion, $77,691, making the amount due the government $1,903,986, from which deduct transportation withheld, $1,313,794, leaving cash balance due the United States of $500,191.

Settlement has not yet been consummated because of the refusal of this office to allow the company to deduct items for new construction and new equipment for the year ending December 31, 1881, aggregating $1,409,817, from the gross earnings to ascertain the net earnings, as required by the act of May 7, 1878. There is also involved the claim of the company to deduct the sum of $971,622 for prior years. A detailed statement was rendered and payment demanded of the balance due for the year ending December 31, 1881, $590,191; also of previous balances to December 31, 1880, amounting to $242,286, but payment was refused for the reason stated. The question will probably be submitted to the Attorney-General for his opinion.

The purpose of the company is everywhere manifest to perfect the roadway and its equipment. All new work is substantial and of the best. The main line and the connecting roads operated by it are in excellent condition.

Commissioner Armstrong concurs with his predecessor in commending the policy adopted by this company of aiding in the construction of branch lines. Upon this subject he says:—

In respect to the policy of the Union Pacific and Central Pacific companies in aiding the construction of branch lines through valuable territory, which rival companies would occupy to their detriment if such aid were not extended, I entirely concur in the remarks of Mr. French, my predecessor, in his report for 1880. "The policy of investing in these branch lines is undoubtedly the best for insuring a continuance of profitable business for the main line, and so long as the government has such a large interest as creditor it cannot but sanction and confirm such investments. If there is any way by which the branch properties could be merged in or consolidated with the main property it would be desirable, so that in any event or contingency the main property could not be deprived of these valuable feeders."

NORTHERN PACIFIC.

Thorough inspection of the property of the Northern Pacific Railroad Company has been made and great improvements noted over last year. The rapidity with which construction has progressed on both the eastern and western divisions is without precedent in the history of the company. During the year ending June 30, 1882, 285 miles of track were laid from the East and 102 miles from the West, leaving the two ends of the track 572 miles apart on June 30, which, at the present rate of construction, will be lessened about three hundred miles by the close of the year. The final connection of the tracks is expected to be made not later than the fall of 1883. The building of this transcontinental line will develop an immense area of agricultural and grazing lands. During the past year there has been an unprecedented flow of new population into the States and Territories tributary to the road. A number of thriving towns and numerous settlements are rapidly springing up along both the eastern and western divisions of the road. The rapidity of construction and throughness of the western division deserve high commendation. The Northern Pacific proposes to participate in forming a terminal company for the building of a passenger and freight depot at Portland, and to provide other terminal facilities for all roads centering at that point. It is estimated that the plans and location of property fully cover all present and future needs for terminal facilities at Portland.

Great difficulty of construction was experienced on the Yellowstone division by reason of the peculiar and variable character of the bluffs along the Yellowstone River. During the year the company expended for new construction $15,044,712, and for improvements and betterments on the already constructed road, $1,185,944. The equipment purchased during the year amounted to $2,138,956. The financial statement places the liabilities of the company at $133,730,914, including $90,909,132 capital stock; assets, $136,989,398; surplus, $3,258,483. The earnings were $5,430,305; expenses, $3,572,840. It is estimated that the company's land grants will aggregate 42,000,000 acres of land; 746,509.52 acres have been patented to date. The company claims to have earned to June 30, 1882, 12,234,848.24 acres. No patents have been issued by the United States to the company since November 4, 1873, except one for 3,016 acres in Washington Territory.

The company reports having sold lands up to June 30, 1882, for an amount aggregating $13,108,835, of which sales to the amount of $1,426,461 were made during the year ending June 30, 1882.

OREGON AND CALIFORNIA.

Of the Oregon and California Railroad the report says:—

Inspection of the property of this company was made in July, 1882, and found to be in a somewhat improved condition over the previous year. The past year has been the most eventful one in the history of the company since its organization. It witnessed the end of a crippled and helpless existence which the corporation had led since its bankruptcy in 1873 and the beginning of new vitality and brighter promises for the future. It appears that, from the failure of the company in 1873 until its reorganization, the policy was pursued of incurring the least possible expense in repairs and renewals in order to eke out the largest possible net results for the association of bondholders in control of the property. The legitimate fruit of so false an economy had to be borne sooner or later, if the road hoped to ever attain even a fair standard, and the result was that immediately after the reorganization large expenditures became inevitable. It is the intention of the present management to improve and perfect the property as rapidly as time and money will admit.

The inspection of the Missouri Pacific Railroad system showed that these roads were in a satisfactory condition.

THE TEXAS PACIFIC.

The operations of the Texas Pacific Railroad Company during the year ended June 30, 1882, have been extensive in the enlargement and addition to its property, as evidenced by the fact that during that period 569 miles of track have been built, showing at the close of the fiscal year 1,389.87 miles of road; also in adding to the equipment 37 engines, 18 passenger cars, 933 freight cars; showing the equipment on June 30, 1882, to be 121 engines, 85 passenger and 2,942 freight cars and 51 miscellaneous cars. There is a decided improvement in the appearance of the new track over the older portion, better material being used and a wiser intelligence exercised in its construction. The road extends as far west as Sierra Blanco, Texas, from which point it has the use of the joint track of the Southern Pacific and the Galveston, Harrisburg and San Antonio companies to El Paso, a distance of ninety-two miles. The country along the line of the new road is rapidly developing. Hundreds of car loads of grain were waiting for movement on account of lack of sufficient motive power. Every wheel on the road is in constant demand, and the volume of business seems to be limited only by the facilities for taking care of it. It is proposed to increase the equipment as rapidly as possible until a sufficient amount shall have been obtained to enable the company to handle with despatch the rapidly increasing freights offered for shipment.

The act of March 30, 1871, granted the company forty sections per mile in the Territories and twenty sections per mile in California, but the Texas and Pacific Railroad Company has as yet constructed no road in the Territories or California. The liabilities of the company on the 30th of June last were $74,104,815 and the assets were $59,711,765; deficit, $11,393,050. The earnings were $4,529,005; expenses, $4,429,944.

A healthy degree of improvement of the constructed portions of the Atlantic and Pacific Railroad was noticed by the Commissioner. The surplus of assets over liabilities of the company was $929,539; net earnings $1,544,467.

Commissioner Armstrong remarks that the foregoing total of assets does not include 4,793,885 acres of land owned by the company in the State of Texas.

[NOTE.—This remark would also apply to the other Pacific roads, in whose statements of assets unsold lands are not included.]

He also calls attention to an official statement of the secretary of the Texas Pacific Company that the facilities of the road for the year ended June 30 last were largely taken up with the transportation of material for the construction of the Rio Grande division, which was given the right of way over other traffic and heavily taxed the resources of the portion then completed.

ATCHISON, TOPEKA AND SANTA FE.

The lines of the Atchison, Topeka and Santa Fé Company have been rapidly increasing, and at this date have been extended from Rincon, N. M. (fifty-two miles east of Deming), to El Paso (seventy-seven miles south), where it connects with the Mexican Central Railroad, which is completed as far south as Chihuahua, in Mexico. The company anticipates a profitable business as a result of this connection, the objective point of which is the city of Mexico. It has also made running arrangements with the Central Pacific Company for the use of its Southern Pacific track from Deming to Benson, Arizona (a distance of 173 miles), from which point it has constructed its New Mexico and Arizona road, ninety-five miles south to Los Vogales on the Mexican boundary line, where it connects with the Sonora Railroad, which extends from that point via Hermosillo to Guayamas—270 miles in length—on the Gulf of California, in Mexico. A favorable opportunity occurred for obtaining absolute control of the Sonora Railroad, of which the directors of the Atchison, Topeka and Santa Fé Company availed themselves, and they believe that the purchase will prove a very desirable and profitable one in every particular.

The statement of earnings and expenses of the road during the fiscal year shows a decided increase as compared with the previous year.

SOUTHERN PACIFIC AND OTHER ROADS.

The Southern Pacific Railroad is reported to be in excellent condition, and the financial statement shows a surplus of assets over liabilities of $1,229,331.

The condition of the remaining land grant roads is reported to be generally good, many improvements and much superior rolling-stock having been added during the year.

The estimates for the expenses of the railroad office for the next fiscal year aggregate $20,020.

The report concludes with a commendation of the general efficiency of the employés in the office.

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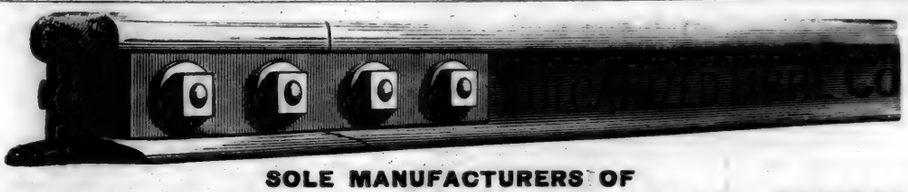
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FOR

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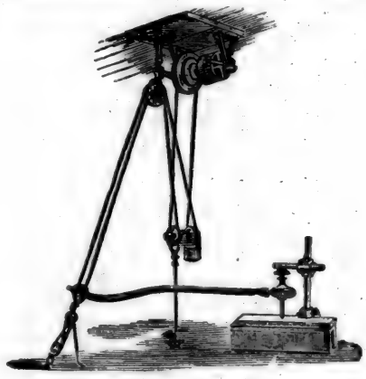
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The Garsed Pneumatic Bell.

THERE has, within the space of two years, and by several letters patent, been granted to R. P. GARSED, Esq., a resident of Norristown, Montgomery county, Pa., a door-bell which is rung by the pressure of air. The contrivance is simple and does away with wire and cranks, and bids fair to supplant the wire-rigged arrangement and form a powerful rival to the electric bell. It is instantaneous in its action, inexpensive and durable. The apparatus and modus operandi as witnessed by a person, may be thus briefly described:—

Commencing at the doorway the visitor finds the ordinary bell pull or lever, and sees that any kind of pull in use can be attached to the pneumatic apparatus, and is more easily operated than when attached to the ordinary wire, and now when pulled and connected to a concavo-convex plunger, compresses an ordinary rubber ball about two inches in diameter with two small apertures, one for the ingress, and the other for the egress of air on opposite parts of the ball, which is held in place by a hemispherical metal cup attached to the inside of the door frame, which cup, as well as preventing the displacement of the ball, prevents its rupture under the action of the plunger, which first stops the outer hole of the ball and then doubles the ball within itself and causes the air to pass through the pipe, communicating with a port in the bottom part of the metal cup to the bell, which, under vibrating or jingling mechanism, is instantaneously rung.

While the ball is placed loosely within the cup, by pressure of the plunger upon its face its sides are distended, forming a perfect joint between it and the metal casing, thus insuring non-escaping of air. The air is forced through a one-eighth inch pipe to collapsible bellows, and inflating the same raises a staple on said bellows, which is attached to a band wound around a shaft, causing it to revolve. All that is now required is the ordinary escapement motion with hammer, such as is in an alarm clock, which escapement causes the hammer to vibrate as the pendulum of a clock is made to vibrate, but with much greater rapidity; the striker by coming in contact with the bell at every vibration produces a sound similar to that of an electric bell, but longer and louder; the band by being unwound in a perpendicular line with the center of the top of the bellows, prevents a swerving of the bellows upon the influx of air, and hence it performs a double and desirable office; as soon as the bellows has been inflated to its fullest capacity, it begins to collapse, in which performance it is made to act rapidly by a small coil or spiral spring, one end of which is attached to the shaft, around which it is wound, and the other to the frame supporting the shaft; the ringing then ceases and the rubber sphere in the mean time has returned to its normal shape, caused in a great measure by the inner sides of the metal cup receiving the pressure of distension of the ball around its center, when acted upon by the plunger, and being at once replenished with air is again ready for operation, and thus an incessant ringing is rendered possible and very easy.

The pipe, which may be run to any distance and turned to any and numberless angles, and when supplanting wire may be run through the same holes from which the wire is taken, is supplied with simple couplings; and the apparatus is easily detached if repairs are necessary or it is desired at the bell end to substitute a bell with different mechanism, (of which the same patentee has many) in lieu of the one just described.

By Mr. Garsed's invention, besides the cranks which are necessary for every turn the wire makes in the ordinary rigging, and the wires also, which are liable to rust and stretch, being both abolished with their well-known lost motion and hardness of pulling, a substitute for the battery with its cost and necessary attention, and space-taking features is found. It may also be used as a hotel communicator, for which purpose Mr. Garsed has invented an annunciator. A company is about being organized for the manufacture and sale of the patent bells, which, ere long, will be rendering service in thousands of buildings.

A DISPATCH from Jacksonville, Fla., says the dredge of the Okeechobee Drainage Company, working up the Caloosahatchee River, entered Lake Okeechobee on the 20th inst. This opens a navigable channel from the heart of the Everglades to the Gulf of Mexico, and is an important event in the history of Florida, as it opens up extremely rich sugar lands.

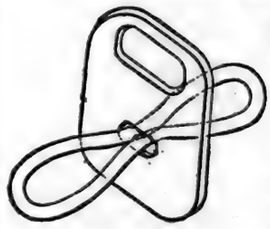
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[Mention this paper.]

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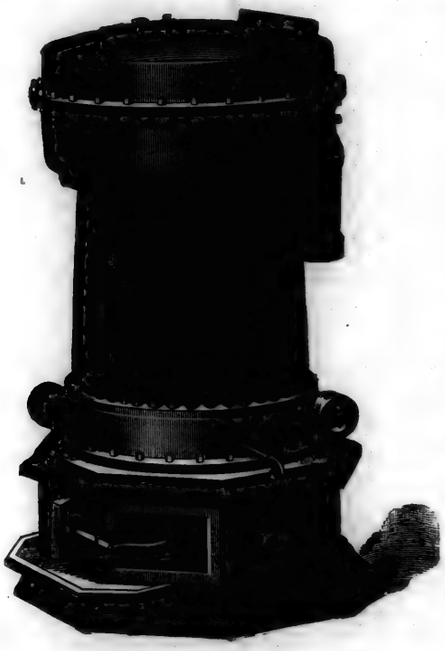
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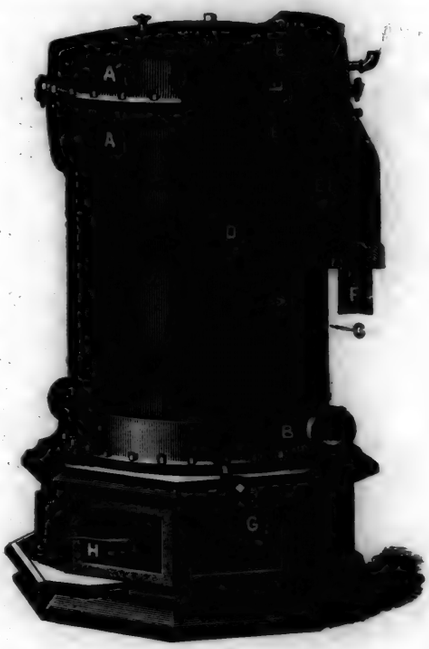
Once filled with coal the fire will last from 24 to 60 hours, according to weather, without replenishing, as proved by actual test.

At the last "Mechanics' Fair" it received the Silver Medal, being the highest award to heaters of any kind.

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Address, Munn & Co., publishers of Scientific American, 261 Broadway, New York.

Handbook about patents mailed free.

Dr. Crevaux.

STILL another name to be added to the long list of martyrs to exploration; still another hero of science, whose memory we have to venerate.

Dr. Crevaux belonged to that great race of courageous and devoted men who seem to be born for sacrifice. A Lorrainian on his mother's side, and a Breton on that of his grandfather, he saw the light at Lorquin, April 1, 1847. He was only thirty-five years of age, then, when he was assassinated by the Tapeti Indians during his last voyage to tropical America. One of his most faithful friends and traveling companions, Mr. E. Lejanne, has just published a few pages in the *Tour du Monde* in regard to unfortunate Crevaux, and from that excellent notice we borrow a few characteristic details which show what the man was that France has just lost.

After having successfully passed his baccalaureate examinations, Crevaux studied for a year at the Faculté de Médecine, at Strassburg, and then went to continue his studies at the Ecole de Médecine Navale, at Brest. What attracted him to this school was a desire to visit regions little known, the certainty of traveling over the world, a wish to incur the perils of the sailor's life; for he loved danger, and it may be said that this was his element.

Crevaux was a small, thick-set man of uncommon vigor, and possessed a high forehead and sparkling eyes. He was a questioner rather than a talker, and would be recognized as a man who was eager to know. He was highly endowed with sagacity. If the theories that he advanced were not always true, they were at least seductive by reason of their ingenuity. He was an excellent companion, indulgent to all, and devoted to his friends. "I do not believe," says Mr. Lejanne, "that he ever refused to do any one a favor."

On the 24th of October, 1868, he was appointed assistant surgeon, a rank corresponding to that of midshipman of the first class. He made his first voyage on the transport Ceres, and visited the French colonies of Senegal and of the Antilles. On board this vessel he had a chance to observe a case of chylous hæmaturia, which was the starting point for his thesis for a doctor's degree.

When the war of 1870 broke out Crevaux, animated by ardent patriotism, obtained a position in the fourth battalion of Cherbourg marines. At the fight of Freteval this battalion was decimated, its commander was killed, and its surgeon was made prisoner while caring for the wounded. Crevaux succeeded in escaping and betook himself to Bourges, where he put himself at the disposal of the Minister of War. The latter confided various missions to him, such as carrying several orders, first into Orleans and then into Salins, which was invested by the enemy. Wounded at Chaffois, January 24, 1871, he went to take his post again in the battalion of marines, and left it only in April to go to Brest again. In October, 1873, he was named Surgeon of the Second Class, a grade corresponding to that of midshipman or lieutenant. On the Lanothe Piquet he made a cruise in the South Atlantic, and reached La Plata. In 1876 he gained in a competition his third place. For a long time he had been turning his thoughts toward Guiana, for he knew that for two hundred years numerous travelers had been vainly attempting to reach the Tumuc-Humac mountains, where was supposed to be located that famous El Dorado whose waters detached the golden particles so coveted by miners. Why should he not be able to accomplish what others had not succeeded in doing before him? None had had more enthusiasm—more of the sacred fire—than he. He was young and full of vigor, and all conditions were favorable for him. What more was necessary? A little money. The colony came to his aid. He was about starting on his journey, when the yellow fever broke out in the Salut Islands, and rendered his presence indispensable. His devotion to his patients and his coolness in the presence of the scourge gained him the cross of the Legion of Honor. He was one of the last to undergo an attack of the disease. As soon as he was well he took up his projects again, and ascended the Maroni as far as the country of the Bonis, where he had the good fortune to meet the negro Apatou, who became his constant and devoted companion. The two reached the Tumuc-Humac mountains and descended the Yari as far as the Amazons. This voyage was one of the finest that had been made for a long time. It presented so many difficulties that many old inhabitants of Guiana refused at first to believe that it had been successfully accomplished.

Crevaux did not remain idle long, but ascended the Oyapock again, and descended the Payou as far as the Amazons. After this he made a new voyage, gained the sources of the Yapoura, and descended this river, which had before that been unexplored. He ran great dangers during this voyage, and on his return to France the Geographical Society awarded him its large gold medal. After a new voyage on the Orinoco, Crevaux became desirous of continuing his explorations of tropical America, of reascending the Paraguay, and of descending to the Amazons by the Tapajos and the Xingu. This new exploration was destined to make of him another martyr to geography.

From the report addressed to the Paris Geographical Society by the Argentine Geographical Institute, we are enabled to give some accurate data as to this last voyage of the unfortunate explorer.

Once in Bolivia, Crevaux proceeded to the confluence of the rivers Pilaya and Pilcomayo, where there are some missions of the Franciscan Fathers dependent upon the monastery of Salta, the capital of one of the Argentine Provinces. Having reached the regions in the vicinity of the source of the Pilcomayo, our explorer superintended the construction of three boats, in which the members of the expedition afterward embarked. The number of persons composing the expedition was increased by the addition of a few Bolivian Indians, making in all nineteen men, each armed and provided with three hundred ball cartridges.

Explorations of the Chaco are always dangerous because of the Indians, who, to the number of forty or fifty thousand, as is supposed, people this immense and almost unknown region. However, on the 15th of April, the expedition got under way and descended the river, animated with the intrepidity that characterized its chief to so high a degree, and full of the most sanguine hopes. On the 24th, at six o'clock in the evening, it reached the region of the Teyo, and was received by the Indians with demonstrations of friendship. Here Dr. Crevaux desired to explore an unknown river that had been described by Mr. Sola, the intrepid explorer of the Chaco. It appears that the travelers landed, on the 24th of April, on the shores of the Tapeti Indians, who invited them with friendly demonstrations and afterward basely assassinated them at nightfall. Only two persons were saved, and these were the missionary Cebalios and the Argentine sailor Blanco, who remained in captivity. The Government of the Republic and the Argentine Geographical Institute have been engaged ever since in organizing an expedition to go in quest of the remains of the Crevaux mission.—*La Nature.*

THE South Carolina House of Representatives has passed a bill providing for a railroad commission by a vote of 72 to 35. There is said to be no doubt of its passage by the Senate by an equally decisive majority. The friends of the bill urged its passage on the ground that the cities of South Carolina, its manufacturers and consumers, were being discriminated against by the railroad companies, whilst the opponents of the bill based their opposition on its alleged unconstitutionality, as well as its interference with the vested rights of corporations.

RIEHLÉ BROTHERS, the well-known scale manufacturers, of Philadelphia, were awarded the "special silver medal" at the American Institute Fair, in this city, for their Testing machines.

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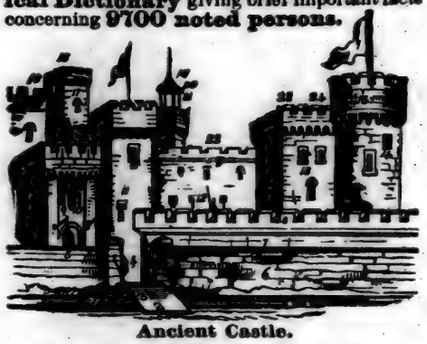
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How to go to sleep in a Pullman car, was the question lately addressed to Dr. W. B. Outten, Supervising Surgeon of the St. Louis, Iron Mountain and Southern Railway, and elicited some very interesting information. The doctor is an old traveler, and his duties as supervising surgeon of the Iron Mountain medical department frequently call him away for weeks at a time, visiting the resident physicians who administer to the employés along the line. When he discourses about traveling he speaks advisedly. "In a majority of the cars the berths are so made that a person is compelled to lie with his feet in the direction of the engine. The position is certainly the safest in case of collision, or an extremely rapid stoppage, as the body goes in the direction motion has been imparted to it, hence there is less danger of injuring by contact the skull and its contents, while the lower extremes have flexible points to neutralize the shock of sudden stoppage. I am of the opinion, however, that to lie with your feet towards the engine there is naturally imparted an influx of blood to the brain. The natural condition of the brain in sleep is to have a relatively smaller amount during sleep than at any other time. Now, in riding with your head directed towards the engine there is naturally a tendency on the part of the blood to gravitate from the brain."

J. Gregory Smith, President of the Central Vermont Railroad Company, having been interviewed, is reported to have said that the compromise agreement to be made between the Central Vermont and the Vermont and Canada roads has been settled upon the following basis:

"A joint mortgage is to be put on the Vermont and Canada and Vermont Central railroads to the extent of $7,000,000, for which thirty-year bonds bearing interest at five per cent, payable semi-annually, are to be issued, to be distributed thus: $1,000,000 to the Vermont and Canada in exchange for its stock at the rate of thirty-three and a third per cent of its par value, which is to be in full discharge of the Vermont and Canada claim; $4,357,000 to be exchanged for the trust liabilities—incurred by the receivers and managers—dollar for dollar of their face value, interest being waived; the balance, $1,643,000 to be appropriated to the retirement of the floating debt and the claim of the Central Vermont. This will be the entire bonded indebtedness of the road. There is also to be issued preferred stock to the amount of $750,000, to be given in exchange for the first and second mortgage bonds of the Vermont Central Railroad, at the rate of twenty per cent of their face value for the first and ten per cent for the second mortgage bonds, all interest being waived. This stock is to be entitled to six per cent interest, if earned, but not cumulative. The interest charge on the property is thus $350,000 per annum, with a contingent charge, if earned, of $45,000 more on the preferred stock. The grand total of liability to be carried by the corporation is thus $7,750,000, in place of $11,857,000 of debt retired."

As previously stated, "the assent of the holders of a majority of the bonds must be had before January 10 to secure the success of the scheme, and at the rate the bonds are coming in there is no doubt of its success. Some $1,200,000 of the bonds held in small amounts by various parties have already come in, and as the assent of the large holders was secured in advance, it is believed that at least two-thirds will be secured by the date mentioned. The plan to be pursued to secure the title to the property will be to allow the first-mortgage bondholders of the Vermont Central to secure a foreclosure and sell the property; the new corporation purchasing it and then securing a perpetual lease of the Vermont and Canada, thus uniting the two roads under a clear title."

The combination with the Grand Trunk Railway Company, of which so much has been said, President Smith states, "is a permanant close traffic arrangement by which all the freight from the great Northwest over the Grand Trunk seeking an outlet on the Atlantic coast is to be poured over the Central Vermont and its connecting roads to Boston. The Grand Trunk, in addition to the network of railways which it controls in Canada and the West, has secured the three great water-routes via Sarnia, Collingwood and Midland, which bring the grain, lumber, metal and other products of the Northwest to Montreal. Thence it has only a single-track line of its own to Portland, which is manifestly inadequate to the handling of such a vast tonnage, even were Portland the best point for shipment. Hence such an outlet as the Central Vermont affords to Boston and New York is a necessity."

The acquirement of the North Shore Road by the Grand Trunk was by absolute purchase, Mr. Senecal and his associates having "transferred seven-tenths of the entire capital stock to the Grand Trunk, and agreed to procure and transfer the remaining three-tenths. The Grand Trunk pays $5,000,000 in its bonds and $250,000 in cash for this road, which originally cost the Senecal syndicate $4,000,000, in addition to which they are said to have spent $1,000,000 or thereabouts for lands and terminal facilities at Quebec."

The Chief of the Bureau of Statistics reports that in the month of November there arrived in the customs districts of Baltimore, Boston, Detroit, Huron, Minnesota, New Orleans, New York, Passamaquoddy, Philadelphia and San Francisco 47,021 passengers, of whom 40,625 were immigrants, 3,699 citizens of the United States returned from abroad, and 2,697 aliens not intending to remain in the United States. Of this total number of immigrants there arrived from England and Wales, 5,280; Ireland, 2,177; Scotland, 745; Austria, 958; Belgium, 194; Bohemia, 404; Denmark, 475; France, 318; Germany, 15,803; Hungary, 2,162; Italy, 1,890; Netherlands, 125; Norway, 775; Russia, 368; Poland, 115; Sweden, 1,887; Switzerland, 890; Dominion of Canada, 5,892; and from all other countries, 167. The number of arrivals in November, 1881, was 51,586. The total number of immigrants arrived in the foregoing customs districts and from the principal foreign countries in the five months ended November 30, 1882, was 244,611, against 291,320 in the corresponding period in 1881.

Advertise in the Railroad Journal.

Photographing Employes.

The Central and Southern Pacific railroads have issued an order requiring all their employés except common day laborers to file with their companies a description and photograph of themselves. A reporter of the San Francisco *Chronicle* interviewed General Superintendent Fillmore as to the cause of the order, which is very obnoxious to most of the men, with the following results. Said Superintendent Fillmore:—

"Four or five years ago the Central Pacific Railroad issued this order requiring all conductors and brakemen in its employ to file their personal descriptive lists and photographs in the general office. Recently the order has been amended so as to include engineers, station-masters, switchmen and every class of employés except ordinary day laborers."

The reporter was then shown one of the "forms," accompanied by the photograph of the employé, in which he gave his name, age, residence, that of his parents or nearest relatives, whether married or single, how long he has been railroading, on what roads, in what capacities, whether he had been discharged, and if so, for what reason.

"This," said Superintendent Fillmore, "serves as a complete personal and business history of the employé. It shows his length of service, business capacity, moral standing, and at the same time serves as a letter of recommendation. It is a passport to position. But if the man has been discharged for some serious offense it protects the road he seeks employment on. So you will see it is a benefit to ourselves, a benefit to other roads and to the general public. It also protects us against re-employing men whom we have discharged for incompetency or serious offenses. It also protects other roads in the same manner. For instance, suppose one of our conductors was discharged for peculation. He might get employment on another portion of our road under an assumed name. But this system of personal description and photographs renders it impossible. A switchman here might go to sleep and let a train be wrecked. Of course, we would not employ that man again. Yet, if it were not for this personal description list and photograph, he might go up to Ogden or down into Texas, get employment on our road, go to sleep on duty again and wreck another train. This is our system of protection, and about the most effective one we could have against unfaithful or negligent employés. It works no hardship upon any one, and it seems to me the well-disposed can find no fault with it."—*Railway Review.*

The Lobdell Car Wheel Company, of Wilmington, Del., completed and shipped to a paper mill in Massachusetts on the 21st inst. a set of chill cast iron calender rolls. They are an excellent piece of work and number in all 10. They were cast at the new foundry. The polishing on them is so fine and well done that they look almost like silver. Their dimensions are as follows: Top, 15 by 80; 2d, 12 by 80; 3d, 4th, 5th, 6th, 7th, 8th, and 9th, 10 by 80, and bottom 18 by 80 inches. They are ground so as to fit perfectly and weigh 24,500 pounds.

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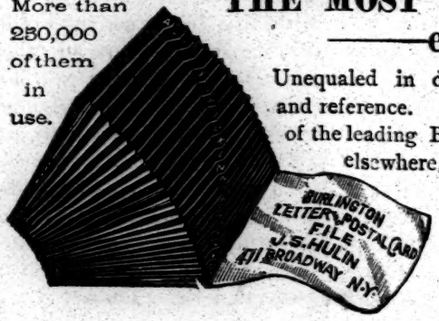
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IMPORTANT ANNOUNCEMENT TO INVENTORS.

THAT department of the AMERICAN RAILROAD JOURNAL which contains descriptions of new inventions properly coming within its range of subjects, is regarded with great notice and favor, particularly by those directly interested in learning what the latest applications of mechanical ingenuity in railroading are, and by those who have produced inventions which they desire to make as widely known as possible.

The large and widespread circulation of this paper, its prestige as the oldest railroad journal in the world, and the weight attached to its contents by the general consent of leading railroad men in all countries, give such value to its carefully prepared descriptions of new machinery and appliances as cannot be found outside of its columns.

The interest manifested by inventors in supplying us with information of their doings, and the eagerness with which this is received, encourage us to give an increased attention to that department of this paper treating of new inventions.

We therefore repeat our invitation to all persons who have produced what they regard as improvements coming within the range of railroad operations, to communicate with us promptly regarding the same.

All matter sent us will be thoroughly examined and considered, and no inventions in our opinion likely to be practicable and useful will be passed over without receiving due attention from us.

List of Patents for Inventions Relating to Railways, Manufacturing, Mining, Machinery, Etc.

BEARING DATE OF DECEMBER 26, 1882.

269,506. Switch: Edward J. Beard and Howard V. Hinckley, Topeka, Kan. Filed Aug. 14, 1882.

269,524. Journal-Lubricator: Thomas B. Howe, Scranton, Pa. Filed Oct. 14, 1882.

269,525. Cable-Tramway: Charles M. Huson, St. Louis, Mo. Filed Jan. 17, 1882.

269,527. Wrecking and Construction Car for Railways: Luther K. Jewett, Fitchburg, Mass. Filed Oct. 19, 1882.

269,529. Railway Switch-Rod and Rail-Coupler: John Lovejoy, West Lebanon, N. H. Filed Oct. 3, 1882.

269,534. Safety-Valve: Alexander Orme, Chicago, Ill. Filed August 7, 1882.

269,537. Adjustable Hanger for Shafting: Nicholas Parent, Cornwall, Conn. Filed Nov. 3, 1882.

269,541. Grain Transfer Car: Lloyd D. Richardson, John R. Trimmer and Eugene E. Loomis, Chicago, Ill. Filed Oct. 9, 1882.

269,587. Shade and Chimney Holder for Car Lamps: John Kirby, Jr., Cincinnati, Ohio, assignor to Post & Co., same place. Filed July 9, 1880.

269,592. Journal-Box: Richard Matteson and Alfred M. Brown, Pawtucket, R. I. Filed Nov. 13, 1882.

269,604. Stock-Car: Stephen P. Tallman, Dunellen, N. J. Filed Sept. 22, 1882.

269,621. Car-Signal: John B. Batt, Williamsville, N. Y.

269,629. Stock-Car: Henry R. Bothwell and James H. Strugnell, Toronto, Ontario, Canada. Filed August 28, 1882.
Filed July 24, 1882.

269,637. Railway-Car Reservoir: Robert G. S. Collamore, Boston, Mass. Filed August 12, 1882.

269,650. Automatic Rail-Punching Machine: John H. England and Edward Horth, Chicago, Ill. Filed July 5, 1882.

269,653. Switch-Indicator: William R. Field, Brooklyn, N. Y. Filed April 10, 1882.

269,665. Apparatus for Working Railway-Signals: John Harrisson, Well street, Hackney, county of Middlesex, England. Filed July 31 1882.

269,666. Steam-Cylinder Lubricator: John W. Hays, Erie, Pa. Filed Oct. 24, 1882.

269,668. Car-Coupling: Gustavos Heidel, St. Louis, Mo. Filed Oct. 18, 1882.

269,672. Station-Indicator: Harvey A. Holloman, Kingston, Tex. Filed April 12, 1882.

269,678. Valve-Gear for Steam Engines: Adoniram Kendall, Erie, Pa. Filed Feb. 23, 1882.

269,681. Direction-Plate and Label-Holder for Cars: Ferdinand King, Atlanta, Ga. Filed Oct. 14, 1882.

269,707. Car-Coupling: Joseph P. B. Rarey, Kokomo, assignor of one-third to Stephen P. Lee, Howard Township, Howard county, Ind. Filed Oct. 24, 1882.

269,711. Frog: James Reed, Altoona, Pa. Filed Sept. 20, 1882.

269,714. Journal-Box: Levi H. Roberts, Paris, Ill. Filed July 17, 1882.

269,718. Steam-Inspirator: John H. Rook, Jonesborough, Ind. Filed Nov. 2, 1882.

269,747. Air Brake for Railroads Cars: Charles Van Dusen, New Albany, Ind., assignor to himself and William L. Breyfogle, Louisville, Ky. Filed May 26, 1882.

269,752. Railway-Track Scale: Thomas H. Ward, Tipton, county of Stafford, England. Filed April 10, 1882.

269,787. Machine for Rolling Rails: Uri Haskin, Pittsburgh, Pa. Filed May 27, 1882.

269,813. Gas-Engine: Lewis C. Parker, Robinson, Kan. Filed August 29, 1882.

Railroad Progress in the Northwest.

A GENERAL review of railroad building for the past year in the Northwest or the system tributary to St. Paul, is published in the *Pioneer Press* of that city, showing the total construction for the year 1882 to have been 2,400 miles, as against 2,081 miles for 1881 and 1,478 miles for 1880. The work of the year was as follows: Northern Pacific, western division, 340 miles; eastern division, 208 miles; branch lines, 250 miles—total, 870 miles. St. Paul, Minneapolis and Manitoba, 210 miles; Chicago, St. Paul, Minneapolis and Omaha, 210 miles; Minnesota Central, 66 miles; Minneapolis and St. Louis, 20 miles; Chicago, Milwaukee and St. Paul, 476 miles; Chicago and Northwestern, 469 miles; Wisconsin Central, 68 miles.

The Chicago, St. Paul, Minneapolis and Omaha Railway has now a large territory, but being absorbed by the Chicago and Northwestern its construction work is a matter for future development, with no plans now formed. The Chicago, Milwaukee and St. Paul professes to have enough mileage, and after its late experiences will be liable to go slow and take a little more time in developing its vast system. It will probably reach out westward from Dakota and still nurse its idea of getting ultimately to the Pacific coast rather than spend too much money in building new lines nearer home to stir up territorial hornets' nests. The purchase of the Omaha line by the Chicago and Northwestern has partially changed the programme which has been laid out in Wisconsin. The new mileage is 235 miles, part of it being incidental to the St. Paul system, including the Chicago, Milwaukee and St. Paul building in the lumber region. In Dakota the mileage is tributary to St. Paul and Minneapolis trade, and is therefore a matter for congratulation.

It may be inferred that the Northwestern Railroad building will not be marked during the coming year with that lively activity which characterized it in the last two years, unless exceptions be made in the cases of the Northern Pacific and Canadian Pacific lines. The Manitoba line, according to present indications, will not extend rapidly, except to points where increased population creates a demand for traffic. Its principal work will be towards Devil's Lake, when immigration will open early in the spring. Its extreme western extension will probably be made slowly in the Red River district and in portions of Dakota, where that line has had building competition.

Dredgers to be Used in Excavating the Panama Canal.

DOUGHTY & KAPELLA, ship-builders, at Petty's Island, have taken the contract for the construction of three dredgers, to be used in excavating for the Panama Canal. The size of each dredger is 100 feet in length, sixty feet in breadth and twelve feet in depth. The contract price for the three, which includes the placing of the machinery, is said to be about $120,000. The machinery will bring their cost to upwards of $400,000. One of the dredgers has been completed and was launched on the 22d inst. It will be taken to the I. P. Morris Company's wharf, where it will be fitted out with machinery, which is already at hand, it having been manufactured in San Francisco, California, and forwarded to Philadelphia. It is stated that a portion of the machinery for the other dredgers will be manufactured in this section of the country. The entire machinery weighs 350 tons.

The machinery consists of eight separate engines; the two which run the dredge are high pressure, of 250-horse power, and the others of about fifty-horse power each. The dredgers are of a new patent and work with a series of buckets on an endless chain. There are forty buckets to each machine, with a capacity for dumping of eighteen buckets a minute, each bucket holding one and one-half cubic yards. After the dirt is scooped up in the buckets it is run up the long arm of the dredge fifty feet and dropped into an iron hopper weighing seven and one-half tons, and thence by its own power attained in the fall passes through a pipe three feet in diameter and 150 feet long, with an eighteen foot fall, to its place of deposit. A constant stream of water is also kept running through the pipe to aid the dirt in its passage.

It is intended, after the dredge is fully fitted out with her machinery, to place her in charge of a large steamer and tow her to her destination.

The dredger, which it is claimed is the largest machine of the kind ever built, is named the "Count De Lesseps," and is for Huerne, Slaven & Co., of San Francisco, California. The building of her hull was superintended by Captain S. L. Clapp, formerly Port Captain for the Pacific Mail Steamship Company, at Colon (Aspinwall) and Panama. The second machine will be launched about February 1 next, and the third a month later.

DONALD A. SMITH has been chosen a director of the Canadian Pacific Railroad Company, in the place of J. J. Hill, resigned.

THE dealer who wrote "these are my lowest rates *to you*" was not more candid than the Esterbrook Steel Pen Co., who admit that their pens are the best in use.

COPIES of this JOURNAL are occasionally distributed as an advertisement, and should not be returned to the office. The proper use for them is their thorough examination, which will result in business to the publishers.